

NEEDHAM PLANNING BOARD

Tuesday, December 5, 2023

7:00 p.m.

Charles River Room

Public Services Administration Building, 500 Dedham Avenue

AND

Virtual Meeting using Zoom

Meeting ID: **880 4672 5264**

(Instructions for accessing below)

To view and participate in this virtual meeting on your phone, download the “Zoom Cloud Meetings” app in any app store or at www.zoom.us. At the above date and time, click on “Join a Meeting” and enter the following Meeting ID: **880 4672 5264**

To view and participate in this virtual meeting on your computer, at the above date and time, go to www.zoom.us click “Join a Meeting” and enter the following ID: **880 4672 5264**

**Or to Listen by Telephone: Dial (for higher quality, dial a number based on your current location):
US: +1 312 626 6799 or +1 646 558 8656 or +1 301 715 8592 or +1 346 248 7799 or +1 669 900 9128 or +1 253 215 8782 Then enter ID: **880 4672 5264****

Direct Link to meeting: <https://us02web.zoom.us/j/88046725264>

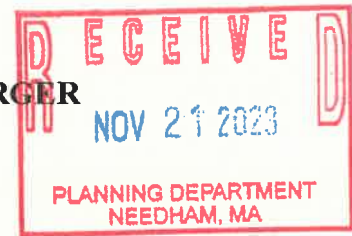
1. ANR Plan – Judson Garrett Parker Jr. and Helen Frame Peters, Petitioners, (Property located at 133 South Street, Needham, MA).
2. De Minimus Change: Major Project Site Plan Review Special Permit No. 1998-11: 117 Kendrick DE, LLC, 116 Huntington Ave, #600, Boston, MA, 02116, Petitioner, (Property located at 117 Kendrick Street, Needham, MA.)
3. Board of Appeals – December 14, 2023.
4. Minutes.
5. Report from Planning Director and Board members.
6. Correspondence.
7. Executive Session pursuant to M.G.L. c.30A, §21 purpose 7 (to comply with, or act under the authority of, any general or special law or federal grant-in-aid requirements): Review and approve minutes of prior executive sessions.

(Items for which a specific time has not been assigned may be taken out of order.)

LAW OFFICE OF DAVID J. HIMMELBERGER

One Hollis Street, Suite 400
Wellesley, Massachusetts 02482

Fax: (781) 235-8242
Telephone: (781) 237-8180



David J. Himmelberger

Email: david@himmelbergerlaw.com

November 15, 2023

Ms. Alexandra Clee
Assistant Town Planner
Public Services Administration Building
500 Dedham Avenue
Needham, MA 02492

Re: ANR Application

Dear Ms. Clee:

I represent the record owners of 133 South Street, Needham, Judson Garrett Parker, Jr. and Helen Frame Peters in connection with their request to divide their property. Please find enclosed the following:

1. A completed Application for Endorsement of Plan Believed Not To Require Approval.
2. A letter from the owners confirming that I am authorized to act as their agent in the submittal of the ANR Plan.
3. A draft ANR Plan
4. A check in the amount of \$200, (\$100 per plan, plus \$100 for the two new building lots created by the Plan) payable to the Town of Needham.

I look forward to receiving any and all requests for any revisions to the proposed ANR Plan, and am hopeful that we could be placed on the Planning Board's December 5, 2023 meeting agenda. Should you have any questions concerning the foregoing, please do not hesitate to contact me.

Very truly yours,

A handwritten signature in blue ink, appearing to read 'David J. Himmelberger', written over a horizontal line.

David J. Himmelberger

Enclosures

**TOWN OF NEEDHAM
MASSACHUSETTS**



PLANNING BOARD

500 Dedham Avenue
Needham, MA 02492
781-455-7550

APPLICATION FOR ENDORSEMENT OF PLAN
BELIEVED NOT TO REQUIRE APPROVAL

Submit three (3) copies. One copy to be filed with the Planning Board and one with the Town Clerk as required by Section 81-P, Chapter 41 of the General Laws. This application must be accompanied by the **Original Tracing** and **three (3) copies of the plan**.

To the Planning Board:

The undersigned, believing that the accompanying plan of land in the Town of Needham does not constitute a subdivision within the meaning of the Subdivision Control Law, for the reasons outlined below, herewith submits said plan for a determination and endorsement that Planning Board approval under the Subdivision Control Law is not required.

1. Name of Applicant Judson Garrett Parker, Jr and Helen Frame Peters
Address 133 South St, Needham
2. Name of Engineer or Surveyor Field Resources
Address 281 Chestnut St Needham MA
3. Deed of property recorded in Norfolk Registry,
Book 9321, Page 384
4. Location and description of property 133 South Street SR B
5. Reasons approval is not required (check as applicable):

- ☒ a) Every lot shown has the area and frontage required by the Zoning By-Law on a way, as defined by Section 81-L, Chapter 41 of the General Laws.
- b) Land designated _____ shall not be used as separate building lot(s) but only together with adjacent lots having the required area and frontage.
- c) Lot(s) having less than required frontage or area resulted from a taking for public purpose or have been recorded prior to 3/26/1925, no land is available to make up the deficiency and the frontage and land area of such lots are not being reduced by the plan.
- d) _____

(If the applicant is not the owner, written authorization to act as agent must be attached)

Signature of Applicant Daniel J. Linnell

Address One Hollis St Suite 400 Wellesley MA 02482

By _____ (agent)

Application accepted this _____ day of _____ 20____
as duly submitted under the rules and regulations of the Planning Board.

By _____

Planning Board
Town of Needham
500 Dedham Avenue
Needham, MA 02492

Dear Board Members:

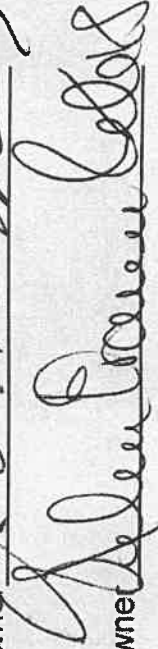
This will confirm that we, Judson Garrett Parker, Jr., and Helen Frame Peters, the record owners of 133 South Street, Needham, MA, do authorize Attorney David J. Himmelberger to act as our agent in the submittal of an ANR Plan to divide our property.

Sincerely,

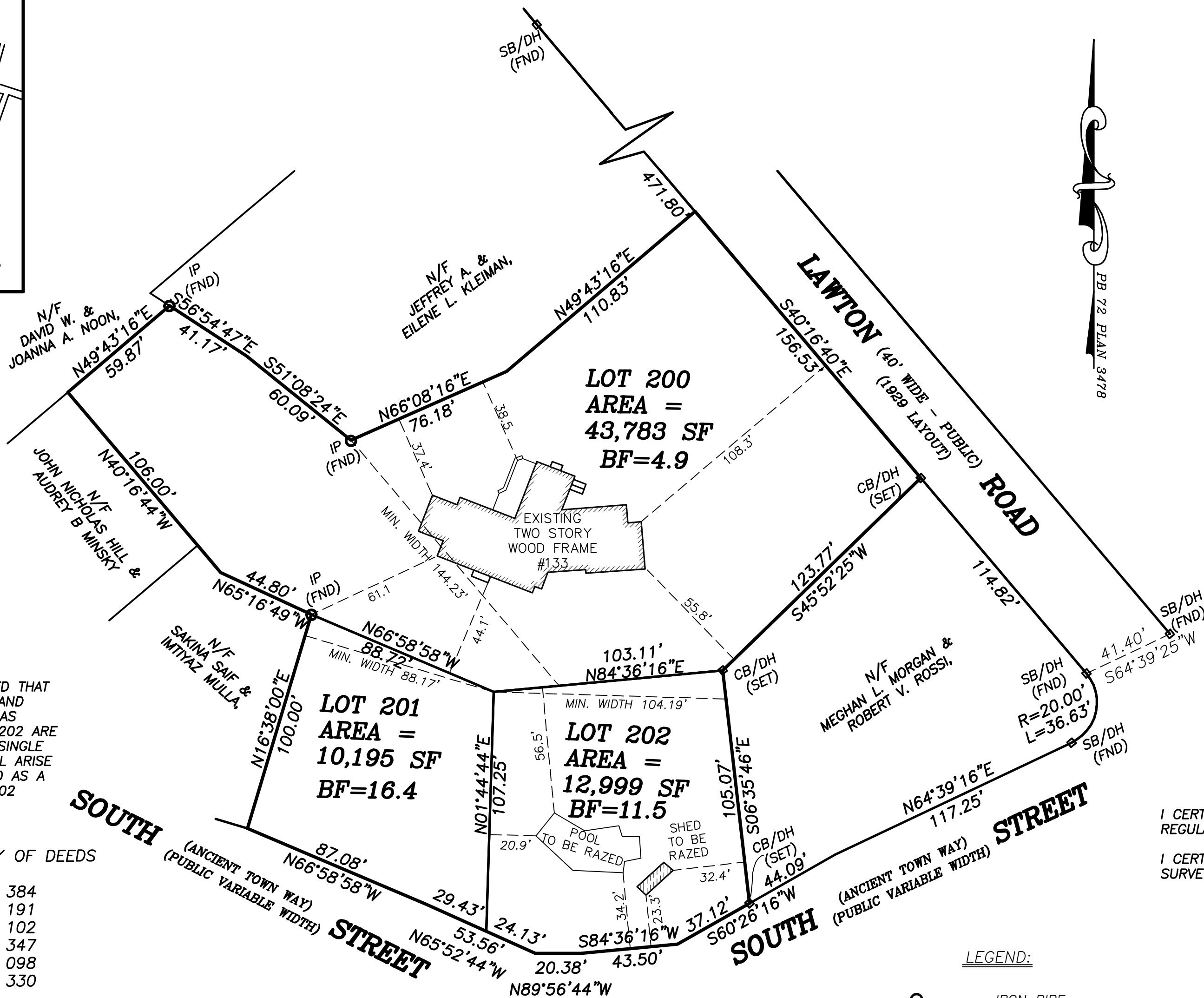
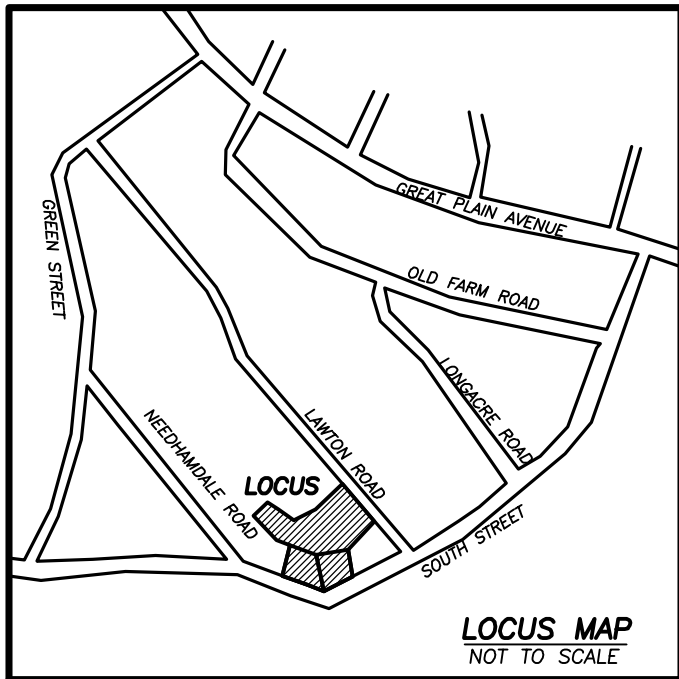
Signature of Owner

A handwritten signature in cursive script, appearing to read "J. G. Parker, Jr.", written over a horizontal line.

Signature of Owner

A handwritten signature in cursive script, appearing to read "Helen Frame Peters", written over a horizontal line.

133 South Street
Needham, MA 02492



IT IS HEREBY NOTED AND DISCLOSED THAT IN THE EVENT THE EXISTING POOL AND SHED ON LOT 202 IS NOT RAZED, AS SHOWN, AND EITHER LOT 200, OR 202 ARE TRANSFERRED OR CONVEYED AS A SINGLE LOTS, THEN ZONING VIOLATIONS WILL ARISE CONCERNING SUCH POOL AND SHED AS A PERMITTED PRIMARY USE ON LOT 202

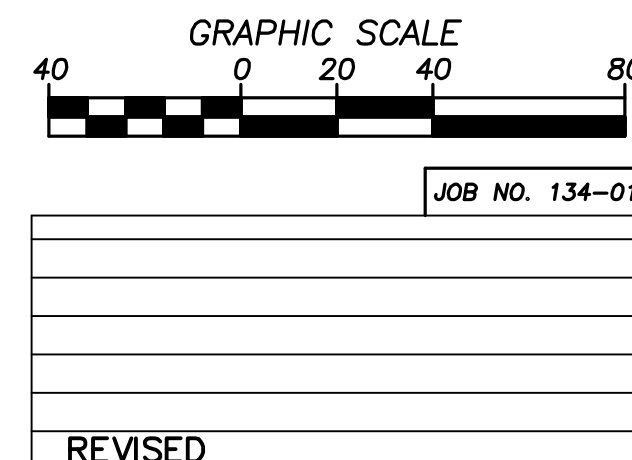
- REFERENCES:**
- NORFOLK COUNTY REGISTRY OF DEEDS
- DEEDS
- BOOK 9321 PAGE 384
- BOOK 38155 PAGE 191
- BOOK 41361 PAGE 102
- BOOK 26949 PAGE 347
- BOOK 23775 PAGE 098
- BOOK 23893 PAGE 330
- PLANS**
- PLAN BOOK 405 PAGE 290(LOCUS)
- PLAN 868 OF 1958
- PLAN BOOK 72 PAGE 3478
- DEED BOOK 1593 PAGE 169
- DEED BOOK 1842 PAGE 553 (LAWTON LAYOUT)

ZONING INFORMATION: SINGLE RESIDENCE B (SRB)				
	REQUIRED	LOT 200	LOT 201	LOT 202
MINIMUM LOT AREA	10,000 SF	43,783 SF	10,195 SF	12,999 SF
MAXIMUM BUILD FACTOR	20	4.9	16.4	11.5
MINIMUM LOT FRONTAGE	80 FEET	156.53 FEET	116.51	96.32 FEET
MINIMUM FRONT SETBACK	20 FEET	108.3 FEET	N/A	23.3 FEET
MINIMUM SIDE YARD	14 FEET	55.8 FEET	N/A	20.9 FEET
		38.5 FEET	N/A	32.4 FEET
MINIMUM REAR YARD	20 FEET	44.1 FEET	N/A	56.5 FEET
MAXIMUM BUILDING COVERAGE	25%	7.2%(3143 SF)	N/A	0.7%(88 SF)
MAXIMUM BUILDING HEIGHT	35 FEET	<35 FEET	N/A	N/A
MAXIMUM BUILDING HEIGHT	2 1/2 STORIES	2 1/2 STORIES	N/A	N/A

TOWN OF NEEDHAM
MAP 08 PARCEL 48

NORFOLK COUNTY
REGISTRY OF DEEDS
BOOK 9321 PAGE 384
PLAN BOOK 405 PLAN 290

OWNER/APPLICANT:
JUDSON GARRETT PARKER &
HELEN FRAME PETERS



APPROVAL NOT REQUIRED
SUBDIVISION PLAN OF LAND
133 SOUTH STREET
NEEDHAM, MASS.

Field Resources, Inc.
LAND SURVEYORS

NOVEMBER 28, 2023 SCALE 1"=40'

P.O. BOX 324 281 CHESTNUT ST.
AUBURN, MA NEEDHAM, MA.
508 832 4332 781 444 5936
fieldresources@hotmail.com

FOR REGISTRY USE ONLY

APPROVAL UNDER THE SUBDIVISION
CONTROL LAW NOT REQUIRED
NEEDHAM PLANNING BOARD

DATE:

NO DETERMINATION AS TO COMPLIANCE
WITH ZONING REQUIREMENTS IS MADE
OR INTENDED.

THE PURPOSE OF THIS PLAN IS TO
DIVIDE 133 SOUTH STREET INTO LOTS
200 , 201 AND 202.

I CERTIFY THAT THIS PLAN CONFORMS WITH THE RULES AND
REGULATIONS OF THE REGISTERS OF DEEDS.

I CERTIFY THAT THIS PLAN IS BASED UPON AN ACTUAL FIELD
SURVEY, AND THE LATEST PLANS AND DEEDS OF RECORD.

November 14, 2023

BY OVERNIGHT DELIVERY & ELECTRONIC MAIL

Town of Needham Planning Board (the “Board”)
Public Service Administration Building
500 Dedham Avenue
Needham, MA 02492
Attn: Lee Newman, Planning Director

Re: 117 Kendrick Street, Needham, Massachusetts (the “Property”)

Dear Planning Board Members:

We are counsel to 117 Kendrick DE, LLC, an affiliate of The Bulfinch Companies, Inc. (the “Applicant”) in connection with the Property, which is subject to the terms of that certain Major Project Special Permit No. 98-11, dated November 18, 1998, as amended on January 21, 2003, January 10, 2006, June 5, 2001 and June 23, 2015 (as amended, the “Special Permit”).

The Applicant is proposing a minor amendment to the Special Permit to add one loading bay along Third Avenue to accommodate special deliveries to one of the office/life science suites (the “Application”). This new loading bay is needed because servicing this particular suite from the existing loading dock is not a workable arrangement and will render this suite difficult to market to prospective lab/research and development tenants.

As we discussed informally with the Board on October 17th, the proposed loading bay will be used infrequently, there is no impact to the Third Avenue traffic operations, the Property will remain compliant with zoning and the terms of the Special Permit and there is no proposed change in building footprint or gross floor area. On November 6th, the Design Review Board reviewed and unanimously approved the proposed modifications to the Third Avenue façade as shown on the enclosed materials.

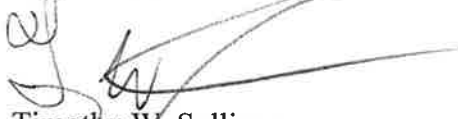
In support of the Application, enclosed are the following materials and information (3 *copies of each unless otherwise indicated*):

1. Application for a minor modification to the Special Permit;
2. Plans titled “Context Plan” and “Civil Site Plan” (collectively, the “Site Plan”), prepared by Vivo Architecture, which identifies the area where work will occur to install the new loading bay;
3. Memorandum prepared by Vanasse Hangen Brustlin, Inc. (“VHB”), dated November 13 2023;

4. Elevations showing the existing and proposed Third Avenue façade; and
5. Check payable to the Town of Needham in the amount of \$250.00, representing the filing fee for the Application.

We appreciate your attention to this matter. The Applicant and the entire Project team look forward to meeting with you and discussing the Application on December 5, 2023 or any earlier date that is convenient for the Board.

Very truly yours,



Timothy W. Sullivan
Attorney for Applicant

Enclosures

TOWN OF NEEDHAM
MASSACHUSETTS



500 Dedham Avenue
Needham, MA 02492
781-455-7550

PLANNING BOARD

APPLICATION FOR SITE PLAN REVIEW

Project Determination: (circle one) Major Project Minor Project

Minor Modification

This application must be completed, signed, and submitted with the filing fee by the applicant or his representative in accordance with the Planning Board's Rules as adopted under its jurisdiction as a Special Permit Granting Authority. Section 7.4 of the By-Laws.

Location of Property 117 Kendrick Street
Name of Applicant 117 Kendrick DE, LLC
Applicant's Address 110 Huntington Ave #1000 Boston, MA 02114
Phone Number (781) 707-0400

Applicant is: Owner ☒ Tenant _____
 Agent/Attorney _____ Purchaser _____

Property Owner's Name 117 Kendrick DE, LLC
Property Owner's Address 110 Huntington Ave #1000 Boston MA 02114
Telephone Number (781) 707-0400

Characteristics of Property: Lot Area 12,089 ^{sq ft} Present Use Office & Lab
 Map # _____ Parcel # _____ Zoning District NEBC within WCFT overlay
Parcel # 199 300 0012 0000

Description of Project for Site Plan Review under Section 7.4 of the Zoning By-Law:

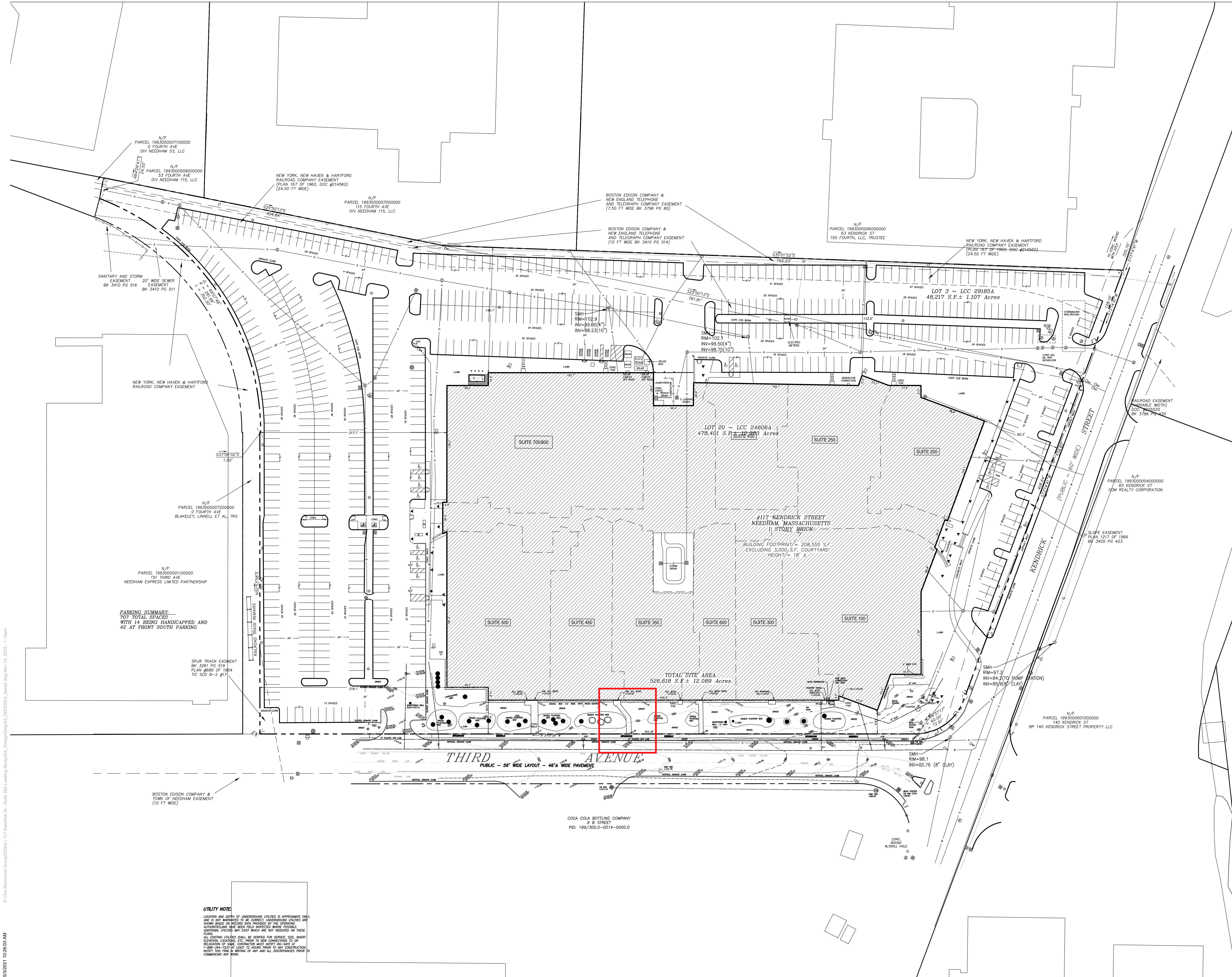
Minor amendment to existing Special Permit for the office/life science building located at 117 Kendrick Street to allow for the addition of a loading dock bay to accommodate special deliveries to one of the office/life science suites from 3rd Avenue. This bay is needed because servicing this particular suite from the existing loading dock is not a workable arrangement and will render this suite difficult to market to prospective lab/R&D tenants. The property remains compliant with zoning and there is no change in gross floor area of the building.

Signature of Applicant (or representative) 117 Kendrick DE, LLC
Address if not applicant _____ Robert K. Schiager, V.P.
Telephone # 781-707-4000
Owner's permission if other than applicant _____

SUMMARY OF PLANNING BOARD ACTION

Received by Planning Board _____ Date _____
Hearing Date _____ Parties of Interest Notified of Public Hearing _____
Decision Required by _____ Decision/Notices of Decision sent _____
Granted _____
Denied _____ Fee Paid _____ Fee Waived _____
Withdrawn _____

NOTE: Reports on Minor Projects must be issued within 35 days of filing date.



VIVO
architecture

123 N. Washington Street Boston, Massachusetts
617.227.7727 www.vivoarch.co

Landlord

Bulfinch

Construction Manager

RICHMOND

Construction Manager's Consultants

SGH
SIMPSON GUMPERTZ & HESER
485 Totten Road
Watson, MA 02451
781.307.7000
sg-h.com

EMPLOYEE-OWNED

nsmc
North Shore Mechanical Contractors, LLC

Interstate
Electrical Services

NS NOREMAC
Noremac Corporation

ESI
Environmental Systems, Inc.

CODE RED
CONSULTANTS

HIGHPOINT ENGINEERING, INC.
LAND PLANNING
PRIVATE ENGINEERING
CIVIL ENGINEERING
CONSULTING
DESHAM EXECUTIVE CENTER
180 WASHINGTON ST., SUITE 214
DEHAMA, MA 02026
www.HighpointEng.com

Issue Schedule		
Date	Description	
07/24/2023	ISSUED FOR PERMIT	
08/21/2023	ISSUED FOR CONSTRUCTION	
10/26/2023	REVISED ISSUED FOR CONSTRUCTION	

Project No.
23109.11

Project Name
CORE & SHELL IMPROVEMENTS - PHASE 2

Project Address
**117 KENDRICK STREET
NEEDHAM,
MASSACHUSETTS**

Stamp

SEAL OF THE COMMONWEALTH OF MASSACHUSETTS
JOSEPH J. PICCOLLI
CIVIL
No. 55050
REGISTERED PROFESSIONAL ENGINEER

Sheet Title
EXISTING CONDITIONS PLAN

Approved By: JJP
Checked By: JJP
Drawn By: SD/WH

Scale: 1"=40'

Sheet Number
C100

Issue Schedule	
Date	Description
07/24/2023	ISSUED FOR PERMIT
08/21/2023	ISSUED FOR CONSTRUCTION
10/26/2023	REVISED ISSUED FOR CONSTRUCTION

Project No.
23109.11

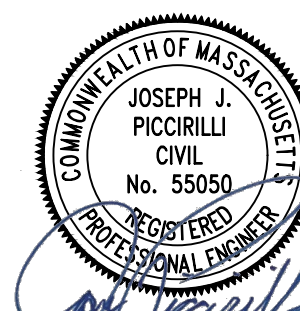
Project Name

CORE & SHELL IMPROVEMENTS - PHASE 2

Project Address

117 KENDRICK STREET
NEEDHAM,
MASSACHUSETTS

Stamp



Sheet Title

CONTEXT PLAN

Approved By: JJP

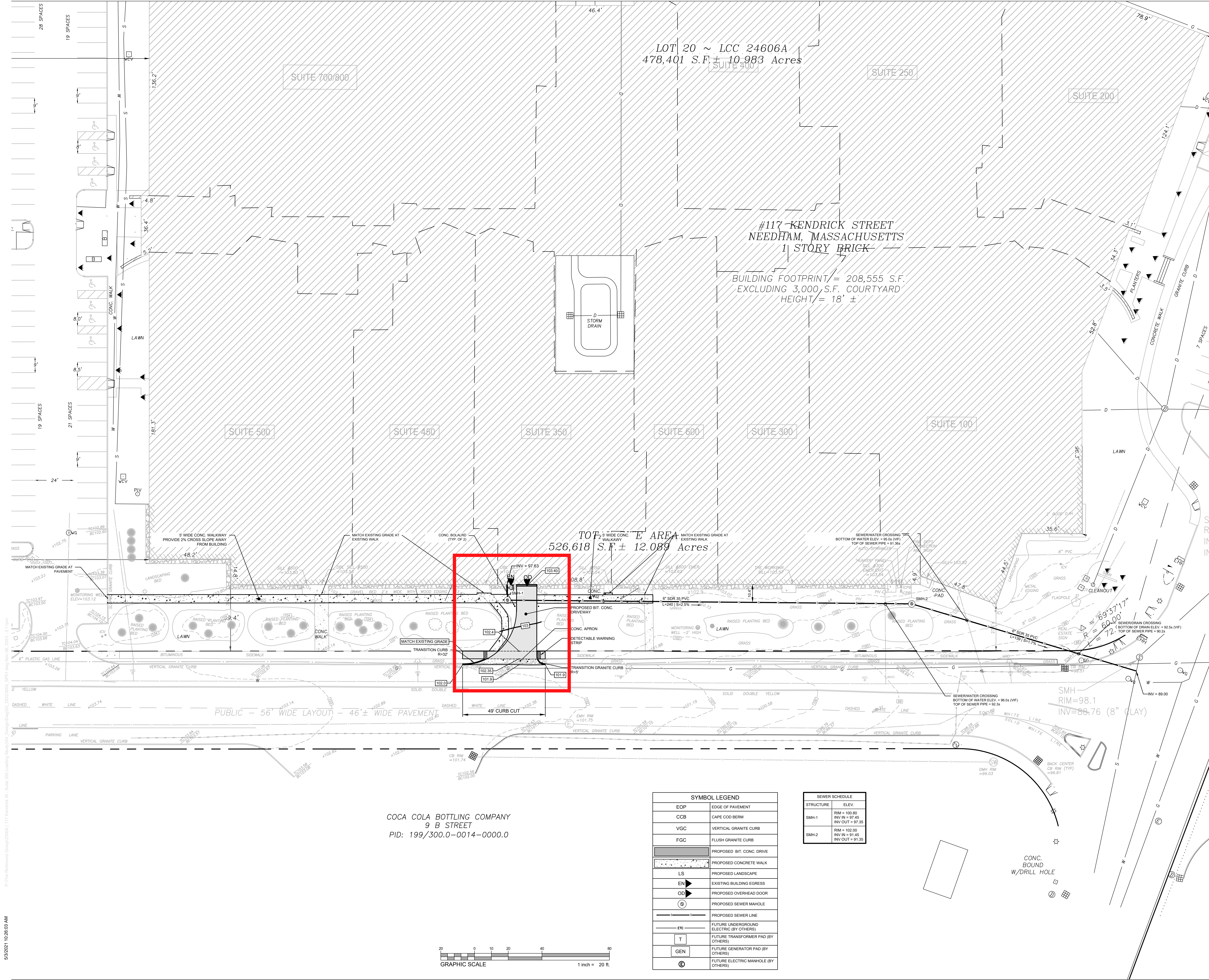
Checked By: JJP

Drawn By: WH

Scale: 1" = 50'

Sheet Number

C002



VIVO

architecture

123 N. Washington Street Boston, Massachusetts
617.227.7727
www.vivoarch.co

Landord

Bulfinch

Construction Manager

RICHMOND

Construction Manager's Consultants

SGH

SIMPSON QUINTELL & HEDER
400 TOWN FORD STREET
WILMINGTON, MA 01951
781.367.5000
sgh.com

EMPLOYEE-OWNED

nsme

North Shore Mechanical Contractors, LLC

Interstate

Electrical Services

NS

NOREMAC

Environmental Corporation

ESI

Environmental Systems, Inc.

CODE RED

CONSULTANTS

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LAND PLANNING
PERMIT PREPARING
CIVIL ENGINEERING
CONSULTING

DEEDHAM EXECUTIVE CENTER
180 WASHINGTON STREET, SUITE 210
DEEDHAM, MA 01928
www.HighpointEng.com

Issue Schedule

Date	Description
07/24/2023	ISSUED FOR PERMIT
08/21/2023	ISSUED FOR CONSTRUCTION
10/26/2023	REVISED ISSUED FOR CONSTRUCTION

Project No.

23109.11

Project Name

CORE & SHELL
IMPROVEMENTS -
PHASE 2

Project Address

117 KENDRICK STREET
NEEDHAM,
MASSACHUSETTS

Stamp

COMMONWEALTH OF MASSACHUSETTS

JOSEPH J. PICCARELLI

CIVIL

No. 55050

REGISTERED PROFESSIONAL ENGINEER

Joseph J. Piccarelli

Sheet Title

CIVIL SITE PLAN

Approved By: JJP

Checked By: JJP

Drawn By: WH

Scale: NTS

Sheet Number

C300

5/9/2021 10:26:03 AM

© COPYRIGHT 2023 VIVO ARCHITECTURE



Exterior - Existing Condition (from Third Ave)



Exterior - Proposed Condition (from Third Ave)



Exterior - Existing Condition (from Third Ave)



Exterior - Proposed Condition (from Third Ave)





To: Town of Needham Planning Board

Date: November 13, 2023

Memorandum

Project #: 16169.00

From: Ryan White, PE
Sean Manning, PE, PTOE

Re: 117 Kendrick Street
Proposed Change of Use and New Loading Driveway Review

Vanasse Hangen Brustlin, Inc. (VHB) has been retained by 117 Kendrick DE, LLC (an affiliate of The Bulfinch Companies, Inc.) (Client) to provide transportation planning and engineering services to assess the viability of introducing a new, supplemental loading bay at 117 Kendrick Street in Needham, MA (Site). The purpose of this memorandum is to demonstrate that the proposed loading bay will operate safely and without burdening or introducing uncontrolled conflicts to traffic along Third Avenue in the proposed condition.

117 Kendrick Street first received its Special Permit from the Town of Needham in November 1998. As the Proponent and Project Team have been developing this proposed fifth amendment to that Special Permit, there has been a measurable coordination effort with the Town. This included a pre-filing meeting/site walk (August 14, 2023) and an initial presentation & Project overview to the Planning Board (October 17, 2023). A detailed loading assessment was conducted in advance of the October 17 Planning Board meeting, and that summary was shared with the Planning Board that evening to provide them with technical information and expected outcomes to help them better understand this proposal. That summary was shared in the form of a PowerPoint presentation, and that presentation is included with this memorandum as **Attachment A**.

In response to Planning Board questions, the Project Team has identified similar peer sites/land uses to help determine actual daily truck trip generation and appropriately quantify the impacts of a new loading bay. This technical analysis assesses the feasibility and impacts of new truck trips to a dedicated loading bay that would be proposed to be constructed along Third Avenue, serving Suite 350 in the existing building. In addition to a truck trip generation estimate, truck turns, a gap study, and existing queue observations were conducted. These efforts were all conducted to better understand and convey that safe and efficient traffic operations can be maintained along Third Avenue with the new loading bay in place.

Loading Bay Need and Location

117 Kendrick Street is served by an existing dedicated loading dock that is located on the north face of the building and accessed via the site's parking field. Nearly all typical deliveries (US Mail, FedEx, UPS, Amazon, other parcel delivery, paper goods, office supplies, etc.) are expected to utilize this existing general building loading dock. However, Suite 350 is being redesigned for laboratory use. While the future tenant of this space is not known at this time, it is expected to require infrequent, special deliveries which need to be delivered directly to the laboratory area within the rear of the Suite. A new loading driveway and curb cut is proposed along Third Avenue to support these special deliveries that require specific handling and storage conditions to support research development/lab space. These deliveries could include medical gas, refrigerated and/or delicate items that cannot be efficiently managed without appropriate facilities and should not be ferried through office and common area corridors within the 117 Kendrick building. To ensure the smooth and safe receipt of these items, it is crucial to the success of this laboratory suite to establish a dedicated loading bay with direct access into the Suite.

The proposed loading bay will consist of a short driveway on Third Avenue that can support a single truck backing into a dedicated loading door. A concept of the proposed loading driveway is shown in **Figure 1**.

99 High Street
Boston, MA 02110-2354
P 617.728.7777

Loading Driveway Operations

As mentioned previously, regular/typical deliveries to Suite 350 will continue to utilize the general building loading dock on the north face of the building. Due to the nature and use of the future Suite 350 tenant, special deliveries will be arriving on-site and need to be delivered directly to the lab portion of the Suite.

To understand the frequency of these special deliveries and potential impacts to Third Avenue, observations were collected at similar peer research development/lab sites to collect data on the type and volume of anticipated loading activity. Locations with similar tenant uses and surrounding transportation infrastructure were selected. Details of the sites and truck trip generation are listed below in **Table 1**.

Table 1: Loading Dock Operation and Characteristic Comparison

Location	Building/Suite Size (KSF)	Special Deliveries to Site
20 Cambridge Discovery Park Cambridge, MA	175	2 per day
30 Cambridge Discovery Park Cambridge, MA	110	3 per day
Candel Tx 117 Kendrick Ste 450 Needham, MA	15	1-2 per week
Organogenesis 333 Providence Hwy Norwood, MA	85	1-2 per week
117 Kendrick Ste 350 Needham, MA*	18	1-2 per week Expected

* Only special deliveries will utilize Suite 350 loading bay

The study and the collected data revealed loading dock operations typically occur from 6:00 AM to 2:00 PM, Monday through Friday.

Observations indicated that most special deliveries are fulfilled via a commercial van, although some deliveries were also fulfilled via a 30-foot box truck. The design vehicle for the loading bay ranges from a delivery van up to a SU-30 (30' single axle box truck). The loading bay, related driveway and sidewalk/walkways have been designed to ensure a vehicle actively loading in the proposed bay will not extend and block the existing sidewalk nor impede traffic flow along Third Ave. Truck profiles and turns have been overlaid on the loading bay concept as depicted in **Figure 2 and Figure 3**.

Vehicle Parking On-Site

To comply with the Special Permit, parking must be provided on-site, both to support on-site activities and meet the Town's zoning requirements. As there is no change to the building size nor the on-site parking proposed by this Project, the Site will continue to comply with the Town's zoning requirements. The existing building contains approximately 208,555 SF. Assuming the office land use parking rate of one space per 300 SF, 696 parking spaces are

required on-site. The Site currently contains 707 striped parking spaces, thus exceeds minimum Town zoning requirements.

Third Avenue Traffic Operations

Gap Study

A gap study measures the size and frequency of gaps in traffic flow. Gaps are measured as the time clearance intervals between vehicles passing a point on the road. A gap study was conducted to verify trucks will have ample time to maneuver along Third Avenue into and out of the proposed Suite 350 loading bay without impacting existing traffic.

Special truck deliveries are expected to utilize the loading bay for deliveries to Suite 350 up to twice a week. Trucks must back-in to the driveway to access the loading bay meaning efficient breaks in traffic are needed to facilitate the turn. Conservatively, it is assumed that this access maneuver may block Third Ave traffic for up to 15 seconds. To help determine potential impacts to Third Avenue, a gap analysis was conducted. This gap analysis for Third Avenue revealed more than 45 sufficient gaps greater than 15 seconds during the morning peak hour. A breakdown of the observed gaps is shown in Table 2 below.

Table 2: Gap Analysis Observations (8:00 AM-9:00 AM)

Gap Length	Number of Gaps
15-29 seconds	32
30-44 seconds	8
45+ seconds	6

Queue Observations

The proposed loading bay is located approximately 325' north of the signalized intersection of Third Avenue and Kendrick Street. To understand if there might be impacts to the intersection's operation, queues were observed during the morning and evening peak hours. The longest queue occurred during the evening peak hour, extending nearly half the distance to the proposed bay (about 175'). The morning peak hour saw shorter queues. The longest queue during each period for each of the two lanes were plotted in relation to the loading bay in **Figure 4**. The loading bay operation is not expected to impact or add to the existing queue.

Conclusion:

Based on this analysis, operations of the proposed loading bay, and the traffic operations and peer tenant data collected, it is expected that the proposed driveway and loading bay will operate safely and efficiently without impacting traffic or pedestrian flows along Third Avenue. A low volume of trucks is expected at the loading bay and driveway (about two special deliveries per week), based on a review of similar locations. With this volume, coupled with available existing gaps in traffic flow along Third Avenue, will result in negligible changes to traffic operations along Third Avenue and the nearby Kendrick Street/Third Ave intersection.

Figure 1 Loading Bay Concept

117 Kendrick Street | Needham, Massachusetts

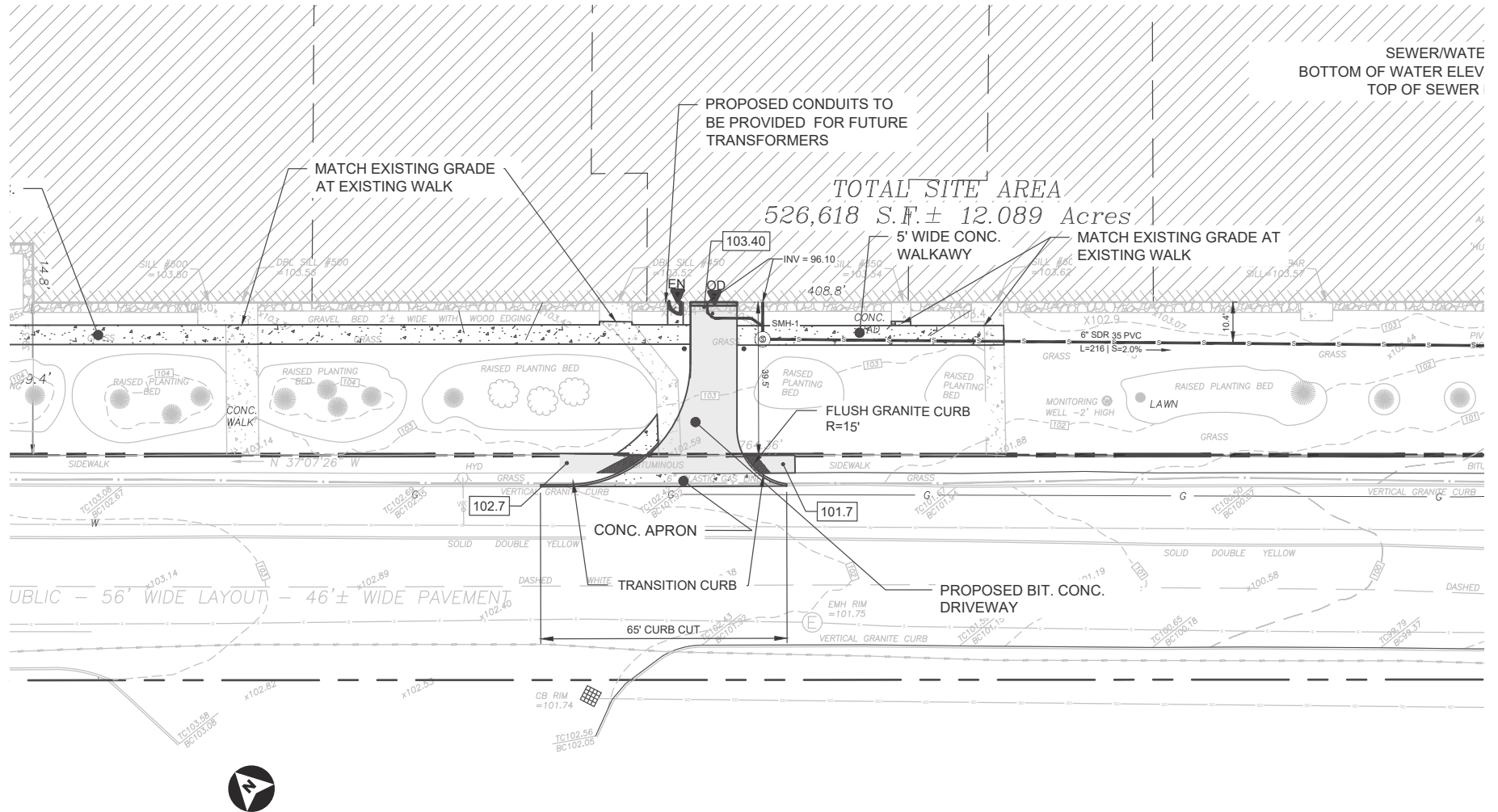
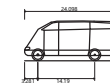
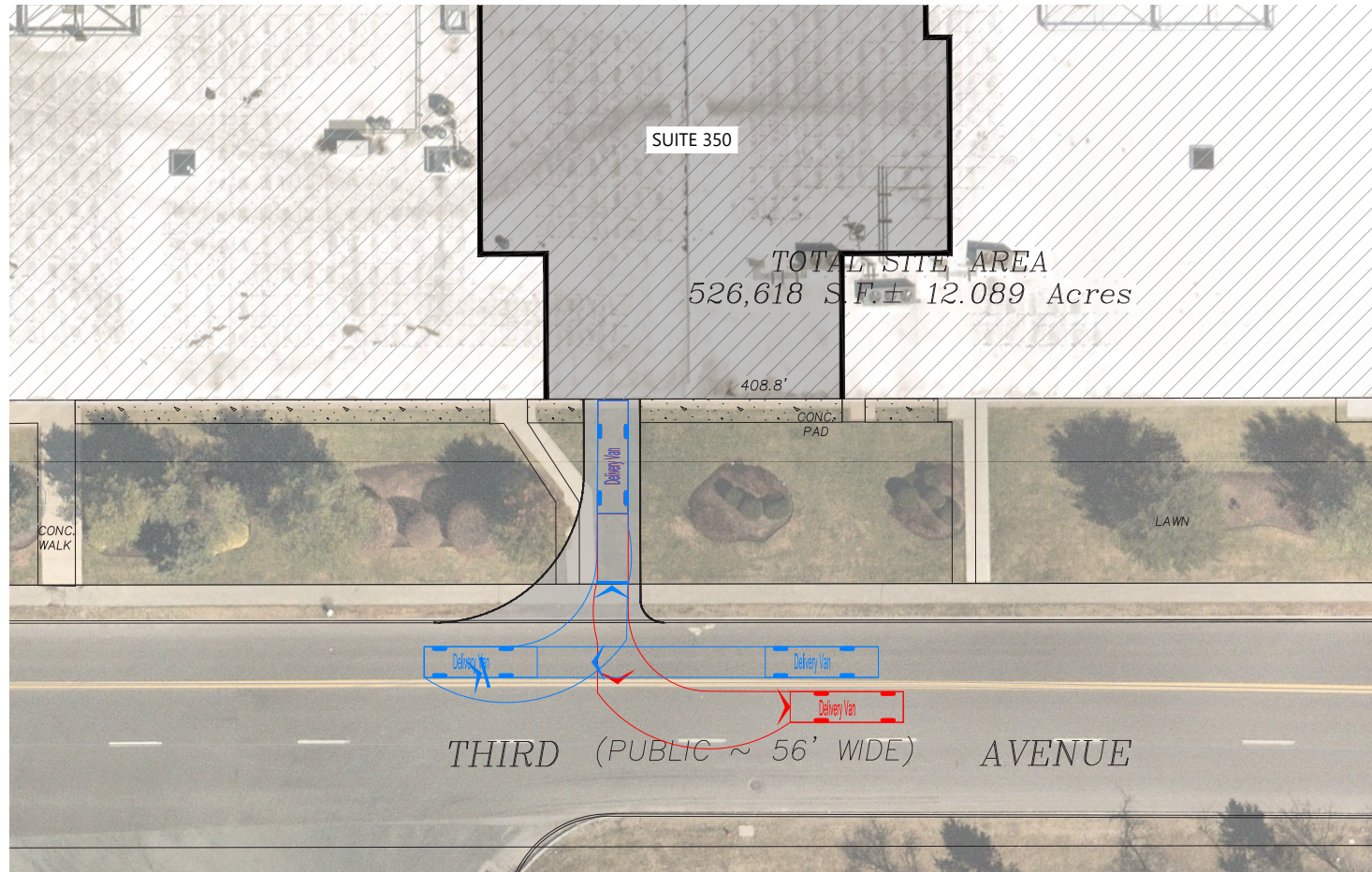


Figure 2 Loading Bay Truck Turns - Delivery Van

117 Kendrick Street | Needham, Massachusetts



Delivery Van	24.09ft
Overall Length	6.59ft
Overall Width	9.94ft
Overall Body Height	6.33ft
Min Body Ground Clearance	6.33ft
Track Width	5.00ft
Lock-to-lock time	25.59ft
Wall to Wall Turning Radius	

Figure 3 Loading Bay Truck Turns - SU-30

117 Kendrick Street | Needham, Massachusetts

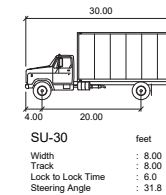
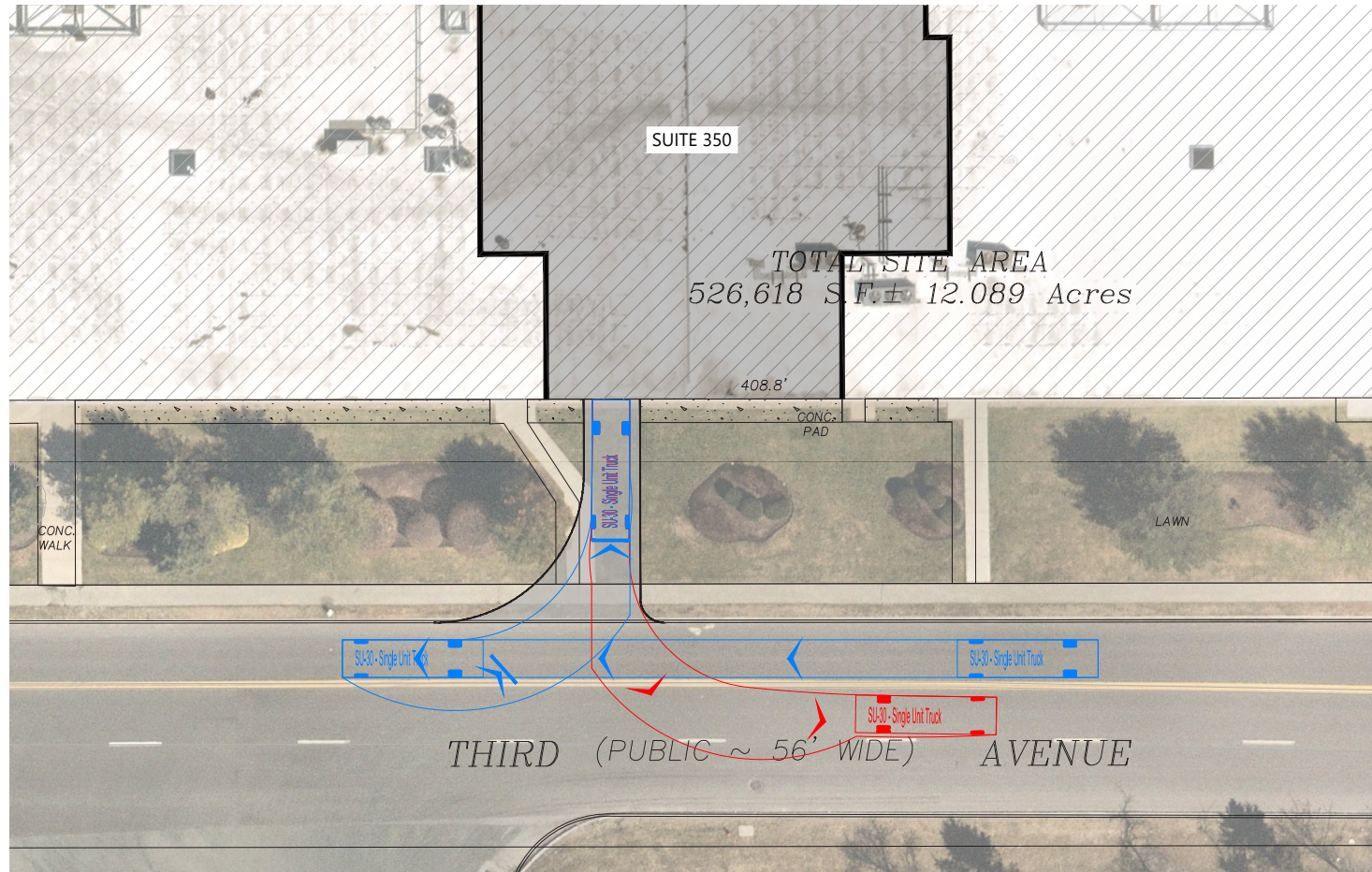


Figure 4 Observed Queues
 117 Kendrick Street | Needham, MA



\\vhb\gb\proj\Boston\16169.00 117 Kendrick\Graphics\FIGURES\Figures 11-2023



- Morning Peak Hour
- Evening Peak Hour
- ||||| Left-Turn Lane Queue
- Right-Turn Lane Queue
- Proposed Loading Dock

Appendix A

117 Kendrick Street

Suite 350 & Third Avenue Loading Dock

Bulfinch

1. SITE LOCATION AND PLAN

2. PROJECT OVERVIEW

3. BUILDING FLOORPLAN UPDATES

4. PROJECT SITE IMPROVEMENTS

5. LOADING AND SERVICE OPERATIONS

6. THIRD AVENUE IMPACTS

7. SPECIAL PERMIT AMENDMENT AND SCHEDULE

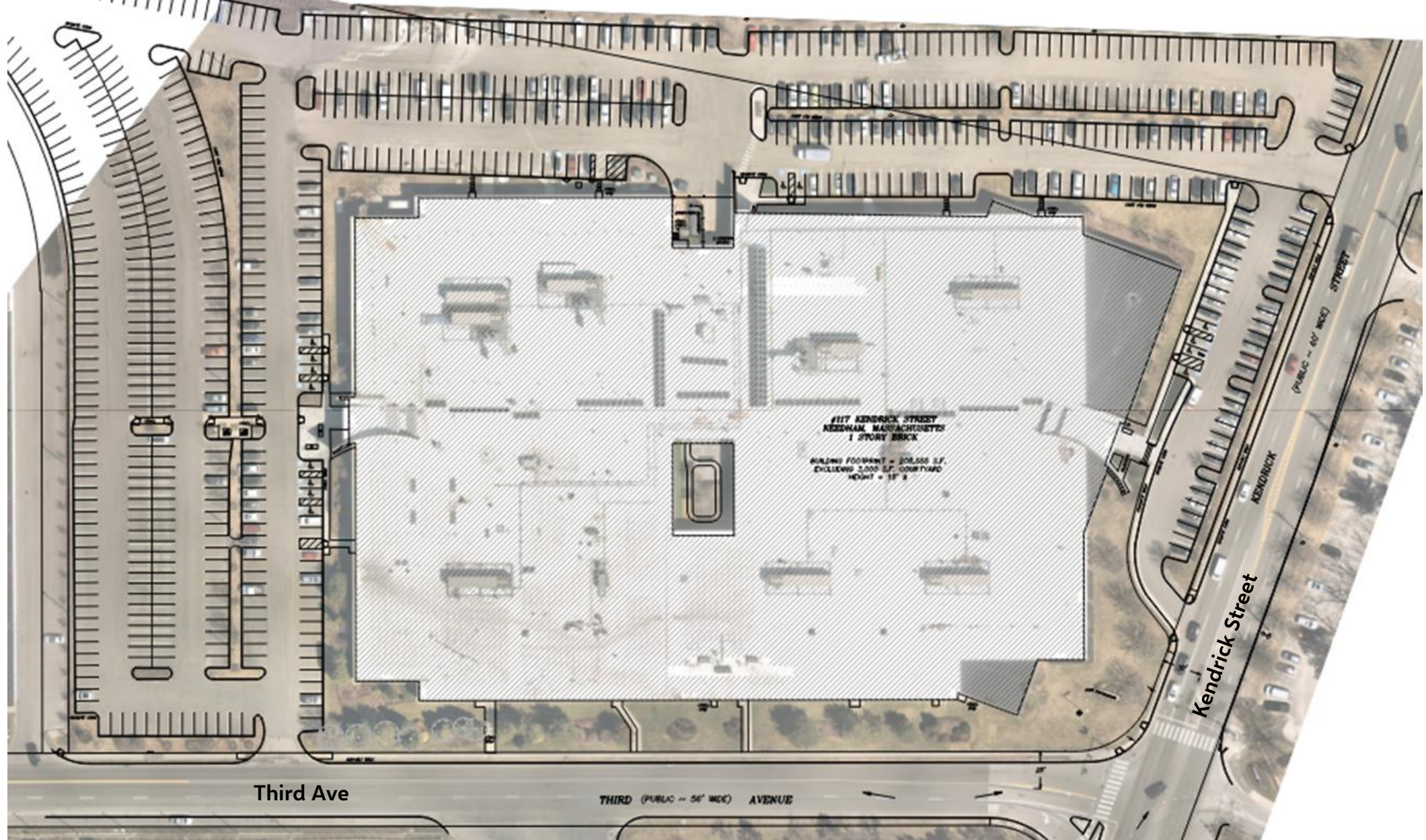
8. COMMENTS AND NEXT STEPS



Source: Bulfinch

Site Location

117 Kendrick Street | Bulfinch



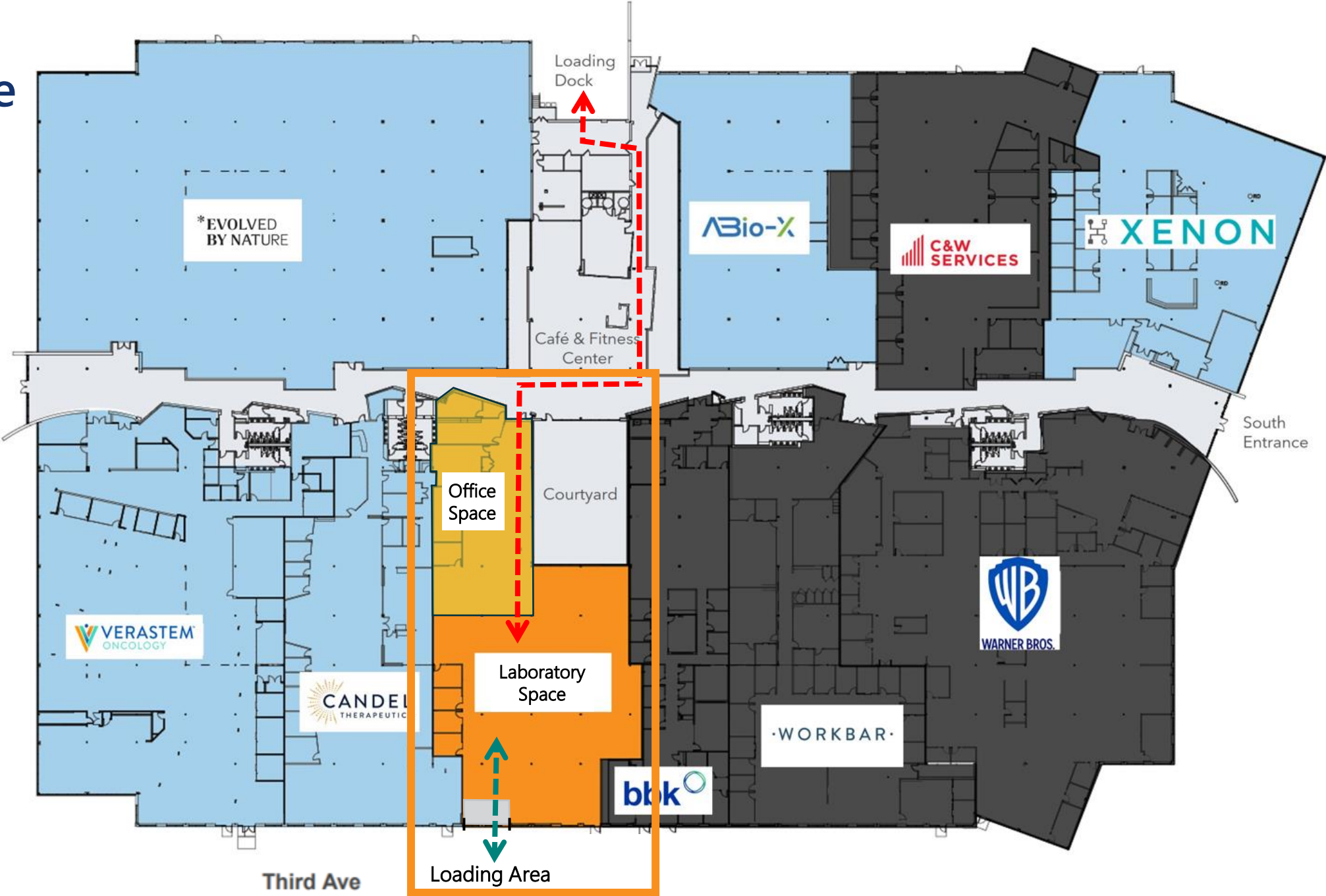
Existing Site Plan

117 Kendrick Street | Bulfinch

Suite Update

- Available
- Life Science
- Office

North Entrance



Loading Dock

ABio-X

C&W SERVICES

XENON

Café & Fitness Center

South Entrance

Office Space

Courtyard

VERASTEM ONCOLOGY

CANDEL THERAPEUTICS

Laboratory Space

WB WARNER BROS.

WORKBAR

bbk

Third Ave

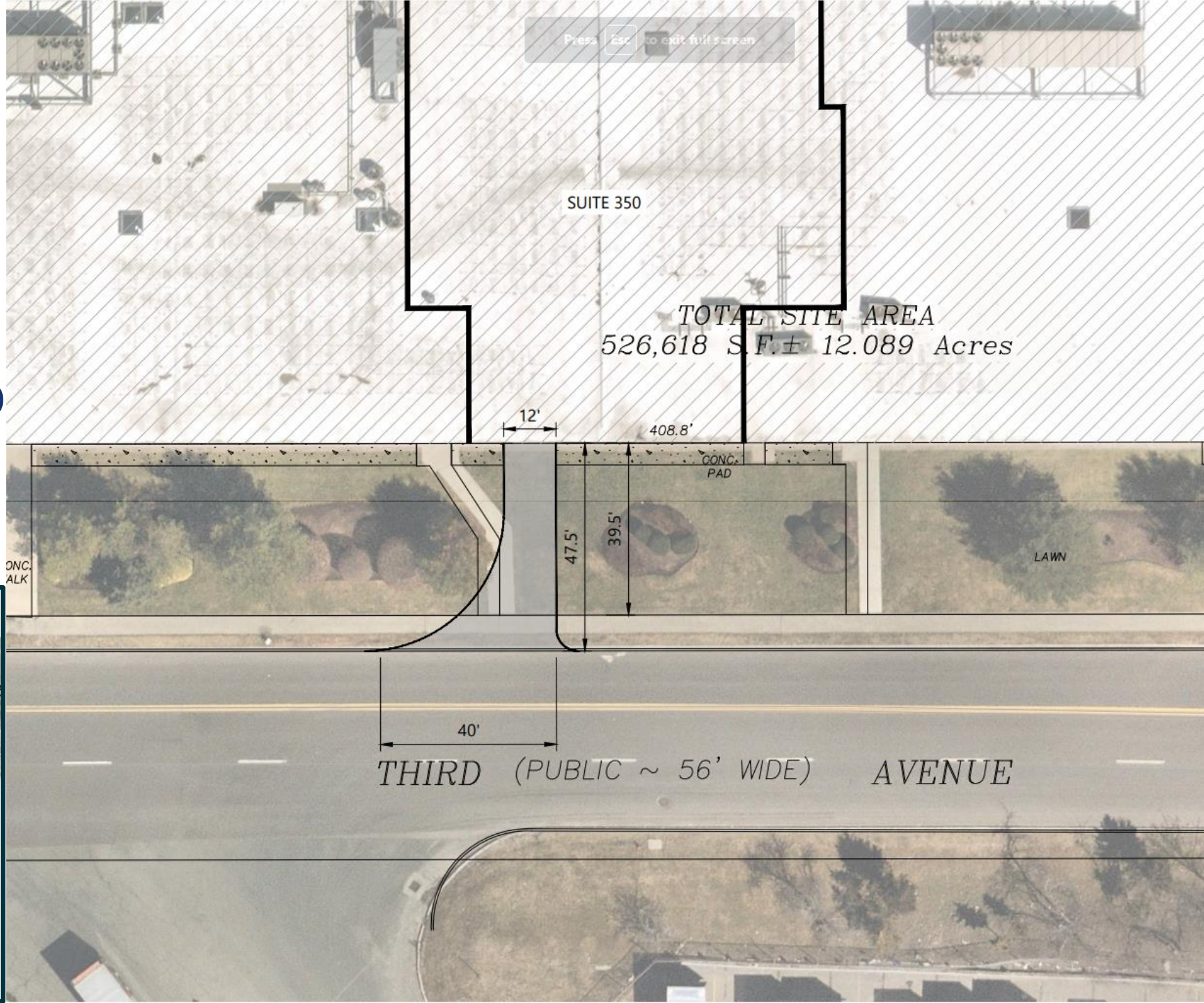
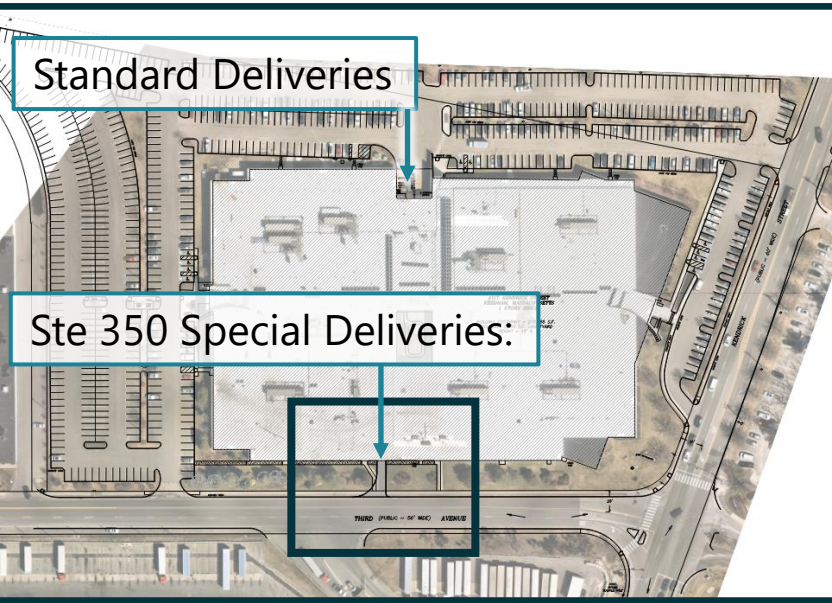
Loading Area

Proposed Loading Area

12' Loading Bay to be accessed via Third Ave

To be used exclusively for
special deliveries for Suite 350

Standard deliveries to use existing loading bay



Loading Dock Operations and Characteristics Comparison

Location	Building Size (KSF)	Special Deliveries Directly to Lab (i.e new dock)
20 Cambridge Discovery Park	175	2 / day
30 Cambridge Discovery Park	110	3 / day
Candel Tx 117 Kendrick Ste 450	15	1-2 / week
Organogenesis 333 Providence Hwy, Norwood	85	1-2 / week
117 Kendrick Ste 350	18	1-2 / week

Only special deliveries will utilize Suite 350 loading bay

Typical Delivery Vehicles

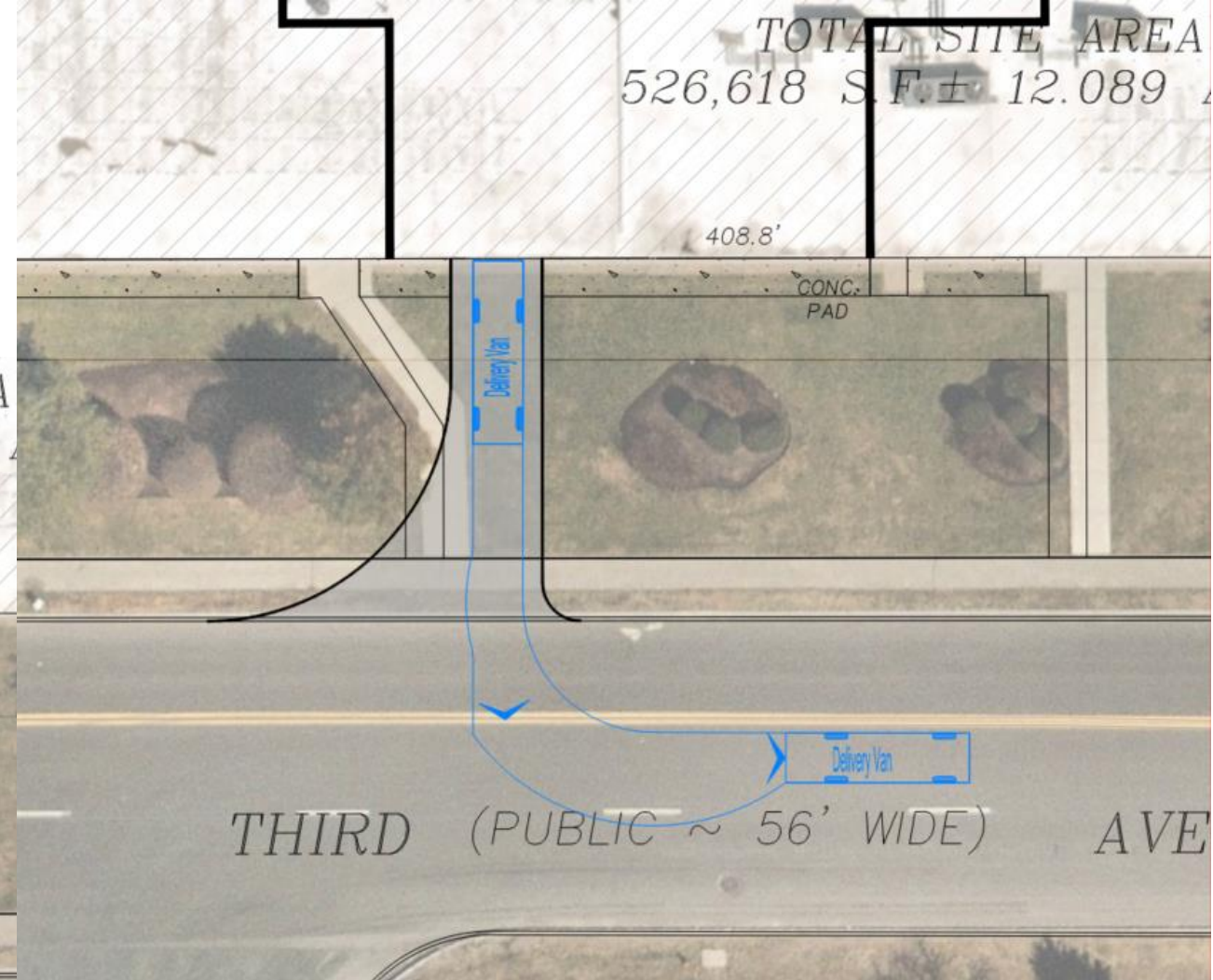
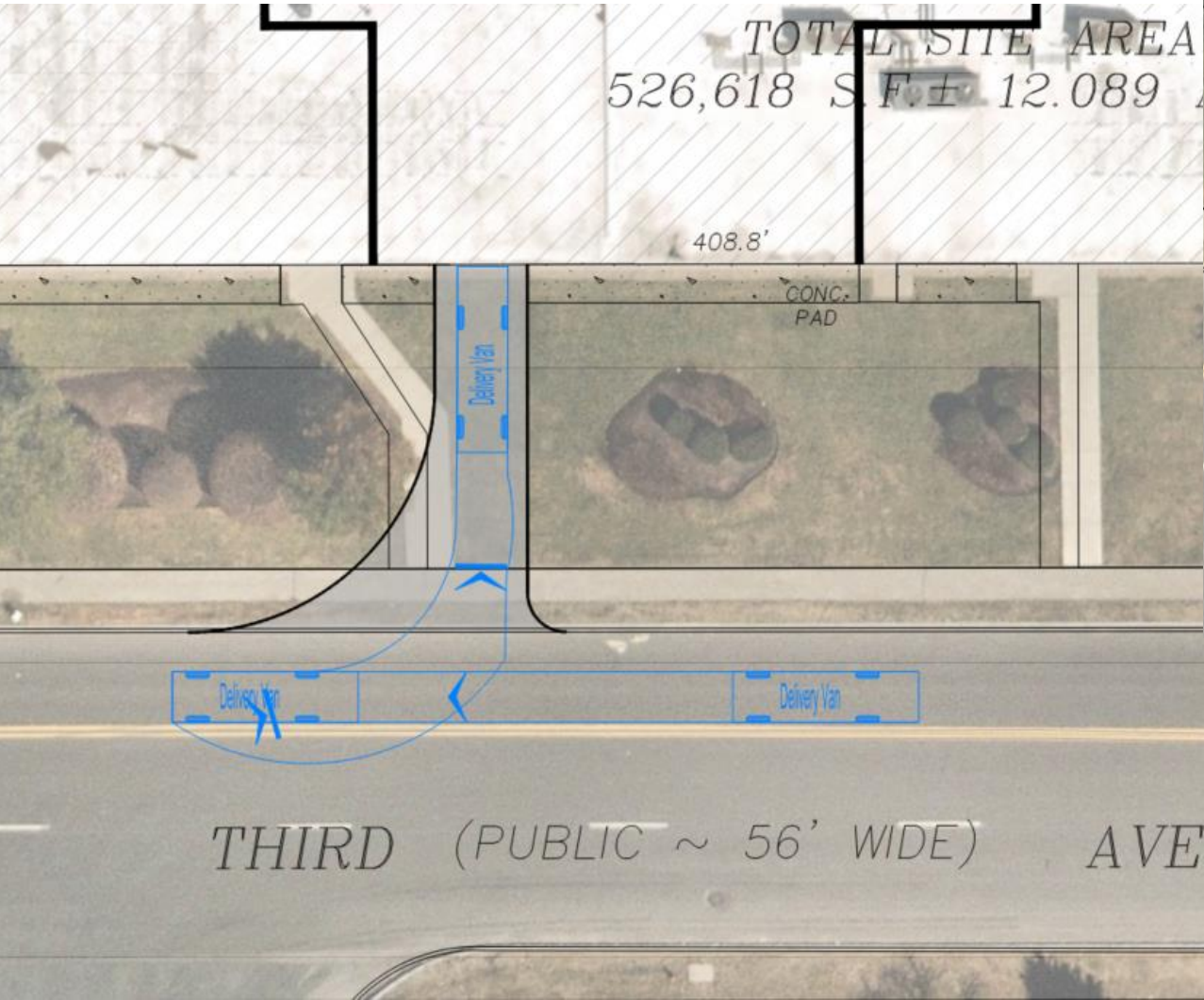


Delivery Vehicles

Vans are by far the most common delivery vehicle

SU trucks are most common for large deliveries

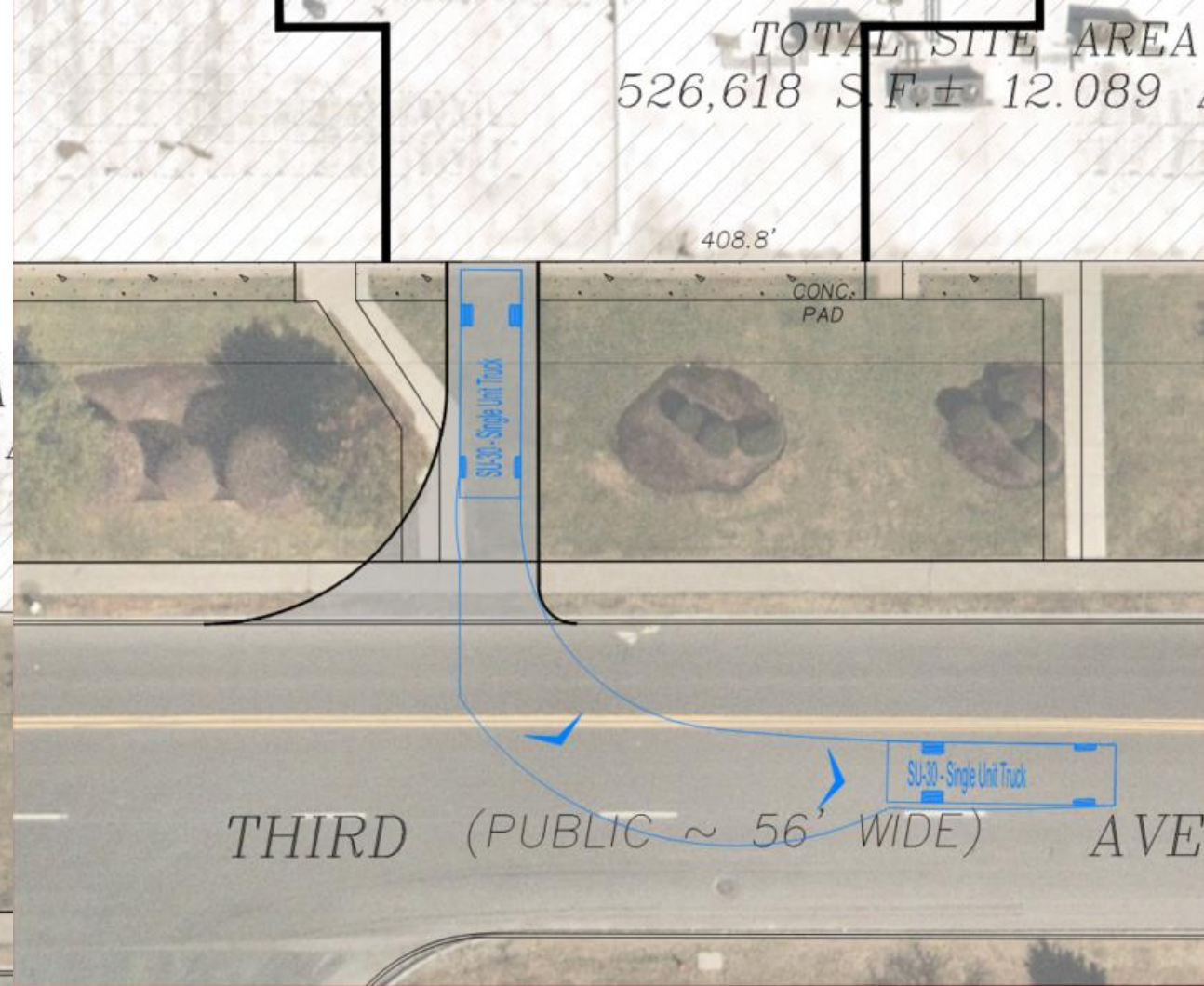
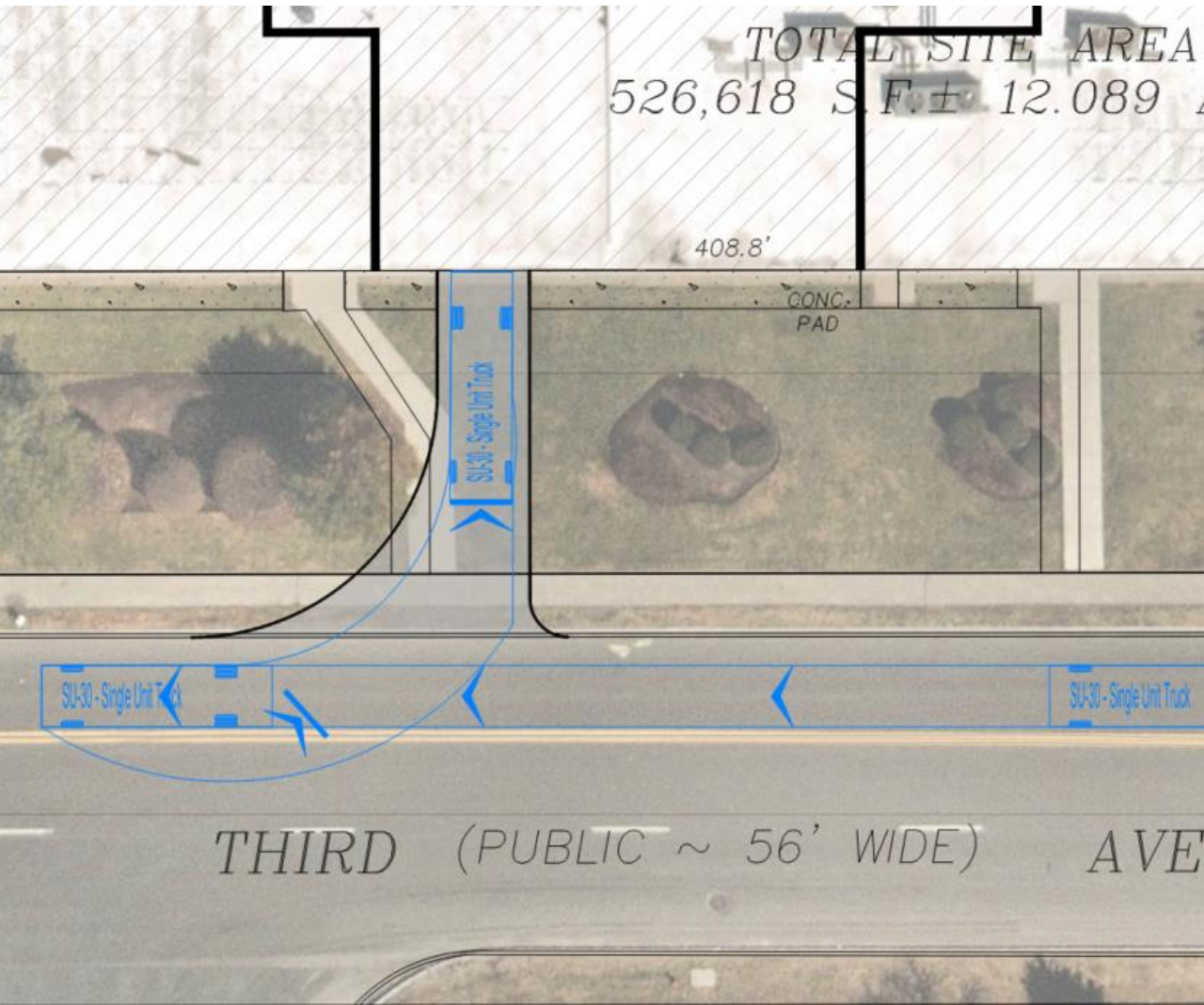
Typical Delivery Vehicles



Vans

Vans are the most common delivery vehicle.
Expected to comprise about 2/3 of all deliveries

Typical Delivery Vehicles



SU-30

Smaller truck, about 30' in length are expected to comprise about 30% of all deliveries

Exterior - Existing Condition (from Third Ave)



Exterior - Proposed Condition (from Third Ave)



Exterior - Existing Condition (from Third Ave)



Exterior - Proposed Condition (from Third Ave)

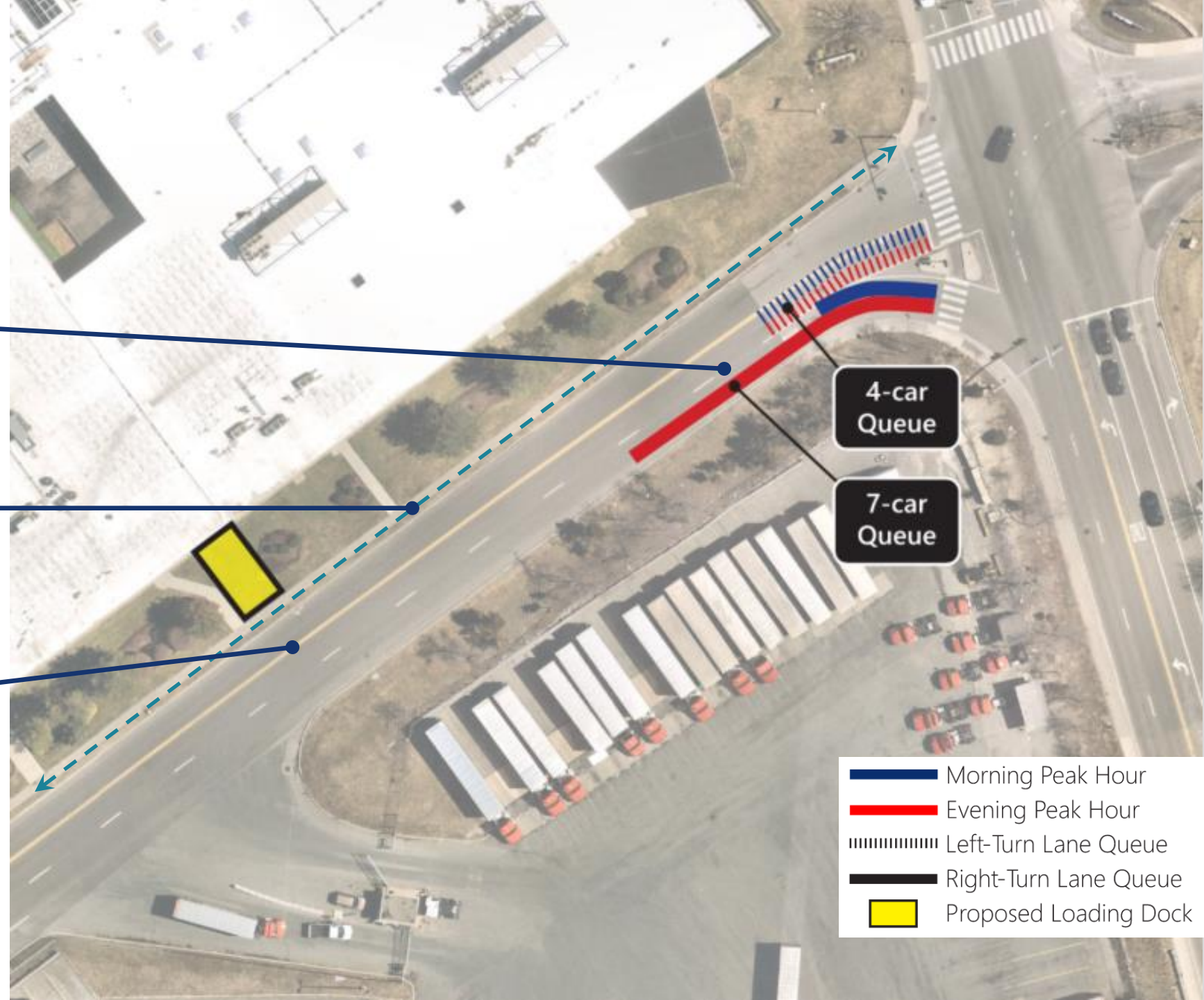


Third Avenue Traffic Operations

Intersection queuing: no conflicts with proposed loading dock.

Pedestrian Impacts: sidewalks will remain open, and disruptions minimized

Gap Study: ample gaps of 15+ seconds observed on Third Street



4-car Queue

7-car Queue

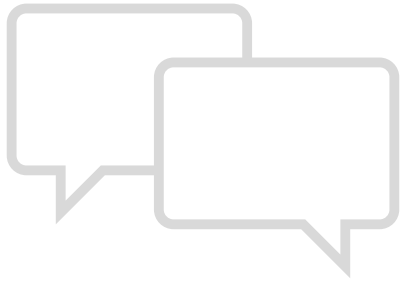
- Morning Peak Hour
- Evening Peak Hour
- - - Left-Turn Lane Queue
- Right-Turn Lane Queue
- Proposed Loading Dock

Third Avenue Gap Study

- A gap study measures the size and frequency of gaps in traffic flow
 - Gaps are the time clearance intervals between vehicles passing a point on the road.
- A gap study was conducted to verify trucks will have ample time to maneuver along Third Avenue into and out of the proposed Suite 350 loading bay
 - Approx. gap required for loading dock entry: up to 15 seconds
- 72 such gaps were observed on Third Avenue during the morning peak hour
- Reminder: 1-2 special deliveries per week destined for Suite 350 loading bay
 - Loading dock will cease operation before evening peak hour of traffic

Special Permit Amendment and Schedule

- Minor Amendment to the Special Permit
 - No Traffic Impacts to 3rd Avenue
 - New Loading Dock entrance and overall parking supply compliant with Zoning Bylaw
 - Minor exterior building alterations subject to design review
 - No change in gross floor area
- Next Steps
 - Respond to Board questions and comments
 - File application materials



Next Steps

Comments?

Questions?

Next Steps





TOWN OF NEEDHAM

**TOWN HALL
1471 Highland Avenue
Needham, MA 02492-2669**

Design Review Board

November 12, 2023

Memo: Modification to Site Plan Review, 117 Kendrick Street

The applicant proposes modifications to the building to install a new entrance and garage door/loading entrance to a single tenant space.

The modifications require changing a pair of windows by removing the portion of wall below the existing windows. One side will have new storefront windows and entry door. The other side will be changed to a roll up overhead door with a weather apron added to the wall for protection during deliveries. A driveway and sidewalk will also be installed with a new curb cut.

The new storefront will match the existing building storefront. The overhead door will be similarly finished. The Board approves of these designs. A light will be added above the door for personnel, not the garage door. The weather apron was discussed. There was concern that it didn't easily fit in with the decorative accents on the windows. While most of the trucks expected will be able to back into the garage, there will be some larger box trucks that will not, and the apron will help prevent rain or snow from interfering with deliveries. This is acceptable to the Board.

The Board asked whether traffic will be impacted when trucks back in to the entry. The drive entry is asymmetric, with a larger arc on one side than the other, this will enable trucks to back in without having to turn partially into the driving lanes. The Board agreed this is a good solution.

The Board did discuss two items that we recognize are really issues for the Planning Board and not the DRB. The first was why this delivery door was necessary, and whether they could use the existing delivery area like the other tenants. The applicant noted that they are creating space for a tenant that would have materials delivered that they would not want to transfer through the general shared public spaces of the building. The Board also asked about whether noise from deliveries would impact other tenants, The applicant stated it should not be an issue, the volume of deliveries should be low and not a nuisance.

The DRB approves the proposed changes to the building.

End of notes.



TOWN OF NEEDHAM

DESIGN REVIEW BOARD

Public Service Administration Building

500 Dedham Avenue

Needham, MA 02492

Application and Report

Property Location: 117 Kendrick Street Date: 10/31/2023

Owner: 117 Kendrick DE, LLC

Address: 116 Huntington Ave #400 Boston, MA 02116
Street City State Zip

Telephone: (781) 707-4000

Applicant: 117 Kendrick DE, LLC

Address: 116 Huntington Ave #400 Boston, MA 02116
Street City State Zip

Telephone: (781) 707-4000

Designer/Installer: Vivo Architecture Tagline: The Richmond Group
123 N. Washington Street 77 Main Street

Address: Boston, MA 02113 Hopkinton, MA 01748
Street City State Zip

Telephone: (617) 227-7727 (508) 435-9700

Type of Application

- ☐ Sign
- ☐ Minor Project
- ☒ Exterior Alterations
- ☐ Major Project (Site Plan Review)
 - ☐ - preliminary
 - ☐ - final
- ☐ Flexible Subdivision
- ☐ Planned Residential Development
- ☐ Residential Compound

Brief description of sign or project:

Minor amendment to existing Special Permit for the office/life science building located at 117 Kendrick Street to allow for the addition of a loading dock bay to accommodate special deliveries to one of the office/life science suites from 3rd Avenue. This bay is needed because servicing this particular suite from the existing loading dock is not a workable arrangement and will render this suite difficult to market to prospective lab/R&D tenants. The property remains compliant with zoning and there is no change in gross floor area of the building.

Please email completed application to elitchman@needhamma.gov

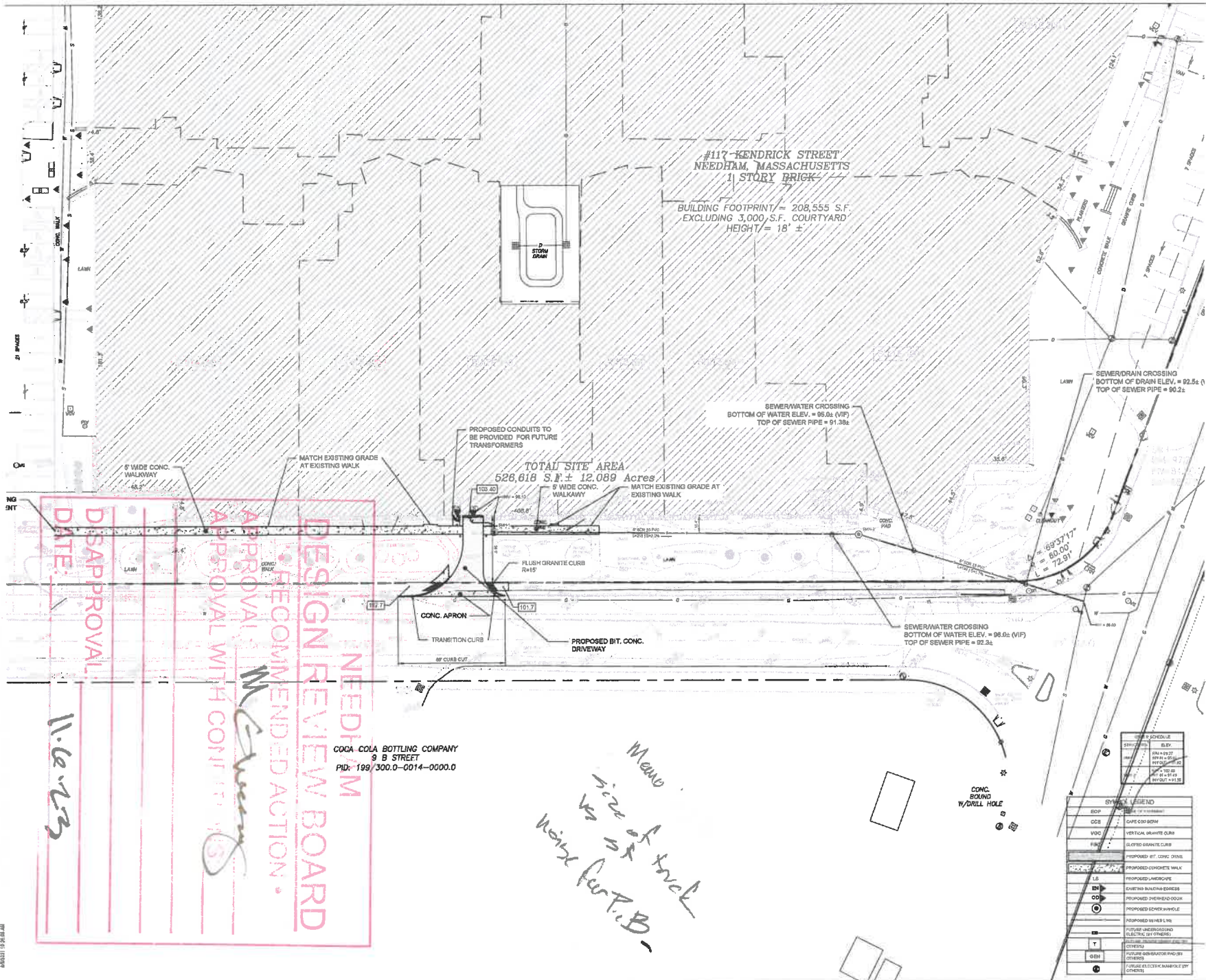
NEEDHAM
DESIGN REVIEW BOARD

RECOMMENDED ACTION:
APPROVAL WITH CONDITIONS

DISAPPROVAL:

DATE: 11.6.23

Revised 2/2020



DESIGN REVIEW BOARD
RECOMMENDED ACTION
APPROVAL: *[Signature]*
APPROVAL WITH COMMENTS: *[Signature]*
DATE: 11.6.23
DSAPPROVAL:

COCA COLA BOTTLING COMPANY
9 B STREET
PID: 199/300.0-0014-0000.0

*Mean size of truck
to 5 ft
width feet. B.*

Bulfinch

Exterior - Proposed Condition (from Third Ave)

NEECHAM	
DESIGN REVIEW BOARD	
• RECOMMENDED ACTION •	
APPROVAL:	<i>[Signature]</i>
APPROVAL WITH CONDITIONS:	<i>[Signature]</i>
DISAPPROVAL:	
DATE:	<i>11.6.23</i>

From: [Joseph Prondak](#)
To: [Alexandra Clee](#)
Subject: RE: request for comments: 117 Kendrick Street - Minor Modification Application
Date: Thursday, November 16, 2023 12:24:12 PM

Hi Alex,

The Building Department has no concerns for this proposal.

Joe Prondak
Needham Building Commissioner
781-455-7550 x308

From: Alexandra Clee <aclee@needhamma.gov>
Sent: Wednesday, November 15, 2023 7:05 PM
To: Tom Conroy <TConroy@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>; Joseph Prondak <jprondak@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>
Cc: Elisa Litchman <elitchman@needhamma.gov>; Lee Newman <LNewman@needhamma.gov>; Justin Savignano <jsavignano@needhamma.gov>; Donald Anastasi <DAnastasi@needhamma.gov>; Jay Steeves <steevesj@needhamma.gov>; Ronnie Gavel <rgavel@needhamma.gov>
Subject: FW: request for comments: 117 Kendrick Street - Minor Modification Application

Hi All,

I had a braindead moment and sent this to Chief Condon instead of the correct, current Chief .
Apologies.

Alex.

Alexandra Clee
Assistant Town Planner
Needham, MA
781-455-7550 ext. 271
www.needhamma.gov/planning

From: Alexandra Clee
Sent: Wednesday, November 15, 2023 6:59 PM
To: Thomas Ryder <tryder@needhamma.gov>; Joseph Prondak <jprondak@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>; Dennis Condon <DCondon@needhamma.gov>

Cc: Elisa Litchman <elitchman@needhamma.gov>; Lee Newman <LNewman@needhamma.gov>; Justin Savignano <jsavignano@needhamma.gov>; Donald Anastasi <DAnastasi@needhamma.gov>; Jay Steeves <steevesj@needhamma.gov>; Ronnie Gavel <rgavel@needhamma.gov>
Subject: request for comments: 117 Kendrick Street - Minor Modification Application

Dear all,

We have received the attached application materials for a proposed Minor Modification to 117 Kendrick Street to add a loading bay.

The Planning Board has scheduled this matter for December 5, 2023. Please send your comments by Wednesday November 29, 2023 at the latest.

Please find attached:

1. Letter from Timothy Sullivan, Attorney, dated November 14, 2023.
2. Application for a Minor Modification.
3. Plan Sheet C100, entitled "Existing Conditions Plan," prepared by Highpoint Engineering, Inc., dated July 24, 2023, revised June 21, 2023 and October 26, 2023.
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Thanks, alex.

Alexandra Clee
Assistant Town Planner
Needham, MA
781-455-7550 ext. 271
www.needhamma.gov/planning

From: [Tom Conroy](#)
To: [Alexandra Clee](#)
Subject: RE: request for comments: 117 Kendrick Street - Minor Modification Application
Date: Thursday, November 16, 2023 1:52:58 PM
Attachments: [image002.png](#)
[image003.png](#)

Hi Alex,
The project looks good from the Fire Dept side.
Thank you.



Thomas M. Conroy

Fire Chief - Needham Fire Department

tconroy@needhamma.gov

Ph (781) 455-7580

From: Alexandra Clee <aclee@needhamma.gov>
Sent: Wednesday, November 15, 2023 8:01 PM
To: Tom Conroy <TConroy@needhamma.gov>
Subject: RE: request for comments: 117 Kendrick Street - Minor Modification Application

We would like your comments (or someone from your team) on the project. Sorry again !

Alexandra Clee
Assistant Town Planner
Needham, MA
781-455-7550 ext. 271
www.needhamma.gov/planning

From: Tom Conroy <TConroy@needhamma.gov>
Sent: Wednesday, November 15, 2023 7:59 PM
To: Alexandra Clee <aclee@needhamma.gov>
Subject: RE: request for comments: 117 Kendrick Street - Minor Modification Application

No problem, Alex. Please no worries.
Thank you for the update!!
If you need anything from me or the NFD please don't hesitate.
Thanks.

Tom

From: Alexandra Clee <aclee@needhamma.gov>

Sent: Wednesday, November 15, 2023 7:05 PM

To: Tom Conroy <TConroy@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>; Joseph Prondak <jprondak@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>

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Thanks, alex.

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Needham, MA
781-455-7550 ext. 271
www.needhamma.gov/planning

From: [John Schlittler](#)
To: [Alexandra Clee](#)
Subject: RE: request for comments: 117 Kendrick Street - Minor Modification Application
Date: Tuesday, November 28, 2023 3:24:02 PM

Only question would be if the trucks when unloading would block the sidewalk. Otherwise, I am fine with it.

Thanks

From: Alexandra Clee <aclee@needhamma.gov>
Sent: Tuesday, November 28, 2023 12:51 PM
To: John Schlittler <JSchlittler@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>
Cc: Lee Newman <LNewman@needhamma.gov>
Subject: FW: request for comments: 117 Kendrick Street - Minor Modification Application

Hi there,

Just a reminder that I would like your comments on this by tomorrow.

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Alexandra Clee

Assistant Town Planner

Needham, MA

781-455-7550 ext. 271

www.needhamma.gov/planning



TOWN OF NEEDHAM, MASSACHUSETTS
PUBLIC WORKS DEPARTMENT
500 Dedham Avenue, Needham, MA 02492
Telephone (781) 455-7550 FAX (781) 449-9023

November 30, 2023

Needham Planning Board
Needham Public Safety Administration Building
Needham, MA 02492

RE: Minor Modification Major Project Special Permit No. 98-11
117 Kendrick Street- Bullfinch Companies

Dear Members of the Board,

The Department of Public Works has completed its review of the above referenced application for the proposed work at 117 Kendrick Street. The project includes an additional curb cut in front of the building along Kendrick Street to allow for truck deliveries into a proposed loading bay.

The documents submitted for review are as follows:

1. Letter from Timothy Sullivan, Attorney, dated November 14, 2023.
2. Application for a Minor Modification.
3. Plan Sheet C100, entitled "Existing Conditions Plan," prepared by Highpoint Engineering, Inc., dated July 24, 2023, revised June 21, 2023 and October 26, 2023.
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Our comments and recommendations are as follows:

- The Engineering Division has met with the applicant and their engineers onsite over the summer to discuss. The proposal is not an ideal situation for delivery trucks to back into a drive from the street. However, we have no comment or objection to the size of

vehicles and expected delivery weekly as indicated in the report prepared by VHB dated November 13, 2023.

If you have any questions regarding the above, please contact our office at 781-455-7538.

Truly yours,

Thomas A Ryder
Town Engineer

From: [Sullivan, Timothy](#)
To: [Alexandra Clee](#)
Cc: [Lee Newman](#)
Subject: RE: request for comments: 117 Kendrick Street - Minor Modification Application
Date: Thursday, November 30, 2023 2:19:37 PM

Thanks, Alex. I checked with Sean Manning at VHB and his response is as follows:

The loading dock has been designed to accommodate the special deliveries that a lab tenant could expect. We have estimated that the frequency of deliveries is likely 1-2 times per week based upon a detailed assessment of similar tenant types and sizes that Bulfinch has leases with. These deliveries are primarily fulfilled by vans – but also medium sized box trucks. All deliveries will be accommodated within the proposed dock bay, with the truck parked behind and not blocking or encroaching upon any portion of both the street right-of-way and the adjacent pedestrian sidewalk.

Timothy W. Sullivan

Direct (617) 574-4179

Mobile (617) 645-4361

[goulston&storrs](#)

From: Alexandra Clee <aclee@needhamma.gov>
Sent: Tuesday, November 28, 2023 4:24 PM
To: Sullivan, Timothy <TSullivan@GOULSTONSTORRS.com>
Cc: Lee Newman <LNewman@needhamma.gov>
Subject: FW: request for comments: 117 Kendrick Street - Minor Modification Application

FYI.

Alexandra Clee
Assistant Town Planner
Needham, MA
781-455-7550 ext. 271
www.needhamma.gov/planning

From: John Schlittler <JSchlittler@needhamma.gov>
Sent: Tuesday, November 28, 2023 3:24 PM
To: Alexandra Clee <aclee@needhamma.gov>
Subject: RE: request for comments: 117 Kendrick Street - Minor Modification Application

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Sent: Tuesday, November 28, 2023 12:51 PM
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Alex.

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Justin Savignano <jsavignano@needhamma.gov>; Donald Anastasi <DAnastasi@needhamma.gov>;
Jay Steeves <steevesj@needhamma.gov>; Ronnie Gavel <rgavel@needhamma.gov>
Subject: request for comments: 117 Kendrick Street - Minor Modification Application

Dear all,

We have received the attached application materials for a proposed Minor Modification to 117 Kendrick Street to add a loading bay.

The Planning Board has scheduled this matter for December 5, 2023. Please send your comments by Wednesday November 29, 2023 at the latest.

Please find attached:

1. Letter from Timothy Sullivan, Attorney, dated November 14, 2023.
2. Application for a Minor Modification.
3. Plan Sheet C100, entitled "Existing Conditions Plan," prepared by Highpoint Engineering, Inc., dated July 24, 2023, revised June 21, 2023 and October 26, 2023.
4. Plan Sheet C002, entitled "Context Plan," prepared by Highpoint Engineering, Inc., dated July 24, 2023, revised June 21, 2023 and October 26, 2023.
5. Plan Sheet C300, entitled "Civil Site Plan," prepared by Highpoint Engineering, Inc., dated July 24, 2023, revised June 21, 2023 and October 26, 2023.
6. Memorandum regarding Transportation re: "Proposed Change of Use and New Loading Driveway Review," prepared by Ryan White and Sean Manning, vhb, dated November 13, 2023.
7. Conceptual Elevations, not dated, consisting of 5 sheets: Sheet 1, no title; Sheet 2, "Exterior - Existing Condition (from Third Ave)"; Sheet 3, "Exterior - Proposed Condition (from Third Ave)"; Sheet 4, "Exterior - Existing Condition (from Third Ave)"; Sheet 5, "Exterior - Proposed Condition (from Third Ave)".

Thanks, alex.

Alexandra Clee
Assistant Town Planner
Needham, MA
781-455-7550 ext. 271
www.needhamma.gov/planning

From: [John Schlittler](#)
To: [Alexandra Clee](#); [Thomas Ryder](#)
Cc: [Lee Newman](#)
Subject: RE: request for comments: 117 Kendrick Street - Minor Modification Application
Date: Monday, December 4, 2023 4:08:31 PM

Ok thank you I am fine with the project.
Thanks,

Chief John J Schlittler
Needham Police Department
88 Chestnut St
Needham, MA 02492
Office: (781-455-7583)
Fax: (781-453-9496)
FBINA 259
jschlittler@needhamma.gov

From: Alexandra Clee <aclee@needhamma.gov>
Sent: Thursday, November 30, 2023 2:41 PM
To: Thomas Ryder <tryder@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>
Cc: Lee Newman <LNewman@needhamma.gov>
Subject: FW: request for comments: 117 Kendrick Street - Minor Modification Application

Chief, Tom,

Please see response from the applicant to both of your comments.

THanks, alex.

Alexandra Clee
Assistant Town Planner
Needham, MA
781-455-7550 ext. 271
www.needhamma.gov/planning

From: Sullivan, Timothy <TSullivan@GOULSTONSTORRS.com>
Sent: Thursday, November 30, 2023 2:19 PM
To: Alexandra Clee <aclee@needhamma.gov>
Cc: Lee Newman <LNewman@needhamma.gov>
Subject: RE: request for comments: 117 Kendrick Street - Minor Modification Application

Thanks, Alex. I checked with Sean Manning at VHB and his response is as follows:

The loading dock has been designed to accommodate the special deliveries that a lab tenant could expect. We have estimated that the frequency of deliveries is likely 1-2 times per week based upon a detailed assessment of similar tenant types and sizes that Bulfinch has leases with. These deliveries are primarily fulfilled by vans – but also medium sized box trucks. All deliveries will be accommodated within the proposed dock bay, with the truck parked behind and not blocking or encroaching upon any portion of both the street right-of-way and the adjacent pedestrian sidewalk.

Timothy W. Sullivan

Direct (617) 574-4179

Mobile (617) 645-4361

goulston&storrs

From: Alexandra Clee <aclee@needhamma.gov>

Sent: Tuesday, November 28, 2023 4:24 PM

To: Sullivan, Timothy <TSullivan@GOULSTONSTORRS.com>

Cc: Lee Newman <LNewman@needhamma.gov>

Subject: FW: request for comments: 117 Kendrick Street - Minor Modification Application

FYI.

Alexandra Clee

Assistant Town Planner

Needham, MA

781-455-7550 ext. 271

www.needhamma.gov/planning

From: John Schlittler <JSchlittler@needhamma.gov>

Sent: Tuesday, November 28, 2023 3:24 PM

To: Alexandra Clee <aclee@needhamma.gov>

Subject: RE: request for comments: 117 Kendrick Street - Minor Modification Application

Only question would be if the trucks when unloading would block the sidewalk. Otherwise, I am fine with it.

Thanks

From: Alexandra Clee <aclee@needhamma.gov>

Sent: Tuesday, November 28, 2023 12:51 PM

To: John Schlittler <JSchlittler@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>

Cc: Lee Newman <LNewman@needhamma.gov>

Subject: FW: request for comments: 117 Kendrick Street - Minor Modification Application

From: [Thomas Ryder](#)
To: [John Schlittler](#); [Alexandra Clee](#)
Cc: [Lee Newman](#)
Subject: RE: request for comments: 117 Kendrick Street - Minor Modification Application
Date: Monday, December 4, 2023 4:45:24 PM

We agree

Thomas A Ryder, PE

Town Engineer

Needham Department of Public Works
500 Dedham Avenue
Needham, MA 02492
Telephone: 781-455-7538
Fax: 781-449-9023
E-mail: Tryder@needhamma.gov
Website: www.needhamma.gov

From: John Schlittler <JSchlittler@needhamma.gov>
Sent: Monday, December 4, 2023 4:08 PM
To: Alexandra Clee <aclee@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>
Cc: Lee Newman <LNewman@needhamma.gov>
Subject: RE: request for comments: 117 Kendrick Street - Minor Modification Application

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Alexandra Clee
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Subject: FW: request for comments: 117 Kendrick Street - Minor Modification Application

FYI.

Alexandra Clee
Assistant Town Planner
Needham, MA

FOR PLANNING BOARD USE ONLY

NEEDHAM

ZONING BOARD OF APPEALS

AGENDA

THURSDAY, December 14, 2023 - 7:30PM

Charles River Room Public Service Administration Building 500 Dedham Avenue Needham, MA 02492	Also livestreamed on Zoom Meeting ID: 869-6475-7241 To join the meeting click this link: https://us02web.zoom.us/j/86964757241
--	---

- 1. Minutes** Review and approve Minutes from November 16, 2023 meeting.
- 2. 7:30PM 30 Wilshire Park**
Jeremy & Jessica Karlin, owners, applied for a Special Permit under Sections 1.4.6, and any other applicable section of the By-Law to alter, enlarge and extend a pre-existing, non-conforming single-family to allow the demolition of an existing deck and stairs and replace it with a basement and a family room above. The property is located at 30 Wilshire Park, Needham, MA in the Single-Residence B (SRB) District. (Continued from November 16, 2023)
- 3. 7:30PM 460 Hillside Avenue**
Dish Wireless, LLC, applicant, applied to the Board of Appeals for a Special Permit under Sections 6.7.3.3 (b) (c) and any other applicable section of the By-Law to install as part of their wireless telecommunications network some of the following equipment: 3 antennas, 6 remote radio units, 3 junctions boxes, 3 fiber cables, and 3 power cables. The property is located at 460 Hillside Avenue, Needham, MA in the Industrial (I) District.
- 4. 7:45PM 320 Grove Street**
Corbin Petro and Jessica Gelman, owners, applied to the Board of Appeals for a Variance under MGL 40A, Section 10, 4.2.3, and Section 7.5.3 and any other applicable section of the Needham By-Law to seek zoning relief to allow side setbacks of no less than 15 feet where 25 feet are allowed due to unusual soil, shape of topography of the land. This request is associated with the demolition and reconstruction of an existing non-conforming single family home.
- 5. 8:00PM 1688 Central Avenue**
Holly Clarke, Gregg Darish, Robert DiMase, Matthew and Nicole Heideman, Carl Jonasson, Ann and Peter Lyons, and Eileen Sullivan, appellants, applied to the Board of Appeals for an Appeal of Building Inspector Decision (ABID) of Building Permit BC23-10079 issued to Matt Borrelli and Needham Enterprise LLC dated September 19, 2023, for the construction of a childcare facility. The ABID concludes that the Building Permit plans on file do not

Next ZBA Meeting – January 18, 2024

demonstrate that the construction, alteration or use as proposed complies with the Zoning By Laws as limited by the Dover Amendment MGL 40A, Section 3 The property is located at 1688 Central Street, Needham, MA in the Single-Residence A (SRA) District. (Continued from November 16, 2023)



ZBA Application For Hearing

RECEIVED TOWN CLERK
NEEDHAM, MA 02432

2023 NOV 28 PM 4:30

Applicants must consult with the Building Inspector prior to filing this Application. *Failure to do so will delay the scheduling of the hearing.*

Applicant Information

Applicant Name	DISH Wireless LLC			Date:	11/20/23
Applicant Address	5701 South Santa Fe Blvd, Littleton, CO 80120				
Phone		email			
Applicant is ☒ Owner; ☐ Tenant; ☐ Purchaser; ☐ Other _____					
If not the owner, a letter from the owner certifying authorization to apply must be included					
Representative Name	Kris Kopycinski and Andrew Gorham				
Address	100 Apollo Dr, Suite 303, Chelmsford, MA 01824				
Phone	978-799-9520	email	agorham@nbcllc.com		
Representative is ☐ Attorney; ☒ Contractor; ☐ Architect; ☐ Other _____					
Contact ☐ Me ☒ Representative in connection with this application.					

Subject Property Information

Property Address	460 Hillside Ave		
Map/Parcel Number	199/100.0-0003-0000.0	Zone of Property	Industrial
Is property within 100 feet of wetlands, 200 feet of stream or in flood Plain? ☐ Yes ☒ No			
Is property ☐ Residential or ☒ Commercial			
If residential renovation, will renovation constitute "new construction"? ☐ Yes ☐ No			
If commercial, does the number of parking spaces meet the By-Law requirement? ☒ Yes ☐ No			
Do the spaces meet design requirements? ☒ Yes ☐ No			
Application Type (select one): ☒ Special Permit ☐ Variance ☐ Comprehensive Permit ☐ Amendment ☐ Appeal Building Inspector Decision			



ZBA Application For Hearing

Existing Conditions:

4 story commercial building. Existing Wireless Telecommunications Facility.

DISH Wireless to add to existing facility

Statement of Relief Sought:

Dish proposes to place 3 antennas, 6 RRUs, 3 junction box(s), 3 fiber cable(s),

at the 37/46 foot RAD. Dish will require a lease area for ground equipment.

Applicable Section(s) of the Zoning By-Law:

6.7.3.3

If application under Zoning Section 1.4 above, list non-conformities:

	Existing Conditions	Proposed Conditions
Use		
# Dwelling Units		
Lot Area (square feet)		
Front Setback (feet)		
Rear Setback (feet)		
Left Setback (feet)		
Right Setback (feet)		
Frontage (feet)		
Lot Coverage (%)		
FAR (Floor area divided by the lot area)		
<i>Numbers must match those on the certified plot plan and supporting materials</i>		



ZBA Application For Hearing

Date Structure Constructed including additions:
1943

Date Lot was created:

Submission Materials	Provided
Certified Signed Plot Plan of Existing and Proposed Conditions (Required)	X
Application Fee, check made payable to the Town of Needham Check holders name, address, and phone number to appear on check and in the Memo line state: "ZBA Fee – Address of Subject Property" (Required)	X
If applicant is tenant, letter of authorization from owner (Required)	X
Electronic submission of the complete application with attachments (Required)	X
Elevations of Proposed Conditions (when necessary)	
Floor Plans of Proposed Conditions (when necessary)	

Feel free to attach any additional information relative to the application.
Additional information may be requested by the Board at any time during the
application or hearing process.



I hereby request a hearing before the Needham Zoning Board of Appeals. I have
reviewed the Board Rules and instructions.

I certify that I have consulted with the Building Inspector 9/28/23
date of consult

Date: 11/20/23 Applicant Signature Andrew Gorham

An application must be submitted to the Town Clerk's Office at
townclerk@needhamma.gov and the ZBA Office at dcollins@needhamma.gov



DISH Wireless L.L.C. SITE ID:

BOBOS01058A

DISH Wireless L.L.C. SITE ADDRESS:

**460 HILLSIDE AVENUE
NEEDHAM, MA 02494**

MASSACHUSETTS CODE COMPLIANCE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

CODE TYPE	CODE
BUILDING	MA STATE BUILDING CODE, 9TH EDITION (780 CMR)/2015 IBC W/ AMENDMENTS
MECHANICAL	MECHANICAL CODE 2015 OF MASSACHUSETTS/2015 IMC W/ AMENDMENTS
ELECTRICAL	MA ELECTRICAL CODE/2020 NEC W/ AMENDMENTS

SHEET INDEX

SHEET NO.	SHEET TITLE
T-1	TITLE SHEET
A-1	BUILDING PLAN
A-2	ANTENNA PLAN, ELEVATION AND SCHEDULE
A-3	BUILDING ELEVATION
A-4	EQUIPMENT PLATFORM AND H-FRAME DETAILS
A-5	EQUIPMENT DETAILS
A-6	EQUIPMENT DETAILS
E-1	ELECTRICAL/FIBER ROUTE PLAN AND NOTES
E-2	ELECTRICAL DETAILS
E-3	ELECTRICAL ONE-LINE & PANEL SCHEDULE
G-1	GROUNDING PLANS AND NOTES
G-2	GROUNDING DETAILS
G-3	GROUNDING DETAILS
RF-1	RF CABLE COLOR CODE
GN-1	LEGEND AND ABBREVIATIONS
GN-2	RF SIGNAGE
GN-3	GENERAL NOTES
GN-4	GENERAL NOTES
GN-5	GENERAL NOTES
GN-6	PMI CHECKLIST & NOTES
ST-1	CANISTER DETAILS
ST-2	CONNECTION DETAILS
ST-3	BILL OF MATERIALS

SCOPE OF WORK

THIS IS NOT AN ALL INCLUSIVE LIST. CONTRACTOR SHALL UTILIZE SPECIFIED EQUIPMENT PART OR ENGINEER APPROVED EQUIVALENT. CONTRACTOR SHALL VERIFY ALL NEEDED EQUIPMENT TO PROVIDE A FUNCTIONAL SITE. THE PROJECT GENERALLY CONSISTS OF THE FOLLOWING:

- SECTOR SCOPE OF WORK:
- INSTALL (3) PROPOSED PANEL ANTENNAS (1 PER SECTOR)
 - INSTALL (3) PROPOSED ANTENNA MOUNTS (1 PER SECTOR)
 - INSTALL (2) PROPOSED ANTENNA CONCEALMENTS (1 PER BETA & GAMMA SECTORS)
 - INSTALL PROPOSED JUMPERS
 - INSTALL (6) PROPOSED RRU_s (2 PER SECTOR)
 - INSTALL (3) PROPOSED RRU MOUNTS (1 PER SECTOR)
 - INSTALL (3) PROPOSED OVER VOLTAGE PROTECTION DEVICE (OVP) (1 PER SECTOR)
 - INSTALL (3) PROPOSED DC POWER CABLES (1 PER SECTOR)
 - INSTALL (3) PROPOSED FIBER TRUNKS (1 PER SECTOR)
 - INSTALL PROPOSED CABLE TRAY

- ROOFTOP SCOPE OF WORK:
- INSTALL (1) PROPOSED BBU IN CABINET
 - INSTALL (1) PROPOSED EQUIPMENT CABINET
 - INSTALL (1) PROPOSED NEMA 3 TELCO-FIBER BOX
 - INSTALL (1) PROPOSED GPS UNIT

SITE PHOTO



UNDERGROUND SERVICE ALERT - 811 DIG SAFE
UTILITY NOTIFICATION CENTER OF MASSACHUSETTS
(888) 344-7233
WWW.DIGSAFE.COM

CALL 3 WORKING DAYS UTILITY NOTIFICATION PRIOR TO CONSTRUCTION

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE. NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

11"x17" PLOT WILL BE HALF SCALE UNLESS OTHERWISE NOTED

CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON THE JOB SITE, AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

SITE INFORMATION

PROPERTY OWNER: KEW MANAGEMENT GROUP, LLC
ADDRESS: 460 HILLSIDE AVENUE
NEEDHAM, MA 02494

TOWER TYPE: ROOFTOP

TOWER CO SITE ID: N/A

TOWER APP NUMBER: N/A

COUNTY: NORFOLK

LATITUDE (NAD 83): 42° 17' 28.352" N
42.291209 N

LONGITUDE (NAD 83): 71° 14' 10.971" W
71.236381 W

ZONING JURISDICTION: TOWN OF NEEDHAM

ZONING DISTRICT: OFFICE BUILDING - MFG

PARCEL NUMBER: NEED-100-003

OCCUPANCY GROUP: U

CONSTRUCTION TYPE: II-B

POWER COMPANY: EVERSOURCE/NSTAR

TELEPHONE COMPANY: COMCAST

PROJECT DIRECTORY

APPLICANT: DISH Wireless L.L.C.
5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

PROP. MANAGER: KEW MANAGEMENT GROUP, LLC.
460 HILLSIDE AVENUE
NEEDHAM, MA 02494
(781) 455-8222

SITE DESIGNER: NB+C ENGINEERING SERVICES, LLC
100 APOLLO DRIVE, SUITE 303
CHELMSFORD, MA 01824
(978) 856-8308

SITE ACQUISITION: ANDREW GORHAM
AGORHAM@NBCLLC.COM

CONSTRUCTION MANAGER: AARON CHANDLER
AARON.CHANDLER@DISH.COM

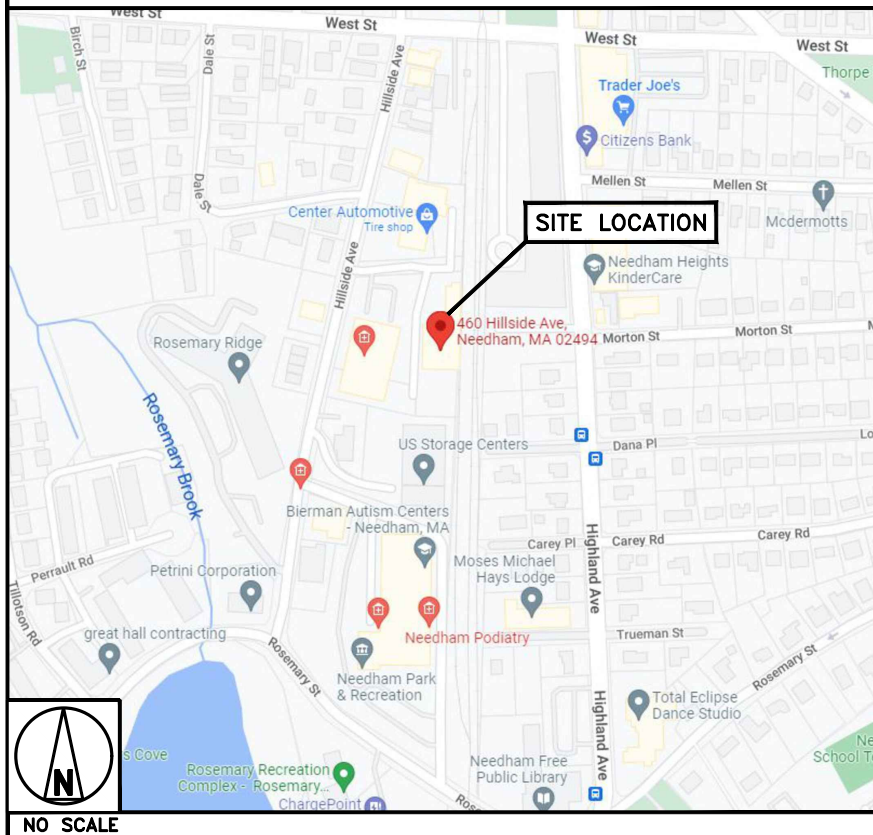
RF ENGINEER: SAMEER PARAKKAVETTY
SAMEER.PARAKKAVETTY@DISH.COM

DIRECTIONS

DIRECTIONS FROM BOSTON, LOGAN AIRPORT:

DESTINATION IS APPROXIMATELY 20 MILES FROM AIRPORT. THIS ROUTE HAS TOLLS. GET ON I-90 W FROM TRANSPORTATION WAY (TAKE TED WILLIAMS TUNNEL = 13'-9" CLEARANCE). AT END OF TUNNEL, KEEP TO THE LEFT (WEST 90 WORCESTER). TAKE EXIT 123A (WALTHAM / PROVIDENCE RI) AND FOLLOW SIGNS TOWARD I-95 S (DEDDHAM / PROVIDENCE RI). TAKE EXIT 35C (HIGHLAND AVE NEEDHAM). AT END OF OFFRAMP, TURN RIGHT ONTO HIGHLAND AVENUE. AFTER 0.7 MILES, TURN RIGHT ONTO WEST STREET. AFTER 500 FEET, TURN LEFT ONTO HILLSIDE AVENUE. AFTER 0.1 MILES, TURN LEFT INTO DRIVEWAY MARKED AS 464 HILLSIDE AVENUE. AFTER 200 FEET, TURN RIGHT. DESTINATION IS ON LEFT.

VICINITY MAP



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



NB+C ENGINEERING SERVICES, LLC.

100 APOLLO DRIVE
SUITE 303
CHELMSFORD, MA 01824
(978) 856-8308



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY: CSG
CHECKED BY: NSB
APPROVED BY: DRG

RFDS REV #: 1

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	07/28/2023	ISSUED FOR REVIEW
1	08/30/2023	BILL OF MATERIALS

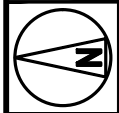
A&E PROJECT NUMBER
100753

DISH Wireless L.L.C.
PROJECT INFORMATION
BOBOS01058A

**460 HILLSIDE AVENUE
NEEDHAM MA, 02494**

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1



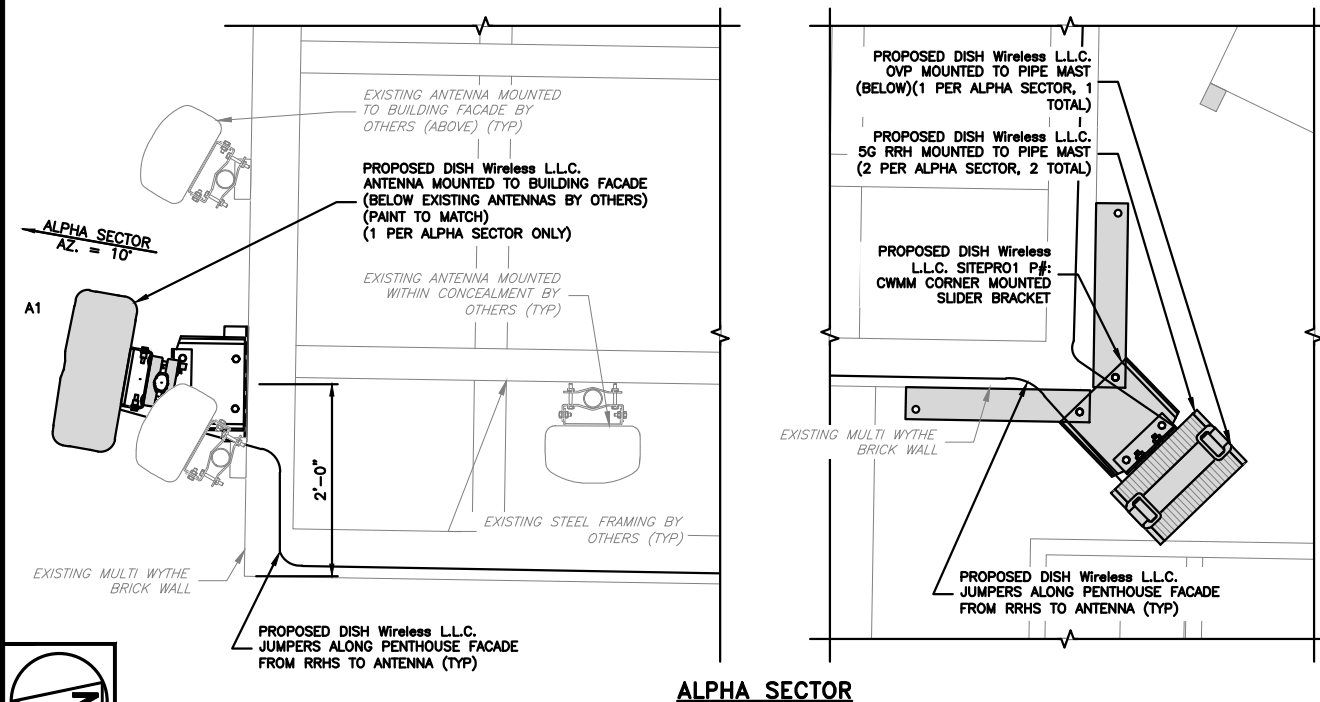
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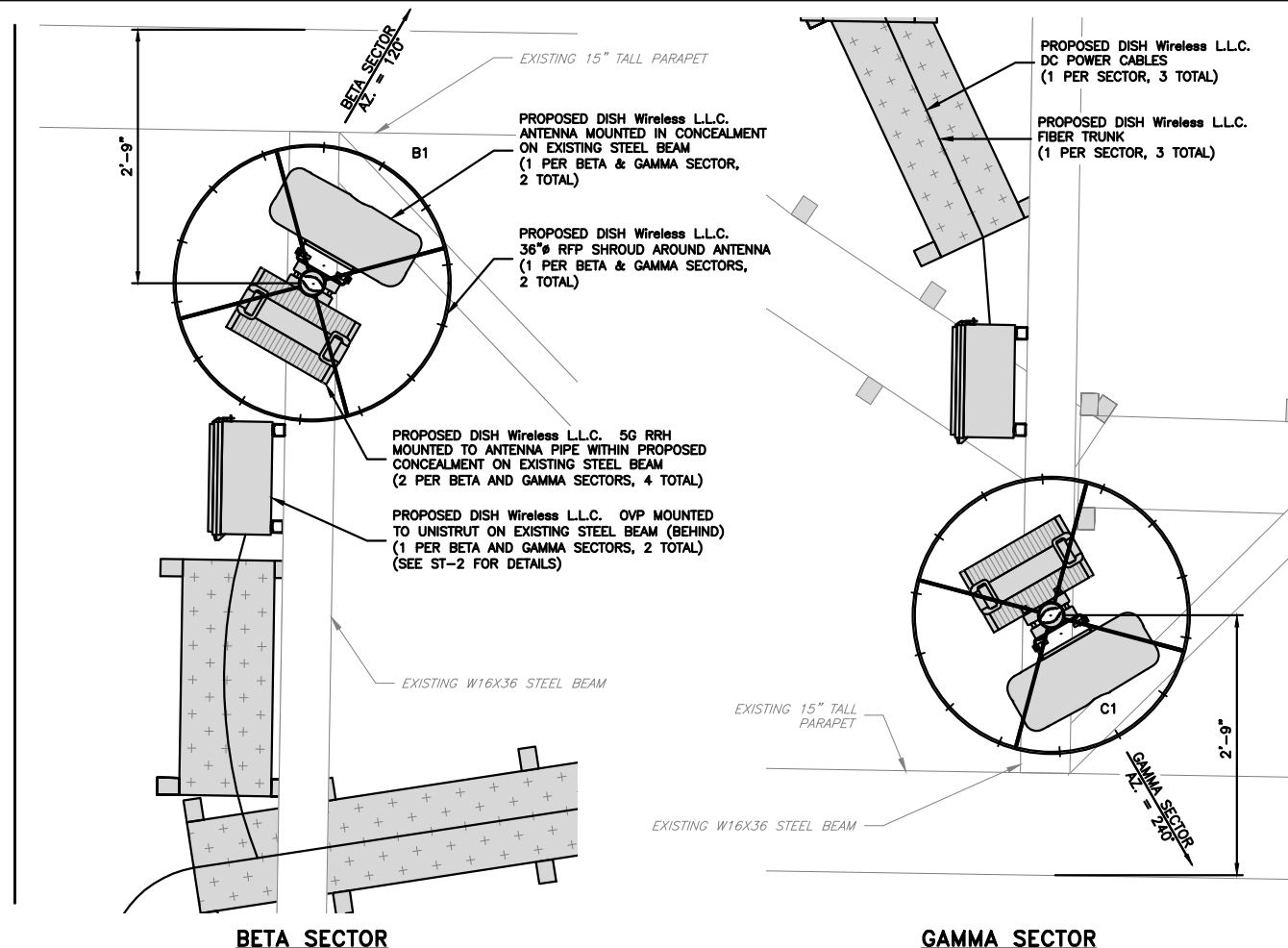
1

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.



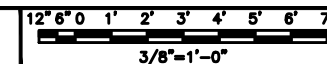
ALPHA SECTOR



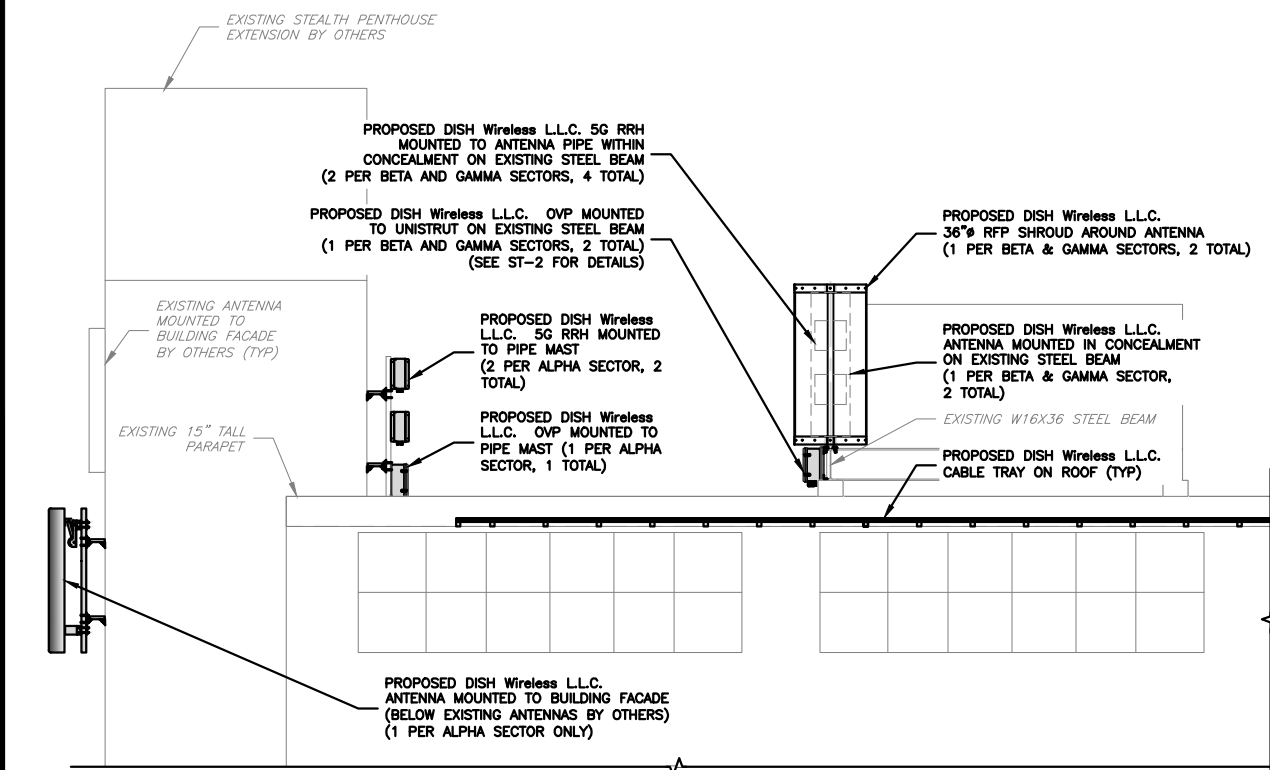
BETA SECTOR

GAMMA SECTOR

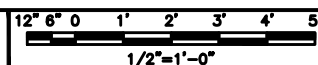
ANTENNA PLANS



1



ANTENNA ELEVATION



2

SECTOR POS.	ANTENNA						TRANSMISSION CABLE		RRH			OVP	
	EXISTING OR PROPOSED	MANUFACTURER - MODEL NUMBER	TECH	AZIMUTH	RAD CENTER		FEED LINE TYPE AND LENGTH		MANUFACTURER - MODEL NUMBER	TECH	POS.	MANUFACTURER MODEL	
A1	PROPOSED	COMMScope - FFVW-65B-R2	5G	10°	37'-0"		(1) 6AWG DC POWER CABLE AND (1) FIBER TRUNK (180'± LONG)		SAMSUNG - MID BAND SFG-ARR3KM01DL_RF4451D-70A SAMSUNG - LOW BAND SFG-ARR3J601DL_RF4450T-71A	5G	A1	RAYCAP RDIC-3045-PF-48	
B1	PROPOSED	COMMScope - FFVW-65B-R2	5G	120°	46'-0"		(1) 6AWG DC POWER CABLE AND (1) FIBER TRUNK (155'± LONG)		SAMSUNG - MID BAND SFG-ARR3KM01DL_RF4451D-70A SAMSUNG - LOW BAND SFG-ARR3J601DL_RF4450T-71A	5G	B1	RAYCAP RDIC-3045-PF-48	
C1	PROPOSED	COMMScope - FFVW-65B-R2	5G	240°	46'-0"		(1) 6AWG DC POWER CABLE AND (1) FIBER TRUNK (172'± LONG)		SAMSUNG - MID BAND SFG-ARR3KM01DL_RF4451D-70A SAMSUNG - LOW BAND SFG-ARR3J601DL_RF4450T-71A	5G	C1	RAYCAP RDIC-3045-PF-48	

NOTES

- CONTRACTOR TO REFER TO FINAL CONSTRUCTION RFDS FOR ALL RF DETAILS.
- ANTENNA AND RRH MODELS MAY CHANGE DUE TO EQUIPMENT AVAILABILITY. ALL EQUIPMENT CHANGES MUST BE APPROVED AND REMAIN IN COMPLIANCE WITH THE PROPOSED DESIGN AND STRUCTURAL ANALYSES.

ANTENNA SCHEDULE

NO SCALE

3

dish
wireless.

5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

NB+C
TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.

100 APOLLO DRIVE
SUITE 303
CHELMSFORD, MA 01824
(978) 856-8308



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DRAWN BY: CHECKED BY: APPROVED BY:

CSG NSB DRG

RFDS REV #: 1

CONSTRUCTION DOCUMENTS

SUBMITTALS

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A&E PROJECT NUMBER
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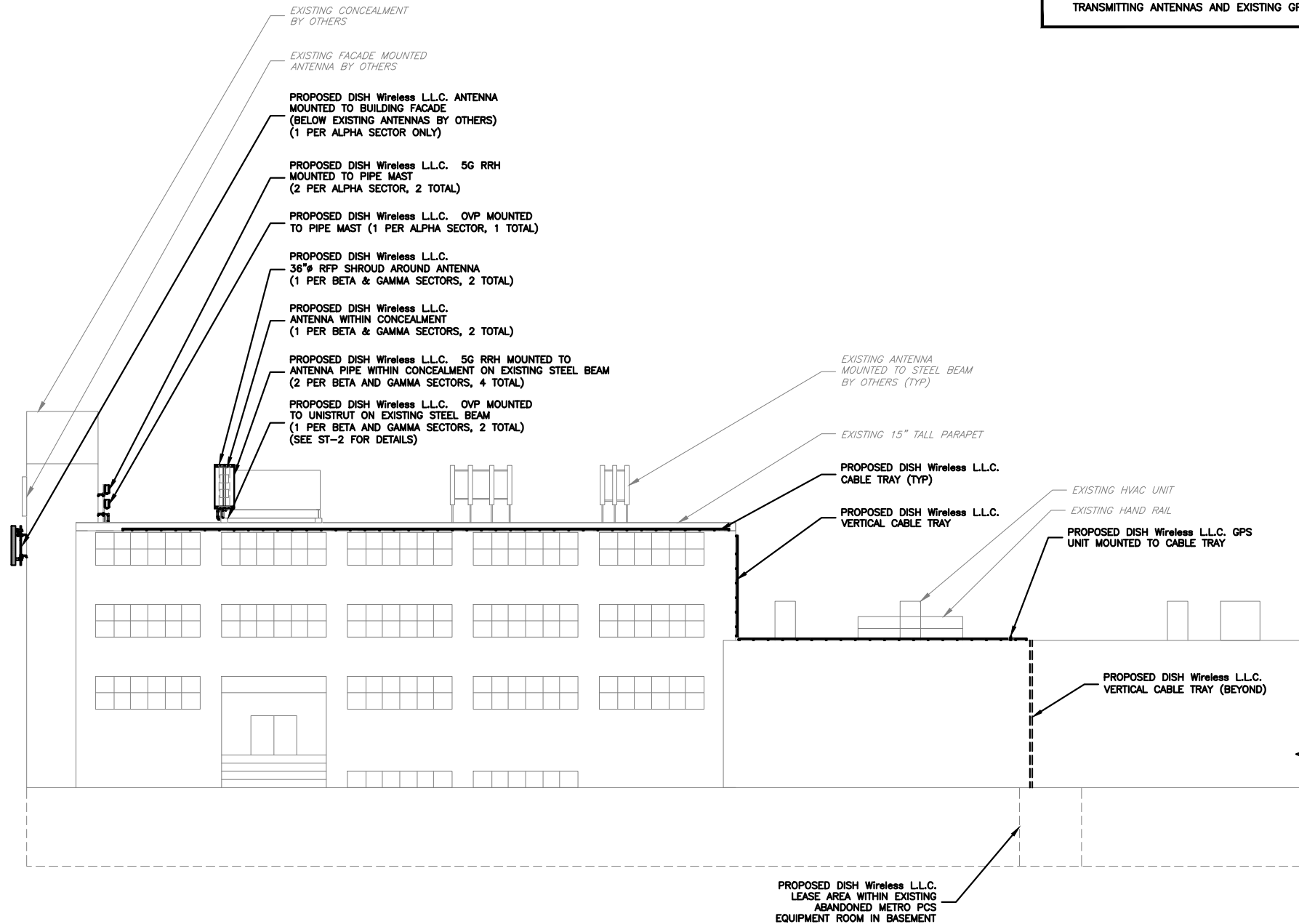
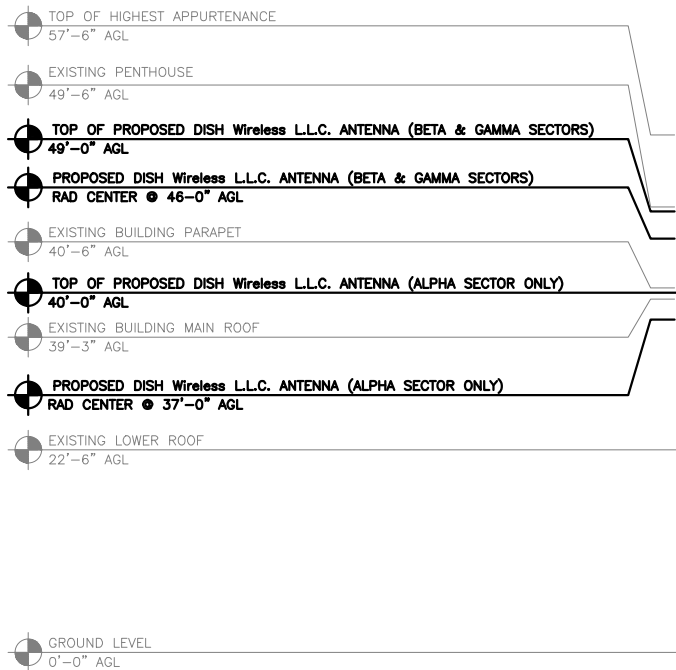
DISH Wireless L.L.C.
PROJECT INFORMATION
BOBOS01058A

460 HILLSIDE AVENUE
NEEDHAM MA, 02494

SHEET TITLE
ANTENNA PLAN,
ELEVATION AND SCHEDULE

SHEET NUMBER

A-2



NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. CONTRACTOR SHALL MAINTAIN A 10'-0" MINIMUM SEPARATION BETWEEN THE PROPOSED GPS UNIT, TRANSMITTING ANTENNAS AND EXISTING GPS UNITS.

dish
wireless.

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LITTLETON, CO 80120

NB+C
TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.

100 APOLLO DRIVE
SUITE 303
CHELMSFORD, MA 01824
(978) 856-8308



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CONSTRUCTION DOCUMENTS

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1	08/30/2023	BILL OF MATERIALS

A&E PROJECT NUMBER
100753

DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS01058A

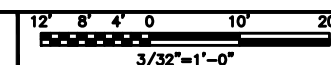
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NEEDHAM MA, 02494

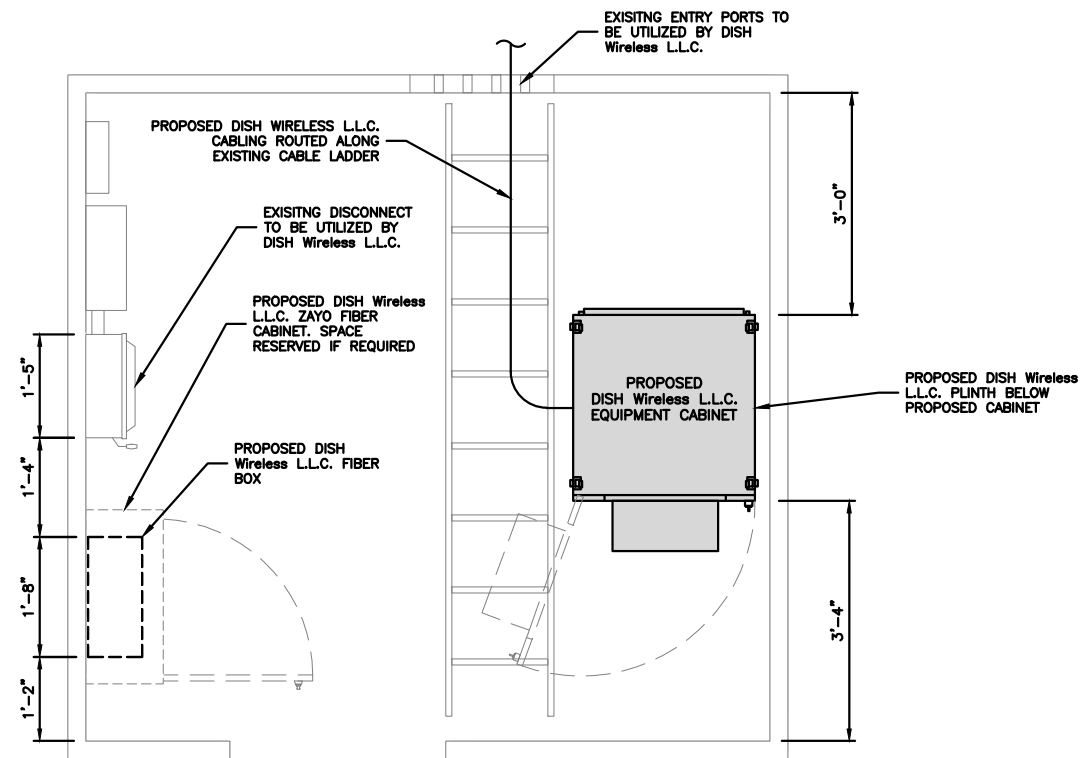
SHEET TITLE
BUILDING
ELEVATION

SHEET NUMBER

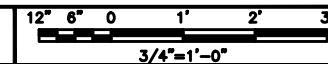
A-3

BUILDING ELEVATION

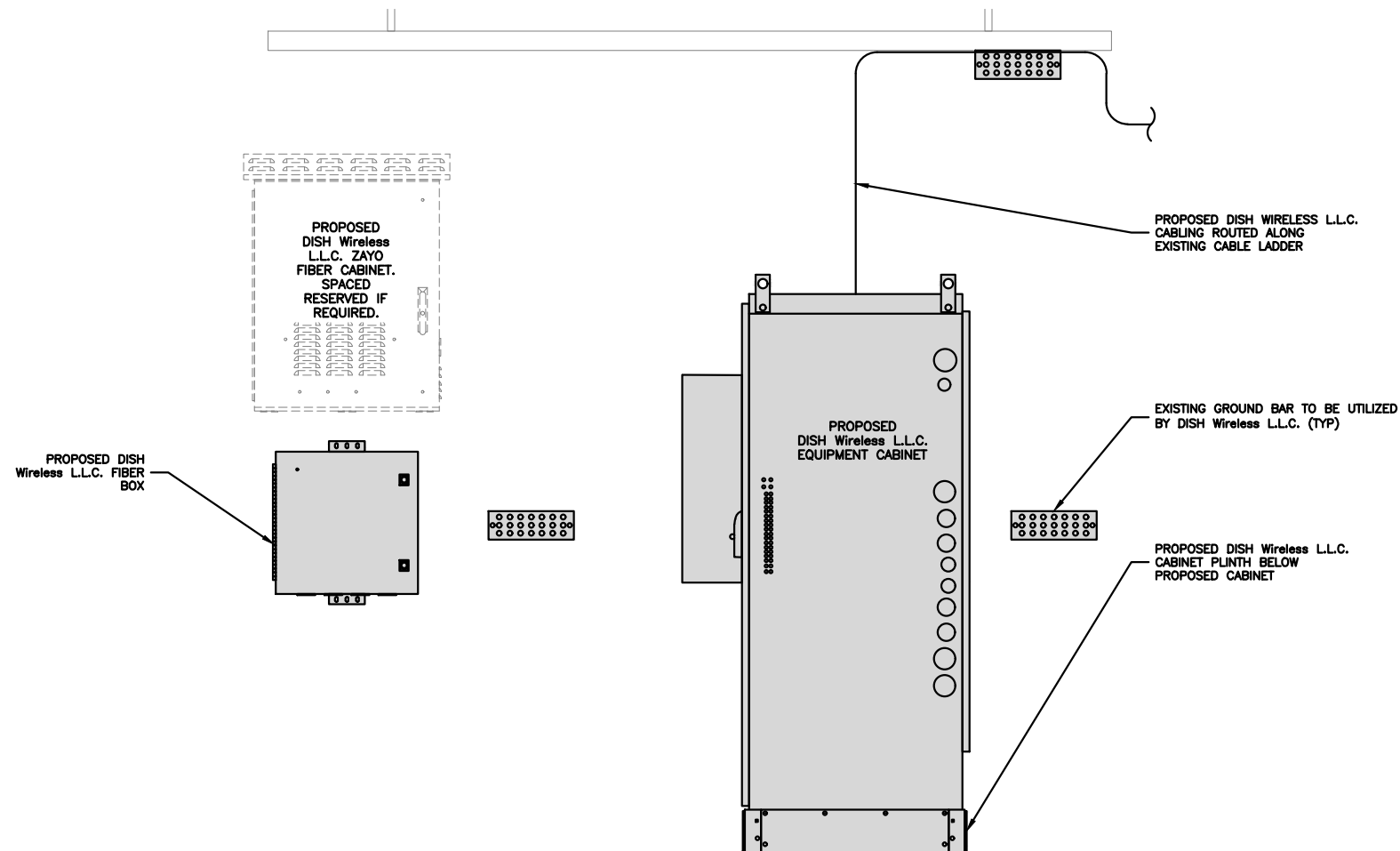




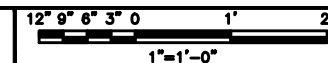
EQUIPMENT PLAN



1



EQUIPMENT ELEVATION



3

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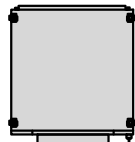
460 HILLSIDE AVENUE
NEEDHAM MA, 02494

SHEET TITLE
EQUIPMENT PLATFORM AND
H-FRAME DETAILS

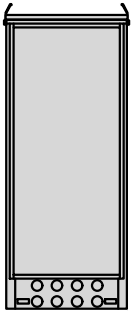
SHEET NUMBER

A-4

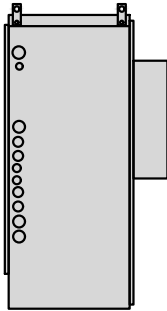
ENERSYS HVAC 2000005995	
DIMENSIONS (HxWxD)	73"x30"x32"
POWER SYSTEM	-48V ALPHA/600A
HVAC	600W
TOTAL WEIGHT (EMPTY)	371 lbs



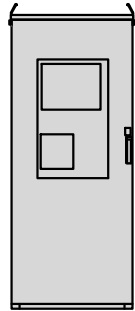
PLAN



BACK



SIDE



FRONT

CABINET DETAIL

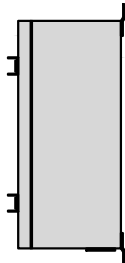
NO SCALE

1

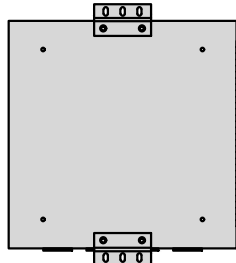
CHARLES CFIT-PF2020DSH1 FIBER TELCO ENCLOSURE	
ENCLOSURE DIMS (HxWxD)	20"x20"x9"
ENCLOSURE WEIGHT	20 lbs
MOUNTING	WALL
COMPLIANCE	TYPE 4



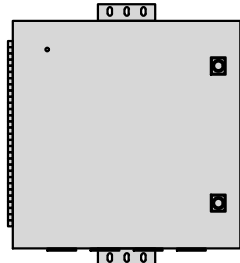
FRONT



SIDE



BACK



FRONT

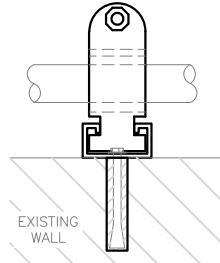
FIBER TELCO ENCLOSURE DETAIL

NO SCALE

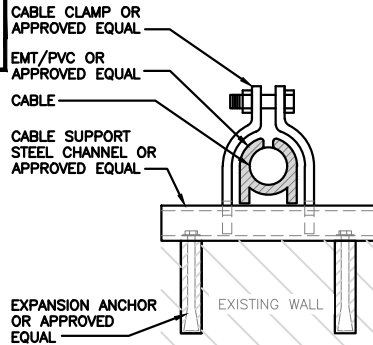
2

CABLE WALL MOUNT SUPPORT	
UNISTRUT TYPE	GRAINGER P1000T
UNISTRUT DIMENSIONS (HxWxD)	1 5/8"x 1 5/8"x 12"
WEIGHT/ VOLUME	1.85 LB PER FOOT
ULTIMATE LOAD CAPACITY	718.5 LB

NOTES:
1. ALL HARDWARE AND PARTS SHALL BE HOT DIPPED GALVANIZED WITH LOCK WASHERS AND HEAVY HEX NUTS.
2. VERTICAL CABLE MOUNT: 4'-0" MAX. UNISTRUT SEPARATION
3. HORIZONTAL CABLE MOUNT: 3'-0" MAX UNISTRUT SEPARATION



PLAN



SIDE

CABLE WALL MOUNT SUPPORT DETAIL

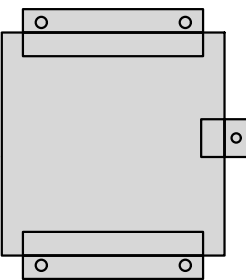
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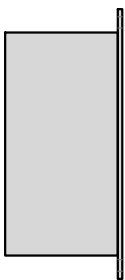
LEVITON 1N240-21 SUBMETER	
WATTAGE	3
AMPS	200
VOLTS AC	120, 208, 240
PHASE	1



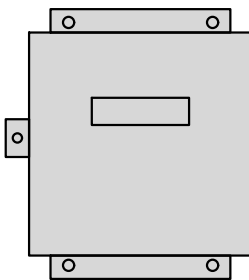
PLAN



BACK



SIDE



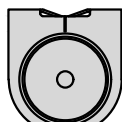
FRONT

E-MON D-MON DETAIL

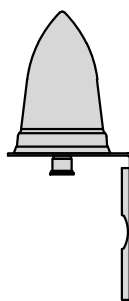
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4

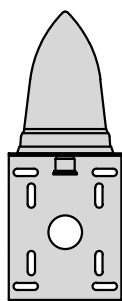
PCTEL GPSGL-TMG-SPI-40NCB	
DIMENSIONS (DIAxH) MM/INCH	81x184mm 3.2"x7.25"
WEIGHT W/ACCESSORIES	075 lbs
CONNECTOR	N-FEMALE
FREQUENCY RANGE	1590 ± 30MHz



TOP



BACK

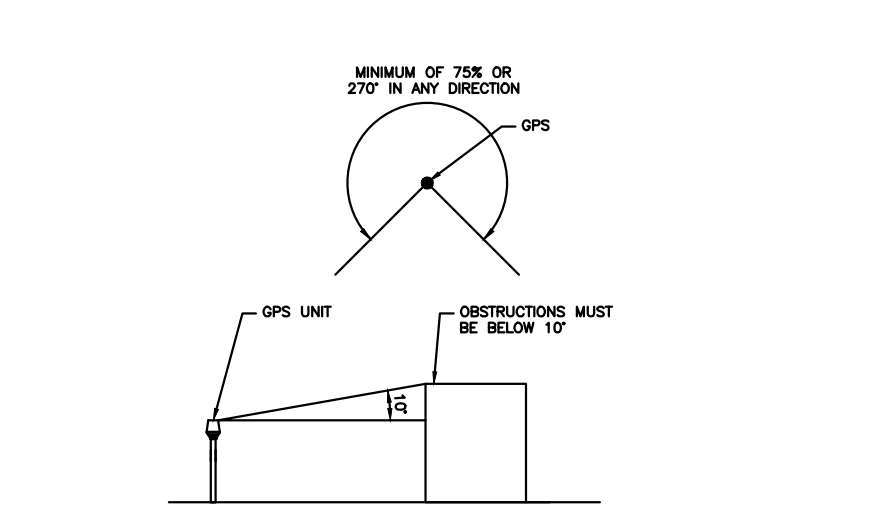


SIDE

GPS DETAIL

NO SCALE

5

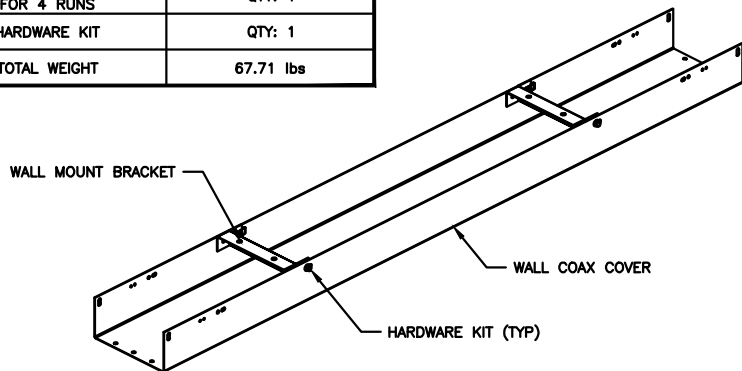


GPS MINIMUM SKY VIEW REQUIREMENTS

NO SCALE

6

COMMSCOPE COAX WALL SUPPORT MT-F1589	
WALL MOUNT BRACKET (4 RUNS OF COAX)	QTY: 2
WALL COAX COVER FOR 4 RUNS	QTY: 1
HARDWARE KIT	QTY: 1
TOTAL WEIGHT	67.71 lbs

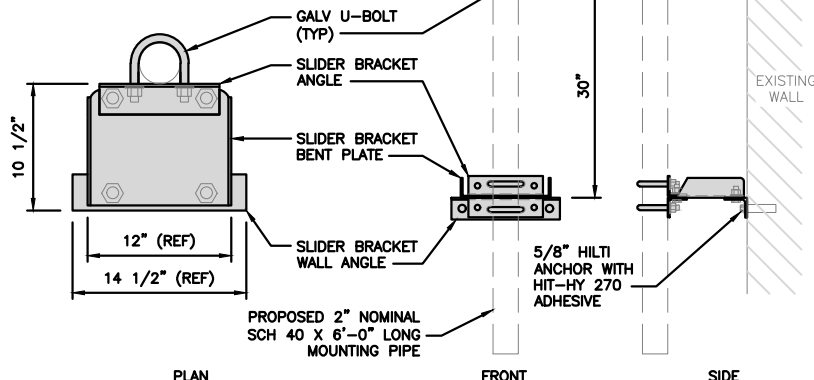


CABLE WALL SUPPORT

NO SCALE

7

SITEPRO1 SBWM SLIDER BRACKET WALL MOUNTS	
DIMENSIONS (WxD)	14.5" x 10.5"
WEIGHT	53.48 LB
ANTENNA PIPE SIZE	2-3/8" O.D.



PLAN

FRONT

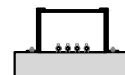
SIDE

ANTENNA WALL MOUNT DETAIL

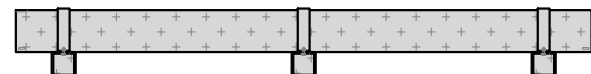
NO SCALE

8

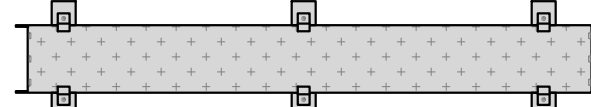
COMMSCOPE RT-CB4D ROOFTOP COVER KIT		MOUNTING	NON-PENETRATING
DIMENSIONS (HxWxD)	7"x 11.25"x 96"	INCLUDED PRODUCTS:	RTCB4D.01 CHANNEL (1)
WEIGHT/ VOLUME	85.98 LBS		MT-F1598 SLEEPERS (3)
CABLE RUN (QTY)	4		RTCUH HARDWARE
			RTHC.01 HOLD-DOWN CLAMPS (6)



END



SIDE



PLAN

ROOFTOP CABLE TRAY DETAIL

NO SCALE

9

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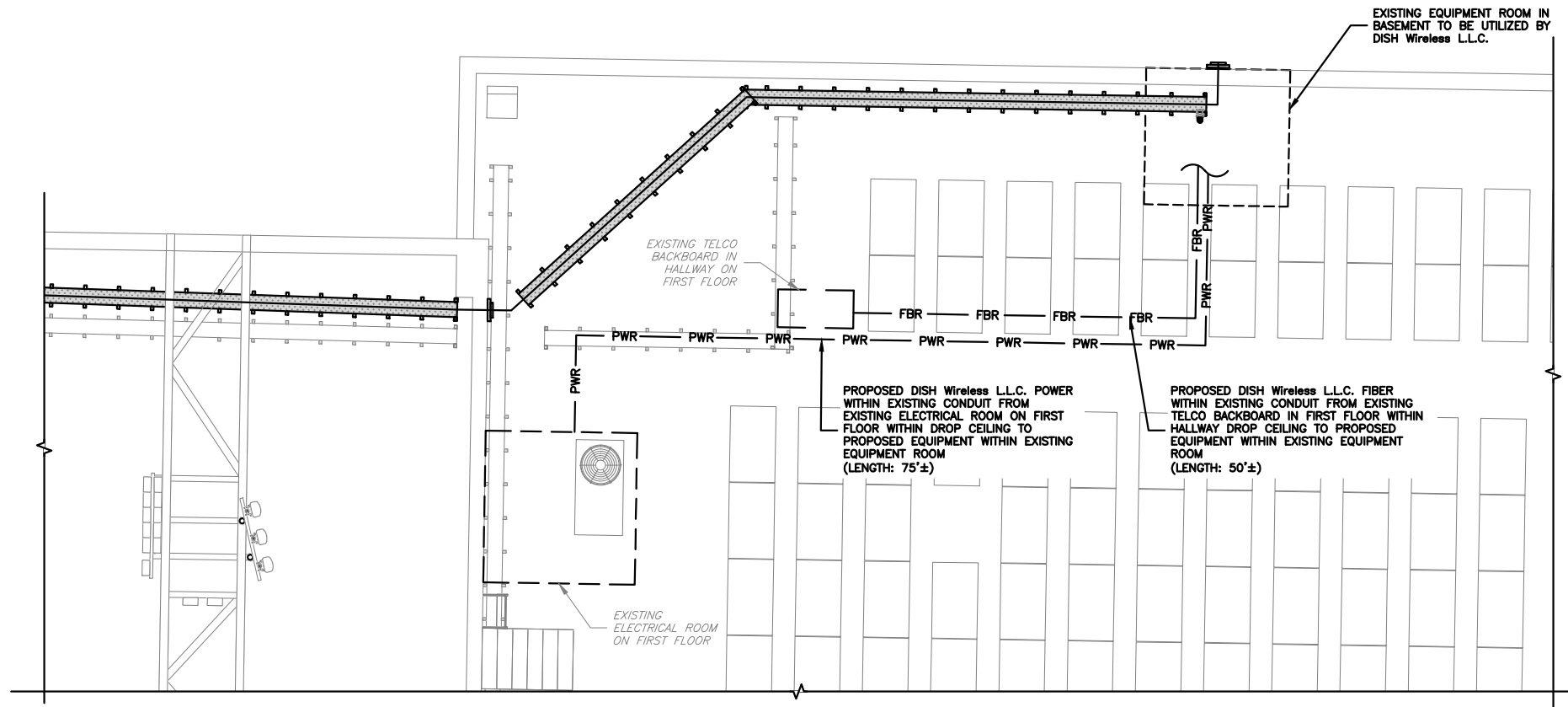
BOBOS01058A

460 HILLSIDE AVENUE
NEEDHAM MA, 02494

SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER

A-5



NOTE

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. UTILIZE EXISTING ABANDONED METROPCS CONDUITS WHERE AVAILABLE. REPLACE/INSTALL NEW CONDUIT SECTIONS AS NEEDED.
3. CONTRACTOR TO VERIFY WITH DISH Wireless L.L.C. C.M. THE LOCATION OF THE POWER AND FIBER SOURCE PRIOR TO CONSTRUCTION.



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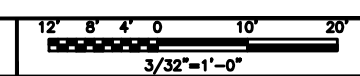
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DISH Wireless L.L.C.
PROJECT INFORMATION
BOBOS01058A
460 HILLSIDE AVENUE
NEEDHAM MA, 02494

SHEET TITLE
ELECTRICAL/FIBER ROUTE
PLAN AND NOTES

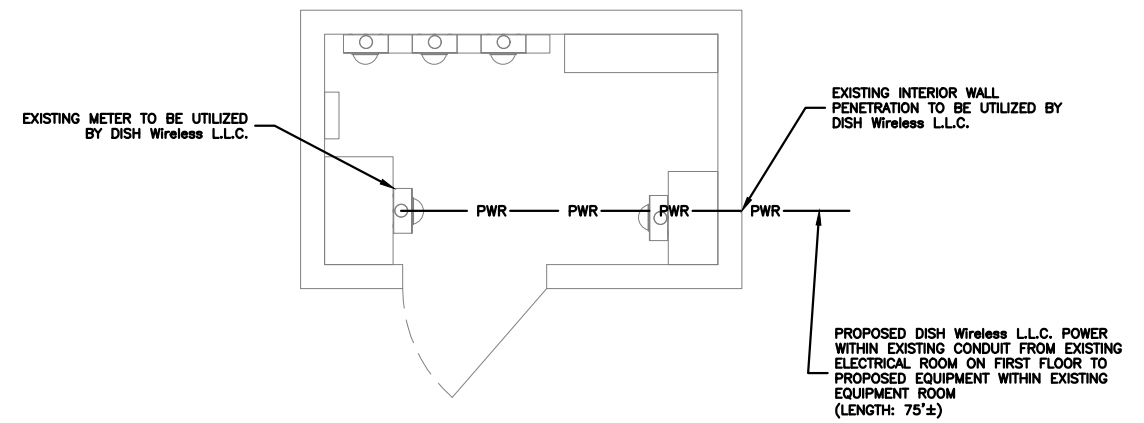
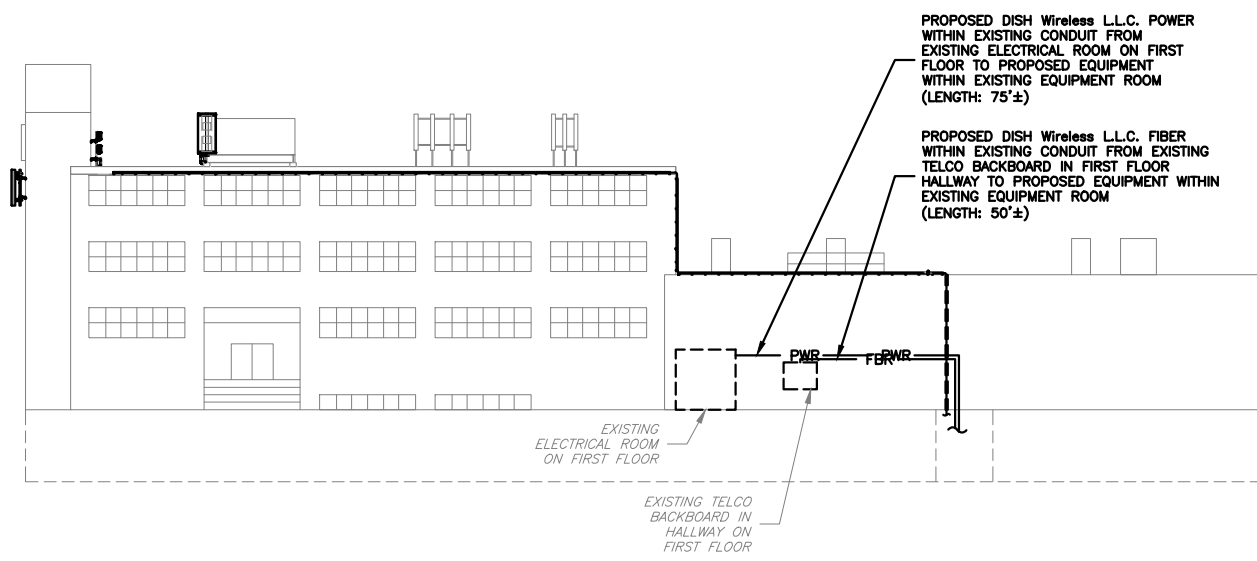
SHEET NUMBER
E-1

UTILITY ROUTE PLAN

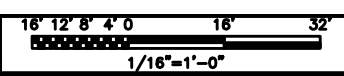


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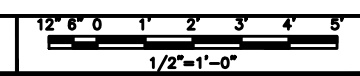
1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. EXISTING METER AND DISCONNECT LOCATED IN THE ELECTRICAL ROOM IN THE BASEMENT. WILL NEED BUILDING MAINTENANCE FOR ROOM ACCESS



UTILITY ROUTE ELEVATION



ELECTRICAL ROOM PLAN



CONTRACTOR SHALL INSPECT THE EXISTING CONDITIONS PRIOR TO SUBMITTING A BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTOR'S FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN AWARDED.

ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT NATIONAL ELECTRICAL CODES AND ALL STATE AND LOCAL CODES, LAWS, AND ORDINANCES. PROVIDE ALL COMPONENTS AND WIRING SIZES AS REQUIRED TO MEET NEC STANDARDS.

LOCATION OF EQUIPMENT, CONDUIT AND DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SHALL BE COORDINATED WITH FIELD CONDITIONS PRIOR TO CONSTRUCTION.

CONDUIT ROUGH-IN SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT TO AVOID LOCATION CONFLICTS. VERIFY WITH THE MECHANICAL EQUIPMENT CONTRACTOR AND COMPLY AS REQUIRED.

CONTRACTOR SHALL PROVIDE ALL BREAKERS, CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETE SYSTEM.

CONTRACTOR SHALL PROVIDE PULL BOXES AND JUNCTION BOXES AS REQUIRED BY THE NEC ARTICLE 314.

CONTRACTOR SHALL PROVIDE ALL STRAIN RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

ALL DISCONNECTS AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED PHENOLIC NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS INSTALLED ON, AND PANEL FIELD LOCATIONS FED FROM.

INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS PER THE SPECIFICATIONS AND NEC 250. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULL BOXES, AND ALL DISCONNECT SWITCHES, AND EQUIPMENT CABINETS.

0. ALL NEW MATERIAL SHALL HAVE A U.L. LABEL.

1. PANEL SCHEDULE LOADING AND CIRCUIT ARRANGEMENTS REFLECT POST-CONSTRUCTION EQUIPMENT.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR AS-BUILT PANEL SCHEDULE AND SITE DRAWINGS.



NO SCALE

2



NO SCALE

3

ELECTRICAL NOTES

NO SCALE

1

NOT USED

NO SCALE

4

NOT USED

NO SCALE

5

NOT USED

NO SCALE

6

NOT USED

NO SCALE

7

NOT USED

NO SCALE

8



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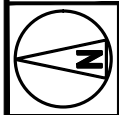
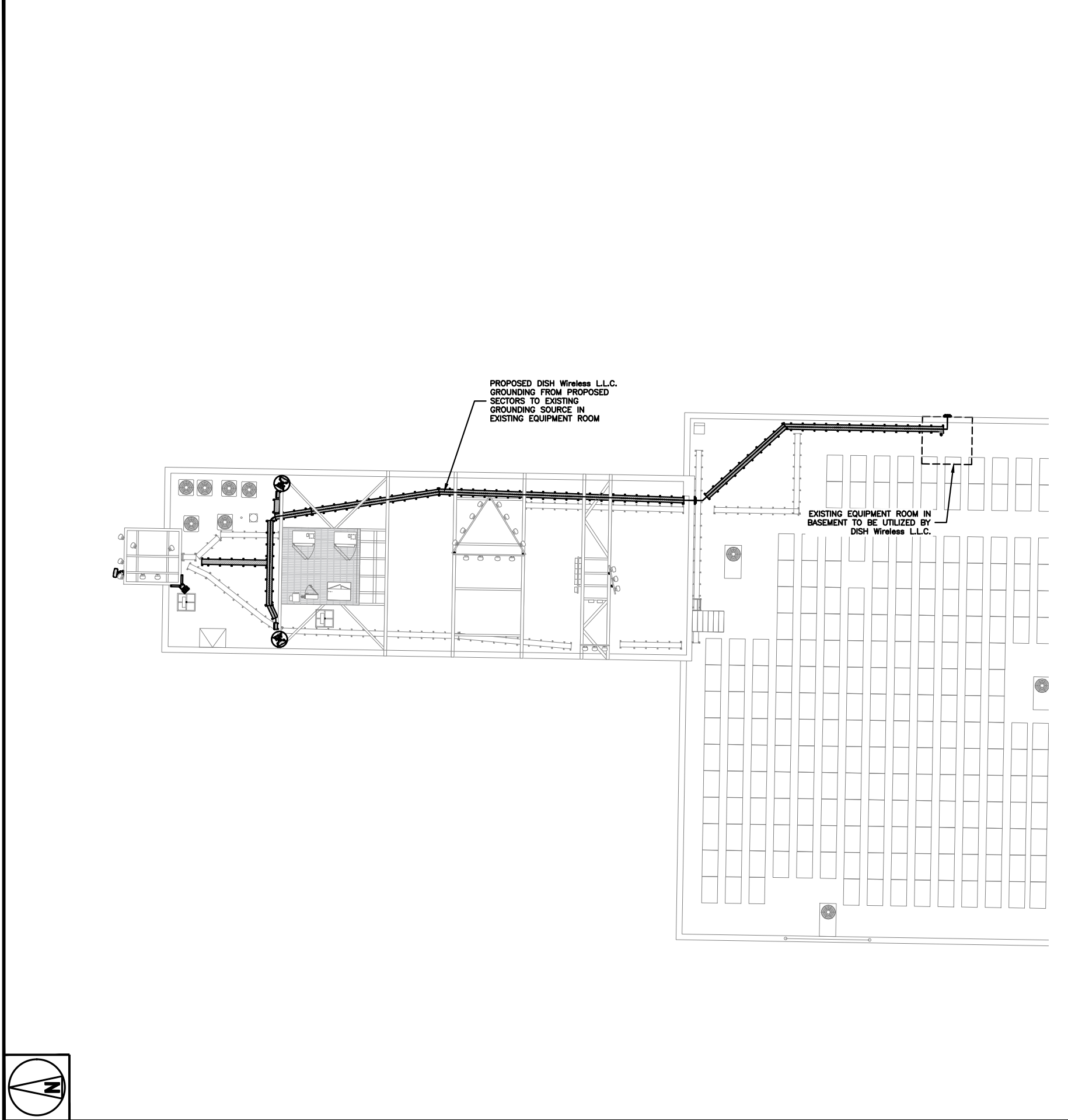
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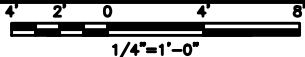
SHEET TITLE
ELECTRICAL
DETAILS

SHEET NUMBER

E-2



GROUNDING PLAN



1

GROUNDING KEY NOTES

NO SCALE

2

- EXOTHERMIC CONNECTION

■

 MECHANICAL CONNECTION

—

 GROUND BUS BAR

○

 GROUND ROD
- ⬢

 TEST GROUND ROD WITH INSPECTION SLEEVE

 #6 AWG STRANDED & INSULATED

- · - · -

 #2 AWG SOLID COPPER TINNED

▲

 BUSS BAR INSULATOR

GROUNDING LEGEND

1. GROUNDING IS SHOWN DIAGRAMMATICALLY ONLY.
2. CONTRACTOR SHALL GROUND ALL EQUIPMENT AS A COMPLETE SYSTEM. GROUNDING SHALL BE IN COMPLIANCE WITH NEC SECTION 250 AND DISH Wireless L.L.C. GROUNDING AND BONDING REQUIREMENTS AND MANUFACTURER'S SPECIFICATIONS.
3. ALL GROUND CONDUCTORS SHALL BE COPPER; NO ALUMINUM CONDUCTORS SHALL BE USED.
4. NO EXOTHERMIC WELDING ON ROOFTOP

GROUNDING ROOFTOP KEY NOTES

- A

EXTERIOR GROUND RING: #2 AWG SOLID COPPER, BURIED AT A DEPTH OF AT LEAST 30 INCHES BELOW GRADE, OR 6 INCHES BELOW THE FROST LINE AND APPROXIMATELY 24 INCHES FROM THE EXTERIOR WALL OR FOOTING.
- B

ROOFTOP GROUND SYSTEM: THE GROUND SYSTEM USING MINIMUM #2 AWG SOLID COPPER CONDUCTORS.
- C

INTERIOR GROUND RING: #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTOR EXTENDED AROUND THE PERIMETER OF THE EQUIPMENT AREA. ALL NON-TELECOMMUNICATIONS RELATED METALLIC OBJECTS FOUND WITHIN A SITE SHALL BE GROUNDED TO THE INTERIOR GROUND RING WITH #6 AWG STRANDED GREEN INSULATED CONDUCTOR.
- D

BOND TO INTERIOR GROUND RING: #2 AWG SOLID TINNED COPPER WIRE PRIMARY BONDS SHALL BE PROVIDED AT LEAST AT FOUR POINTS ON THE INTERIOR GROUND RING, LOCATED AT THE CORNERS OF THE BUILDING OR ROOM.
- E

GROUND ROD: UL LISTED COPPER CLAD STEEL. MINIMUM 1/2" DIAMETER BY EIGHT FEET LONG. GROUND RODS SHALL BE INSTALLED WITH INSPECTION SLEEVES. GROUND RODS SHALL BE DRIVEN TO THE DEPTH OF GROUND RING CONDUCTOR.
- F

CELL REFERENCE GROUND BAR (CRGB): POINT OF GROUND REFERENCE FOR ALL COMMUNICATIONS EQUIPMENT FRAMES. ALL BONDS ARE MADE WITH #2 AWG UNLESS NOTED OTHERWISE STRANDED GREEN INSULATED COPPER CONDUCTORS. BOND TO COMMON BUILDING GROUND SYSTEM WITH (2) #2 SOLID TINNED COPPER CONDUCTORS.
- G

HATCH PLATE GROUND BAR: BOND TO THE COMMON BUILDING GROUND SYSTEM WITH TWO #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTORS. WHEN A HATCH-PLATE AND A CELL REFERENCE GROUND BAR ARE BOTH PRESENT, THE CRGB MUST BE CONNECTED TO THE HATCH-PLATE AND TO THE INTERIOR GROUND RING USING (2) TWO #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTORS EACH.
- H

EXTERIOR CABLE ENTRY PORT GROUND BARS: LOCATED AT THE ENTRANCE TO THE CELL SITE ROOM. BOND TO GROUND RING WITH A #2 AWG SOLID TINNED COPPER CONDUCTORS WITH MECHANICAL CONNECTIONS.
- J

TELCO GROUND BAR: BOND TO BOTH CELL REFERENCE GROUND BAR OR EXTERIOR GROUND RING.
- K

FRAME BONDING: THE BONDING POINT FOR TELECOM EQUIPMENT FRAMES SHALL BE THE GROUND BUS THAT IS NOT ISOLATED FROM THE EQUIPMENTS METAL FRAMEWORK.
- L

INTERIOR UNIT BONDS: METAL FRAMES, CABINETS AND INDIVIDUAL METALLIC UNITS LOCATED WITH THE AREA OF THE INTERIOR GROUND RING REQUIRE A #6 AWG STRANDED GREEN INSULATED COPPER BOND TO THE INTERIOR GROUND RING.
- M

FENCE AND GATE GROUNDING: METAL FENCES SHALL BE BONDED TO THE COMMON BUILDING GROUND SYSTEM WITH A #2 AWG SOLID TINNED COPPER CONDUCTOR AT AN INTERVAL NOT EXCEEDING 25 FEET. BONDS SHALL BE MADE AT EACH GATE POST AND ACROSS GATE OPENINGS.
- N

EXTERIOR UNIT BONDS: METALLIC OBJECTS, EXTERNAL TO OR MOUNTED TO THE BUILDING, SHALL BE BONDED TO THE COMMON BUILDING GROUND SYSTEM. USING #2 TINNED SOLID COPPER WIRE
- P

ICE BRIDGE SUPPORTS: EACH ICE BRIDGE LEG SHALL BE BONDED TO THE GROUND RING WITH #2 AWG BARE TINNED COPPER CONDUCTOR. PROVIDE EXOTHERMIC WELDS AT BOTH THE ICE BRIDGE LEG AND BURIED GROUND RING.
- Q

DURING ALL DC POWER SYSTEM CHANGES INCLUDING DC SYSTEM CHANGE OUTS, RECTIFIER REPLACEMENTS OR ADDITIONS, BREAKER DISTRIBUTION CHANGES, BATTERY ADDITIONS, BATTERY REPLACEMENTS AND INSTALLATIONS OR CHANGES TO DC CONVERTER SYSTEMS IT SHALL BE REQUIRED THAT SERVICE CONTRACTORS VERIFY ALL DC POWER SYSTEMS ARE EQUIPPED WITH A MASTER DC SYSTEM RETURN GROUND CONDUCTOR FROM THE DC POWER SYSTEM COMMON RETURN BUS DIRECTLY CONNECTED TO THE CELL SITE REFERENCE GROUND BAR
- R

ROOFTOP COLLECTOR BUSS BAR IS TO BE MECHANICALLY BONDED TO COMMON BUILDING GROUND SYSTEM. REFER TO DISH Wireless L.L.C. GROUNDING NOTES.



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0	07/28/2023	ISSUED FOR REVIEW
1	08/30/2023	BILL OF MATERIALS

A&E PROJECT NUMBER
100753

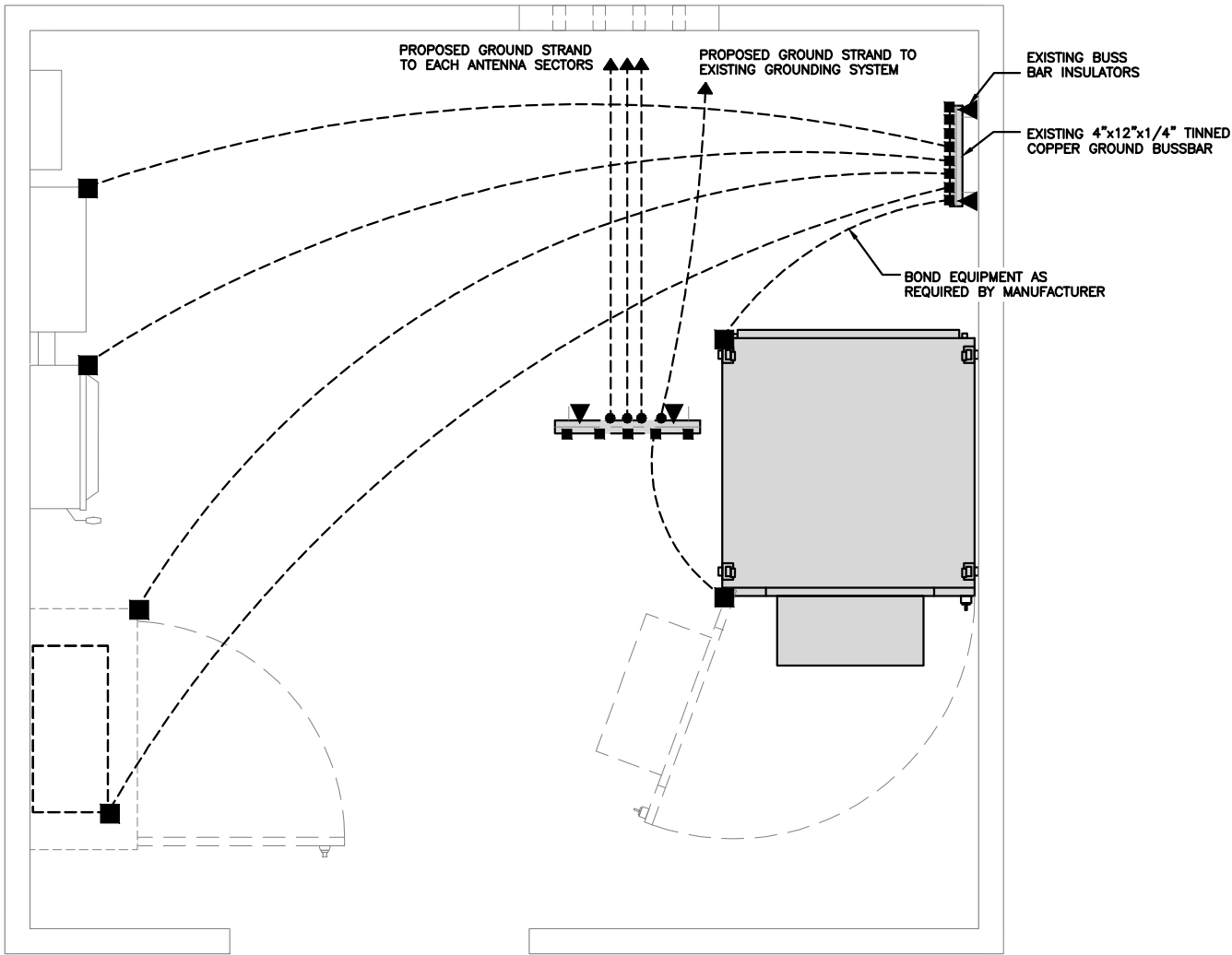
DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS01058A

460 HILLSIDE AVENUE
NEEDHAM MA, 02494

SHEET TITLE
GROUNDING PLANS
AND NOTES

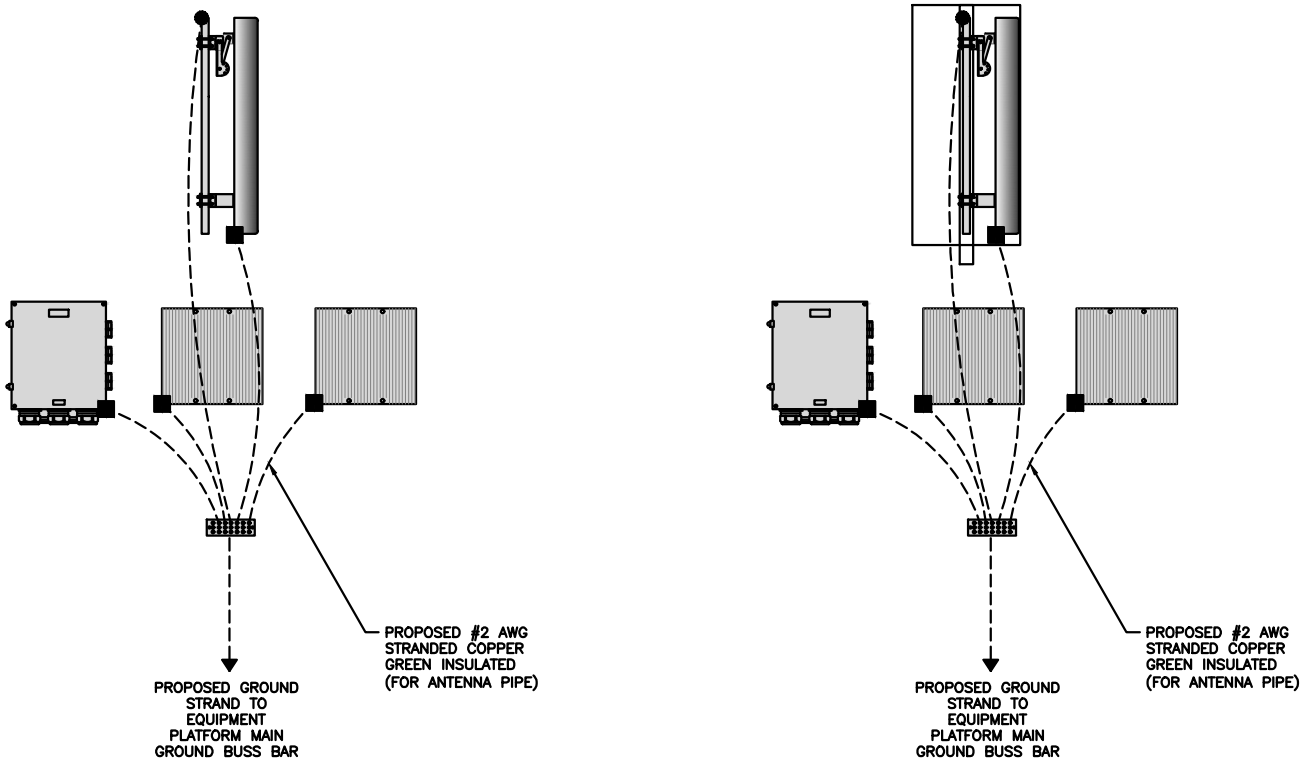
SHEET NUMBER
G-1



TYPICAL EQUIPMENT GROUNDING PLAN

NO SCALE

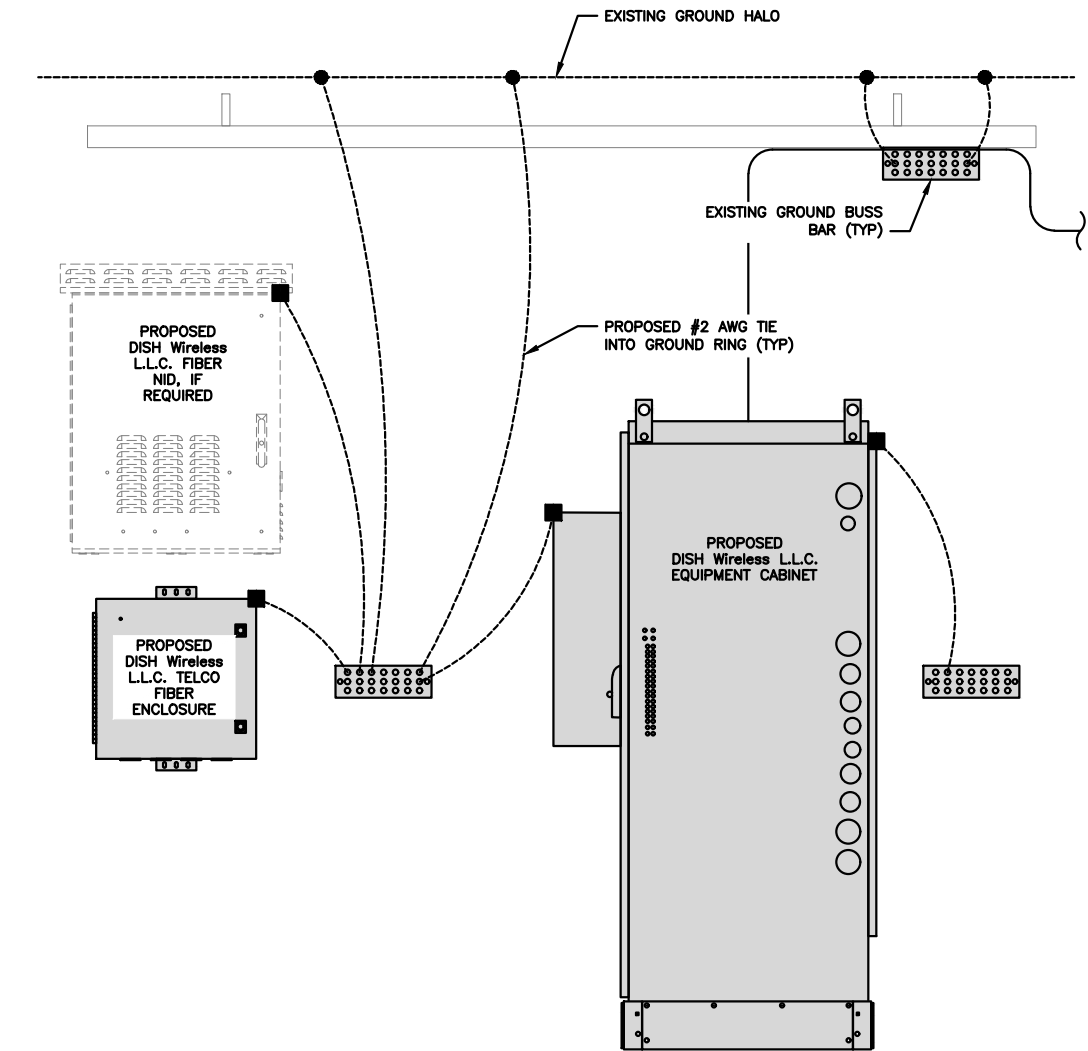
1



TYPICAL ROOFTOP ANTENNA GROUNDING PLAN

NO SCALE

2



H-FRAME GROUNDING DETAIL

NO SCALE

3

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CHELMSFORD, MA 01824
(978) 856-8308



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CSG NSB DRG

RFDS REV #: 1

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GROUNDING DETAILS

SHEET NUMBER

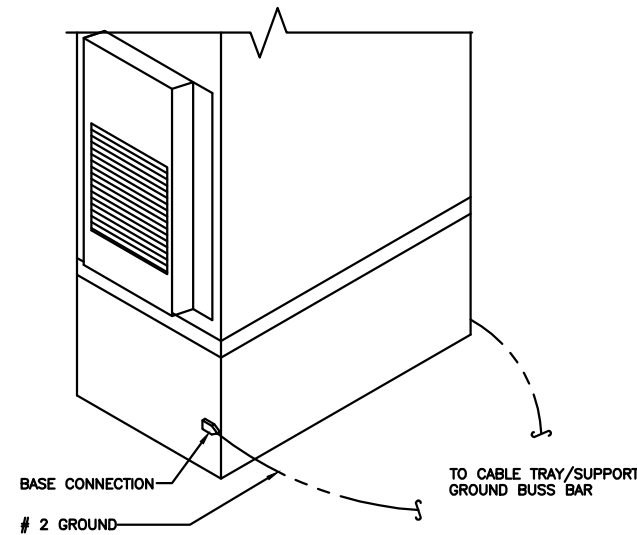
G-2

1. EXOTHERMIC WELD (2) TWO, #2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO GROUND BAR. ROUTE CONDUCTORS TO BURIED GROUND RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
2. ALL EXTERIOR GROUNDING HARDWARE SHALL BE STAINLESS STEEL 3/8" DIAMETER OR LARGER. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
3. FOR GROUND BOND TO STEEL ONLY: COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
4. DO NOT INSTALL CABLE GROUNDING KIT AT A BEND AND ALWAYS DIRECT GROUND CONDUCTOR DOWN TO GROUNDING BUS.
5. NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUND BAR AND BOLTED ON THE BACK SIDE.
6. ALL GROUNDING PARTS AND EQUIPMENT TO BE SUPPLIED AND INSTALLED BY CONTRACTOR.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL GROUND BAR AS REQUIRED.
8. ENSURE THE WIRE INSULATION TERMINATION IS WITHIN 1/8" OF THE BARREL (NO SHINERS).

TYPICAL GROUNDING NOTES

NO SCALE

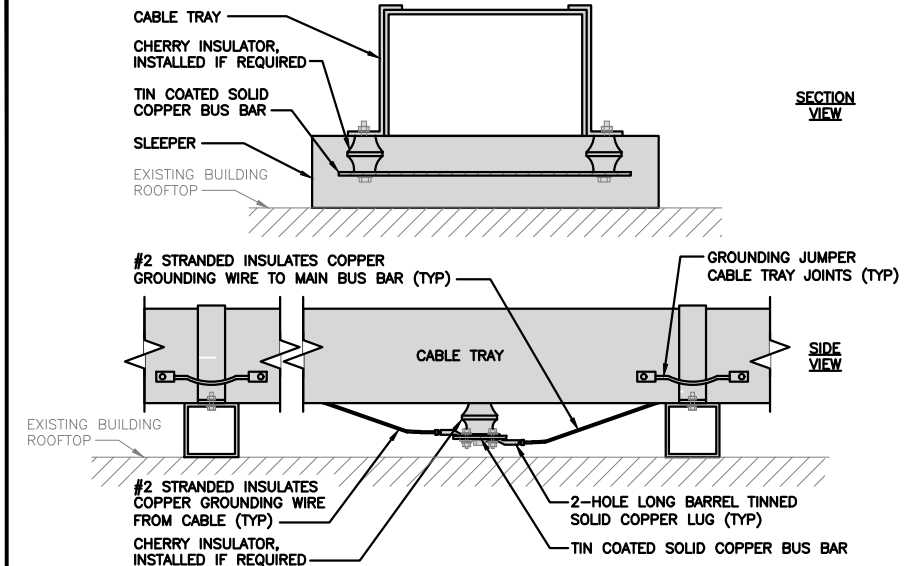
1



OUTDOOR CABINET GROUNDING

NO SCALE

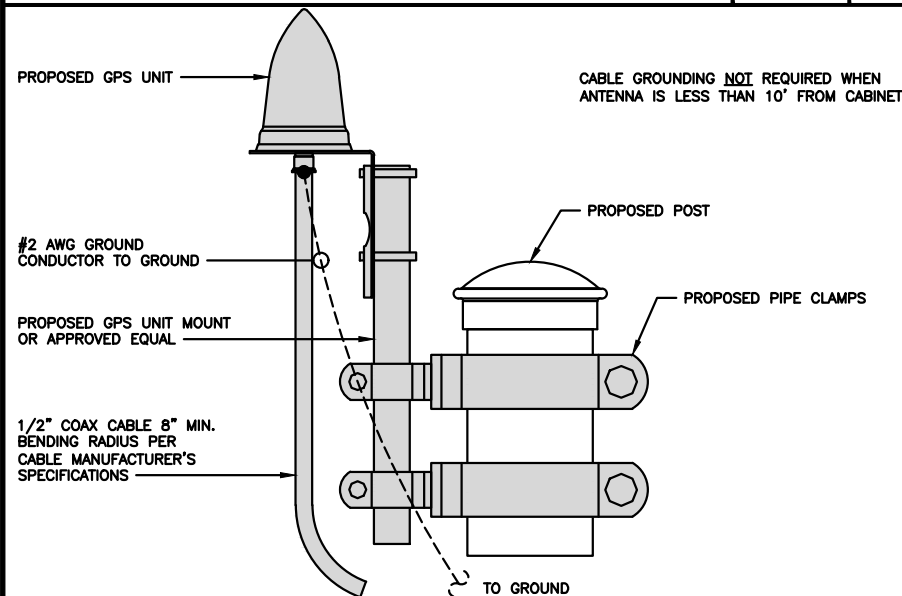
2



TYPICAL CABLE TRAY GROUND BUSS BAR

NO SCALE

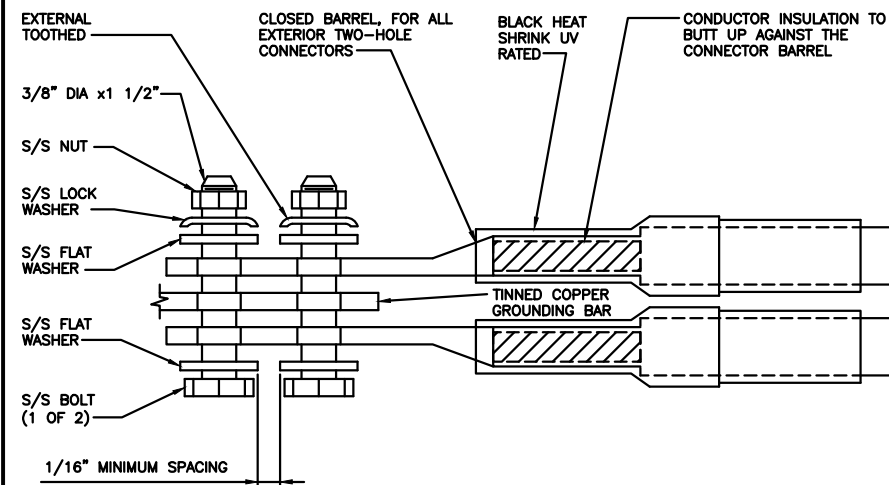
3



TYPICAL GPS UNIT GROUNDING

NO SCALE

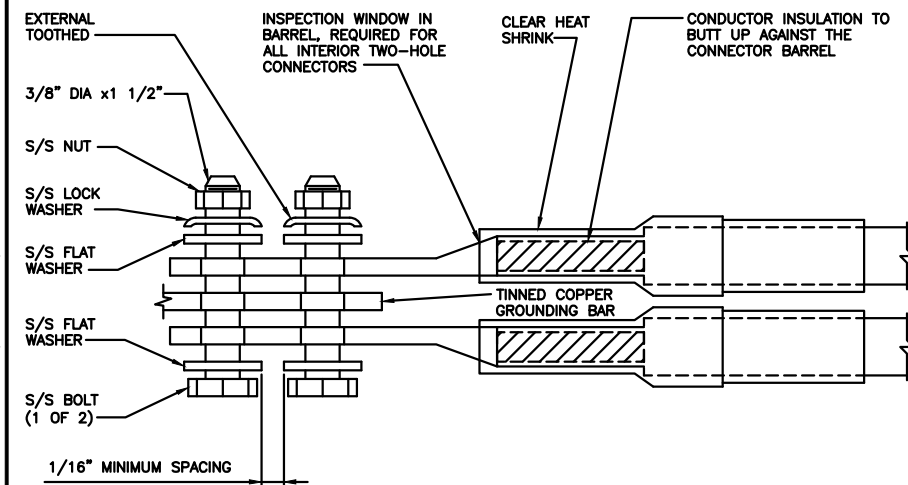
4



TYPICAL EXTERIOR TWO HOLE LUG

NO SCALE

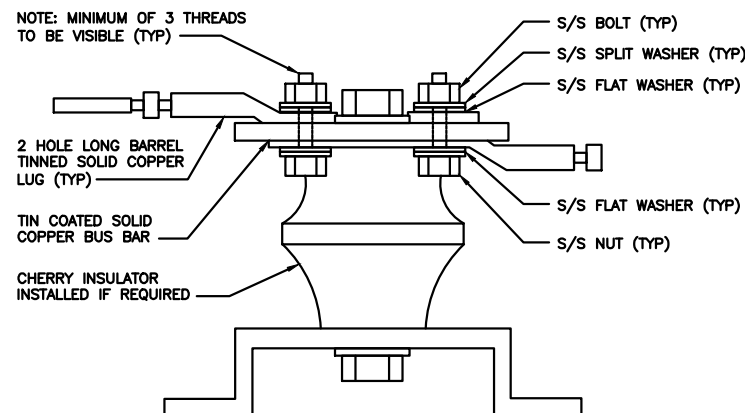
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TYPICAL INTERIOR TWO HOLE LUG

NO SCALE

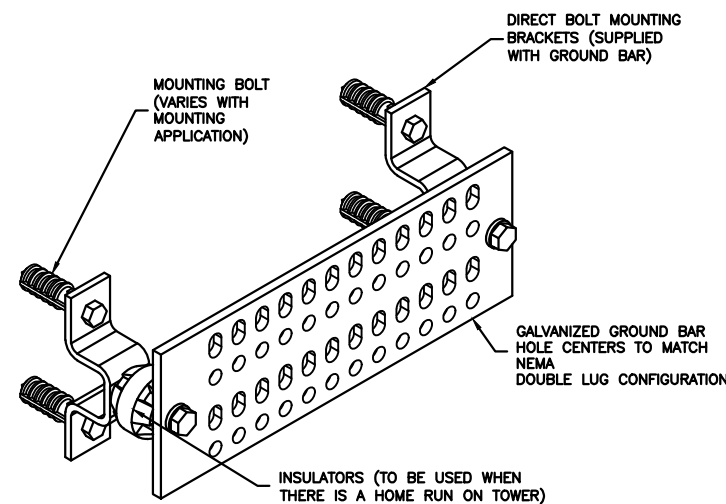
6



LUG DETAIL

NO SCALE

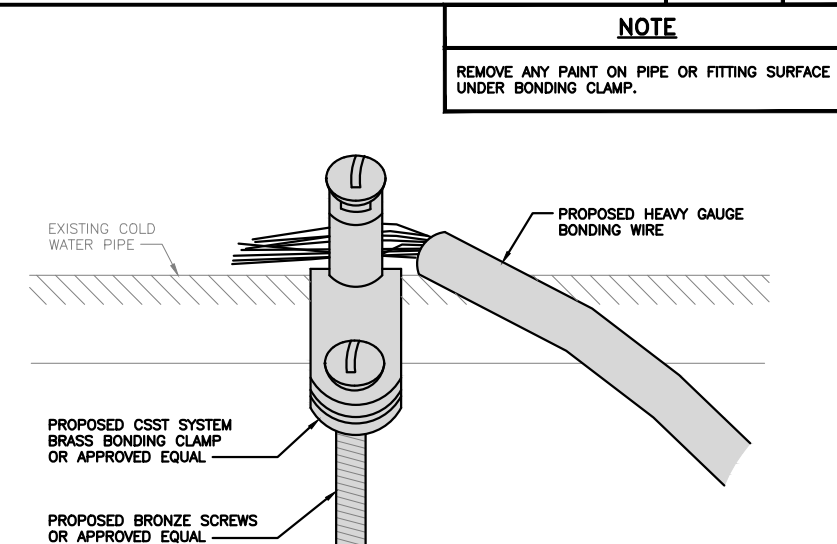
7



GROUND BAR DETAIL

NO SCALE

8



TYPICAL COLD WATER CONDUIT GROUNDING DETAIL

NO SCALE

9

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DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS01058A

**460 HILLSIDE AVENUE
NEEDHAM MA, 02494**

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER

G-3

HYBRID/DISCREET CABLES				3/4" TAPE WIDTHS WITH 3/4" SPACING							
LOW-BAND RRH (600 MHz N71 BASEBAND) + (850 MHz N26 BAND) + (700 MHz N29 BAND) - OPTIONAL PER MARKET ADD FREQUENCY COLOR TO SECTOR BAND (CBRS WILL USE YELLOW BAND)				ALPHA RRH				BETA RRH			
				PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT
				RED	RED	RED	RED	BLUE	BLUE	BLUE	BLUE
				ORANGE	ORANGE	RED	RED	ORANGE	ORANGE	BLUE	BLUE
MID-BAND RRH (AWS BANDS N66+N70) ADD FREQUENCY COLOR TO SECTOR BAND (CBRS WILL USE YELLOW BANDS)				WHITE (- PORT)	ORANGE	ORANGE	WHITE (- PORT)	WHITE (- PORT)	ORANGE	ORANGE	WHITE (- PORT)
				RED	RED	RED	RED	BLUE	BLUE	BLUE	BLUE
				PURPLE	PURPLE	RED	RED	PURPLE	PURPLE	BLUE	BLUE
				WHITE (- PORT)	PURPLE	PURPLE	WHITE (- PORT)	WHITE (- PORT)	PURPLE	PURPLE	WHITE (- PORT)
HYBRID/DISCREET CABLES				EXAMPLE 1	EXAMPLE 2	EXAMPLE 3 COAX #1 (ALPHA)	CANISTER COAX #2 (ALPHA)				
INCLUDE SECTOR BANDS BEING SUPPORTED ALONG WITH FREQUENCY BANDS. EXAMPLE 1 - HYBRID, OR DISCREET, SUPPORTS ALL SECTORS, BOTH LOW-BANDS AND MID-BANDS. EXAMPLE 2 - HYBRID, OR DISCREET, SUPPORTS CBRS ONLY, ALL SECTORS. EXAMPLE 3 - MAIN COAX WITH GROUND MOUNTED RRHs.				RED	RED	RED	RED				
				BLUE	BLUE						
				GREEN	GREEN						
				ORANGE	YELLOW						
FIBER JUMPERS TO RRHs				LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH
LOW-BAND HHR FIBER CABLES HAVE SECTOR STRIPE ONLY.				RED	RED	BLUE	BLUE	GREEN	GREEN	ORANGE	PURPLE
				ORANGE	PURPLE	ORANGE	PURPLE	ORANGE	PURPLE		
POWER CABLES TO RRHs				LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH
LOW-BAND RRH POWER CABLES HAVE SECTOR STRIPE ONLY				RED	RED	BLUE	BLUE	GREEN	GREEN	ORANGE	PURPLE
				ORANGE	PURPLE	ORANGE	PURPLE	ORANGE	PURPLE		
RET MOTORS AT ANTENNAS				ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND
RET CONTROL IS HANDLED BY THE MID-BAND RRH WHEN ONE SET OF RET PORTS EXIST ON ANTENNA. SEPARATE RET CABLES ARE USED WHEN ANTENNA PORTS PROVIDE INPUTS FOR BOTH LOW AND MID BANDS.				IN	IN	IN	IN	IN	IN	IN	IN
				RED	RED	BLUE	BLUE	GREEN	GREEN	PURPLE	ORANGE
				PURPLE	ORANGE	PURPLE	ORANGE	PURPLE	ORANGE		
MICROWAVE RADIO LINKS				FORWARD AZIMUTH OF 0-120 DEGREES		FORWARD AZIMUTH OF 120-240 DEGREES		FORWARD AZIMUTH OF 240-359 DEGREES			
LINKS WILL HAVE A 1.5-2 INCH WHITE WRAP WITH THE AZIMUTH COLOR OVERLAPPING IN THE MIDDLE. ADD ADDITIONAL SECTOR COLOR BANDS FOR EACH ADDITIONAL MW RADIO. MICROWAVE CABLES WILL REQUIRE P-TOUCH LABELS INSIDE THE CABINET TO IDENTIFY THE LOCAL AND REMOTE SITE ID's.				PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY
				WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE
				RED	RED	BLUE	BLUE	GREEN	GREEN	WHITE	WHITE
				WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	GREEN	GREEN

RF CABLE COLOR CODES

NO SCALE

1

NOT USED

NO SCALE

4

LOW BANDS (N71+N26)
OPTIONAL - (N29)

ORANGE

AWS
(N66+N70+H-BLOCK)

PURPLE

CBRS TECH
(3 GHz)

YELLOW

NEGATIVE SLANT PORT
ON ANT/RRH

WHITE

ALPHA SECTOR

RED

BETA SECTOR

BLUE

GAMMA SECTOR

GREEN

COLOR IDENTIFIER

NO SCALE

2

NOT USED

NO SCALE

3

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DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS01058A

460 HILLSIDE AVENUE
NEEDHAM MA, 02494

SHEET TITLE
RF
CABLE COLOR CODE

SHEET NUMBER

RF-1

SIGN TYPES		
TYPE	COLOR	COLOR CODE PURPOSE
INFORMATION	GREEN	"INFORMATIONAL SIGN" TO NOTIFY OTHERS OF SITE OWNERSHIP & CONTACT NUMBER AND POTENTIAL RF EXPOSURE.
NOTICE	BLUE	"NOTICE BEYOND THIS POINT" RF FIELDS BEYOND THIS POINT MAY EXCEED THE FCC GENERAL PUBLIC EXPOSURE LIMIT. OBEY ALL POSTED SIGNS AND SITE GUIDELINES FOR WORKING IN RF ENVIRONMENTS. IN ACCORDANCE WITH FEDERAL COMMUNICATIONS COMMISSION RULES ON RADIO FREQUENCY EMISSIONS 47 CFR-1.1307(b)
CAUTION	YELLOW	"CAUTION BEYOND THIS POINT" RF FIELDS BEYOND THIS POINT MAY EXCEED THE FCC GENERAL PUBLIC EXPOSURE LIMIT. OBEY ALL POSTED SIGNS AND SITE GUIDELINES FOR WORKING IN RF ENVIRONMENTS. IN ACCORDANCE WITH FEDERAL COMMUNICATIONS COMMISSION RULES ON RADIO FREQUENCY EMISSIONS 47 CFR-1.1307(b)
WARNING	ORANGE/RED	"WARNING BEYOND THIS POINT" RF FIELDS AT THIS SITE EXCEED FCC RULES FOR HUMAN EXPOSURE. FAILURE TO OBEY ALL POSTED SIGNS AND SITE GUIDELINES FOR WORKING IN RF ENVIRONMENTS COULD RESULT IN SERIOUS INJURY. IN ACCORDANCE WITH FEDERAL COMMUNICATIONS COMMISSION RULES ON RADIO FREQUENCY EMISSIONS 47 CFR-1.1307(b)

SIGN PLACEMENT:

- RF SIGNAGE PLACEMENT SHALL FOLLOW THE RECOMMENDATIONS OF AN EXISTING EME REPORT, CREATED BY A THIRD PARTY PREVIOUSLY AUTHORIZED BY DISH Wireless L.L.C.
- INFORMATION SIGN (GREEN) SHALL BE LOCATED ON EXISTING DISH Wireless L.L.C. EQUIPMENT.
 - A) IF THE INFORMATION SIGN IS A STICKER, IT SHALL BE PLACED ON EXISTING DISH Wireless L.L.C. EQUIPMENT CABINET.
 - B) IF THE INFORMATION SIGN IS A METAL SIGN IT SHALL BE PLACED ON EXISTING DISH Wireless L.L.C. H-FRAME WITH A SECURE ATTACH METHOD.
- IF EME REPORT IS NOT AVAILABLE AT THE TIME OF CREATION OF CONSTRUCTION DOCUMENTS; PLEASE CONTACT DISH Wireless L.L.C. CONSTRUCTION MANAGER FOR FURTHER INSTRUCTION ON HOW TO PROCEED.

NOTES:

1. FOR DISH Wireless L.L.C. LOGO, SEE DISH Wireless L.L.C. DESIGN SPECIFICATIONS (PROVIDED BY DISH Wireless L.L.C.)
2. SITE ID SHALL BE APPLIED TO SIGNS USING "LASER ENGRAVING" OR ANY OTHER WEATHER RESISTANT METHOD (DISH Wireless L.L.C. APPROVAL REQUIRED)
3. TEXT FOR SIGNAGE SHALL INDICATE CORRECT SITE NAME AND NUMBER AS PER DISH Wireless L.L.C. CONSTRUCTION MANAGER RECOMMENDATIONS.
4. CABINET/SHELTER MOUNTING APPLICATION REQUIRES ANOTHER PLATE APPLIED TO THE FACE OF THE CABINET WITH WATER PROOF POLYURETHANE ADHESIVE
5. ALL SIGNS WILL BE SECURED WITH EITHER STAINLESS STEEL ZIP TIES OR STAINLESS STEEL TECH SCREWS
6. ALL SIGNS TO BE 8.5"x11" AND MADE WITH 0.04" OF ALUMINUM MATERIAL

INFORMATION

This is an access point to an
area with transmitting antennas.

Obey all signs and barriers beyond this point.
Call the DISH Wireless L.L.C. NOC at 1-866-624-6874

Site ID: _____



THIS SIGN IS FOR REFERENCE PURPOSES ONLY

NOTICE



Transmitting Antenna(s)

Radio frequency fields beyond this point MAY
EXCEED the FCC Occupational exposure limit.

Obey all posted signs and site guidelines for
working in radio frequency environments.

Call the DISH Wireless L.L.C. NOC at 1-866-624-6874
prior to working beyond this point.

Site ID: _____

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CAUTION



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DISH Wireless L.L.C.
PROJECT INFORMATION
BOBOS01058A

460 HILLSIDE AVENUE
NEEDHAM MA, 02494

SHEET TITLE
RF SIGNAGE

SHEET NUMBER
GN-2

RF SIGNAGE

SITE ACTIVITY REQUIREMENTS:

1. NOTICE TO PROCEED – NO WORK SHALL COMMENCE PRIOR TO CONTRACTOR RECEIVING A WRITTEN NOTICE TO PROCEED (NTP) AND THE ISSUANCE OF A PURCHASE ORDER. PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE DISH Wireless L.L.C. AND TOWER OWNER NOC & THE DISH Wireless L.L.C. AND TOWER OWNER CONSTRUCTION MANAGER.
2. "LOOK UP" – DISH Wireless L.L.C. AND TOWER OWNER SAFETY CLIMB REQUIREMENT:

THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR DISH Wireless L.L.C. AND DISH Wireless L.L.C. AND TOWER OWNER POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.
3. PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.
4. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND DISH Wireless L.L.C. AND TOWER OWNER STANDARDS, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA–322 (LATEST EDITION).
5. ALL SITE WORK TO COMPLY WITH DISH Wireless L.L.C. AND TOWER OWNER INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON DISH Wireless L.L.C. AND TOWER OWNER TOWER SITE AND LATEST VERSION OF ANSI/TIA–1019–A–2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."
6. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY DISH Wireless L.L.C. AND TOWER OWNER PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
8. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER’S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
9. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES INCLUDING PRIVATE LOCATES SERVICES PRIOR TO THE START OF CONSTRUCTION.
10. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.
11. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND DISH PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.
12. CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
13. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF DISH Wireless L.L.C. AND TOWER OWNER, AND/OR LOCAL UTILITIES.
14. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.
15. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER’S EQUIPMENT AND TOWER AREAS.
16. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
17. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND/OR PROJECT SPECIFICATIONS.
18. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
19. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR’S EXPENSE TO THE SATISFACTION OF OWNER.
20. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS AND RADIOS REMOVED SHALL BE RETURNED TO THE OWNER’S DESIGNATED LOCATION.
21. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
22. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

GENERAL NOTES:

- 1.FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:

CONTRACTOR:GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION

CARRIER:DISH Wireless L.L.C.

TOWER OWNER:TOWER OWNER
2. THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. IT IS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
3. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, FORMWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION OF THE FINISHED STRUCTURE ONLY.
4. NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES, AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FURTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.
5. SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE.
6. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CARRIER POC AND TOWER OWNER.
7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
8. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
9. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER’S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
10. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CARRIER AND TOWER OWNER PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
11. CONTRACTOR IS TO PERFORM A SITE INVESTIGATION, BEFORE SUBMITTING BIDS, TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, AND TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING PLAN DRAWINGS.
12. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR’S EXPENSE TO THE SATISFACTION OF DISH Wireless L.L.C. AND TOWER OWNER
13. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER’S DESIGNATED LOCATION.
14. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.



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DRAWN BY:	CHECKED BY:	APPROVED BY:
CSG	NSB	DRG

RFDS REV #: 1

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	07/28/2023	ISSUED FOR REVIEW
1	08/30/2023	BILL OF MATERIALS

A&E PROJECT NUMBER
100753

DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS01058A

460 HILLSIDE AVENUE
NEEDHAM MA, 02494

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-3

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
2. UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.
3. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3000 psi AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL ELAPSE FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90°f AT TIME OF PLACEMENT.
4. CONCRETE EXPOSED TO FREEZE-THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER-TO-CEMENT RATIO (W/C) OF 0.45.
5. ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (Fy) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:

#4 BARS AND SMALLER 40 ksi

#5 BARS AND LARGER 60 ksi
6. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

• CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"

• CONCRETE EXPOSED TO EARTH OR WEATHER:

• #6 BARS AND LARGER 2"

• #5 BARS AND SMALLER 1-1/2"

• CONCRETE NOT EXPOSED TO EARTH OR WEATHER:

• SLAB AND WALLS 3/4"

• BEAMS AND COLUMNS 1-1/2"

7. A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
- ELECTRICAL INSTALLATION NOTES:
1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.

2. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.

3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.

4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.

4.1. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.

4.2. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 22,000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.

5. EACH END OF EVERY POWER PHASE CONDUCTOR, GROUNDING CONDUCTOR, AND TELCO CONDUCTOR OR CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.

6. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH LAMICOID TAGS SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (i.e. PANEL BOARD AND CIRCUIT ID'S).

7. PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.

8. TIE WRAPS ARE NOT ALLOWED.

9. ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.

10. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE COPPER CONDUCTOR (#6 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.

11. POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI-CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.

12. POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.

13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION NOT LESS THAN 75° C (90° C IF AVAILABLE).

14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

15. ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
16. ELECTRICAL METALLIC TUBING (EMT) OR METAL-CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.

17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.

18. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.

19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.

20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND THE NEC.

21. WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOLD SPECMATE WIREWAY).

22. SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).

23. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (i.e. POWDER-ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.

24. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3 (OR BETTER) FOR EXTERIOR LOCATIONS.

25. METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.

26. NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.

27. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CARRIER AND/OR DISH Wireless L.L.C. AND TOWER OWNER BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.

28. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.

29. INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "DISH Wireless L.L.C.".

30. ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.
- dish
wireless.
- 5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120
- NB+C
TOTALLY COMMITTED
- NB+C ENGINEERING SERVICES, LLC.
- 100 APOLLO DRIVE
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|-----------|-------------|--------------|
| DRAWN BY: | CHECKED BY: | APPROVED BY: |
| CSG | NSB | DRG |
- RFDS REV #: 1
- CONSTRUCTION
DOCUMENTS
- | SUBMITTALS | | |
|------------|------------|-------------------|
| REV | DATE | DESCRIPTION |
| 0 | 07/28/2023 | ISSUED FOR REVIEW |
| 1 | 08/30/2023 | BILL OF MATERIALS |
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- A&E PROJECT NUMBER
100753
- DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS01058A

460 HILLSIDE AVENUE
NEEDHAM MA, 02494
- SHEET TITLE
GENERAL NOTES
- SHEET NUMBER
GN-4

GROUNDING NOTES:

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
5. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
6. EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.
7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
15. APPROVED ANTIOXIDANT COATINGS (i.e. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6 ft OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (i.e., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER IN 3/4" NON-METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD-WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).
21. BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY). DO NOT ATTACH GROUNDING TO FIRE SPRINKLER SYSTEM PIPES.



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CONSTRUCTION
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REV	DATE	DESCRIPTION
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DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS01058A

460 HILLSIDE AVENUE
NEEDHAM MA, 02494

SHEET TITLE
GENERAL NOTES

SHEET NUMBER

GN-5

PMI CHECKLIST	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED	REPORT ITEM
PRE-CONSTRUCTION	
X	PMI CHECKLIST DRAWING
N/A	EOR APPROVED SHOP DRAWINGS
N/A	FABRICATION INSPECTION
N/A	FABRICATOR CERTIFIED WELD INSPECTION
N/A	MATERIAL TEST REPORT (MTR)
N/A	FABRICATOR NDE INSPECTION
N/A	NDE REPORT OF MONOPOLE BASE PLATE (AS REQUIRED)
X	PACKING SLIPS
ADDITIONAL TESTING AND INSPECTIONS:	
CONSTRUCTION	
X	CONSTRUCTION INSPECTIONS
N/A	FOUNDATION INSPECTIONS
N/A	CONCRETE COMP. STRENGTH AND SLUMP TESTS
N/A	POST INSTALLED ANCHOR ROD VERIFICATION
N/A	BASE PLATE GROUT VERIFICATION
N/A	CONTRACTOR'S CERTIFIED WELD INSPECTION
N/A	EARTHWORK: LIFT AND DENSITY
N/A	ON SITE COLD GALVANIZING VERIFICATION
N/A	GUY WIRE TENSION REPORT
X	GC AS-BUILT DOCUMENTS
ADDITIONAL TESTING AND INSPECTIONS:	
POST-CONSTRUCTION	
X	PMI INSPECTOR REDLINE OR RECORD DRAWING(S)
N/A	POST INSTALLED ANCHOR ROD PULL-OUT TESTING
X	PHOTOGRAPHS
ADDITIONAL TESTING AND INSPECTIONS:	

NOTE: X DENOTES A DOCUMENT NEEDED FOR THE PMI REPORT
N/A DENOTES A DOCUMENT THAT IS NOT REQUIRED FOR THE PMI REPORT

POST MODIFICATION INSPECTION NOTES:

GENERAL

1. THE POST MODIFICATION INSPECTION (PMI) IS A VISUAL INSPECTION OF TOWER MODIFICATIONS AND A REVIEW OF CONSTRUCTION INSPECTIONS AND OTHER REPORTS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NAMELY THE MODIFICATION DRAWINGS, AS DESIGNED BY THE ENGINEER OF RECORD (EOR).
2. THE PMI IS TO CONFIRM INSTALLATION CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE MODIFICATION DESIGN ITSELF, NOR DOES THE PMI INSPECTOR TAKE OWNERSHIP OF THE MODIFICATION DESIGN. OWNERSHIP OF THE STRUCTURAL MODIFICATION DESIGN EFFECTIVENESS AND INTEGRITY RESIDES WITH THE EOR AT ALL TIMES.
3. ALL PMI'S SHALL BE CONDUCTED BY A PMI INSPECTOR THAT IS APPROVED TO PERFORM ELEVATED WORK FOR NB+C ENGINEERING SERVICES, LLC.
4. TO ENSURE THAT THE REQUIREMENTS OF THE PMI ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR (GC) AND THE PMI INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PO IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE PROACTIVE IN REACHING OUT TO THE OTHER PARTY. IF CONTACT INFORMATION IS NOT KNOWN, CONTACT YOUR NB+C POINT OF CONTACT (POC).
5. REFER TO CCR-01 : CONTRACTOR CLOSEOUT REQUIREMENTS FOR FURTHER DETAILS AND REQUIREMENTS.

CORRECTION OF FAILING PMI'S

1. IF THE MODIFICATION INSTALLATION WOULD FAIL THE PMI ("FAILED PMI"), THE GC SHALL WORK WITH THE ENGINEER OF RECORD TO COORDINATE A REMEDIATION PLAN IN ONE OF TWO WAYS:
 - CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENT PMI.
 - OR, WITH EOR'S APPROVAL, THE GC MAY WORK WITH THE EOR TO RE-ANALYZE THE MODIFICATION/REINFORCEMENT USING THE AS-BUILT CONDITION.

REQUIRED PHOTOS

1. THE GENERAL CONTRACTOR IS REQUIRED TO PROVIDE THE FOLLOWING PHOTOGRAPHS AT A MINIMUM:
 - PRE-CONSTRUCTION GENERAL SITE CONDITION
 - SITE PLACARD WITH DISH SITE NAME
 - PHOTOGRAPHS DURING THE REINFORCEMENT MODIFICATION CONSTRUCTION/ERECTION AND INSPECTION
 - RAW MATERIALS
 - PHOTOS OF ALL CRITICAL DETAILS
 - BOLT INSTALLATION AND TORQUE
 - FINAL INSTALLED CONDITION
 - PHOTOS SHALL HAVE MEASURING TAPES AND CALIPERS TO CONFIRM ALL DIMENSIONS RELATED TO THE MODIFICATION
 - PHOTOS SHALL IDENTIFY THE SECTOR AND MOUNT POSITION
 - POST CONSTRUCTION PHOTOGRAPHS
 - FINAL INFIELD CONDITION
2. PHOTOS OF ELEVATED MODIFICATIONS TAKEN FROM THE GROUND SHALL BE CONSIDERED INADEQUATE.
3. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE PHOTOGRAPHS CONFIRM THE MOUNT MODIFICATION WAS COMPLETED PER THESE DRAWINGS, TO INCLUDE ALL DIMENSIONS AND CONNECTIONS OF MOUNT MEMBERS AND CONNECTIONS TO THE SUPPORTING STRUCTURE.
4. CONTRACTOR SHALL NOTIFY THE EOR OF ANY ISSUES THAT MAY AFFECT THE PERFORMANCE OF THE MOUNT, INCLUDING SAFETY ISSUES, VARIANCES IN LOADING CONDITIONS FROM THE CONSTRUCTION DRAWINGS, ETC.
5. AS-BUILT CD RED LINES SHALL INCLUDE CONTRACTOR'S NAME, PREPARER'S SIGNATURE, AND DATE.



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



NB+C ENGINEERING SERVICES, LLC.

100 APOLLO DRIVE
SUITE 303
CHELMSFORD, MA 01824
(978) 856-8308



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DRAWN BY:	CHECKED BY:	APPROVED BY:
CSG	NSB	DRG

RFDS REV #: 1

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	07/28/2023	ISSUED FOR REVIEW
1	08/30/2023	BILL OF MATERIALS

A&E PROJECT NUMBER
100753

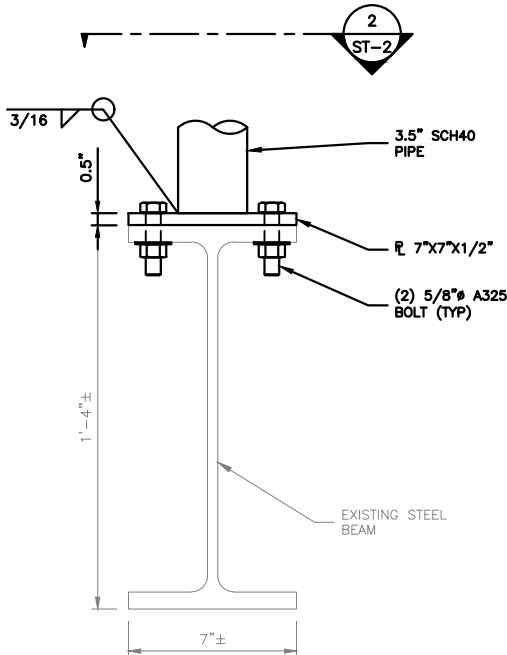
DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS01058A

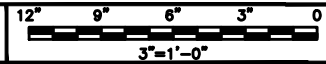
460 HILLSIDE AVENUE
NEEDHAM MA, 02494

SHEET TITLE
PMI CHECKLIST
& NOTES

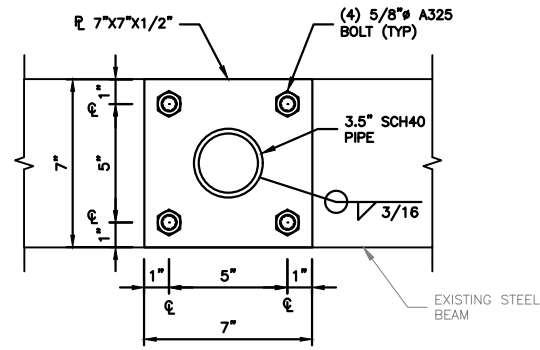
SHEET NUMBER
GN-6



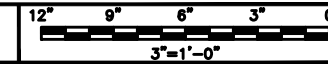
CONNECTION DETAIL



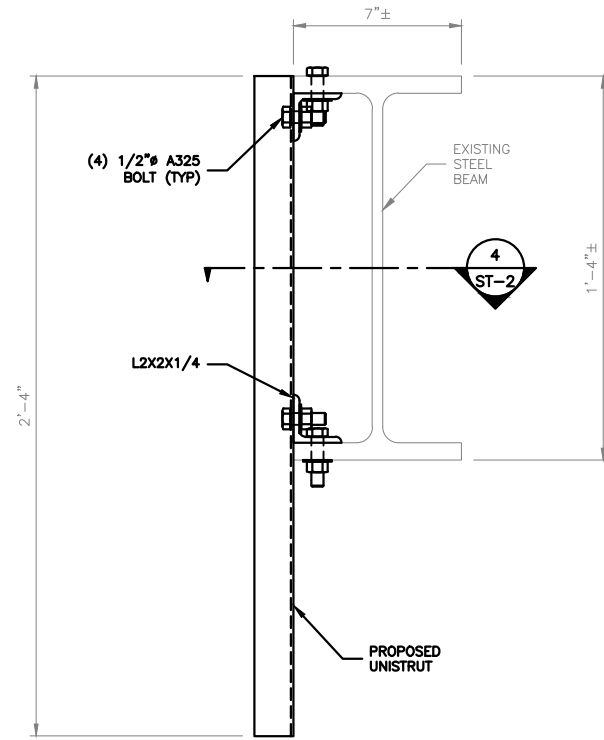
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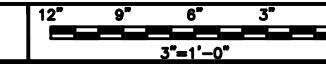
CONNECTION DETAIL



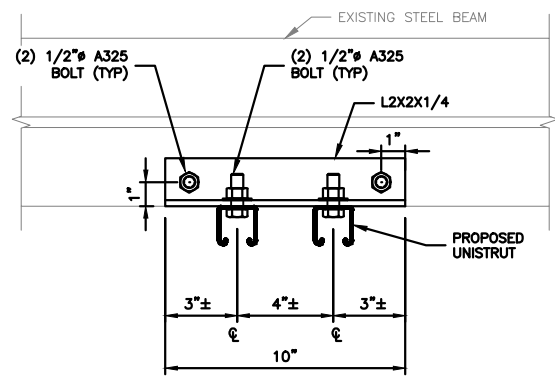
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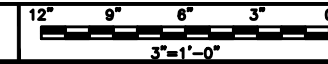
OVP ATTACHMENT TO BEAM DETAIL



3



CONNECTION DETAIL



4



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



NB+C ENGINEERING SERVICES, LLC.

100 APOLLO DRIVE
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CSG	NSB	DRG

RFDS REV #: 1

CONSTRUCTION
DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
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1	08/30/2023	BILL OF MATERIALS

A&E PROJECT NUMBER
100753

DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS01058A

460 HILLSIDE AVENUE
NEEDHAM MA, 02494

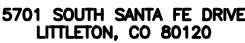
SHEET TITLE
CONNECTION DETAILS

SHEET NUMBER

ST-2



ITEM #	DESCRIPTION	SIZE	LENGTH	Part Number	QTY
1	ABS Cylinder	6'-8"x3/16"	9'-5"	N/A	1
2	Truss Head Bolt	5/16"Ø	1"	N/A	28
3	Washer	5/16"Ø	N/A	N/A	28
4	Hex Nut	5/16"Ø	N/A	N/A	28
5	Steel Plate	4"x3/16"	1'-3 1/2"	N/A	8
6	Steel Plate	4"x3/16"	9'-5"	N/A	2
7	Steel Pipe	4" Nom.	4"	N/A	2
8	Bolt, Thru	5/8"Ø	6 1/2"	N/A	2
9	Washer	5/8"Ø	N/A	N/A	2
10	Hex Nut	5/8"Ø	N/A	N/A	4
11	SCH40 Steel Pipe	3-1/2" Nom.	6'-10"	N/A	1
12	Steel Plate	7"x7"x1/2"	N/A	N/A	1
13	A325 Bolt	5/8"Ø	3"	N/A	4
14	A325 Washer	5/8"Ø	N/A	N/A	4
15	A325 Hex Nut	5/8"Ø	N/A	N/A	4
16	P1000 Unistrut	1-5/8"x1-5/8"	2'-4"	N/A	2
17	Steel Angle	2"x2"x1/4"	10"	N/A	2
18	A325 Bolt	1/2"Ø	2"	N/A	8
19	A325 Washer	1/2"Ø	N/A	N/A	8
20	A325 Hex Nut	1/2"Ø	N/A	N/A	8
Quantities specified are for one concelamnt/sector					



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DRAWN BY: | CHECKED BY: | APPROVED BY:

CSG	NSB	DRG
-----	-----	-----

RFDS REV #: 1

CONSTRUCTION DOCUMENTS

SUBMITTALS

REV	DATE	DESCRIPTION
0	07/28/2023	ISSUED FOR REVIEW
1	08/30/2023	BILL OF MATERIALS

A&E PROJECT NUMBER

100753

DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS01058A

**460 HILLSIDE AVENUE
NEEDHAM MA, 02494**

SHEET TITLE

BILL OF MATERIALS

SHEET NUMBER

ST-3



Site Name: BOBOS01058A
Wireless Communication Facility
460 Hillside Avenue
Needham, MA 02494

Photograph Information:
View 2-Parking Loop
View from the West
Showing the Existing Site

NBIC
TOTALLY COMMITTED.



Site Name: BOBOS01058A
Wireless Communication Facility
460 Hillside Avenue
Needham, MA 02494

Photograph Information:
View 2-Parking Loop
View from the West
Showing the Proposed Site

NBIC
TOTALLY COMMITTED.



Site Name: BOBOS01058A
Wireless Communication Facility
460 Hillside Avenue
Needham, MA 02494

Photograph Information:
View 3-Parking Lot
View from the North
Showing the Proposed Site

NBC
TOTALLY COMMITTED.



View 3

View 1

View 2

BOBOS01058A
Location Map

● - not visible ● - visible



Site Name: BOBOS01058A
Wireless Communication Facility
460 Hillside Avenue
Needham, MA 02494

Photograph Information:
View 1-Parking Loop
View from the Northeast
Showing the Existing Site

NB+C
TOTALLY COMMITTED



Site Name: BOBOS01058A
Wireless Communication Facility
460 Hillside Avenue
Needham, MA 02494

Photograph Information:
View 1-Parking Loop
View from the Northeast
Showing the Proposed Site

NB+C
TOTALLY COMMITTED.



RF DESIGN SHEET

Issue Date	8/2/2023
Revision	2

RFDS Status	Final
Created By	Parakkavetty, Sameer [Outlook]

SITE INFORMATION	
DISH Site Number	BOBOS01058A
DISH Site Name	0
Prequal Asset ID	
AOI	BOS
PEA	7
Latitude	42.291209
Longitude	-71.236381
Address	460 Hillside Avenue
City	Needham Heights
State	MA
ZIP Code	02494
County	Norfolk
Rad Center (ft)	37/46
RAD Confirmed	No Confirmed RAD
Structure Type	Rooftop

LEASE AREA	
Dimensions (ft.)	
Type	Steel Platform
Baseband Cabinet	Charles(Amphenol)-H/EX
Dimensions (in)	32" x 32.1" x 74"
Baseband	gNB-CU
Generator Required	
Make/Model	

PROJECT ASSIGNMENTS	
Market Manager	Bradford Rainey
Site Development Mgr.	Gregory Costello
RF Engineer	Sameer Parakkavetty
Site Acq Specialist/Develop. Cord.	Julie Charest /
SAQ Vendor/A&E Vendor	WE AND C WIRELESS LLC DBA NETWORK BUILDING AND CONSULTING LLC / WE AND C WIRELESS LLC DBA NETWORK BUILDING AND CONSULTING LLC
Asset Owner/Asset #	Private Owner /
Construction Mgr. (Lead/Field)	Aaron Chandler / Armelindo Shahaj
Contractor (General/Tower/Civil)	/ /
Power Company / Transport Provider	EVERSOURCE NSTAR / COMCAST

EMERGENCY CONTACT INFORMATION	
Name	Temporary Emergency Line
Phone	866-624-6874

DESIGN COMMENTS
CM to finalize cable lengths.



RF EQUIPMENT INFORMATION

Issue Date/Revision

Site ID

Site Address

Structure Type

8/2/2023

Revision: 2

BOBOS01058A

460 Hillside Avenue, Needham Heights MA 02494

Rooftop

sectors >20' apart?

Yes

Confirmed RAD?

No Confirmed RAD

37/46

Latitude

Prequal Asset ID

SOW / RF

Comments

42.291209

Longitude -71.236381

Dish proposes to place 3 antennas, 6 RRU's, 3 junction box(es), 3 fiber cable(s), and 3 (power/hybrid) cable(s), at the 37/46 foot RAD. Dish will require a lease area for ground equipment. CM to finalize cable lengths.

Sector 1 (alpha)			Sector 2 (beta)			Sector 3 (gamma)			
ANTENNA									
Antenna Mount Position	1	2	3	1	2	3	1	2	3
Antenna ID		1			2			3	
Manufacturer		Commscope			Commscope			Commscope	
Model Number		FFVV-65B-R2			FFVV-65B-R2			FFVV-65B-R2	
Dimensions H x W x D (in)		72.0" x 19.6" 7.8"			72.0" x 19.6" 7.8"			72.0" x 19.6" 7.8"	
Weight (lbs.)		70.8			70.8			70.8	
TX Power Output (watts)		40000			40000			40000	
ERP (dBm)		76.02			76.02			76.02	
RAD Centerline Height (ft.)		37			46			46	
Azimuths (True North)		10°			120°			240°	
Mech Down Tilt		0°			0°			0°	
Default Mount	Generic								
LOW BAND/RADIO #1									
Manufacturer		Samsung			Samsung			Samsung	
Model Number		RF4450t-71A			RF4450t-71A			RF4450t-71A	
Dimensions H x W x D (in.)		16.5" x 15.0" x 11.0"			16.5" x 15.0" x 11.0"			16.5" x 15.0" x 11.0"	
Weight (lbs.)		94.58			94.58			94.58	
Location		Cabinet			Cabinet			Cabinet	
Band		n71			n71			n71	
Quantity		1			1			1	
Port Assignment		Port 1-4			Port 1-4			Port 1-4	
Elec Down Tilt		2°			2°			2°	
MID BAND/RADIO #2									
Manufacturer		Samsung			Samsung			Samsung	
Model Number		RF4451d-70A			RF4451d-70A			RF4451d-70A	
Dimensions H x W x D (in)		15.0" x 15.0" x 8.9"			15.0" x 15.0" x 8.9"			15.0" x 15.0" x 8.9"	
Weight (lbs.)		61.3			61.3			61.3	
Location		Cabinet			Cabinet			Cabinet	
Quantity		1			1			1	
Band		n70 n66			n70 n66			n70 n66	
Port Assignment		Port 5-8			Port 5-8			Port 5-8	
Elec Down Tilt		2°			2°			2°	
OVP (Junction Box)									
Manufacturer		Raycap			Raycap			Raycap	
Model Number		RDIDC-3045-PF-48			RDIDC-3045-PF-48			RDIDC-3045-PF-48	
Dimensions H x W x D (in.)		18.97" x 16.21" x 9.64"			18.97" x 16.21" x 9.64"			18.97" x 16.21" x 9.64"	
Weight (lbs.)		21			21			21	
Quantity		1			1			1	
LINE DETAILS									
Line Type	Power	Fiber		Power	Fiber		Power	Fiber	
Manufacturer	NWS	NWS		NWS	NWS		NWS	NWS	
Model Number	DC-D06C06-XXXFT_6AWG	FT-LCULCU-D8SMA-XXXFT		DC-D06C06-XXXFT_6AWG	FT-LCULCU-D8SMA-XXXFT		DC-D06C06-XXXFT_6AWG	FT-LCULCU-D8SMA-XXXFT	
Diameter (O.D. in.)	0.938"	0.33"		0.938"	0.33"		0.938"	0.33"	
Weight (lbs. per ft.)	.582 lbs/ft	TBD		.582 lbs/ft	TBD		.582 lbs/ft	TBD	
Quantity	1	1		1	1		1	1	
Approx. Cable Length	180	180		155	155		172	172	
OTHER EQUIPMENT									
Type of Equipment									
Manufacturer									
Model Number									
Dimensions H x W x D (in)									
Weight (lbs.)									
Equipment Location									
Quantity									

Frequencies	n29	n66	n70	n71
Downlink (TX)	-	[2160 - 2170] [2180 - 2200]	[1995 - 2020]	[642 - 652]
Uplink (RX)	-	[1760 - 1770]	[1700 - 1710]	[688 - 698]



ZBA Application For Hearing

Applicants must consult with the Building Commissioner prior to filing this Application. Failure to do so will delay the scheduling of the hearing.

Applicant Information

Applicant Name	Corbin Petro and Jessica Gelman	Date:	11/28/23
Applicant Address	320 Grove Street, Needham, MA 02492		
Phone	617-792-4840	email	Corbin.petro@gmail.com
Applicant is ☒ Owner; ☐ Tenant; ☐ Purchaser; ☐ Other _____ If not the owner, a letter from the owner certifying authorization to apply must be included			
Representative Name			
Address			
Phone		email	

2023 NOV 28 PM 4:31

RECEIVED TOWN CLERK
NEEDHAM, MA 02492

Subject Property Information

Property Address	320 Grove Street, Needham, MA 02492		
Map/Parcel Number	220/03	Zone of Property	SRA
Is property within 100 feet of wetlands, 200 feet of stream or in flood Plain? ☒ Yes ☐ No			
Is property ☒ Residential or ☐ Commercial			
If residential renovation, will renovation constitute "new construction"? ☒ Yes ☐ No			
If commercial, does the number of parking spaces meet the By-Law requirement? ☐ Yes ☐ No			
Do the spaces meet design requirements? ☐ Yes ☐ No			
Application Type (select one): ☐ Special Permit ☒ Variance			



ZBA Application For Hearing

Existing Conditions: 3,291sf single-Family, 2-story brick colonial with an attached 2-car garage located on 204,803sf of an irregular lot in both Needham and Wellesley. The structure is located in the 50' foot wetland buffer zone and the majority of the property contains protected wooded wetlands, wildlife habitat and an intermittent stream. The house flooded currently creating a mold hazard.

Statement of Relief Sought: To demolish and reconstruct a single-family home with 3 car garage, landscaped with permeable hardscape and mitigation planting required by CC. Seeking a variance to preserve the allowable 15' side setbacks enjoyed prior to 2017 zoning amendment due to unusual soil and shape of the topography of the land.

Applicable Section(s) of the Zoning By-Law:

4.2.3, MGL40A, Section 10 and 7.5.3

If application under Zoning Section 1.4 above, list non-conformities:

	Existing Conditions	Proposed Conditions
Use	Res	Res
# Dwelling Units	1	1
Lot Area (square feet)	204803	204803
Front Setback (feet)	N/A	N/A
Rear Setback (feet)	95.4	84.7
Left Setback (feet)	15	17.5
Right Setback (feet)	20.7	15.3
Frontage (feet) (in Wellesley 79.42')*	n/a*	n/a*
Lot Coverage (%)	n/a	n/a
FAR (Floor area divided by the lot area)	n/a	n/a
<i>Numbers must match those on the certified plot plan and supporting materials</i>		



ZBA Application For Hearing

Date Structure Constructed including additions:
1981

Date Lot was created:
02/20/1968

Submission Materials	Provided
Certified Signed Plot Plan of Existing and Proposed Conditions (Required)	yes
Application Fee, check made payable to the Town of Needham (Required)	yes
If applicant is tenant, letter of authorization from owner (Required)	n/a
Elevations of Proposed Conditions (when necessary)	yes
Floor Plans of Proposed Conditions (when necessary)	yes

Feel free to attach any additional information relative to the application. Any memorandum or supplemental materials should be filed 48 hours before the hearing. Additional information may be requested by the Board at any time during the application or hearing process.

I hereby request a hearing before the Needham Zoning Board of Appeals. I have reviewed the Board Rules and instructions.

I certify that I have consulted with the Building Commissioner – 11/12/2013

☒ I will represent myself; or

Name _____ will represent me in connection with the application.

Date: 11/28/2023 Applicant Signature 

An application must be submitted to the Town Clerk's Office at townclerk@needhamma.gov and the ZBA Office at dcollins@needhamma.gov

November 21, 2023

Town of Needham
Zoning Board of Appeals
Needham, Massachusetts 02492

Attn: Daphne M. Collins, Zoning Specialist

Re: Corbin Petro & Jessica Gelman, 320 Grove St, Needham, MA Variance Request

Dear Members of the Needham Board of Appeals,

We have been residents of Needham since February 2013 when we bought our home at 320 Grove St. When we purchased our home, it was **fully conforming** by law until the large house zoning amendment of June 2017. Given events that have rendered our house a threat to our public health and safety, these regulations have created a significant hardship and we are requesting a variance.

By way of background, there has been one previous owner of our house and, while they sent their kids to Wellesley schools, we love the town of Needham. Our property abuts wetlands and our property is more than 4.6 acres. Our 2 boys are at Newman Elementary. We have found the town welcoming to us as two married women and are active in the community, especially with youth sports as coaches.

We love that our home is surrounded by conservation lands. We love nature, the occasional deer, turkey, and quiet - and we enjoy going on adventures with our boys and teaching them about nature. When we moved, we were unaware of the many decades of flooding that existed. Our lovely backyard turns into a pond several times each spring and fall. Over the years, we've called on both Wellesley and Needham fire departments when the water threatened to breach our home. While stressful and frustrating, our home wasn't impacted until **July 2021** when the water breached our **finished basement** and we had 6 inches of water for 4 days.

The damage from the water was significant, both to our house and to us mentally. While we restored our basement at meaningful costs to us, we have ongoing worry about mold, especially with aging parents who have severe allergies and who visit us often. We invested in an engineering analysis to determine the best mitigation strategies to keep our home and health safe. We also have intense stress and anxiety at any rainstorm as we fear flooding and more disruption and damage.

The water issues have gotten progressively worse with new construction and development surrounding the property. We understand by review of public records that there were major concerns by the previous owners and neighbors when Beard Way was developed, largely due to the water issues. Properties being subdivided, like at 390 Grove St in recent years have only exacerbated the water issues. New development, in addition to poor maintenance and an inadequate discharge drain pipe that was built on private property (302 Grove St), put much of this out of our control.

We love our home and want to remain living here for many years to come. Our home is not a teardown - we've lived here for 10 years and remodeled it during that time. However, with health and safety as a concern, we feel the only choice we have to stay here is to replace our home with one on higher ground,

farther from the water/wetlands, and built with the waterproofing and technology required to keep the home safe. As nature lovers and with an appreciation for conservation, we made a commitment to invest in modifications that improve the current footprint and impact to wetlands, and the plan we submitted to ZBA for consideration was approved by the Conservation Commission in July 2023.

The plan approved by the Conservation Commission and that we have submitted for consideration by the ZBA includes building a new home. The new home has setbacks previously allowed in the SRA district, which were 15 feet as the home was built in 1981, before the new regulations from June 2017, when new setback limits were established. The current home at 320 Grove St has setbacks of 15ft and 20ft, on the left hand and right hand sides, respectively. The new home proposal has setbacks of 17ft and 15ft on the left hand and right hand sides, respectively. **Notably, the shortest distance between the proposed house and the house next door (306 Grove St, Wellesley) is approximately 55ft** because of the unusual shape of the lot, which adheres to the spirit of the regulations to ensure space between each home.

We believe the new home will significantly improve the property and neighborhood, and have full support of our neighbors to the right at 330 Grove St and to the left at 306 Grove St (we own this property, which is fully in Wellesley). When we embarked on this process in October 2022, we received assurances from the former building commissioner that we were **entitled by right** to the 15ft setbacks. It was these assurances that were the key criteria we used to develop our plan and decision to stay at the property. We understand now that a different interpretation of the regulations stands and so are requesting a variance.

We are requesting a variance based on Needham bylaw 7.5.3 and Massachusetts General Laws, c.40A, Section 10, which provides that variances may be granted when:

“owing to circumstances relating to the soil conditions, shape, or topography of such land or structures and especially affecting such land or structures but not affecting generally the zoning district in which it is located, a literal enforcement of the provisions of the ordinance or by-law would involve substantial hardship, financial or otherwise, to the petitioner or appellant, and that desirable relief may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of such ordinance or by-law. ”

Applying the criteria of Chapter 40A, Section 10, the first question is whether there exist circumstances relating to the soil conditions, shape, or topography of the Premises or structures that especially affect the Premises but not generally the zoning district in which it is located.

The current non-conforming lot abuts wetlands and has a triangle-shaped lot that narrows as you move away from the wetlands. Our lot is 4.6 acres, plus a small portion in Wellesley, the vast majority of which is not buildable because of an intermittent stream, wetlands, woods and wildlife habitat. As we aimed to improve the property and preserve the wetlands, we moved our house forward. As we do that, the shape of the lot gets smaller, making the buildable lot by right essentially non-existent. With the approval from the Conservation Commission to build within the 25ft buffer zone, we have a buildable lot but require this variance. We meet the criteria for a variance as we have unusual soil conditions given our proximity to wetlands and an unusual shape with the triangle-shaped lot.

No other property in our area has such an unusual shape or limitations.

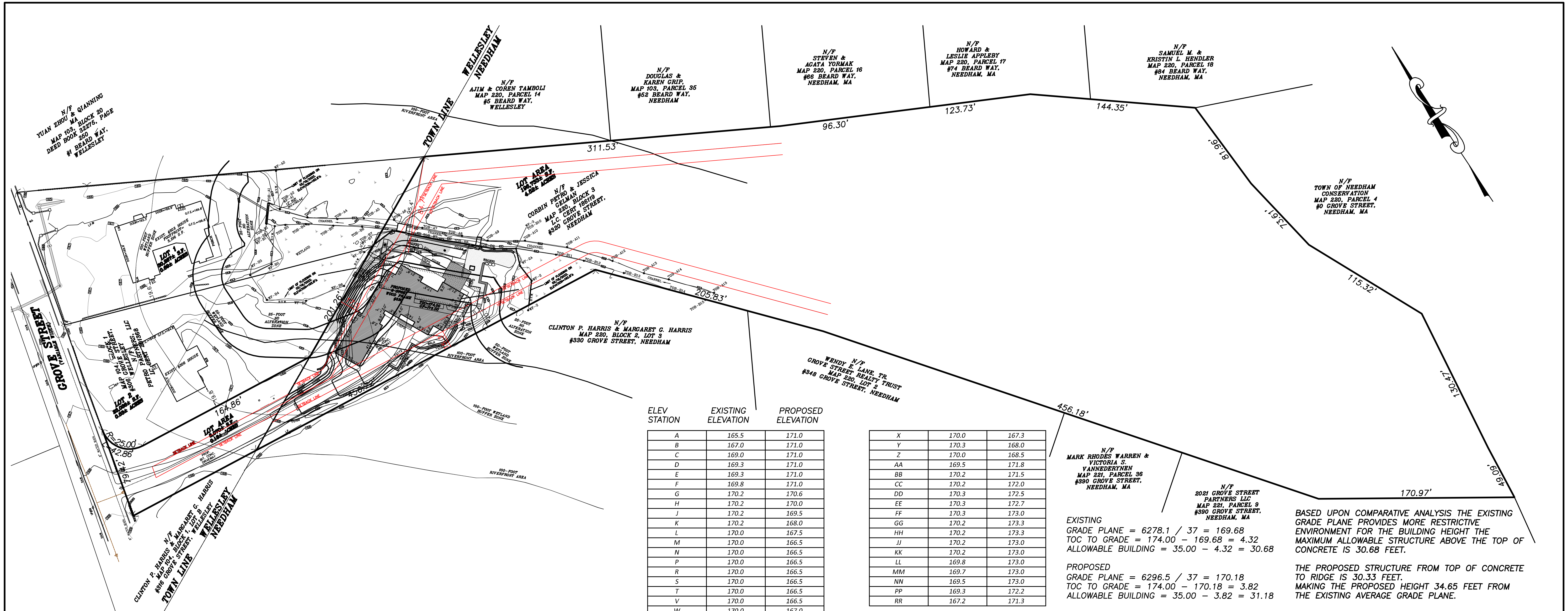
The next question pursuant to Chapter 40A, Section 10 is whether a literal enforcement of the provisions of the By-Law would involve substantial hardship, financial or otherwise. In this case, application of the By-Law to the Premises would render it non-buildable; yet the current house has existed on it for over 40 years. This would render the Premises unusable for any material purpose. As our current house is a risk to our public health, we have faced considerable hardship as we seek to create a livable home on our non-conforming lot. There is little doubt that this inflicts a tremendous hardship on our family, as we have lived at the property for 11 years and wish to continue living at the property in a manner safe for our two young sons and with frequent visits from older family members heavily impacted by mold allergies.

The last question to be asked pursuant to Chapter 40A, Section 10 is whether the requested relief may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the by-law. In this case, the Premises has existed as a separate lot with an existing home for approximately 43 years. At present, minimal change is proposed for the lot itself, and no change is being proposed for its use. Therefore, issuance of a variance to allow for a new build that improves the wetlands conditions, overall neighborhood, and enables the family to live in a home not threatened by water damage does not present any apparent detriment and further does not nullify or substantially derogate from the intent or purpose of the By-Law.

We thank you for your consideration and hope that you will respect the setbacks that we have enjoyed since we purchased the house.

Respectfully,

Corbin Petro & Jessica Gelman



ELEV. STATION	EXISTING ELEVATION	PROPOSED ELEVATION
A	165.5	171.0
B	167.0	171.0
C	169.0	171.0
D	169.3	171.0
E	169.3	171.0
F	169.8	171.0
G	170.2	170.6
H	170.2	170.0
I	170.2	169.5
K	170.2	168.0
L	170.0	167.5
M	170.0	166.5
N	170.0	166.5
P	170.0	166.5
R	170.0	166.5
S	170.0	166.5
T	170.0	166.5
V	170.0	166.5
W	170.0	167.0

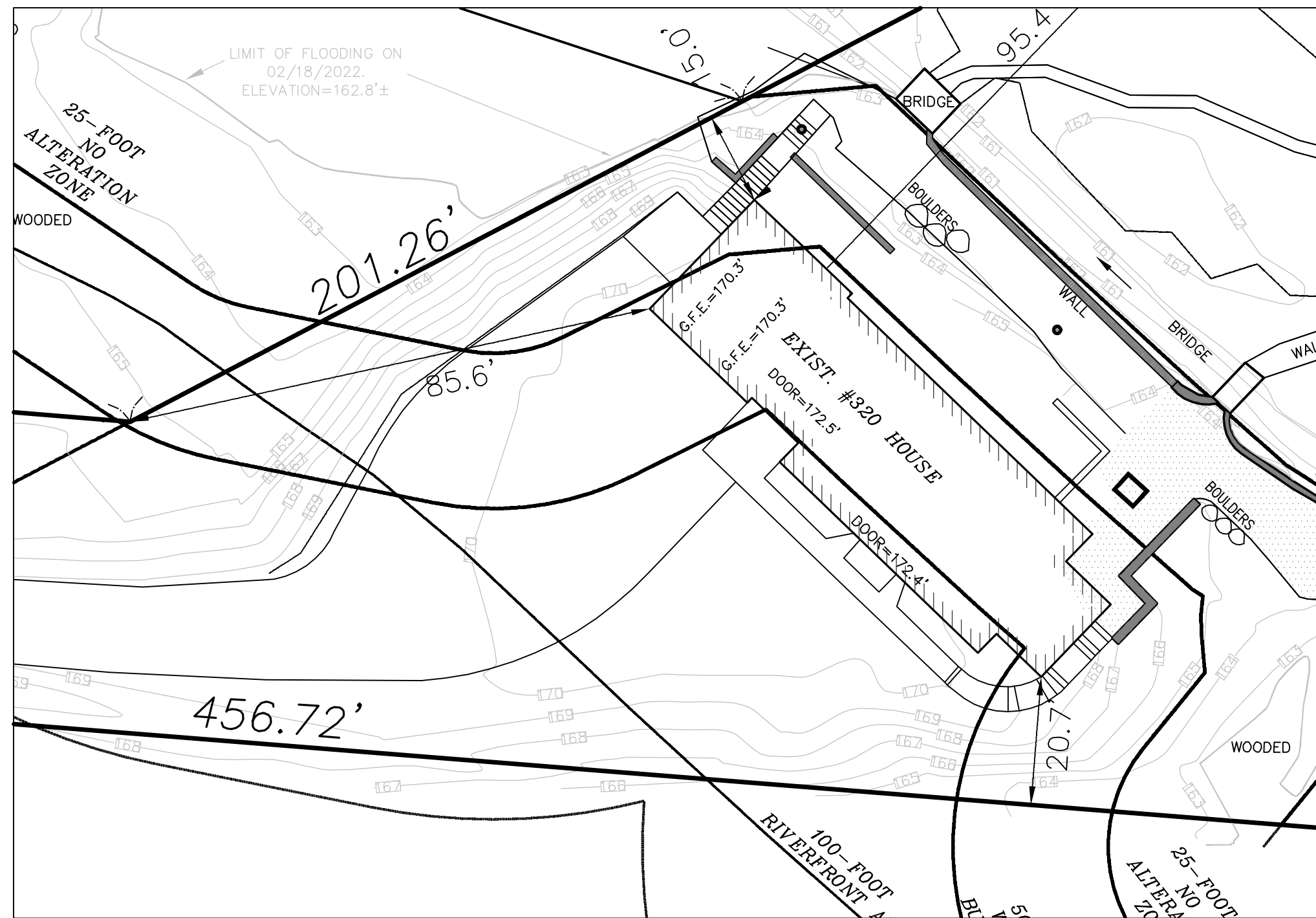
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Y	170.3	168.0
Z	170.0	168.5
AA	169.5	171.8
BB	170.2	171.5
CC	170.2	172.0
DD	170.3	172.5
EE	170.3	172.7
FF	170.3	173.0
GG	170.2	173.3
HH	170.2	173.3
JJ	170.2	173.0
KK	170.2	173.0
LL	169.8	173.0
MM	169.7	173.0
NN	169.5	173.0
PP	169.3	172.2
RR	167.2	171.3

EXISTING
GRADE PLANE = 6278.1 / 37 = 169.68
TOC TO GRADE = 174.00 - 169.68 = 4.32
ALLOWABLE BUILDING = 35.00 - 4.32 = 30.68

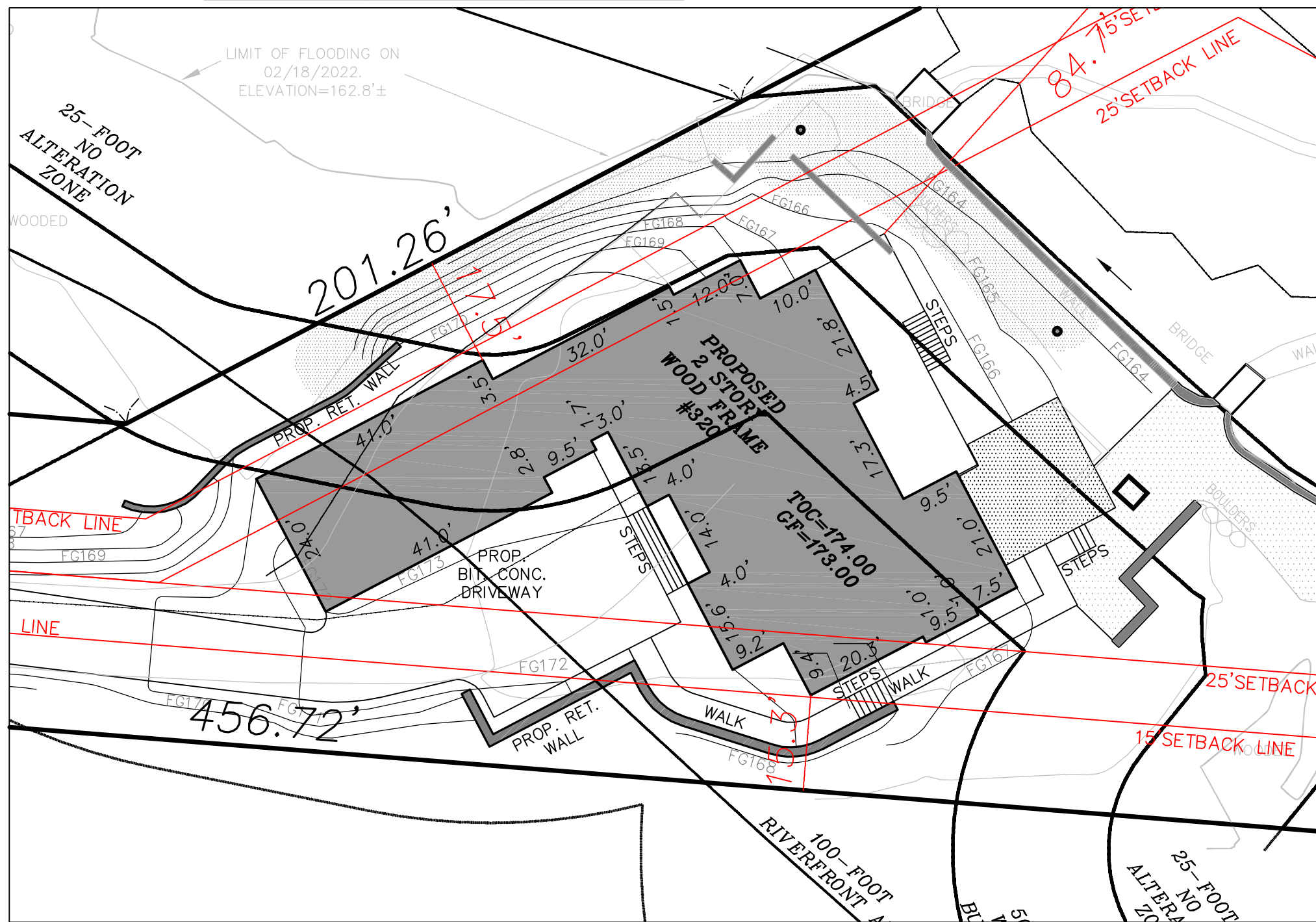
PROPOSED
GRADE PLANE = 6296.5 / 37 = 170.18
TOC TO GRADE = 174.00 - 170.18 = 3.82
ALLOWABLE BUILDING = 35.00 - 3.82 = 31.18

BASED UPON COMPARATIVE ANALYSIS THE EXISTING GRADE PLANE PROVIDES MORE RESTRICTIVE ENVIRONMENT FOR THE BUILDING HEIGHT THE MAXIMUM ALLOWABLE STRUCTURE ABOVE THE TOP OF CONCRETE IS 30.68 FEET.

THE PROPOSED STRUCTURE FROM TOP OF CONCRETE TO RIDGE IS 30.33 FEET.
MAKING THE PROPOSED HEIGHT 34.65 FEET FROM THE EXISTING AVERAGE GRADE PLANE.

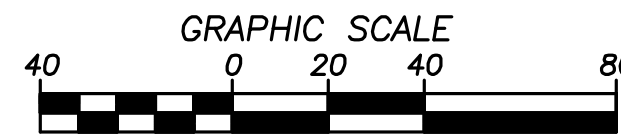


EXISTING SITE DETAIL



PROPOSED SITE DETAIL

ZONING INFORMATION: SINGLE RESIDENCE A (SRA)			
	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	43,560 SF	204,803 SF	204,803 SF
MINIMUM LOT FRONTAGE	150 FEET	N/A FEET	N/A FEET
MINIMUM FRONT SETBACK	30 FEET	N/A	N/A
MINIMUM SIDE YARD	25 FEET*	15.0 FEET*	17.5 FEET*
MINIMUM REAR YARD	15 FEET	20.7 FEET	15.3 FEET*
MAXIMUM BUILDING HEIGHT	35 FEET	30± FEET	34.65 FEET
MAXIMUM BUILDING HEIGHT	2 1/2 STORIES	2 1/2 STORIES	2 1/2 STORIES



ZONING BOARD OF APPEALS
PLAN OF LAND
320 GROVE STREET
NEEDHAM, MASS.

Field Resources, Inc.
LAND SURVEYORS

NOVEMBER 10, 2023 SCALE 1"=40'
P.O. BOX 324 281 CHESTNUT ST.
AUBURN, MA NEEDHAM, MA.
781 444 5936
office@fieldresources.net

TOWN OF NEEDHAM
MAP 220 PARCEL 03
NORFOLK COUNTY
REGISTRY OF DEEDS
LAND COURT OF MASSACHUSETTS
CERTIFICATE NO. 84800
LAND COURT PLAN 84800
CORBIN PETRO &
JESSICA GELMAN
320 GROVE STREET
WELLESLEY, MA



REV #	DATE	ISSUANCE
1	11/03/22	First Draft
2	11/22/22	Second Draft
3	11/29/22	Third Draft
4	02/23/23	Fourth Draft
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Contractor to verify all information and dimensions in the field prior to start of construction and is to notify McKay Architects of any discrepancies

Title Sheet

JOB NO	T-1.1
DATE	
DWG BY	
CKD BY	
SCALE	
AS NOTED	

GENERAL NOTES

General:

- The governing building code for the design and construction is the Massachusetts State Building Code for 1& 2 family dwellings (9th edition).
- Architectural drawings shall be used in conjunction with structural, mechanical, electrical and shop drawings.
- The contractor shall confirm all dimensions and notify architect of any discrepancies, ambiguities, or inconsistencies prior to proceeding with the work. The contractor shall also notify the architect, prior to proceeding with the work, if any construction needs to be adjusted due to field conditions.
- An assumption has been made that the elevation difference between the garage slab and the first floor is 24" the general contractor shall notify the architect if this is inconsistent with the site conditions prior to beginning construction.
- All flashing in contact with pressure treated lumber shall be corrosion resistant.
- All ductwork and hot water piping shall be insulated and where necessary, a vapor barrier for the ductwork will be provided to prevent condensation.
- All chimneys to be constructed so the top of the flue is 2'-0" above any roof/wall within 10'-0".
- Provide continuous pitch break vents at all roof/wall intersections where soffit vents are installed.

Dimensions:

- Dimensions standards within the documents are as follows unless otherwise noted:
 - Dimensions to exterior walls are from outside face of a stud or concrete wall
 - Dimensions at windows and exterior doors represents a dimension to the center of that opening from the center of another opening or the outside face of a stud or concrete wall.
 - Interior dimensions at stud walls represents a dimension to the middle of the stud (unless interior wall is also an exterior wall, then dimension is to face of stud).
- Interior dimensions at stairs represents a dimension to the finished face of the stair.
- Dimensions/locations of walls enclosing tub/shower units, pre-manufactured fireplaces and all other built-ins must be confirmed with the fixture manufacturer for the required RO and attachment.
- Dimensions depicting the building height, shown of the architectural and structural drawings are for the building and building components only. The overall building height depicted is from the 1st floor deck. The owner/G.C. is responsible for coordinating and establishing the grade relative to the 1st floor, to ensure compliance with zoning and building code height requirements.
- All dimensions from existing surfaces are from face of existing surface.
- Closet doors that are not dimensioned are typically centered within the closet.
- All other doors that are not dimensioned are typically 4" to 6" (depending on the finish casing width) from face finish to the door opening on the butt side.
- Dimensions locating cased openings are typically dimensioned to the center of that opening unless otherwise noted.

Stairways/Balconies:

- Stairways shall not be less than 3'-0" in clear width at all points above the permitted handrail height and below the required headroom height. Maximum riser height shall be 8 1/2", minimum tread depth shall be 4" with nosing not to exceed 1 1/4". Wider treads shall have a min depth equal to the straight run tread depth at a distance of 12" from the narrower side with a min. tread depth of 3" at any point. Minimum headroom shall be 6' 6" measured vertically from the sloped plane adjoining the tread nosing or from the floor surface of a landing or platform.
- Handrails shall be provided on at least one side of each continuous run of treads or flight of stairs with 4 or more risers. Minimum height shall not be less than 34" with a maximum not to exceed 38". Handrails shall be continuous for the full length of the flight.
- Guardrails, 36" minimum in height, shall be installed in floor, porch, and/or balcony area more than thirty (30) inches above a floor or grade below. Guardrails on open sides of stairs, with a total rise of more than thirty (30) inches above a floor or grade below, shall be not less than 34" in height measured vertically from the nosing of the treads. The maximum clear opening between rails, balusters, and floors shall not exceed four (4) inches.

Exception:

- The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway may be of such a size that a six inch (6) sphere cannot pass through. Openings for required guards on the sides of stair treads shall not allow a sphere 4-3/8 inches to pass through.
- An insulated door shall be provided at the top of unfinished basement stairs or insulate the walls and the underside of stairs and provide an insulated door at the bottom of basement stairs.
- An insulated door shall be provided at the top of attic stairs or insulate the walls and underside of stairs and provide an insulated door at the bottom of attic stairs. Emergency escape and rescue openings.

Emergency Escape and Rescue Openings/Exterior Windows and Doors:

- Window sizes shown on the drawings are based generically and the owner (or general contractor where applicable) shall choose the final manufacturer. Window sizes shall be verified by the general contractor prior to ordering rough opening sizes shall be provided by the manufacturer.
- Basements, habitable attics and every sleeping room shall have at least one operable emergency escape and rescue opening. Where basements contain more than one sleeping room, each shall have an emergency escape and rescue opening but adjoining areas shall not require one. Emergency escape and rescue openings shall meet the following criteria:
 - Sill height shall not be more than 44 inches above the floor.
 - Where a door having a threshold below the adjacent ground elevation is used as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead shall provide direct access to the basement and when the bulkhead is fully opened it shall provide the minimum net clear opening of 5.7 square feet.
 - Emergency escape and rescue openings with a sill elevation below the adjacent ground elevation shall be provided with a window well with a minimum horizontal area of 9 square feet and a minimum horizontal projection of 36". The window well shall allow the emergency escape and egress opening to be fully opened.
 - All emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet.

Exceptions:

- Grade floor openings shall have a minimum net clear opening of 5.0 square feet
- Double hung windows used for emergency escape shall be permitted to have a new clear opening of 3.3 square feet provided that at least one operable sash meets the minimum height and width requirements and operations constraints.
- The minimum net clear opening shall be 24 inches x 20 inches in either direction
- Emergency escape and rescue openings shall be provided from the inside without the use of key's or tools
- In dwelling units, where the opening of an operable window is located more than 72 inches above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches above the finished floor of the room in which the window is located. Operable sections of windows shall not permit openings that allow passage of a 4 inch diameter sphere where such openings are located within 24 inches of the finished floor.

Exceptions:

- Windows whose openings will not allow a 4 inch diameter sphere to pass through the opening when the opening is in its largest opened position
- Openings that are provided with window fall prevention devices that comply with section R6123.
- Openings that are provided with fall prevention devices that comply with ASTM F2040.
- Windows that are provided with openings limiting devices that comply with section R6124.

Egress:

- Stairways, ramps, exterior exit balconies, hallways and doors shall meet all minimum egress requirements.
- All other exterior exits shall be positively anchored to the primary structure to resist both vertical and lateral forces.
- Enclosed accessible space under stairs shall have walls, under stair surface and any soffits protected on the enclosed side with 1/2" gypsum board.
- Hallways shall be minimum of 3 feet clear
- Egress from dwelling units shall be by means of two exit doors. The minimum nominal width of at least one of the required exit doors shall be not less than 36" with a nominal height shall of six feet eight inches and side hinged. All other required exit doors shall not be less than 32" in nominal width or six feet eight inches in nominal height and may be sliding or side-hinged.
- Egress through an attached garage is permitted provided that the attached garage is also provided with a 32" exit door
- All other exterior doors in excess of the two required exit doors are not required to comply with these minimum dimensions.
- All interior doors providing access to habitable rooms shall have a nominal width of 30 inches and nominal height of six feet 6 inches except bathrooms which are permitted to be 24 inches in nominal width.
- A floor or landing shall be provided on each side of an exterior door. The width of each landing shall not be less than the door served and have a minimum dimension of 36 inches measured in the direction of travel.

Minimum Room Requirements:

- Habitable rooms, hallways, corridors, bathrooms, toilet rooms, laundry rooms and basements shall have a ceiling height of not less than seven (7) feet measured from the finish floor to the lowest projection from the ceiling
 - Beams and girders spaced not less than four (4) feet on center may project not more than six (6) inches below the required ceiling height
 - Ceilings in basements without habitable space may project to within six feet eight inches of the finished floor except that beams, girders, ducts and other obstructions may project to within six feet four inches of the finished floor.
 - Not more than 50% of the required floor area of a room is permitted to have a sloped ceiling less than seven feet in height with no portion of the required floor area less than five feet in height.
 - Bathrooms shall have a minimum ceiling height of six feet eight inches over the fixture and at the front clearance area for the fixtures. A shower or tub with a showerhead shall have a minimum ceiling height of six feet eight inches above a minimum 30" X 30" area at the showerhead.

- Every dwelling shall have at least one habitable room with a gross floor area of at least 150 square feet
- Other habitable rooms shall have a floor area of not less than 70 square feet except kitchens
- Habitable rooms shall not be less than seven feet in any horizontal except kitchens
- Portions of a room with a sloping ceiling measuring less than five (5) feet or a furred ceiling measuring less than seven (7) shall not be considered as contributing to the minimum required habitable area for that room.

Roofing and Siding:

- Provide continuous 3' 0" wide fiberglass reinforced, bituthene, ice and water shield at all roof edges, centered on all valleys and at roof wall intersections carried 1' 0" up the wall (refer to manufacturers installation instructions).
- Provide aluminum step flashing at roof/wall and roof/chimney intersections
- Provide aluminum flashing over all window and doors head trim and at the connection between all exterior walls and exterior decks.
- Provide continuous soffit vents or continuous venter drip edge at all soffit overhangs
- Provide 15" felt under all roof shingles (unless specified otherwise).
- Provide continuous ridge vents (unless specified as otherwise). See building elevation for extent.
- All gutters and downspouts to be prefinished alum. Color to be selected by owner.

Light/Ventilation and Insulation:

- All habitable rooms shall be provided with aggregate glazing of not less than 8% of the floor area being ventilated.
 - The glazed areas need not be operable when the opening is not required to be an emergency escape and rescue opening and an approved mechanical ventilation system is provided capable of producing 0.35 air exchange per hour in the room or a whole-house mechanical ventilation system is installed capable of supplying outdoor ventilation air of 1.5 CFM per occupant with 2 for the first bedroom and one for every additional bedroom.
 - The glazed areas need not be provided in rooms where the above exception is met and artificial light is provided capable of producing an average illumination of six foot candles over the area of the room at a height of 30 inches.
- All bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area of not less than three square feet, 1/2 of which must be operable.
 - The glazed area shall not be required where artificial light and a mechanical ventilation system are provided. Ventilation air from the space shall be exhausted directly to the outside.

- Attic ventilation with a ceiling vapor barrier, provide at least one (1) square foot of free area for each three hundred (300) square feet of ceiling area.
- Attic ventilation without a ceiling ventilation vapor barrier, provide at least one (1) square foot of free area for each one hundred-fifty (150) square feet of ceiling area.
- The contractor is responsible to provide a moisture barrier and properly insulate all walls and ceilings to air leakage into unconditioned spaces.
- If mechanical, electrical or plumbing equipment is to be placed in attics, eves, overhangs and other similar unconditioned, uninsulated spaces, the contractor is responsible to provide a proper enclosure, insulation, direct ventilation, etc. to avoid moisture, condensation, freeze thaw, ice damming, and other similar issues.

Plumbing:

- All sanitary lines within walls and floors adjoining living spaces are to be sound insulated.
- All plumbing within wall or floor cavities which border unconditioned spaces are to be insulated and on the warm side of the cavity insulation to avoid freezing.

Smoke and Carbon Monoxide Detectors/Alarms:

- Combination smoke and carbon monoxide alarms are acceptable provided said alarms have simulated voice and tone alarms the clearly distinguish between the two types of emergencies. If combination alarms are to be used than all required criteria for smoke and carbon monoxide detectors need to be met.
- Fire departments are required to inspect, upon sale or transfer, all dwelling units for required smoke and carbon monoxide detectors.
- Consumers shall check with local building and/or fire officials for accepted alarm types and locations for proper installation in accordance with all applicable codes and regulations.

Smoke Alarms/Detectors:

- All one and two family dwellings shall be equipped with a household fire warning system. All devices shall be installed and maintained in accordance with all applicable codes, manufacturers instructions and listing criteria.
- Smoke detectors are required to be permanently wired to an AC primary power source and shall have secondary (standby) power supplied from monitored batteries.
- Where more than one smoke detector is required, all required detectors shall be installed so that the activation of any detector shall cause the alarm in all required smoke detectors in the dwelling unit to sound (min. 85 dba at 10 feet, 75 dba in bedrooms)
- Smoke detectors shall be provided in the following locations:
 - In the immediate vicinity of bedrooms
 - In all bedrooms
 - In each story of a unit (including basements & cellars) For each 1,200 sq.ft or part thereof
 - Near the base of all stairs where such stairs lead to another occupied floor
- Photo electric smoke detectors are required if located within 20 feet of a kitchen or bathroom
- When one or more sleeping rooms are added or created to an existing dwelling, the entire building shall be provided with smoke detectors designed and located as required for new dwellings.

Carbon Monoxide Alarms/Detectors:

- All one and two family dwellings shall be equipped with a household carbon monoxide warning system. All devices shall be installed and maintained in accordance with all acceptable codes, manufacturers instruction and listing criteria.
- Carbon monoxide detectors shall be located on every level of the dwelling unit including basements and cellars (but not including crawl spaces and uninhabitable attics).
- All alarm-sounding appliances shall have a minimum rating of 85 dba at 10 feet

Heat Detectors:

- Heat detectors shall be installed in any integral or attached garage to the main house
- A new addition attached garage to an existing dwelling shall be installed in accordance with all applicable criteria. If the existing dwelling contains a fire detection system that is compatible with the garage heat detector, the garage heat detector shall be interconnected to the existing dwelling fire detection system. If the detector is not compatible than the detector shall be connected to a sounder or compatible heat detector containing a sounding device, located in the dwelling unit and within 20 feet of the nearest door to the garage
- For flat-finished garage ceilings, the detector shall be located on or near the center of the garage ceiling. For vaulted/ slopped ceilings, the detector shall be placed in the approximate center of the vaulted space.
- The required heat detector shall be listed for and required to be interconnected to all smoke detectors of the required household fire alarm system, such that the activation of the heat detector will activate all of the audible alarms of the household fire alarm system throughout the dwelling.

Sprinklers:

- All one and two-family dwellings having an aggregate area greater than 14,400 square feet, including basements, but not including garages and unfinished attics shall be equipped with an automatic sprinkler system and shall be installed in accordance with NFPA 13D.

GRAPHIC SYMBOLS

	BUILDING CROSS SECTION		NEW CONSTRUCTION
	DOOR NUMBER		EXISTING CONSTRUCTION
	ROOM NUMBER		DEMO CONSTRUCTION
	WINDOW NUMBER		
	ELEVATION DESIGNATION		
	SECTION REFERENCE		
	NEW DOOR TO BE INSTALLED		
	EXISTING DOOR TO REMAIN		
	PARTITION TYPE		

CODE

GOVERNMENT BUILDING CODE

THE MASSACHUSETTS BUILDING CODE, 9TH EDITION

ABBREVIATIONS

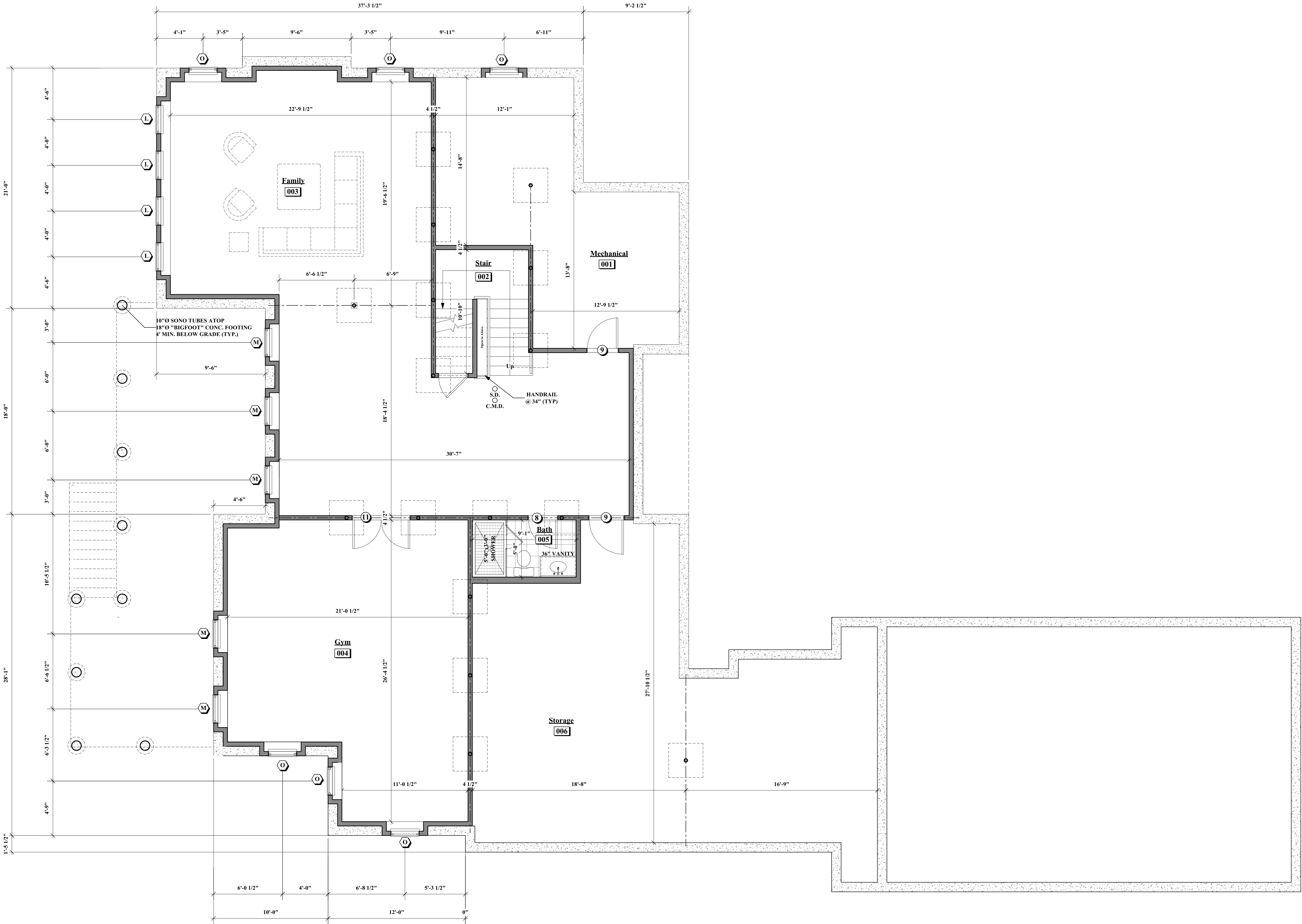
@ AFF ATTEN	AT ABOVE FINISH FLOOR ATTENUATING	MAX MECH MFR MD MIN MO MTL	MAXIMUM MECHANICAL MANUFACTURER MEDIUM DENSITY MINIMUM MASONRY OPENING METAL
BLDG	BUILDING	NIC CLR COL CONC CONT CPT CMT	NOT IN CONTRACT NIGHT LIGHT NOMINAL NOT TO SCALE
CH CL CLR COL CONC CONT CPT CMT	CEILING HEIGHT CENTER LINE CLEAR COLUMN CONCRETE CONTINUOUS CARPET CERAMIC TILE	OC OD OH	ON CENTER OUTSIDE DIAMETER OPPOSITE HANDED
DIM DWG(S)	DIMENSION DRAWING(S)	PLAM PLYWD PT PR PT	PLASTIC LAMINATE PLYWOOD PRESSURE TREATED PAIR PAINTED
EA EIFS ELEC ELEV EQ EWC EXT	EACH EXT INSUL. FINISH SYSTEM ELECTRICAL ELEVATION EQUAL ELECTRICAL WATER COOLER EXTERIOR	QT R RAD REQ REF REV RH RO RTU SA SD SIM SPEC SQ SQ FT SS STL STN SV	QUARRY TILE RISER RADIUS REQUIRED REFERENCE REVISION(S) RIGHT HAND(ED) ROUGH OPENING ROOF TOP UNIT SOUND ATTENTION BATTS SMOKE DETECTORS SIMILAR SPECIFICATION SQUARE SQUARE FEET STAINLESS STEEL STEEL STAIN SHEET VINYL
FC FD FEC FF FFE FIN FFL FOF FOC FOS FRT	FIRE CODE/FIRE CORE FLOOR DRAIN FIRE EXTINGUISHER CABINET FINISHED FLOOR FINISHED FLOOR ELEVATION FINISH FLUORESCENT LIGHTING FACE OF FINISH FACE OF CONCRETE FACE OF STUD FIRE RETARDANT TREATED	THK T TYP UNO	TREAD THICKNESS TOILET PAPER DISPENSER TYPICAL UNLESS NOTED OTHERWISE
GC GL GWB	GENERAL CONTRACTOR GLASS OR GLAZING GYPSUM WALL BOARD	VCT VIF VTR	VINYL COMPOSITION TILE VERIFY IN FIELD VENT THROUGH ROOF
HC HDWR HM HOR HT HVAC HWH	HOLLOW CORE HARDWARE HOLLOW METAL HORIZONTAL HEIGHT HEATING, VENT, A/C HOT WATER HEATER	W/ WC WD X-REF	WITH WATER CLOSET WOOD CROSS REFERENCE
INSUL INT	INSULATION INTERIOR		
L LAV LH	LENGTH LAVATORY LEFT HANDED)		

MATERIAL SYMBOLS

	BLOCKING
	CONCRETE
	EARTH
	BATT INSULATION
	GRAVEL
	WOOD
	DRYWALL
	TILE

DRAWING INDEX

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T-1.2	Zoning Compliance Sheet
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A-1.5	Roof Plan
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S-1.5	Roof Framing Plan



1
A-1.1

Basement Floor Plan
1/4" = 1'-0"

New
Residence

320 Grove Street
Needham, MA

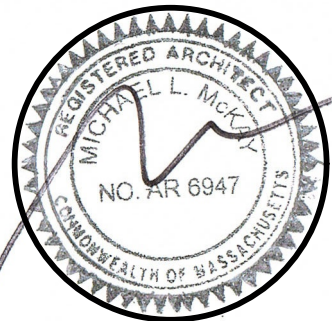
OWNER

architects
mckay

35 Bryant Street
Dedham, MA 02026

p: 781.326.5400

www.mckayarchitects.net



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Basement
Floor Plan

JOB NO

DATE

02/23/23

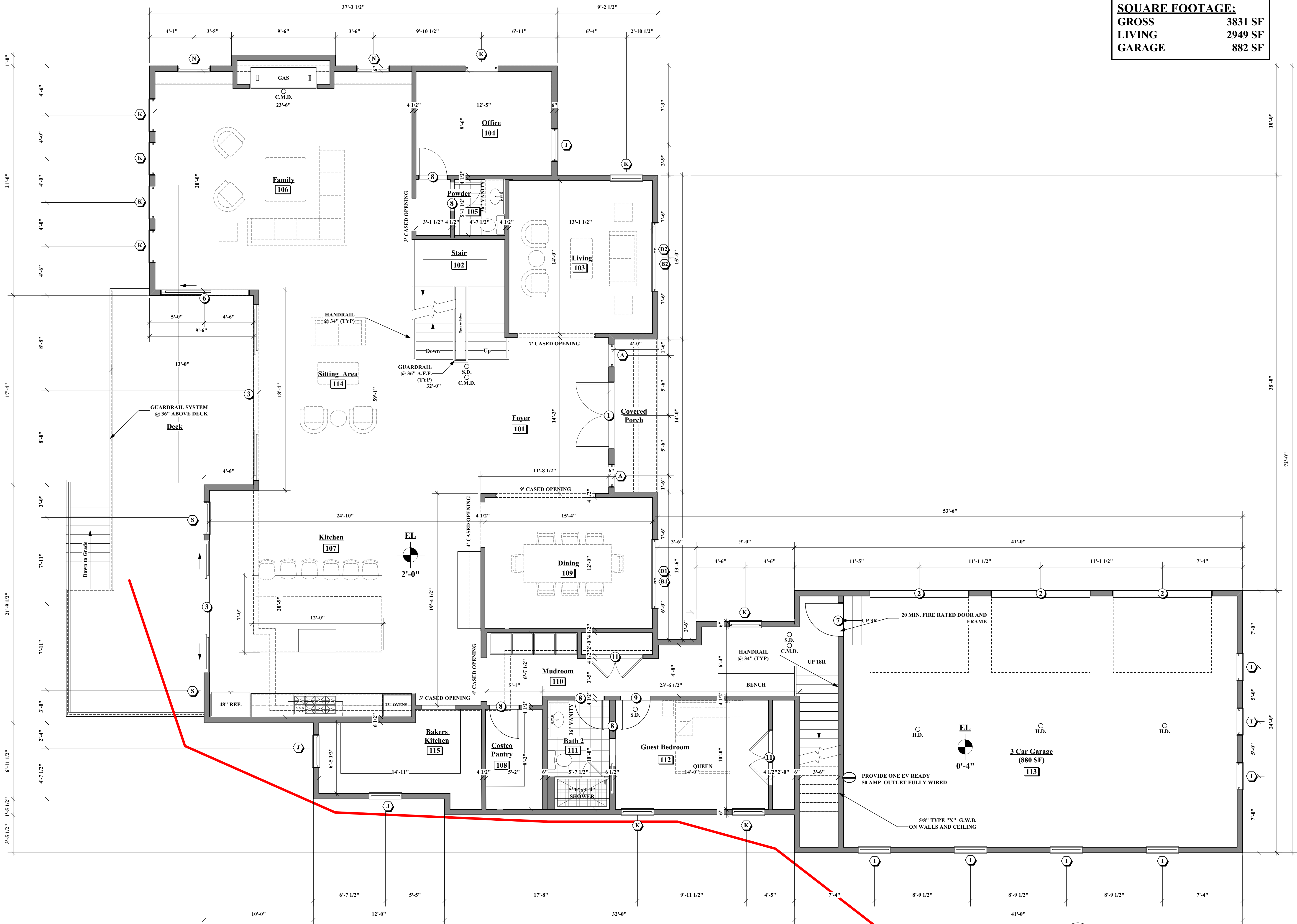
DWG BY

MLM

SCALE

AS NOTED

A-1.1



SQUARE FOOTAGE:
GROSS 3831 SF
LIVING 2949 SF
GARAGE 882 SF

New
Residence

320 Grove Street
Needham, MA

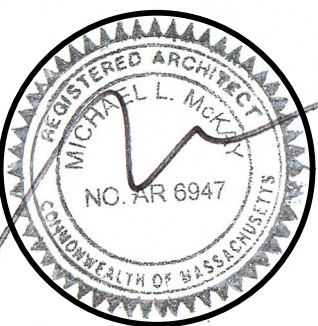
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First Floor Plan

JOB NO

DATE

DWG BY

CKD BY

SCALE

02/23/23

MLM

AS NOTED

1
A-1.2
First Floor Plan
1/4" = 1'-0"

A-1.2

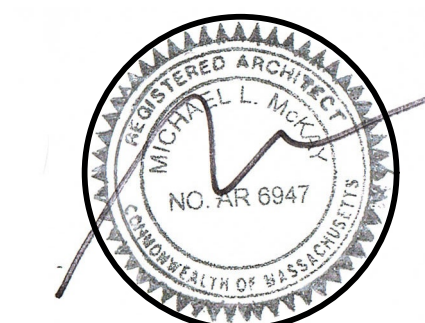
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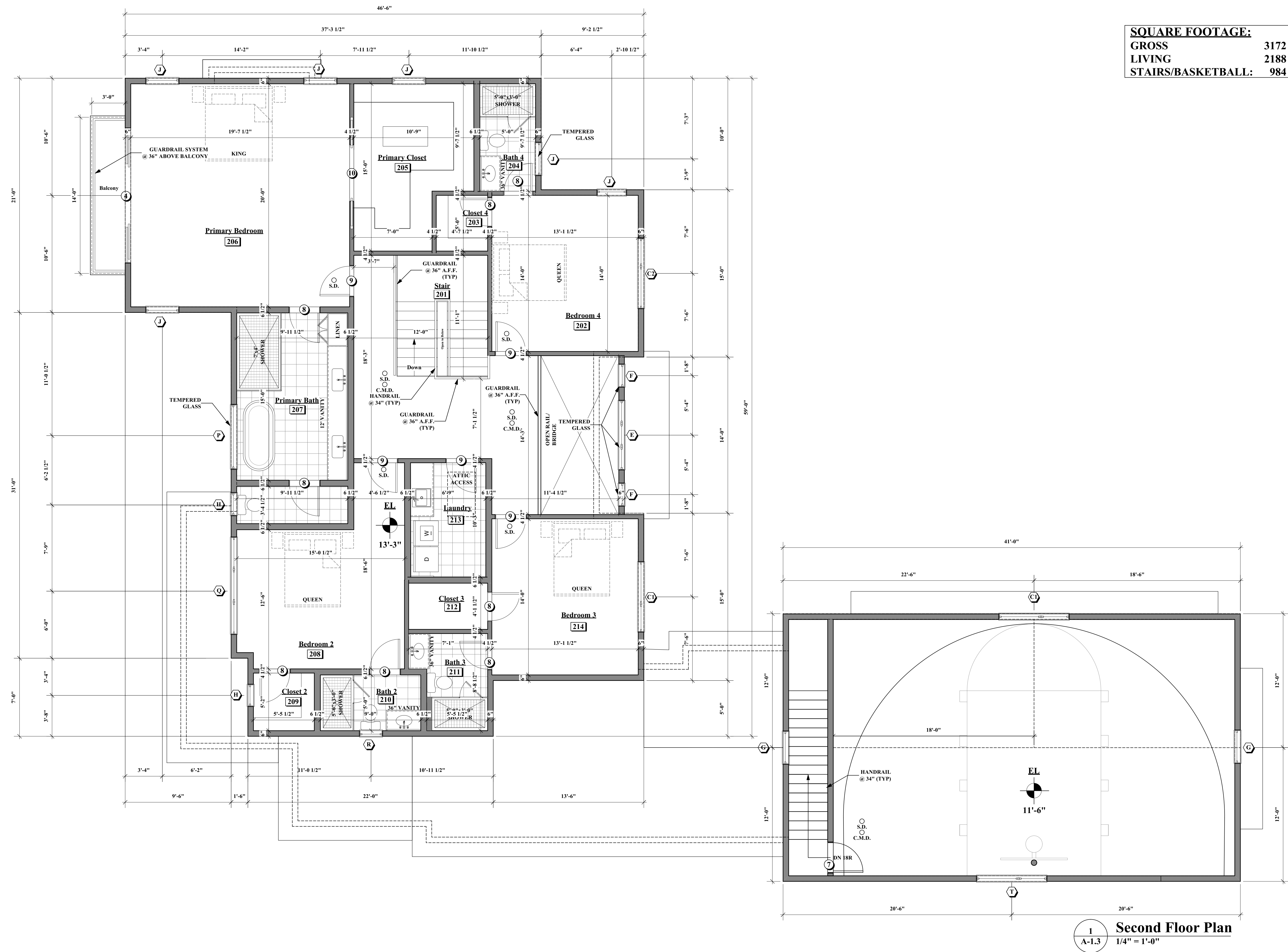
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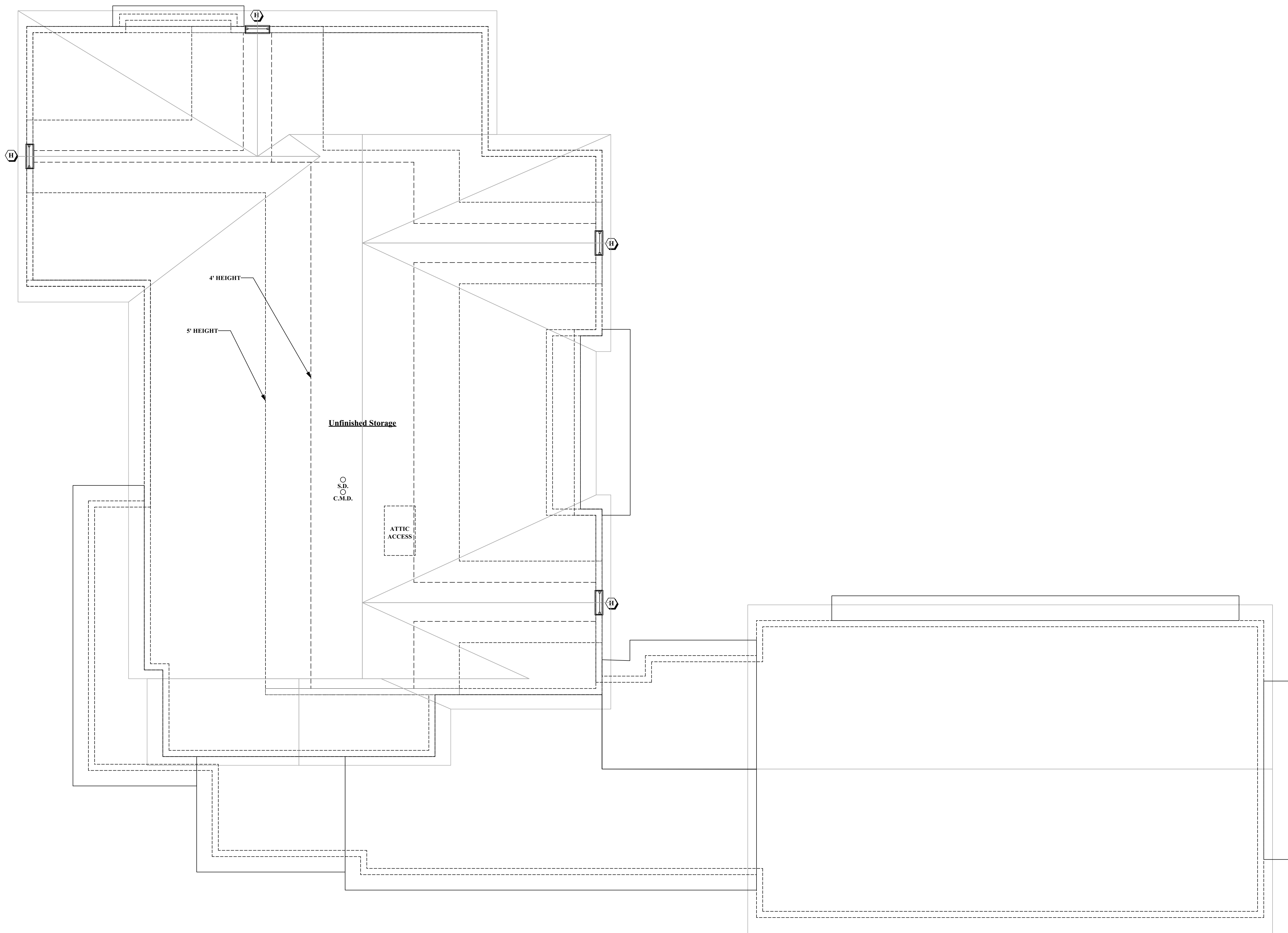
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Second Floor Plan

JOB NO	
DATE	02/23/23
DWG BY	
CCKD BY	MLM
SCALE	
AS NOTED	

A-1.3





Unfinished Storage

○ S.D.
○ C.M.D.

ATTIC ACCESS

Attic Floor Plan
1/4" = 1'-0"

New Residence

320 Grove Street
Needham, MA

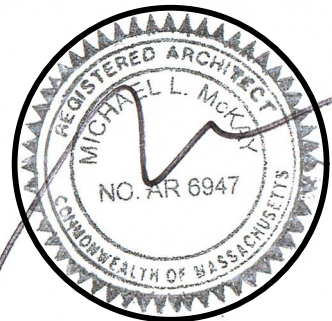
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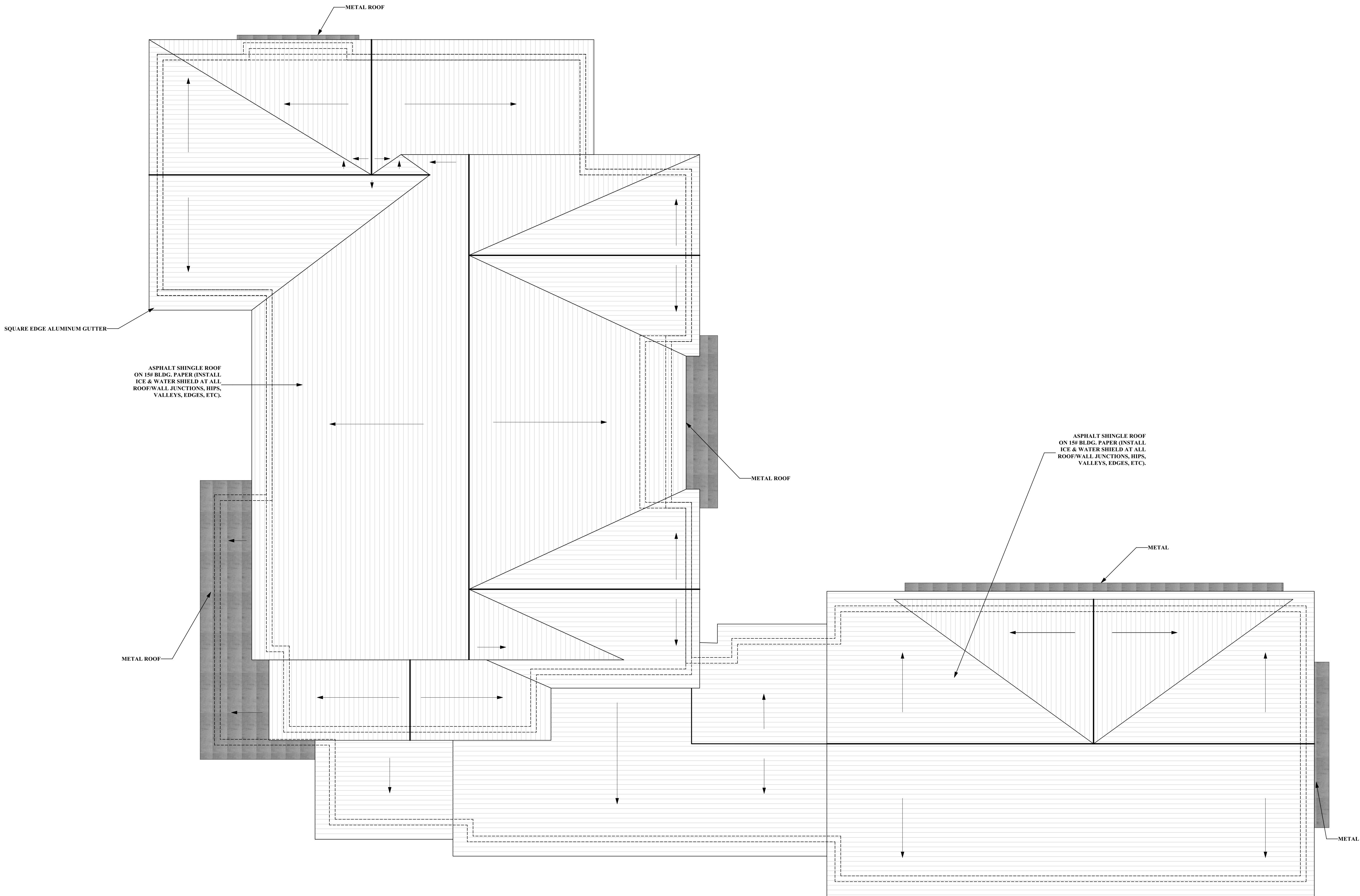
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Attic Plan

JOB NO	A-1.4
DATE	
DWG BY	
CKD BY	
SCALE	

AS NOTED



1 Roof Plan
A-1.5 1/4" = 1'-0"

New Residence

320 Grove Street
Needham, MA

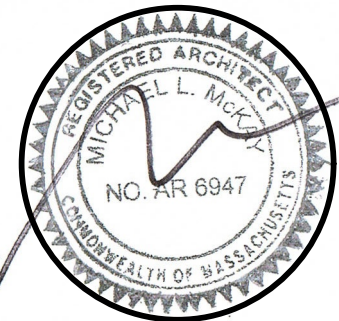
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1	11/03/22	First Draft
2	11/22/22	Second Draft
3	11/29/22	Third Draft
4	02/23/23	Fourth Draft
5	07/21/23	Fifth Draft
6	08/16/23	Sixth Draft

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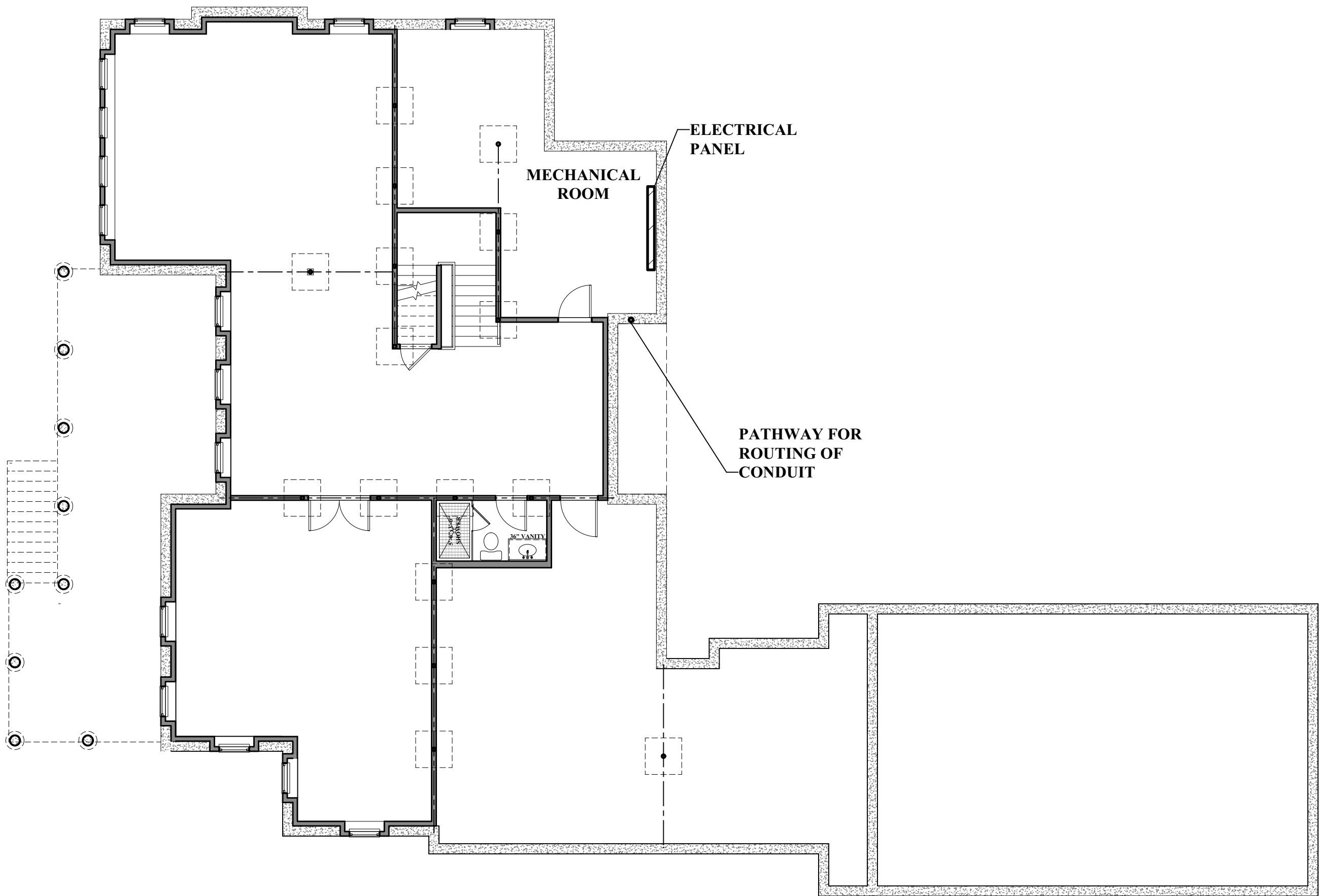
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Roof Plan

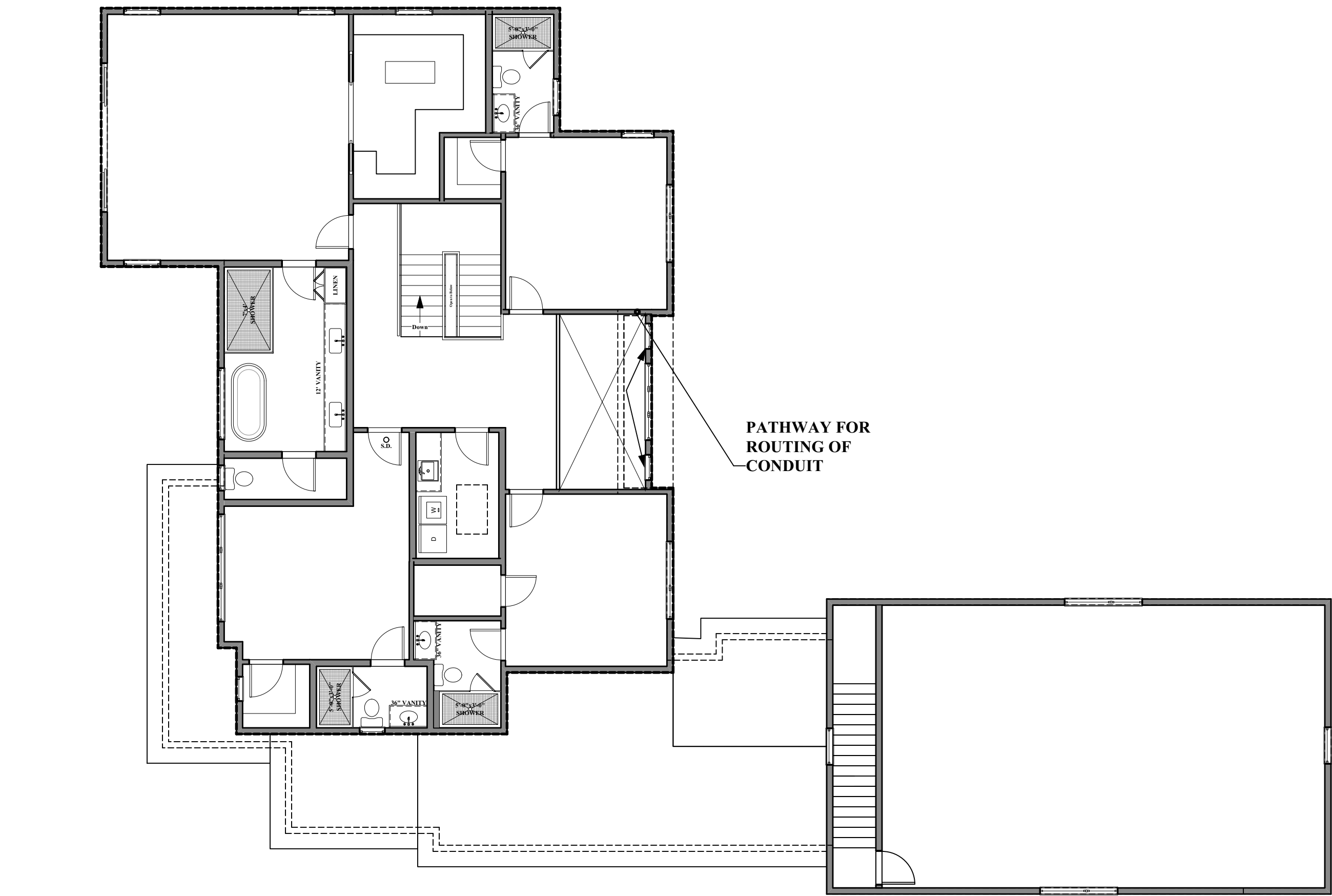
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SCALE

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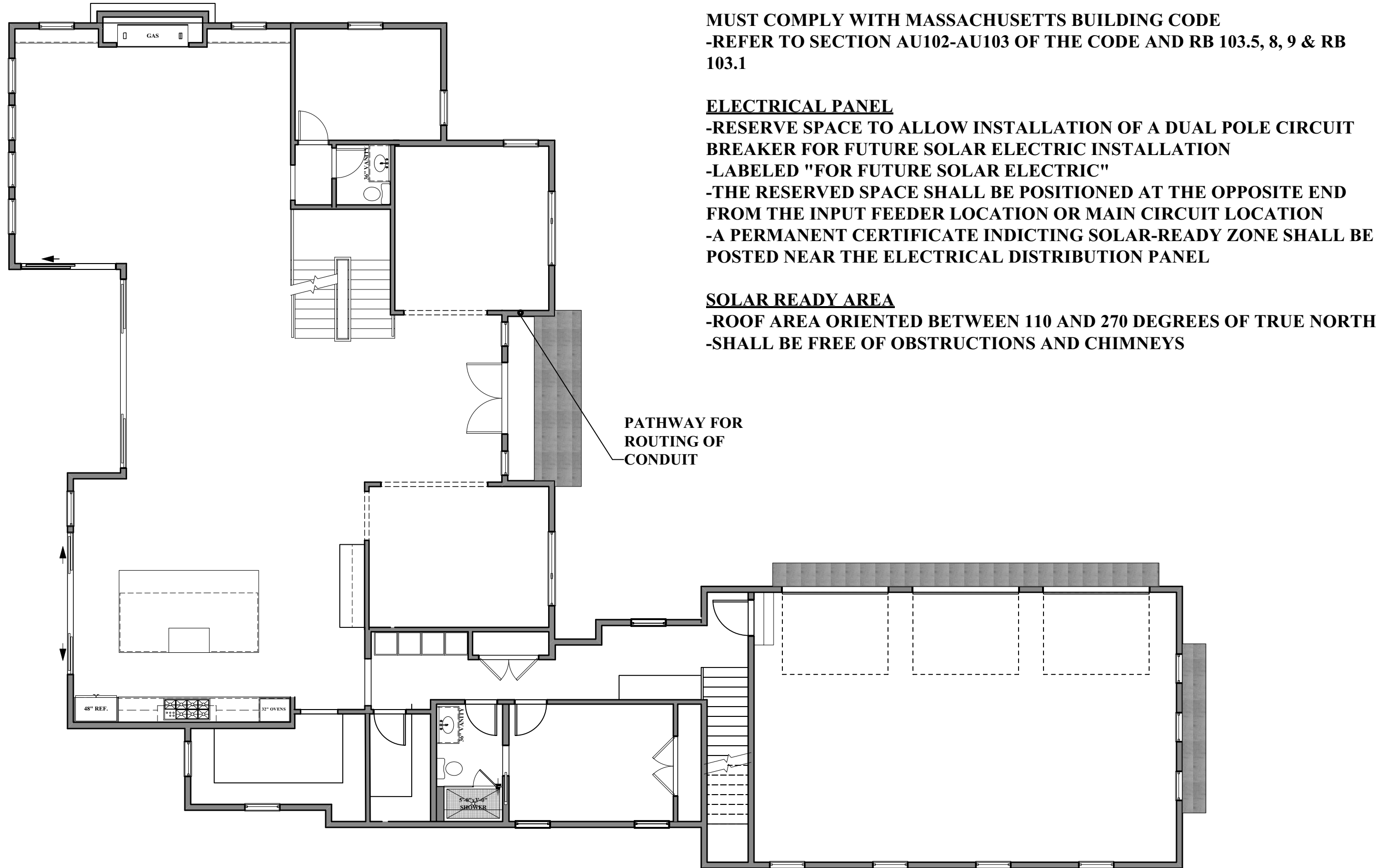
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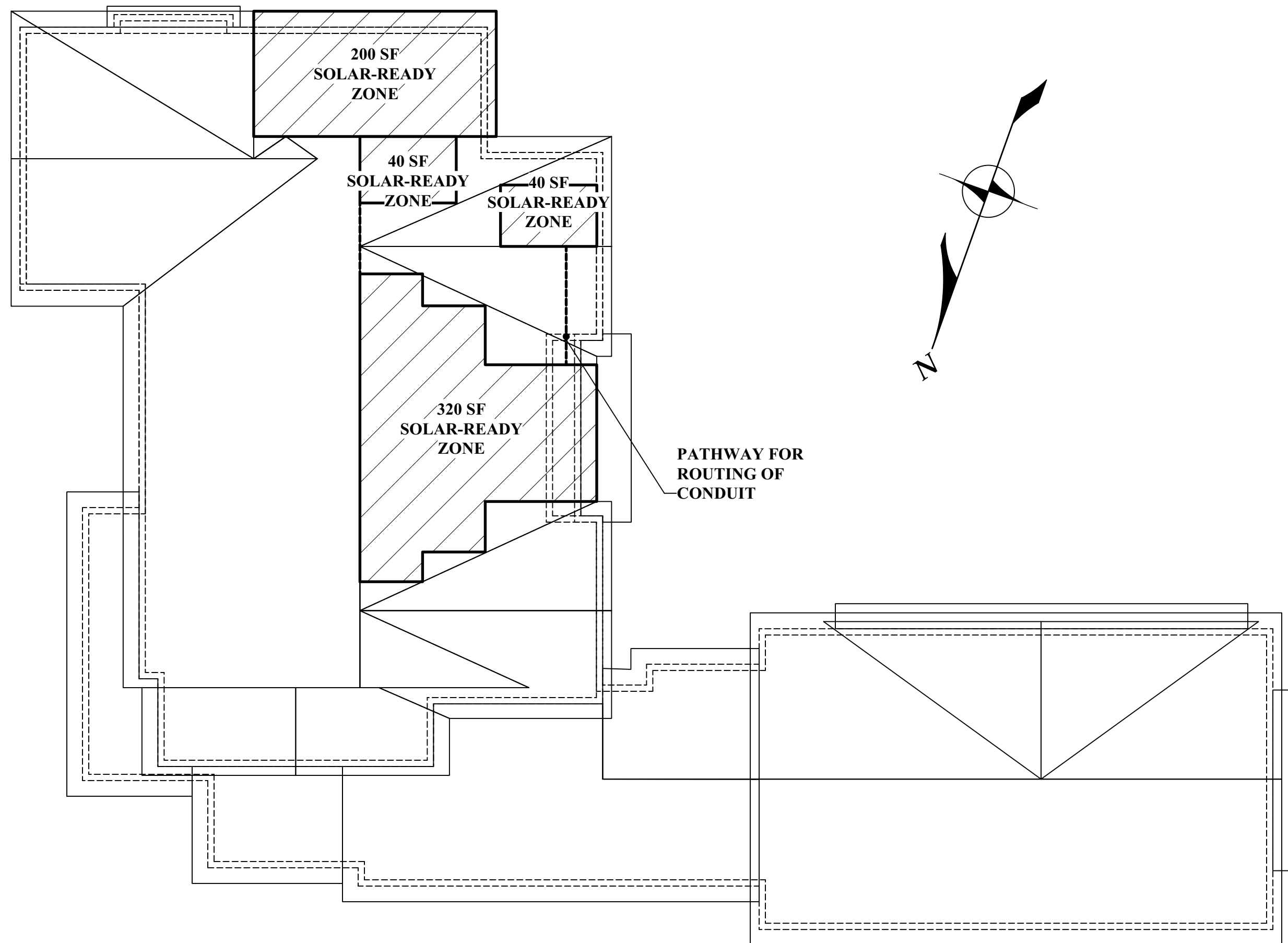
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A-1.1
Basement Floor Plan
1/8" = 1'-0"



1
A-1.3
Second Floor Plan
1/8" = 1'-0"



1
A-1.2
First Floor Plan
1/8" = 1'-0"



1
A-1.4
Attic/Roof Plan
1/8" = 1'-0"

New
Residence

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Needham, MA

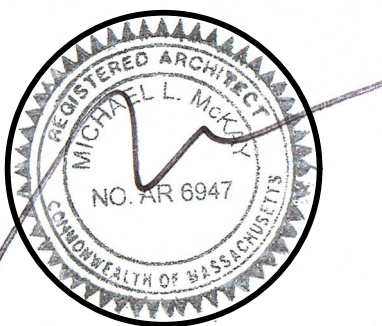
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Solar

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DATE	
DWG BY	
CKD BY	
SCALE	
AS NOTED	

New
Residence

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Needham, MA

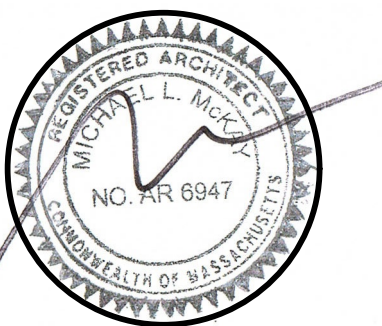
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Front
Elevation

JOB NO
DATE
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CKD BY
SCALE

A-2.1

AS NOTED



1
A-2.1
Front Elevation
1/4" = 1'-0"

320 Grove Street
Needham, MA

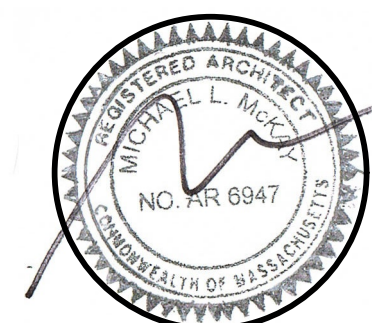
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Right Side Elevation

JOB NO	A-2.2
DATE 02/23/23	
DWG BY	
CKD BY MLM	
SCALE	
AS NOTED	



1
A-2.2

New
Residence

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Needham, MA

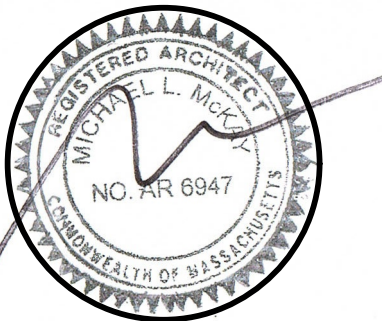
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Rear Elevation

JOB NO	A-2.3
DATE	
DWG BY	
CKD BY	
SCALE	
AS NOTED	

1 Rear Elevation
A-2.3 1/4" = 1'-0"



New
Residence

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Needham, MA

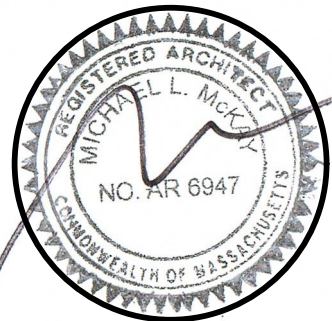
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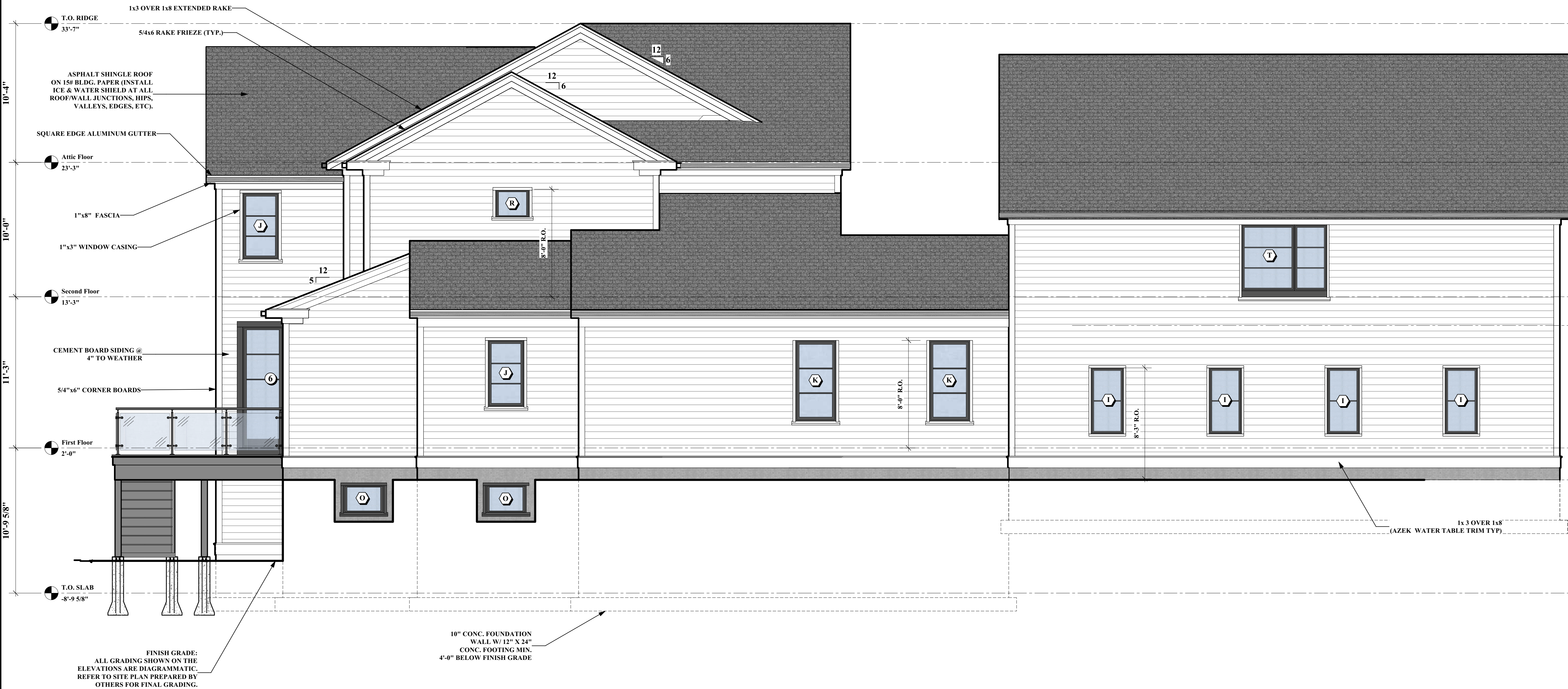
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Left Side Elevation

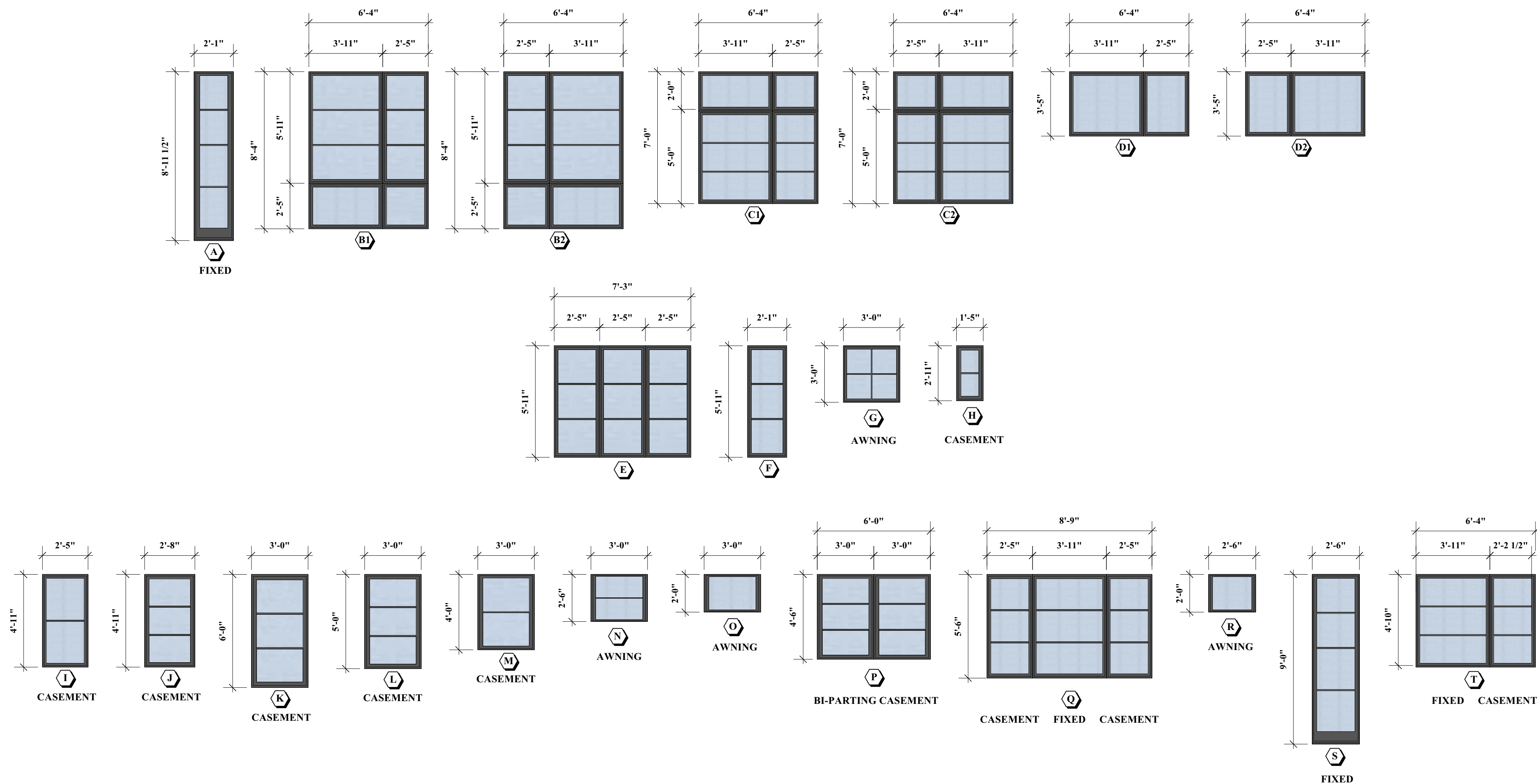
JOB NO	A-2.4
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CKD BY	
SCALE	
AS NOTED	

A-2.4



1 Left Side Elevation
A-2.4 1/4" = 1'-0"

WINDOW SCHEDULE



SHOP DRAWINGS OF WINDOWS ARE TO BE PROVIDED PRIOR TO ORDERING.

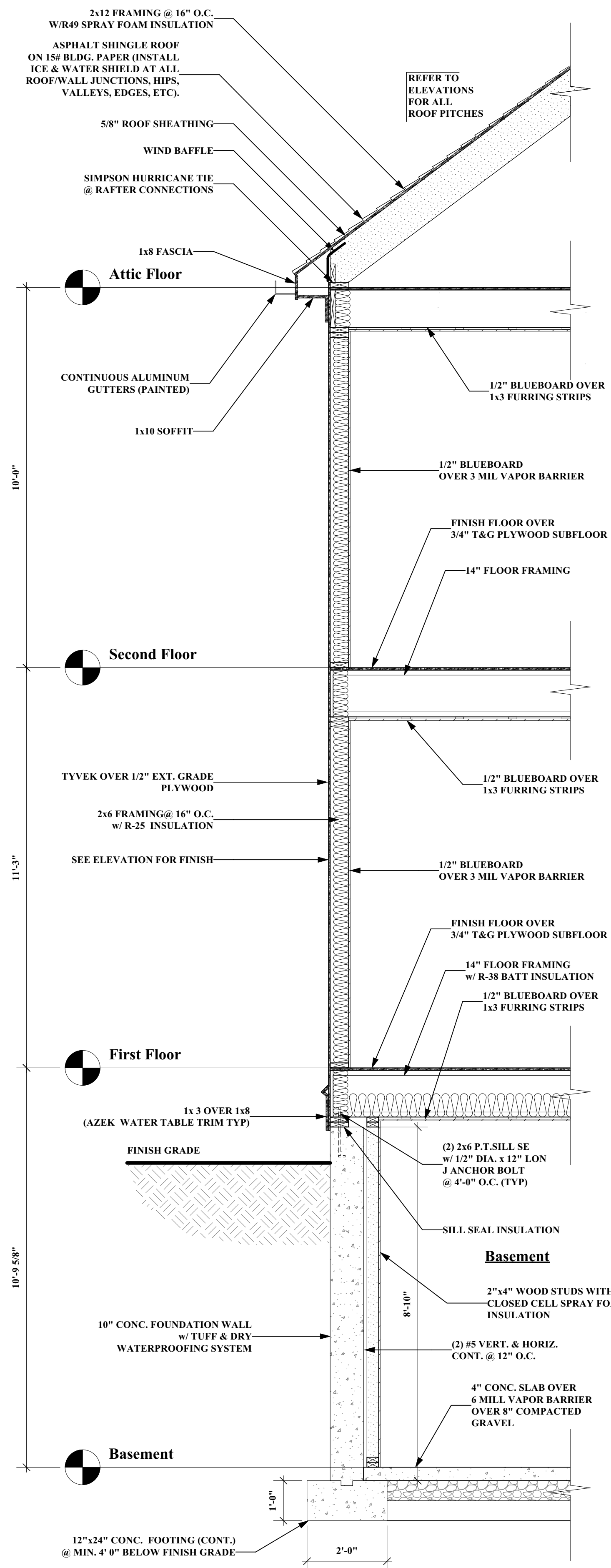
ALL WINDOWS AND PATIO DOORS ARE TO BE MANUFACTURED BY PELLA WINDOWS OR OWNER APPROVED EQUAL. PROVIDE SIMULATED DIVIDED LITE PATTERNS AS INDICATED. ALL UNITS ARE TO BE BLACK CLAD. UNITS ARE TO HAVE 6 5/16" JAMB THICKNESS & WHITE HARDWARE WITH FACTORY PROVIDED SCREENS. INTERIOR OF UNIT IS TO BE FACTORY PRIMED WHITE. PATIO DOORS ARE TO HAVE LOCKING HARDWARE PROVIDED WITH SCREEN DOOR UNITS. ALL GLAZING IS TO BE LOW-E INSULATED GLASS WITH U-VALUE OF .30 OR BETTER.

DOOR SCHEDULE

DOOR ND.	LOCATION / TYPE	SIZE	DETAILS		REMARKS
			HEAD	JAMB	
1	EXTERIOR / (ENTRY)	(2) 3'-0"x9'-0"	WOOD	WOOD	PAIR
2	EXTERIOR / (GARAGE)	9'-0"x9'-0"	WOOD	WOOD	GARAGE OVERHEAD
3	EXTERIOR / (TYP)	12'-0"x9'-0"	WOOD	WOOD	SLIDER
4	EXTERIOR / (PRIMARY BED)	12'-0"x8'-0"	WOOD	WOOD	SLIDER
5	EXTERIOR / (GUEST BED)	3'-0"x8'-0"	WOOD	WOOD	
6	EXTERIOR / (FAMILY)	8'-0"x9'-0"	WOOD	WOOD	SLIDER
7	INTERIOR / GARAGE	3'-0"x8'-0"	WOOD	WOOD	"C" LABEL DOOR
8	INTERIOR / (TYP)	2'-6"x8'-0"	WOOD	WOOD	
9	INTERIOR / (TYP)	2'-8"x8'-0"	WOOD	WOOD	
10	INTERIOR / (TYP)	(2) 2'-6"x8'-0"	WOOD	WOOD	BI-PARTING POCKET
11	INTERIOR / (TYP)	(2) 2'-6"x8'-0"	WOOD	WOOD	PAIR
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NOTE:
SHOP DRAWINGS OF DOORS ARE TO BE PROVIDED PRIOR TO ORDERING.

FINISH SCHEDULE

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New Residence

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Needham, MA

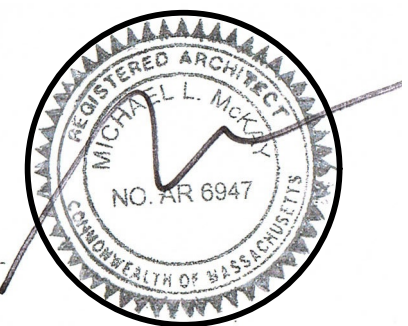
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Schedules and Typical Section

JOB NO

DATE _____

DWG BY

SCALE

02/23/23

AS NOTED

General Notes Design Loads

Massachusetts state building code code regulation 780 CMR 51.00 9th edition

- 1. Floor live loads: residential: 40 PSF
- 2. Ground snow load (PG): 40 PSF
- 3. Wind load basic wind speed (exposure C)- 127 MPH
- 4. Temporary shores shall be designed, erected, supported, braced, and maintained by the contractor to support safely all dead loads presently carried by the structural work being shored, and any construction live loads.
- 5. All dimensions, elevations, shelves, beam pockets, cut-outs, underground utilities, piers, footings, slabs, and all other items shall be fully coordinated with civil, geotechnical, mechanical, architectural and all other trades' drawings prior to construction

Foundation Plan:

Scale: 1/4" = 1'-0"

Foundation Plan Notes:

- 1. T.O. First floor sub floor shall be called elevation 0'-0"
- 2. All dimensions, elevations, shelves, beam pockets, cut-outs, underground utilities, piers, footings, slabs, and all other items shall be fully coordinated with civil, geotechnical, mechanical, architectural and all other trades' drawings prior to construction.
- 3. See general notes for additional foundation information & specifications.

Foundation Notes:

- 1. All topsoil, subsoil, and oil containing organic or unsuitable bearing material shall be cleared from the building footprint.
- 2. All soil supported footings shall be founded upon compacted natural subgrade or compacted bank run gravel fill with a bearing capacity of at least 3000 PSF. Soil bearing capacity shall be verified by a professional engineer registered in the project state.
- 3. G.C. shall be responsible for determining the site's suitability to support the building. Furthermore, the G.C. shall be responsible for constructing the building and surrounding site/subgrade in strict accordance with this requirement.
- 4. All footings shall extend at least 48" below finished grade. G.C. shall coordinate all proposed grades prior to construction.
- 5. Bedrock/ Ledge shall be excavated a minimum of 4" below bottom of footing elevation and covered with a layer of compacted gravel.
- 6. Soil shall be compacted to not less than 95% of maximum dry density per ASTM D1557 in lifts not to exceed 6" loose depth.
- 7. Backfill symmetrically against all foundation walls in increments not to exceed 2 feet maximum differential.
- 8. See plumbing and electrical drawings for under floor systems and special granular fill material requirements.
- 9. No footings or slabs shall be poured into or against subgrade containing free water or ice.
- 10. All slabs-on-grade shall be placed on a layer of compacted fine granular fill under a 10 MIL. Poly vapor retarder. Coordinate additional subgrade preparation requirements with civil and/or geotechnical engineers of record.
- 11. All slabs-on-grade shall be placed on a vapor barrier on a 6" compacted gravel base.
- 12. Forces due to hydrostatic pressure have not been considered in the design of the foundation for this structure. It is the responsibility of the General Contractor/owner to confirm with a geotechnical engineer, civil engineer, or other qualified design professional to ensure hydrostatic forces do not exist.
- 13. General Contractor shall coordinate all insulation, drainage, damp-proofing and water-proofing details with Architect of record.
- 14. A modified proctor test shall be performed by a soils testing lab on each type of soil to be compacted.
- 15. Field density tests shall be performed by an independent soils testing lab to verify compaction. A copy of all test reports shall be filed with the Architect of record.

Concrete Notes:

- 1. All footing and wall concrete shall have a compressive strength of not less than 4000 PSI at 28 days (entrained air content between 4.5% and 7%)
- 2. All interior slab concrete shall have a compressive strength of not less than 3000 PSI at 28 days and contain no air entrainment.
- 3. All exterior slab concrete shall have a compressive strength of not less than 4000 PSI at 28 days (entrained air content between 4.5% and 7%).
- 4. All concrete shall contain an approved water-reducing admixture.
- 5. No calcium chloride shall be used in any concrete.
- 6. All reinforcing bars shall be ASTM A-615 grade 60 unless noted otherwise.
- 7. All reinforcing bar splices shall conform to requirements of ACI 318, but in no case shall they be less than 2'-0" or 48xDIA.
- 8. All welded wire fabric shall conform to ASTM A-185, Fy=60 KSI
- 9. All welded wire fabric shall be lapped two (2) full mesh panels at sides and ends and be securely wired together.
- 10. See architectural drawings for type and location of all floor finishes, floor depressions and cut outs.
- 11. Coordinate all foundation penetrations with Architect, plumbing, mechanical, electrical contractors and local agencies.
- 12. All concrete shall be detailed, formed, handled, placed, and protected in accordance with procedures and guidelines prescribed in the latest edition of "building code requirements for reinforced concrete" ACI-318, manual of standard practice for reinforced concrete structures, ACI-201, and ACI-305/306 guides for hot/cold weather concreting.
- 13. General Contractor shall carefully coordinate all form-work, rebar placement, concrete mix design, and concrete placement to ensure accurate and complete concrete distribution throughout. All precautions, shall be taken to avoid "honeycombing" and voids in concrete foundation. Techniques, such as pre-staging concrete vibrators in congested areas, modified concrete mix designs to promote complete distribution, etc. shall be employed at the contractor's discretion.
- 14. Concrete voids and excessive "honey-combing" shall be documented and reported to the Architect of record for analysis and preparation of a repair method. Parging, Dry-packing, and "floating" the adjacent slab to fill voids are un-acceptable methods of repair for filling significant voids.
- 15. G.C. shall coordinate all concrete finishes with Architect of record. All concrete that shall be considered architecturally exposed shall be poured and finished in a manner which will produce the desired architectural finish. G.C. shall coordinate the concrete mix design (I.E. self-consolidating concrete), rebar placement, and methods of vibration to produce a fully consolidated concrete pour free of voids and/or "honey-combing".
- 16. Checked shop drawings (5 sets) showing reinforcing details, including steel sizes, spacing and placement, shall be submitted by the contractor for approval prior to fabrication. The General Contractor must review the shop drawings prior to submission to the Architect of record. All copies of the shop drawing submittals shall bear a dated and signed shop drawing stamp which documents the General Contractor's approval.
- 17. A mix design (5 copies) shall be submitted for approval for each type of concrete. Mix design submittal shall include historical break data for each mix of concrete.
- 18. A set of four (4) concrete tests cylinders shall be taken by an independent concrete testing lab on each day when concrete placement exceeds 5 cubic yards. One cylinder shall be broken at 7 days, two at 28 days, and one at 56 days. A copy of all test reports shall be filed with the Architect of record.

First Floor Framing:

Scale: 1/4" = 1'-0"

Plan Notes:

- 1. #J-#K Jack and King studs shall be same dimensional stud lumber as adjacent studs. (i.e. 2J-2K means 2 full-height king studs with 2 jack studs supporting the header)
- 2.  - indicates Simpson Strong-Tie type hanger required at beam connection. All Simpson hangers shall be installed per manufacturer's specifications with the maximum fastener size and quantity.
- 3. "Lally Column" all lally columns shall be filled solid with concrete. Provide 1/2" thick "Springfield" cap and base plates at all lally columns.
- 4. Unless otherwise notes on plans, all headers over door and window openings shall be supported on ea. end by a single jack stud ganged to a double king stud.
- 5. Beams and columns on plan marked "P.T." denote pressure treated or wolmanized lumber.
- 6. Refer to general notes for further requirements.
- 7. All full-height columns which pass through floor or ceiling framing systems shall be fully blocked and tied into that framing to effectively brace the column in both directions.

- 8. All platform framed posts, walls, and/or beam loads shall be transferred to supports below with cripple studs, "squash blocks", and/or full-depth solid blocking.
- 9. All multi-ply wood and/or engineered members shall be ganged together in accordance with manufacturer's requirements and prevailing state building code.
- 10. Refer to general notes and prevailing state building code for connections not specifically specified on plans.
- 11. Member layout depicted on this plan is intended as a general guide to framing. The exact framing layout, material take-off, and framing method shall be closely coordinated wit the architectural and structural drawings and ultimately determined by the General Contractor. Any substantial change in framing method/layout shall be reported to Architect of record.
- 12. All dimensions, elevations, shelves, beam pockets, cut-outs, underground utilities, piers, footings, slabs, and all other items shall be fully coordinated with civil, geotechnical, mechanical, architectural, and all other trades' drawings prior to construction.
- 13. All trim, soffits, rakes, eaves, brackets, gutters, corbels, build-outs, pad-outs, and all other applied architectural features and embellishments be the responsibility of others and fully coordinated with the Architect of record.

General Notes Pre-Engineered Wood Trusses:

- 1. Wood trusses shall be designed per the "design specification for metal plate connected wood trusses," published by the truss plate institute.
- 2. All roof trusses and overhanging wood members shall be held down with uplift anchors per truss manufacturer's requirements.
- 3. Wood truss fabricator shall submit to the Architect for approval prior to fabrication, shop drawings bearing seal and signature of the design professional engineer, registered in the state of Massachusetts. Shop drawings shall be reviewed and approved by the General Contractor prior to submitting to Architect. Shop drawings shall include but are not limited to: truss layout plan; truss detail sheets showing configuration, dimensions, loads, member sizes, and grades, member forces, connection plate sizes, permanent bracing requirements, uplift anchorage hardware (specified by truss designer), etc.
- 4. Truss designer shall include all loads required by the Massachusetts state building code and all further requirements included in the structural and architectural contract documents. Additional requirements may include, but are not limited to additional design loads due to wind and/or earthquake, snow drifting, point loads and/or additional loading from other framing members, special top chord slope requirements for drainage etc. truss designer shall carefully coordinate all loads due to mechanical equipment and plumbing fixtures with the G.C., Architect, and mechanical design.
- 5. Truss designer shall design, manufacture, and furnish all floor trusses which meet a live load deflection criteria of L/600 and all roof trusses which meet a total load deflection criteria of the lesser of 3/4" or L/360 unless specifically approved otherwise.
- 6. Wood truss erector shall be responsible for design and installation of all temporary erection bracing.
- 7. Truss spacing shown in structural engineering plans are for reference only. General Contractor shall refer to approved truss shop drawings for actual truss layout and spacing (for both bidding and construction purposes).
- 8. Truss layout and design shall be coordinated with the mechanical equipment layout.

Structural Lumber, Engineered Lumber:

- 1. All material and workmanship shall be in accordance with the latest edition of "timber construction standards" of the American Institute of Timber Construction and the "National Design Specification for Stress-Grade Lumber and its Fastenings" of the National Forest Products Association.
- 2. The minimum grades and design values required for conventional, structural lumber shall be:
- 3. Studs: construction grade spruce-pine-fir, FC= 1000 PSI, E=1,300,000 PSI
- 4. Joists/Rafters/Beams: spruce-pine-fir No.2, FB=875 PSI, E=1,400,000 PSI
- 5. Pressure treated lumber: Southern Pine No.1, E=1,400,000 PSI
- 6. All exterior wall studs shall be at least 2x6 @ 16" O.C. unless noted otherwise. Furthermore, all wall studs adjacent to steel columns shall be fastened to face of column with Hilti X-U powder driven fasteners @ 16" O.C.
- 7. All multiple member beams and headers shall be supported on not less than an equal number of studs at each end, unless noted otherwise.
- 8. Wood columns made with three or more wood studs shall be nailed together with 16d nails. Nail spacing shall be in 2 rows, spaced 8" O.C. from both sides staggered 4" apart.
- 9. Unless otherwise noted, all exterior openings shall have not less than one jack stud and two full height studs at each side of the opening. All interior bearing wall openings shall have not less than two jack studs and one full height stud at each side of the opening unless noted otherwise.
- 10. All conventional lumber roof rafters shall have a Simpson Uplift Anchor at each bearing location. Use Simpson LSSU Skewed and/ or Sloped Hangers at each rafter as required. Provide and install 1.25"x20 GA ridge straps (10) 8d nails) at all conventional rafter pairs (or approved substitution).
- 11. Flush framing shall be supported by joist hangers designed for the full capacity of the supported member.
- 12. Provide and install double floor joists or properly designed trusses under all partitions running parallel to span.
- 13. All wood in contact with concrete or masonry shall be pressure treated with preservative.
- 14. Exterior wall sheathing shall be minimum 15/32 APA structural I rated sheathing or exterior grade. Sheathing shall be nailed with 8d nails not less than 6" O.C. on all panel edges. All wall horizontal panel edges within 48" of building corners must be blocked and nailed. Sheathing panels shall be installed to span across floor levels (centered on band joist) to achieve continuous uplift load path from roof to foundation.
- 15. Sub-flooring shall be 3/4" tongue & groove APA Structural I Rated Sheathing exposure I unless noted otherwise. Fasten sub-floor to supporting framing with industry standard sub-floor adhesive and 8d nails @ 6" O.C.
- 16. Roof sheathing on flat roofs shall be minimum 3/4" T&G APA Structural I Rated Sheathing.
- 17. Roof sheathing on non-curved sloping framing shall be minimum 5/8" T&G APA structural I rated sheathing.
- 18. Roof sheathing on flat roofs and non-curved sloping framing shall be nailed with 8d nails not more than 6" O.C. on all supported panel edges. Nails shall be spaced 4" O.C. in areas within 48" of ridges, hips, rakes, and eaves.
- 19. Roof sheathing on curved framing members shall be three layers on 1/4" APA Rated Plywood sheathing with end and side joists staggered between successive layers. Each layer of sheathing shall be fastened to the supporting framing with 8d rink-shank nails @ 12" O.C. all nails shall be staggered between nails from successive layers.
- 20. Solid blocking shall be provided at ridges and eaves to support and fasten panel edges in all circumstances for all roof types where standard framing does not provide substrate for continuous panel edge support and fastening.
- 21. Engineered lumber supplier shall submit to the engineer of record for approval, shop drawings for all engineered lumber and I-Joists. Shop drawings shall include but are not limited to: Framing layout plan, member sizes, nailing patterns for multiple members, bearing lengths, connection hangers, blocking bridging, and squash blocks.
- 22. Laminated Veneer Lumber (LVL), Laminated Strand Lumber (LSL) and Parallel Strand Lumber (PSL) shall be versa-lam by boise cascade or equal.
- 23. LVL and PSL beams shall have the following minimum properties: FB=3100 PSI, FT= 2150 PSI, FC=750 PSI, FC= 3000 PSI, FV= 285 PSI, E=2,000,000 PSI
- 24. PSL columns/posts shall have the following minimum properties: FB=2650 PSI, FT=1650 PSI, FC=750 PSI, FC= 3000 PSI, FV=285 PSI, E=1,700,000 PSI
- 25. LVL's and PSL's shall be free of finger joints, scarf joints or mechanical connections for the full length of the member.
- 26. Adhesive used shall be waterproof, meeting the requirements of ASTM D-2559-76.
- 27. All Simpson Connectors (hangers, straps, uplift connectors, post caps, etc.) shall be coated with z-max corrosion resistance or approved substitute.
- 28. All fasteners in contact with pressure-treated lumber shall be certified for use with the preservative treatment used.
- 29. All fasteners exposed to moisture, expected condensation, pressure treated lumber, and/or the weather shall be made from non-corrosive materials or coated with an approved anti-corrosive coating certified and approved for use with the materials to be fastened.
- 30. All porch roof and floor beams shall be fastened to resist uplift loads with Simpson 20GA coil straps. Straps shall be centered over the top of the beam and bent down along both sides of post. Fasten straps with IOD nails through all available nail holes.
- 31. All ceiling framing (including truss bottom chords) adjacent to exterior walls shall be framed in order to brace the exterior walls against lateral movements. Coordinate all ceiling framing with Architect of record.
- 32. At all over framed roof conditions framed with conventional lumber, provide & install continuous 2x8 cleat fastened through sheathing and into each roof rafter with (2) #10 decking screws. Fasten over-framed rafters to cleat with (4) 16d toe-nails and single #10 decking screw through top of rafter.

First Floor Shear Walls

Scale: 1/4" = 1'-0"

Holdown Notes:

- 1. All threaded rod holdowns shall be fastened to concrete foundations with Hilti Hit Hy 200 EPOXY system installed in strict accordance with manufacturer's requirements.
- 2. All multi-ply wall studs fastened to holdowns shall be ganged together in accordance with building code and general notes.
- 3. Where upper wall is not in line with lower wall, "STI" strap holdowns shall be extended through floor sheathing and fastened to beams/blocking below. Strap may be extended down and bent around underside of framing as required. See typical shearwall details for further information.
- 4. All dimensions, elevations, shelves, beam pockets cut-outs, underground utilities, piers, footings, slabs, and all other items shall be fully coordinated with civil, geotechnical, mechanical, architectural and all other trades' drawings prior to construction.

Second Floor & Low Roof Framing

Scale: 1/4" = 1'-0"

Plan Notes:

- 1. #J-#K jack and king studs shall be same dimensional stud lumber as adjacent studs. (i.e. 2J-2K means 2 full-height king studs with 2 jack studs supporting the header).
- 2.  - indicates Simpson Strong-Tie type hanger required at beam connection. All Simpson hangers shall be installed per manufacturer's specifications with the maximum fastener size and quantity.
- 3. "Lally Column" all lally columns shall filled solid with concrete. Provide 1/2" thick "Springfield" cap and base plates at all lally columns.

- 4. Unless otherwise noted on plans, all headers over door and window openings shall be supported on ea. end by a single jack stud ganged to a double king stud.
- 5. Beams and columns on plan marked "P.T." denote pressure treated or wolmanized lumber.
- 6. Refer to general notes for further requirements.
- 7. All full-height columns which pass through floor or ceiling framing systems shall be fully blocked and tied into that framing to effectively brace the column in both directions.
- 8. All platform framed posts, walls, and/or beam loads shall be transferred to supports below with cripple studs, "squash blocks" and/or full-depth solid blocking.
- 9. All multi-ply wood and/or engineered members shall be ganged together in accordance with manufacturer's requirements and prevailing State Building Code.
- 10. Refer to general notes and prevailing State Building Code for connections not specifically specified on plans.
- 11. Member layout depicted on this plan is intended as a general guide to framing, the exact framing layout, material take-off, and framing method shall be closely coordinated with the architectural and structural drawings and ultimately determined by the General Contractor. Any substantial change in framing method/layout shall be reported to Architect of record.
- 12. All dimensions, elevations, shelves, beam pockets, cut-outs, underground utilities, piers, footings, slabs, and all other items shall be fully coordinated with civil, geotechnical, mechanical, architectural and all other trades' drawings prior to construction.
- 13. All trim, soffits, rakes, eaves, brackets, gutters, corbels, build-outs, pad-outs, and all other applied architectural features and embellishments be the responsibility of others and fully coordinated with the Architect of record.

Structural Steel Notes:

- 1. All detailing, fabrication and erection shall conform to the AISC specifications and codes, latest edition.
- 2. All wide flange section structural beams (W) shall be ASTM A992 Fy=50 KSI. Base plates, channels, angles, and misc. structural steel shall be ASTM A-36, Fy= 36 KSI. All square and rectangular hollow structural sections (HSS) shall be ASTM A-500 grade B Fy minimum 46 KSI.
- 3. All anchor bolts and threaded rods shall conform to the requirements of ASTM F1554 and A307.
- 4. All bolts, nuts, and washers shall conform to the requirements of ASTM A-325 for 3/4" diameter high strength bolts unless noted otherwise.
- 5. All welding electrodes shall be E70XX.
- 6. All welding shall be done by certified welders and shall conform to the AWS "code for ARC and gas welding in building construction", latest edition.
- 7. No connection shall consist of less than two 3/4" diameter bolts or welds developing a minimum of 10,000 pounds unless noted otherwise.
- 8. All fillet welds shall be a minimum of 1/4" unless noted otherwise.
- 9. All welds shall be visually inspected and all full penetration welds shall be inspected by ultra-sonic testing.
- 10. An independent steel testing agency shall perform all inspection and testing. The structural steel fabricator and erector shall schedule all work to allow the above testing requirements to be completed. A copy of all test reports shall be filed with the Architect.
- 11. The contractor shall be responsible for the control of all erection procedures and sequences with relation to temperature differentials and stability.
- 12. After fabrication, all steel, except that to be galvanized shall be cleaned of all rust, loose mill scale and other foreign materials and receive one coat of approved primer paint or approved prefactory application specified by the corrosion inhibiting coating manufacturer.
- 13. The fabricator shall furnish checked shop and erection drawings and obtain approval prior to fabricating and structural steel.
- 14. Cuts, holes, openings, etc. required in structural steel members for the work of other trades shall be shown on shop drawings for structural steel and shall be made in the shop. Burning of holes or cuts in structural steel members in the field will not be permitted except by written permission from the structural engineer of record.
- 15. Full moment connections shall be designed and detailed to develop the full capacity of the members being connected.
- 16. Submit shop drawings for review and approval prior to construction.

Upper Roof Framing

Scale: 1/4" = 1'- 0"

Plan Notes:

- 1. #J-#K jack and king studs shall be same dimensional stud lumber as adjacent studs. (c.e.2J-2K means 2 full height king studs with 2 jack studs supporting the header).
- 2.  - indicates Simpson Strong-Tie type hanger required at beam connection. All Simpson hangers shall be installed per manufacturer's specifications with the maximum fastener size and quantity.
- 3. "Lally Column": All lally columns shall be filled solid with concrete. Provide 1/2" thick "Springfield" cap and base plates at all lally columns.
- 4. Unless otherwise noted on plans, all headers over door and window openings shall be supported on ea. end by a single jack stud ganged to a double king stud.
- 5. Beams and columns on plan marked "P.T." denote pressure treated or wolmanized lumber.
- 6. Refer to general notes for further requirements.
- 7. All full-height columns which pass through floor or ceiling framing systems shall be fully blocked and tied into that framing to effectively brace the column in both directions.
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- 11. Member layout depicted on this plan is intended as a general guide to framing. The exact framing layout, material take-off, and framing method shall be closely coordinated with the architectural and structural drawings and ultimately determined by the General Contractor. Any substantial change in framing method/layout shall be reported to Architect of record.
- 12. All dimensions, elevations, shelves, beam pockets, cut-outs, underground utilities, piers, footings, slabs, and all other items shall be fully coordinated with civil, geotechnical, mechanical, architectural and all other trades' drawings prior to construction.
- 13. All trim, soffits, rakes, eaves, brackets, gutters, corbels, build-outs, pad-outs, and all other applied architectural features and embellishments be the responsibility of others and fully coordinated with the Architect of record.

Second Floor Shear Walls

Scale: 1/4" = 1'-0"

Holdown Notes:

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Second Floor Shear Walls

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New Residence

320 Grove Street
Needham, MA

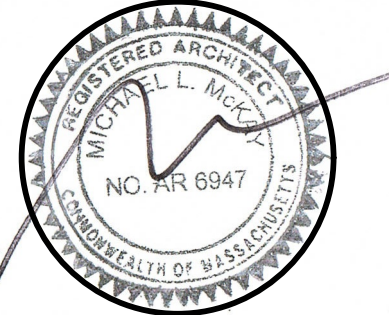
OWNER

architects
mckay

35 Bryant Street
Dedham, MA 02026

p: 781.326.5400

www.mckayarchitects.net



REV #	DATE	ISSUANCE
1	11/03/22	First Draft
2	11/22/22	Second Draft
3	11/29/22	Third Draft
4	02/23/23	Fourth Draft
5	07/12/23	Fifth Draft
6	08/16/23	Sixth Draft

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Contractor to verify all information and dimensions in the field prior to start of construction and is to notify McKay Architects of any discrepancies

Structural Notes

JOB NO	S-0.1
DATE	
02/23/23	
DWG BY	
CKD BY MLM	
SCALE	
AS NOTED	

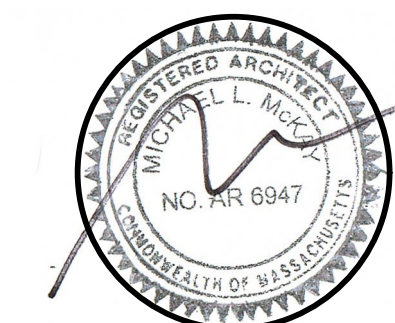
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Dedham, MA 02026**

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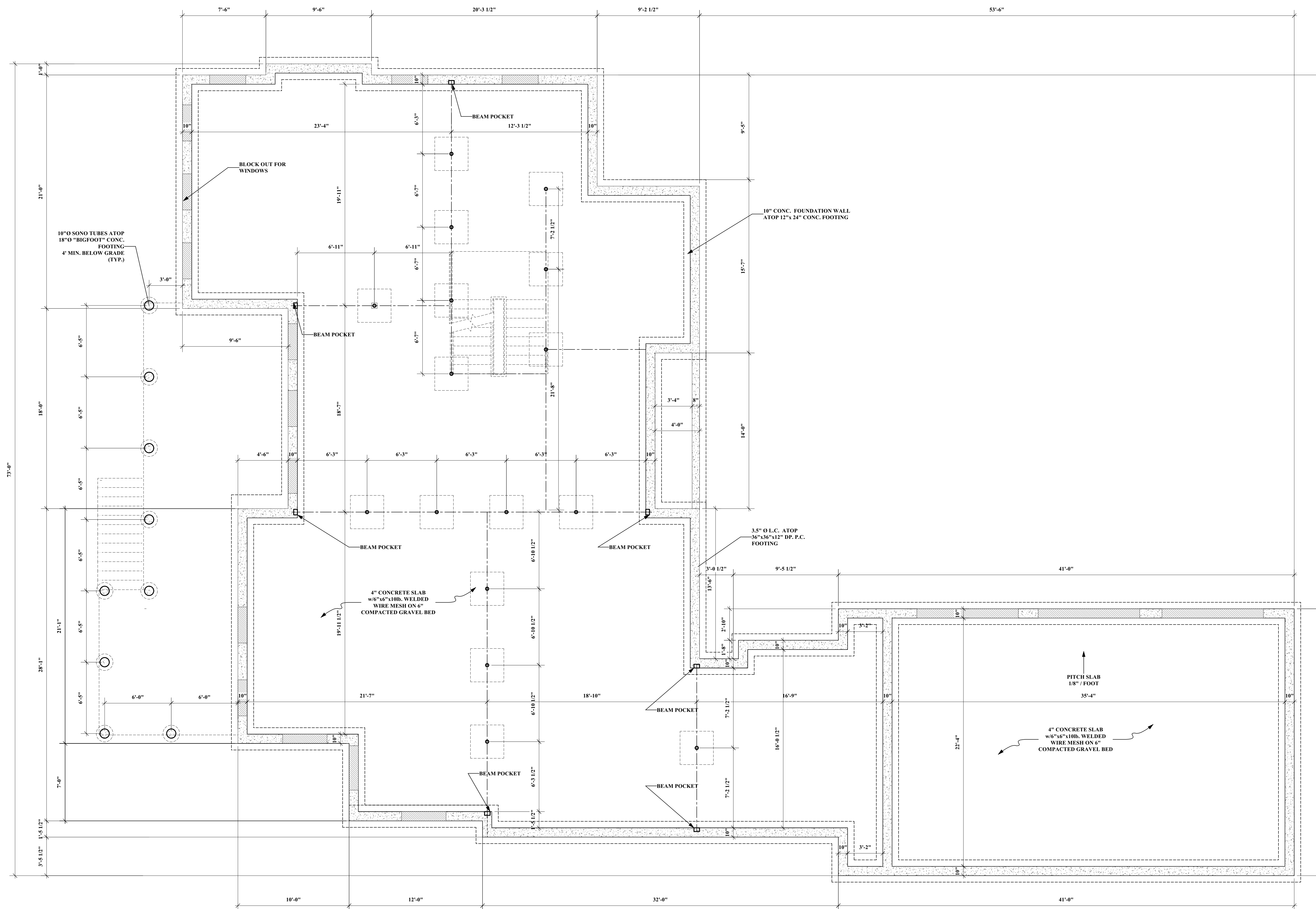
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Foundation Plan

JOB NO	
DATE	02/23/23
DWG BY	
CKD BY	MLM
SCALE	AS NOTED

S-1.1



1
S-1.1

New
Residence

320 Grove Street
Needham, MA

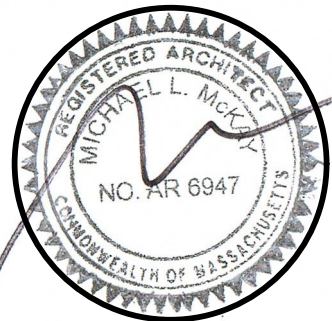
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First Floor
Framing Plan

JOB NO	S-1.2
DATE	
DWG BY	
CKD BY	
SCALE	

AS NOTED

S-1.2

FLOOR FRAMING NOTE:

6x6 PSL POST	■
4x6 PSL POST	■
4x4 PSL POST	■
4x6 DF POST	▣
4x4 DF POST	▣
POST UP	□
BEARING WALL	▨

1
S-1.2

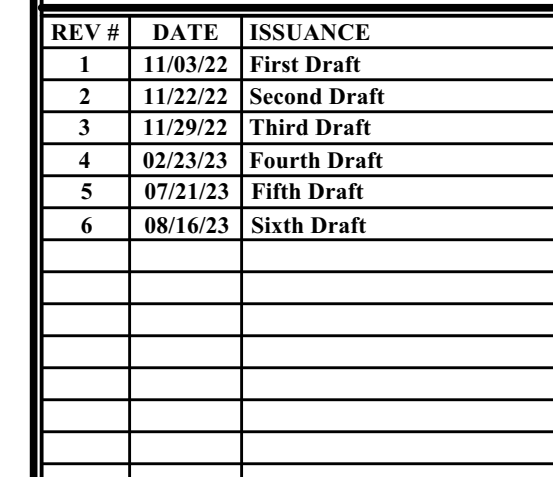
First Floor Framing Plan

1/4" = 1'-0"

320 Grove Street
Needham, MA

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Second Floor Framing Plan

S-1.3



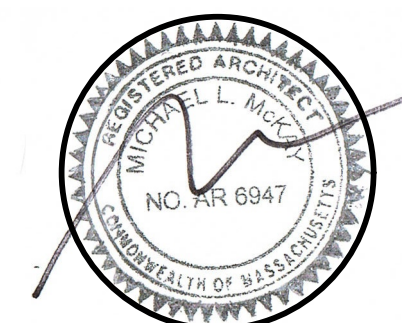
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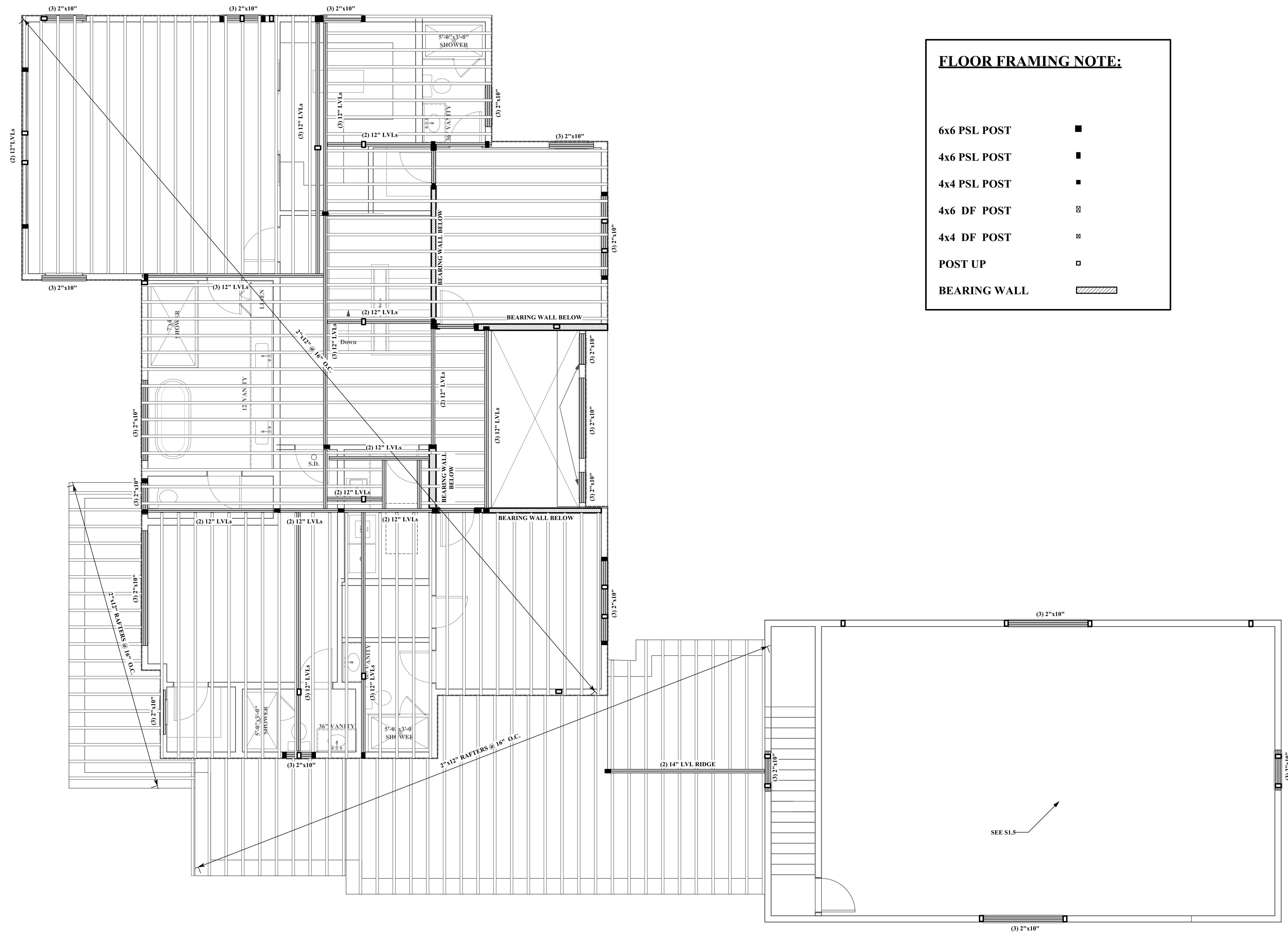
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Attic Floor Framing Plan

JOB NO	
DATE	02/23/23
DWG BY	
CKD BY	MLM
SCALE	AS NOTED

S-1.4



1
S-1.4

Attic Floor Framing Plan

$$1/4'' = 1'-0''$$

New
Residence

320 Grove Street
Needham, MA

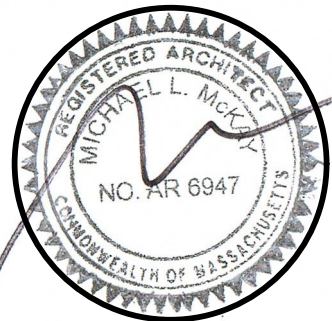
OWNER

architects
mckay

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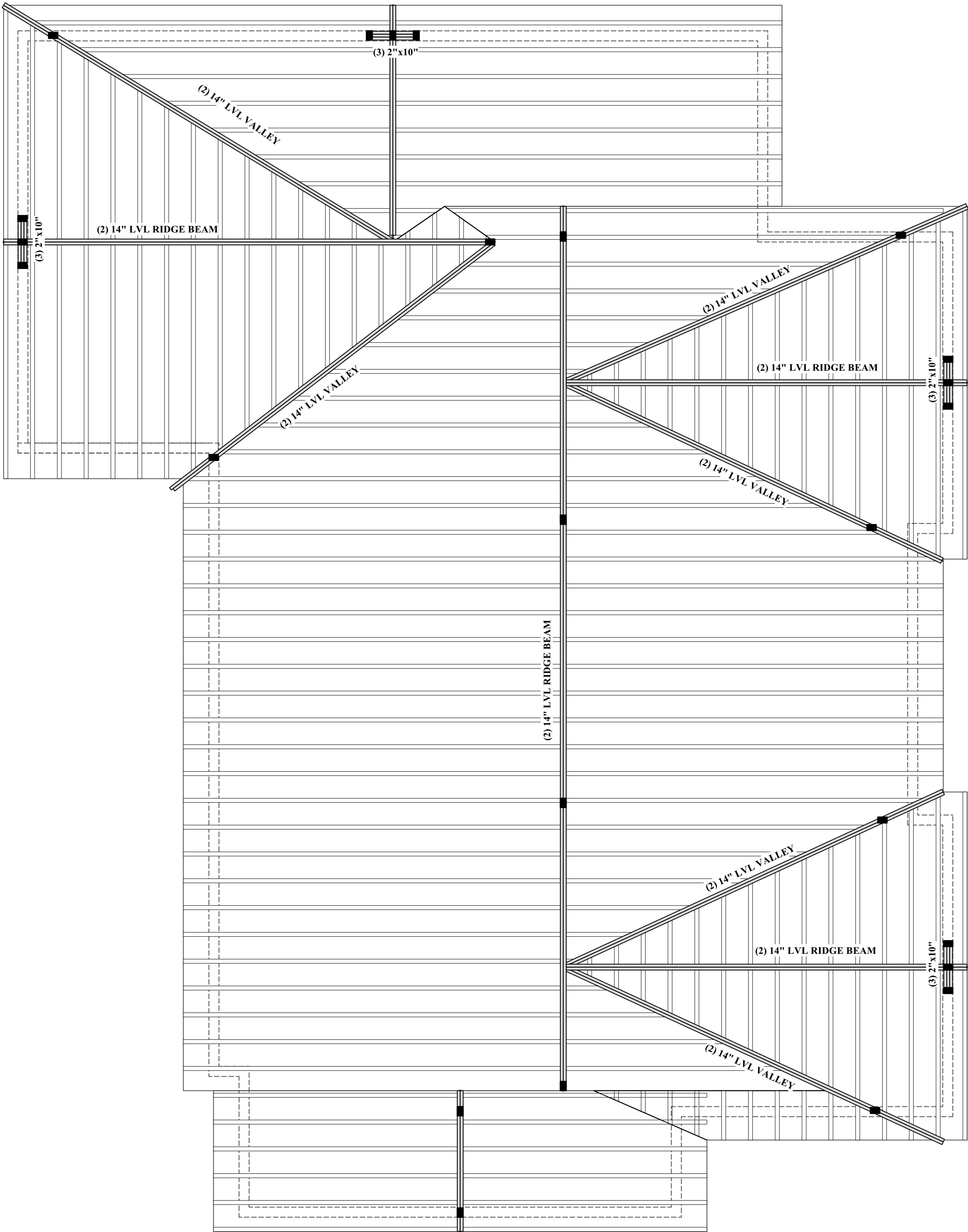
Contractor to verify all information and dimensions in the field prior to start of construction and is to notify McKay Architects of any discrepancies

Roof
Framing Plan

JOB NO
DATE
DWG BY
CKD BY
SCALE

AS NOTED

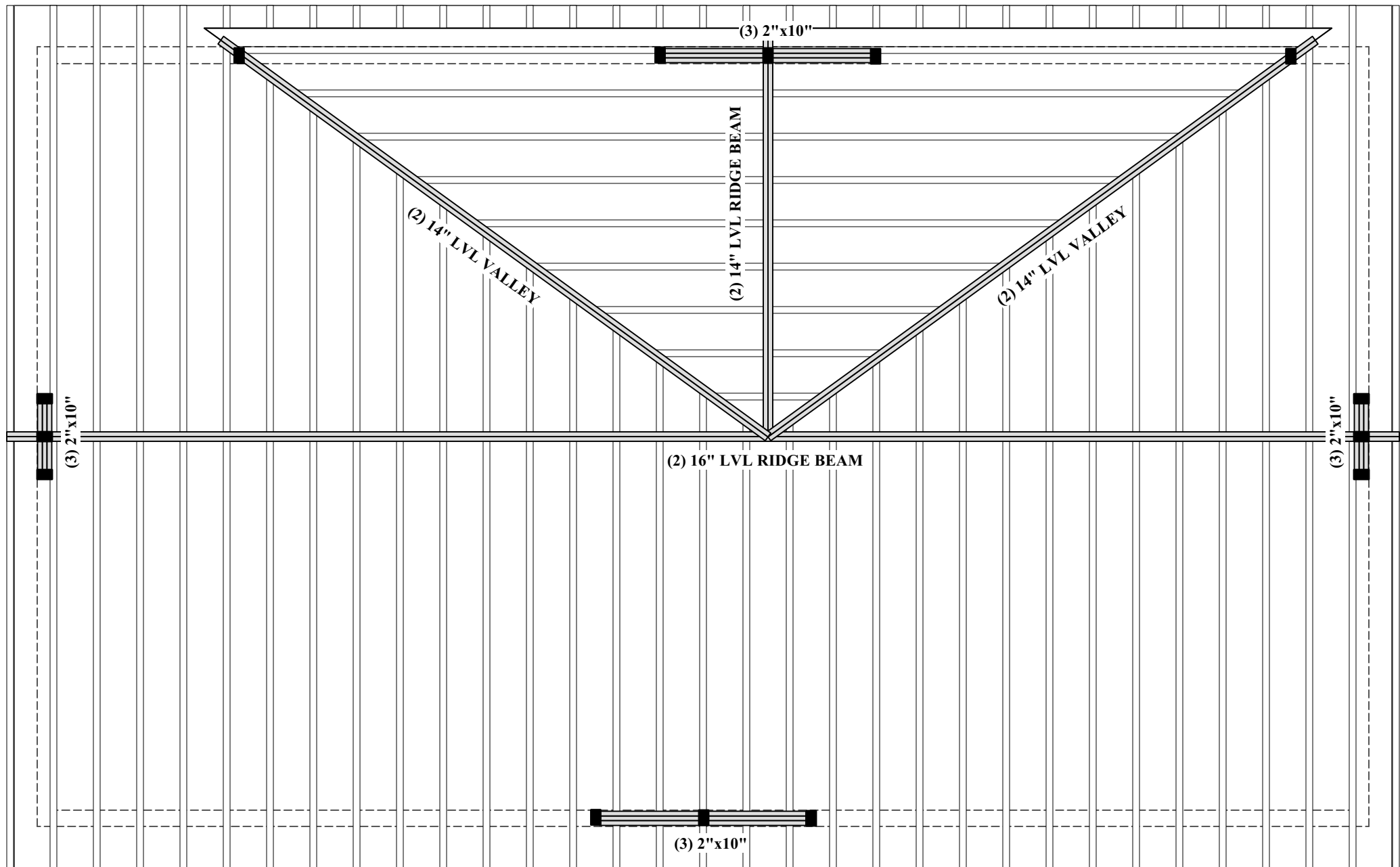
S-1.5



ROOF FRAMING NOTE:

ALL RAFTERS TO BE 2x12 @ 16" O.C.
w/2x10 COLLAR TIES @ 16" O.C. (U.N.O.)

6x6 PSL POST	■
4x6 PSL POST	■
4x4 PSL POST	■
4x6 DF POST	▣
4x4 DF POST	▣
POST UP	□
BEARING WALL	▨



1
S-1.5

Roof Framing Plan
1/4" = 1'-0"

NEEDHAM PLANNING BOARD MINUTES

September 19, 2023

The Needham Planning Board meeting, held in the Charles River Room of the Public Services Administration Building and virtually using Zoom, was called to order by Adam Block, Chairman, on Tuesday, September 19, 2023, at 7:00 p.m. with Messrs. Crocker and Alpert and Mmes. McKnight and Espada, Planner, Ms. Newman and Assistant Planner, Ms. Clee.

Mr. Block noted this is an open meeting that is being held in a hybrid manner in public and remotely per state guidelines. He reviewed the rules of conduct for all meetings. This meeting does not include any public hearings and no public comment will be allowed. If any votes are taken at the meeting, the vote will be conducted by roll call. All supporting materials, including the agenda, are posted on the town's website.

Transfer of Permit: Major Project Site Plan Review No. 2015-07: Latin-A Group, LLC d/b/a Latina Kitchen and Bar, to Metrowest Dining, LLC dba The Common Room, Petitioner (Property located at 30 Dedham Avenue, Needham, MA).

Mr. Block noted a letter from Scott McCourt, Manager of Metrowest Dining, LLC, acknowledging he has reviewed the previous special permit and would be bound by the terms and conditions. Mr. McCourt stated he, Ted Connolly and Tom Griffin all grew up in Needham. He graduated from Needham High School. They think the town does not have a place to go, watch games and meet with neighbors. This is a beautiful space, and it is a great opportunity to take over the space. There will be an American pub style menu and it will be an inclusive gathering spot. There will be 2 chefs, and they have a builder who will do the build out. Mr. Connolly and Mr. Griffin both have restaurant experience. Mr. Block asked how many seats are there currently. Mr. Connolly noted, with the patio, there ~~are were~~ about 75 seats.

Mr. McCourt stated there are no real changes needed. There is no request for any more seats. A wall will be put up between the restaurant and the kitchen and there will be some décor changes. The bar will be upgraded a bit but there are no major changes planned. Mr. Block noted there are 71 interior seats and 28 exterior seats. Ms. Clee clarified there are only 99 seats allocated inside December 1 through March 31. Ms. McKnight noted there will be occasional functions. She feels that is needed in town. Mr. McCourt confirmed that there will be a separate function room and there will be a Needham flavor with a sports type bar. Ms. Espada asked if ~~there were~~ any exterior changes are proposed. Mr. McCourt noted only the design. The exterior is fine. There may be a change of the awning, but the project will stay within the footprint. Eventually he would like open windows.

Mr. Crocker suggested the applicants think about the noise [with closing off an open restaurant – unclear]. Mr. McCourt stated that was talked about today. They are thinking of acoustic ceiling tiles. He noted the bar is off to the smaller side of the building. Ms. McKnight stated there is an emphasis on sports on ~~TV~~. Will there be live music? Mr. McCourt stated there will be live music and noted Latina has live music now.

Upon a motion made by Mr. Alpert, and seconded by Ms. McKnight, it was by a vote of the five members present unanimously:

VOTED: to consent to the transfer by Latin-A Group, LLC, to Metro West Dining, LLC, of the Major Project Site Plan Special Permit No. 2015-07, with the decision amended as of record for premises at 30 Dedham Avenue.

Upon a motion made by Mr. Alpert, and seconded by Ms. McKnight, it was by a vote of the five members present unanimously:

VOTED: to approve the decision as drafted and included in the materials this evening.

Mr. Block asked when the anticipated opening would be was. Mr. McCourt noted they will go before the Select Board on 9/26. Mr. Crocker asked about staff. Mr. McCourt would like to keep as many of the current staff as possible.

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Appointments:

7:10 p.m. – George Giunta Jr.: Discussion of possible redevelopment and rezoning of property located at 888 Great Plain Avenue.

Mr. Alpert stated he had previously recused himself on this matter. No zoning had been discussed yet. He was the Attorney for the First Baptist Church, which is an abutter, and was in the audience. The church has merged with the First Baptist Church of Jamaica Plain, so The First Baptist Church of Needham no longer exists as an entity. He discussed this with Town Counsel who agreed he no longer has to recuse himself. Ms. McKnight asked if the church would continue as a place of worship. Mr. Alpert stated the church will be used as a satellite for the First Baptist Church of Jamaica Plain, but he does not represent them. The church will continue to be used for church community outreach.

Mr. Block gave a brief overview of how this discussion would proceed. The Board is not discussing specific zoning but concept, the rezoning approach and dimensional elements. This is not a public hearing but a discussion to make the Board aware of what the developer wants to do. George Giunta Jr., representative for the applicant, ~~said he wanted~~ to bring the Board up to date. The applicant has done public outreach. This requires Town Meeting action for a zoning change. The ~~proposed~~ building is roughly the same as the last version. The upper floors are cut out for light and air. One change is it was 32 ~~housing~~ units and is now 26 units to make the building smaller. There is a good mix with 6 3-bed units, 11 2-bed units and 9 1-bed units. There will be 4 affordable units with one fully accessible. He showed the revised renderings. The ~~level-4~~ half story has been pulled back from the front and made smaller so it will not be seen from the street.

Mr. Block asked what the ~~yard?~~ setbacks would be ~~was~~ from the roof of the third floor. Mr. Giunta Jr. stated it was 23 feet to 36 feet. Ms. McKnight asked what the ~~front yard~~ setbacks ~~is are~~. Mr. Giunta Jr. stated 20 feet in front. The building has been pulled back due to a concern with the garage exit. Now it can queue one car before the ramp to the garage and landscape has been added. Ms. McKnight asked the setback ~~area~~ for the landscaping. Mr. Giunta Jr. noted 20 feet in front and 25 feet on the sides ~~would be landscaped~~. The applicant would need relief for ~~building setbacks, this~~ as this zone has a 50-foot buffer setback. Mr. Alpert noted ~~what is proposed is was~~ a 20-foot front setback to the sidewalk. He asked how wide the sidewalk is. Mr. Giunta Jr. feels it is probably the standard 4 feet.

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Mr. Crocker wanted to make it clear the applicant is reducing the project down closer to what it was in the beginning. He thinks it was 24 units originally. He commented on green space and noted the side ~~yard going down~~ has a sidewalk ~~going down~~. Mr. Giunta Jr. stated that ~~walkway~~ is on the First Church of Christ Scientist property. Mr. Crocker asked if the entrance to the living quarters ~~would be was~~ in front with the 3 retail spaces. Jay Derenzo, owner, noted the entrance ~~to the living quarters~~ is on the side. Mr. Crocker noted there will be at least one or 2 ~~sidewalk ways~~ going to the building to get to the retail spaces. Mr. Derenzo agreed. Mr. Crocker stated there could potentially be green space around the ~~side paved~~ walks in front and on the side. The rendering shows all green space, but it is not accurate.

Mr. Block asked what the open space percent ~~is was~~. Mr. Giunta Jr. talked about the top floor being pulled back and being barely visible from the front. There are 45 spaces in underground parking. The height is the same ~~as previously proposed~~ at around 45 feet. The applicant has had 3 community meetings. One was quite well attended, and the applicant received good feedback. He heard the concern regarding traffic and safety. The building has been pulled back. A traffic engineer has been engaged. There will be an impact, but it will be minor. The traffic engineer will be engaged again to look at on-site and off-site safety. The applicant will proceed with that evaluation and will come back to the Board to discuss. He would like feedback from the Board and if there are any new issues that have come up.

Mr. Block stated there will be 3 discussions – the concept of Mixed Use at this site and the percent of affordable housing, then dimensional elements and then the zoning elements. Ms. McKnight asked how deliveries will be handled for the commercial ~~uses~~ and the residents. Mr. Block stated he wants to talk about Mixed Use on the site and the concept. Ms. McKnight does not see a loading dock on the plans and ~~an area for~~ rubbish removal. Mr. Giunta Jr. stated there is no designated location. The applicant needs to look at that. He envisions the retail operations without large scale deliveries. Deliveries in general will need to be evaluated.

Ms. McKnight explained she was very involved in housing. Recently the state agency came up with guideline changes for the MBTA Communities ~~laws~~. In the ~~Town's 2022~~ Housing Plan it was decided to leave Needham Center alone. There

was not a focus on more housing in the Center. Now, with the guideline changes, Mixed-Use housing can comply with the guidelines. She envisions this moving forward and would personally support that the Center Business District be rezoned ~~to~~ include this property without any change in use or dimensional provisions. She would look at the 50-foot setbacks in general to see if it is a barrier to development in the Center Business District, but would not make a special exception for this lot. The CBD overlay could be extended to include this site, then they could do a mixed-use development something like Dedham Avenue. She sees this as a 2-step process. She wants to institute at least a 12½% rule for affordable housing everywhere in Needham. They Housing Needham (HONE) Advisory Committee will be looking at the Center Business District this coming year.

Ms. Espada stated, for the Mixed Use and affordable housing, she thinks this site is a bridge between the residential area and the Center. She asked if there is access to the back of the site where deliveries could be made. She wants to understand the circulation of the site better. For the street-side setback, she appreciates the space for cars to get into the site, but all the other buildings are fronting on the street edge. She has no solutions, but if continuing the Center Business District, they need to figure out how to transition the site. Mr. Giunta Jr. noted it makes sense to create underground parking but how do you access it? They need to make safe sight lines. The other option would be a driveway down the side and access from the back, but green space is lost. Both approaches have negatives, but this gives the best safety and sight lines. He appreciates the comments. The building started on the sidewalk, but it was pulled back for access to the garage and for safety. He is open to ideas. Ms. Espada requested the site plan be developed more. The design in front would be most important and transition is important to bring the 2 districts together.

Mr. Crocker stated he struggles with this. The design is pretty nice, but it is opposite Green's Field. He is not sure how this fits in. He is in favor of retail on the first floor and housing above. This is not downtown but across from Green's Field. This is losing green space for a commercial building. The Board is struggling to extend the Business District that is not there now and looking to bring in mixed-use that would count under the MBTA Communities law. The town needs more housing, but this is asking an awful lot from the community. This should not be treated special. Ms. Espada noted the town common is a park and none of the buildings surrounding it are that tall. Everything on Great Plain Avenue that street is on the edge of the sidewalk. Mr. Crocker asked where the Center Business District stops.

Mr. Alpert stated he is confused about parking and asked if the nearby public lot would be available to residents and customers. He is concerned with parking on Great Plain Avenue. Usually, you do not see retail space where customer parking is underground, and the customers take an elevator up. If the public lot is available, it makes sense to have a sidewalk from the public lot to the retail. That is more conducive as it takes cars off Great Plain Avenue and puts them on Dedham Avenue. He does not think there is a lot of available parking on Great Plain Avenue. He feels people park there to go to Green's Field. People are concerned about the double parking, especially for deliveries. If trucks can park in the public lots and go in the back it takes the stress off Great Plain Avenue. He asked what the minimum density of the MBTA Communities law requires. Ms. McKnight noted it was a minimum of 15 units per acre. This site would allow 9 units if current CBD zoning were extended. The State allowing Mixed Use to count is new. The Planning Board needs to look at the downtown zoning again as to mixed-use.

Ms. McKnight noted the setback from the front to make the exit from the basement safe would be addressed if in the current Needham Center Overlay District A were extended. Despite the maximum front setback requirement, the Planning Board may waive when the applicant proposes to have a pedestrian plaza. Across from Green's Field it seems an appropriate setback and the transition would work for this site. The Town's recent parking study showed that the 43 spaces proposed provided under the 50 Dedham Avenue mixed-use development as required parking was much more than the number of cars parked there. She noted that the retail concept with underground parking on Chestnut Street does not work. Mr. Alpert thinks retail customers will be looking for spaces on the street. The automobile stress on Great Plain Avenue needs to be relieved. He wants a setback for extra cars coming out. – unclear

Mr. Block sees this as a natural extension of the Center Business District. It is a transition site and Mixed Use makes sense. The goal is to create housing near transit, and this is close. Great Plain Avenue did have multi-story buildings in the past. He sees this as an opportunity to modify the mix of retail use. Density needs to be created. This would promote a natural turn to more dynamic uses. This is asking for almost 50 housing units per acre. This is well above what 50 Dedham Avenue has. He is not excited about the Board making an exception for the one site. Trade? routes need to be planned more efficiently. He likes the mixed-use concept and the density figure proposed but he would like that for a broader area.

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Green's Field has a lot of mixed use around it. He would like to have some green space around so there would be some continuity of the green space. He noted the front setback of 50 Dedham Avenue is to the street but the Board specifically asked the developer to push this building back so the entrance was not right on the street. When entering and exiting the Dedham Avenue site the sight line issue is not present like at 888 Great Plain Avenue.

Mr. Block noted there are a couple of options for the zoning approach. The applicant could prepare the zoning as a Citizen's Petition, the Planning Board would hold a hearing, make comments to the Petitioner and make a recommendation to Town Meeting or the Planning Board could take this up as the sponsor. He ~~is~~ has not decided which he prefers. The best scenario is working through the HOME Committee. The site needs to be looked at in relation to the area and be consistent with zoning especially along Great Plain Avenue. Mr. Crocker suggested also looking at Chapel Street and Chestnut Street down to Roche Bros. ~~also~~. Mr. Block feels it may make sense for a downtown area to have greater density than a non-downtown area. Mr. Crocker does not like spot zoning. He feels it makes sense for the Board to look at the whole area and what the density would be. The focus has always been on 18 units per acre. He is in favor of more housing on top. Ms. Espada stated there needs to be community input and to do this holistically.

Ms. McKnight wants to extend the Center Business zone to include this parcel. She does not see it as spot zoning as it is adjacent to the Business District. She feels it is best for the town. She had wanted the 50 Dedham Avenue project to go around the corner, but the owner of the Great Plain Avenue property was difficult. She feels they have the opportunity here to see that happen. If ~~the~~is developer wants to bring the proposed rezoning to the ~~Town~~ Meeting, let them do it but the Planning Board could also work on it. 50 Dedham Avenue only has 10 housing units. The developer is spending a lot of money to put in underground parking and is able to get only this number of units under current zoning if. ~~The~~ density is not changing. Ms. Newman clarified that the current number of units is 18 units per acre in downtown. Mr. Giunta Jr. stated the Center Business District has 18 units per acre. The CBD Overlay District omits a density limitation, so the question is if there is a density limit. The property on Dedham Avenue is developed at more than 18 units per acre. Mr. Block asked the Planning Director to speak with the Building Commissioner and get a ruling to see if there is a density limit in the Overlay District. Mr. Alpert stated the Board does not have the authority to waive the 50-foot ~~setback~~. The zoning would need to be revised in order to reduce it. The By-Law would need to be amended in general for the Center Business District and the Overlay District. Mr. Giunta Jr. stated they would need to discuss the feedback from tonight and evaluate how best to proceed. In order to proceed with this version there would need to be relief of the 50-foot setback. Continuing the Center Business District and the Overlay District seems the natural approach. Single residence does not make sense here. The Mixed-Use development rules in the packet are exactly what the applicant needs. Mr. Block would like to know the total square footage of the building to get the FAR and if there would be additional relief needed. Mr. Alpert noted 59,248 is from adding up the square footage of the units. Mr. Block would like clarification from Mr. Giunta Jr.

The Board took a 5-minute recess.

Discussion of Zoning Strategies for Solar Energy Systems.

Mr. Block noted the Board will be discussing small-, medium- and large-scale ground mounted solar arrays, canopies and roof mounted solar arrays. Ms. Newman did an extensive memo to the Board and demonstrated what the changes would look like. Ms. McKnight stated she did not understand what a pitch less than a 15-degree angle was. Mr. Crocker noted solar on the roof is parallel to the roof. If the roof gets too low, it is common to pitch the solar up. What is the pitch of the roof and does the solar run parallel to that or do you have to pitch the solar? Ms. Espada suggested it say roof pitch. Ms. Newman stated this memo is a starting off point for conversation. She found 10 examples from other towns but only 3 were able to be used. For example, Lexington does not allow medium or large size solar at all. She will fill in the framework of what other towns are doing. Ms. McKnight feels this is a wonderful start and would fit beautifully in the framework of the By-Law.

Ms. Newman stated Natick has solar regulated in one area of its by-law rather than spread out throughout. It is easier to understand and easier to explain to people. Adding a solar By-Law section makes sense. Mr. Block asked if Ms. Newman wanted a standalone Zoning By-Law section that would deal with solar. Ms. Newman would keep this in a new section like the accessory uses dealing with solar as it is easier and cleaner. Mr. Block had questions on specific language and some words that are not necessary. In terms of the By-Law, there is already Section 3.13 in the By-Law that deals with ground mounted solar. He would look at this as a new solar By-Law section and have 4 or 5 separate sub sections. The last would

be large-scale ground mounted, just before that would be medium-scale ground mounted solar, then small ground mounted solar, solar canopies over parking structure and parking lots, and first would be roof mounted solar arrays. Ms. Newman stated that Section 3.13 this is the overlay and this discussion is not about overlays. Mr. Block agreed but feels this can be used to fit in there.

Ms. McKnight thought the policy was good in general but thought the maximum height was very high. In response, it was noted 35 feet was already allowed for buildings in residential districts. Mr. Crocker knows there is some controversy about land clearing for arrays. He is fine having that conversation. The optics are bad for large scale arrays, but he understands it is good for the environment. With regard to rear and side yards, some property owners have large properties with fairly large front yards. He is not sure if the Board needs to regulate require where solar arrays are located on a lot. Historic Districts are being set up around the state. The Board needs to think about the historic aspect. Ms. McKnight noted there is no historic district in Needham currently and there will only be one house in the currently proposed historic district. Mr. Alpert would like to see more historic districts in town. He hopes this will generate more discussions as there are a lot of historic buildings in town. Mr. Block commented there are a lot of sporadically placed historic homes in town.

Ms. Espada thought this was well done. For lot coverage, her understanding is that the area of the solar is counted toward maximum lot coverage as if a building. Ms. Newman agreed but noted it would not count if on top of the building. It would not count on impervious area, but if extending out over green space it would count. Mr. Crocker stated ground mounted solar canopies do not really take away impervious surface. He clarified that solar arrays and canopies are not impervious. Ms. Espada asked if there was anything regarding electrical charging stations. She feels something should be added. [She had a thought if solar canopies should be on parking lots. – unclear] She asked if a 1,500 sq. ft. small system would be as of right in every district and was informed they would be. She noted medium scale would be by special permit but questioned large scale. Ms. Newman noted large scale are [by special permit?] in the overlay. Mr. Crocker stated the 1,500 square-foot limit for small scale should be changed to 2,000. He does not know if it hurts the town to have medium scale arrays [allowed by right?]. Ms. Espada stated the scale has to be appropriate. A discussion ensued regarding the scale of arrays.

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Mr. Block asked if the members want to allow solar arrays in a neighbor's back yard, where there can already be an accessory structure. Mr. Alpert noted there is already a lot coverage requirement in Single Residence A and B and General Residence. Ms. McKnight noted it could be allowed as an accessory use. Mr. Crocker stated there could be standalone solar arrays by special permit. Ms. Espada noted it should be as of right on roofs, but they need to think about freestanding. Mr. Alpert is leaning toward Lexington's by-law and only allowing small arrays in residential districts. As now proposed, the Board does not specifically prohibit anywhere in town. Mr. Block noted he is hearing from the members they do not want medium anyway and large should be contained to a certain geographical area. He will have Town Counsel look into this.

Ms. McKnight stated the approach the Planning Director outlined regulating solar as an accessory use is a good idea and a good approach toward that. This should be regulated. She feels large scale should be allowed with the overlay concept. Mr. Alpert has no issue with ground mounted solar arrays in the Business, Industrial or Mixed-Use areas. Mr. Crocker explained how solar worked with businesses and where it feeds to. Ms. Espada stated the goal is to make solar accessible to all, but they need to make sure people are respectful of their neighbors. Mr. Block feels medium ground mounts would require a site plan and small would be allowed by right with no site plan review. He would recommend this approach. Ms. Newman stated large scale could be by special permit. The Board talked about the need to define medium and discussed the Werlin statistics in the packet. Ms. Espada asked the Planning Director to do some more research on this. The big thing for her is the ground mounted. Ms. Newman will do more research and put a table together.

Mr. Block stated Mr. Crocker provided for a solar canopy to be allowed over and above mechanicals. This adds another component. There needs to be circulation and ventilation around the equipment. Ms. McKnight noted residential arrays do not really add to the height of the building. Ms. Espada stated there are some arrays that would never be seen from below and others are structures on top of the building. There are different impacts. Mr. Block stated he is not sure, under the Dover Amendment, if it is permissible to regulate aesthetics with respect to exempt uses. He is not sure the Board has the legal authority to regulate this. Mr. Block stated Ms. Newman identified a height of 12½ feet for ground mounted. Compared to an 8-foot stockade fence, he does not want it towering over the fence. He feels the Board needs to revisit this. Mr. Crocker stated 12 feet would be a very unusual height as it is way too high. Usually the arrays are around 10 feet.

Minutes

Ms. McKnight noted on the minutes of 5/12/23, in the presentation, she noted ~~reference to the~~ Town Meeting approval date of 5/22/23. The date will be removed. Mr. Block noted the title at the time was Economic Development Manager and not Director. Ms. McKnight noted on page 2, the residential development in the Heights averages one space per unit. Is this the supply or demand? It is correct as it is. She noted the statement the Board asked for 3 times the available number. Mr. Block noted that is what was said. Ms. McKnight noted the comment that if a special permit is involved, she would like to see the lease. That should be for off site parking.

Upon a motion made by Ms. McKnight, and seconded by Mr. Alpert, it was by a vote of the five members present unanimously:

VOTED: to, with these corrections and the other red lined changes, accept the minutes of 5/12/23.

Ms. McKnight noted on the minutes of 6/6/23, in the report, it should say working with Katie King for funding for “compliance” and it should be “planning study money.” She noted on page 4, 2nd paragraph, the HONE Committee, “if this were coming from the Select Board...” Mr. Alpert noted he said that and feels it should be left alone. Ms. McKnight noted, in the vote, “Real Estate” should be capitalized.

Upon a motion made by Ms. McKnight, and seconded by Mr. Alpert, it was by a vote of the five members present unanimously:

VOTED: to accept the minutes of 6/6/23 with the changes discussed tonight and the red line changes.

Ms. McKnight noted on the minutes of 6/20/23, Needham Housing Authority, 3rd paragraph, with key zoning issues parking “appearance” should be “requirements.” In the 4th paragraph, it says the Housing Authority would retain ownerships and “it” would come back. Mr. Block stated he said that, and it should be left alone. He noted it should be HONE on page 3.

Upon a motion made by Ms. McKnight, and seconded by Mr. Alpert, it was by a vote of the five members present unanimously:

VOTED: to accept the minutes of 6/20/23 with the one change to HONE and red lined changes.

Report from Planning Director and Board members.

Ms. Newman noted the consultants did a very good job at the kickoff meeting ~~of the HONE Committee~~. She anticipates she will have the build out numbers on 10/5/23 under the housing plan and on 10/18/23 they will prepare for the 11/19/23 first community meeting. She feels the first meeting was very good. Mr. Block thought all did an excellent job and looks forward to participating. Ms. Newman noted the contract with GPI ~~as to Highland Avenue Medical Building?~~. There is a hearing on 10/3/23 and she hopes to have a report for the Board. Mr. Block stated there is a preliminary study report on the Single Parcel Historical Committee. He participated in writing a portion of it.

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Correspondence

Mr. Block noted the following correspondence for the record: an email dated 9/5/23 from Maggie Abruzese; an email dated 9/5/23 from Joe Abruzese and an email dated 9/10/23 from Holly Clarke, all encouraging the town to appeal the Land Court decision regarding 1688 Central Avenue, and an email dated 9/6/23 from Caren Carpenter, regarding a run off problem from a new home to the neighbors' property and noting this was not an isolated incident. Mr. Alpert stated a client of his had a problem like this in Wellesley. The Building Commissioner said there was nothing he could do, ~~and- He~~ was told his client would have to deal with the developer or hire a lawyer. In that case the Conservation Commission was involved with it. Ms. Espada stated there is a Storm Water By-Law and asked if the Building Commissioner was authorized to stop construction. Mr. Block would like the Planning Director to speak with Town Counsel regarding enforcement and report back to the Board. There needs to be clarity on the authority of the Building Commissioner on the Storm Water By-Law and enforcement during construction and post construction.

Mr. Alpert stated ~~a~~Ms. Carpenter's complaint was made to the Planning Board, but it is out of our jurisdiction. Is it the Board's place to go to the Building Commissioner or Town Counsel or go back to the homeowner and have them go through

the appropriate channels? The Building Commissioner is not the Planning Board's employee. The complaint is the Building Commissioner is not doing his job. This Board does not have authority to get involved. He would ~~not~~-vote not to get involved. Ms. Clee noted the Town Manager has been contacted and she was copied on this email. Mr. Block asked if there is anything that prohibits the Board from saying that every property owner has to prevent run off during construction. Mr. Alpert noted this has nothing to do with zoning. The Board does not monitor construction. Mr. Block noted an email, dated 5/9/23, from the new Building Commissioner to the Zoning Board of Appeals (ZBA) regarding 1458 Central Avenue, with comments and an email regarding the proposed Single Parcel Historic District.

Mr. Alpert stated, historically, the Building Commissioner always sent Dover Amendment requests to the ZBA and never ruled on it himself. He feels the new Building Commissioner should follow what has historically happened. The new Building Commissioner has determined he would issue permits. He should not interpret case law and statutes. Mr. Block feels there should be a Chair/Vice-Chair meeting with the Building Commissioner and Mr. Alpert sooner rather than later. Ms. McKnight agreed the Building Commissioner should not be interpreting statutes.

Mr. Block noted a legal notice from the City of Newton, dated 9/26/23, regarding the creation of the Village Center Overlay District. Mr. Alpert suggested sending a comment to the ZBA on ~~theirs~~ change of agenda. The ZBA would need to take up the request for withdrawal without prejudice. He feels the Board should send a comment to the ZBA that the Planning Board recommends the applicant not be allowed the withdrawal of the application to amend the special permit because the Board disagrees with the Building Commissioner's interpretation. The ZBA has authority to ~~triangulate~~-regulate parking. Pursuant to the statute, and pursuant to case law, they can regulate traffic pursuant to Tufts vs. Medford and that the catchall parking By-Law is a perfectly reasonable method to determine parking and otherwise the Board makes no comment. Mr. Block stated he disagrees. The Board's place is to comment on this. Different opinions are not reflective of the full Board and he would recommend specifically that the Board have the Chair/Vice-Chair meeting with the Building Commission as soon as possible to identify some areas of disagreement and how they can resolve disagreements so there is clear approval for the municipality.

Upon a motion made by Mr. Alpert, and seconded by Ms. McKnight, it was by a vote of four of the five members present (Mr Block voted in the negative):

VOTED: to send a comment to the ZBA that the Planning Board recommends the applicant not be allowed the withdrawal of the application to amend the special permit because the Board disagrees with the Building Commissioner's interpretation. The ZBA has authority to ~~triangulate~~-regulate parking. Pursuant to the statute and pursuant to case law they can regulate traffic pursuant to Tufts vs. Medford and that the catchall parking By-Law is a perfectly reasonable method to determine parking and otherwise the Board makes no comment.

Mr. Block noted a letter from Attorney General Andrea Campbell, dated 9/15/23, regarding Warrant Articles 18, 19 and 20 from the 5/1/23 Town Meeting and the approval of Articles 19, 20 and 39; and a letter from the Attorney General extending the deadline for Article 18 for an additional 60 days with a new decision date of 11/17/23.

Upon a motion made by Ms. McKnight, and seconded by Ms. Espada, it was by a vote of the five members present unanimously:

VOTED: to adjourn the meeting at 10:52 p.m.

Respectfully submitted,
Donna J. Kalinowski, Notetaker

~~Jeanne S. McKnight, Vice Chairman and Clerk~~

DRAFT

From: [Stephen Frail](#)
To: [Planning](#)
Subject: Ground-based solar arrays in front yards / Parking structure canopies
Date: Tuesday, November 28, 2023 9:38:32 PM

Planning Board:

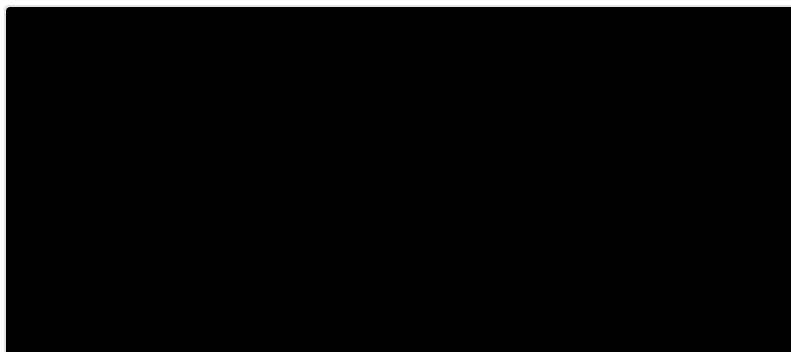
Thank you for the time and consideration on solar zoning. I have been following the discussion with great interest. I wanted to weigh in on the topic of ground-based solar arrays in front yards. My comments are my own but informed by discussions we've had on this topic in the Climate Action Planning Committee.

Before I do, I wanted to also pass along one argument in favor of adding solar canopies over parking garage structures that was made by our previous Building Commissioner: safety. His argument in favor of solar canopies on those structures is that during the winter the rooftops of parking structures fill up with snow and become significant safety hazards for kids who may go up there and try to sled down the snow piles. For that reason, top levels in parking garages often get closed off during snow events. Solar canopies would allow the snow to more effectively shed off the roof and minimize the snow piles. This was one reason that the discussion led to a recommendation that we offer canopies over parking garage structures (and exempt them from the height restrictions for the garage). Canopies over the top level of the garage also provide shade for cars in the summer. Commercial buildings don't have the same safety or convenience issues, so we didn't recommend adding a full canopy over rooftop mechanicals and instead discussed exempting the solar panels from the 25% roof coverage restriction that exists in some zoning districts.

Regarding ground-based solar arrays, speaking only for myself, I favor the idea of special permit for ground-mounted front yards. A special permit process would allow the Town to say *no* to, for example a ground-based array that is two feet off the ground along the front of the property, but yes to, for example, a covered walkway leading up the front door or a solar-covered carport. To help ground the Planning Board's discussion, below are some images that show creative architectural approaches to solar canopies doing double duty for covered walkways, patios, pool decks, car ports, and in the last case, landscape art. I would urge the PB to keep it simple: if our zoning bylaws allow an accessory structure in front, side, or front yards, allow solar arrays on those structures, subject to same height and setback restrictions. Building permit in side yards and back yards, special permit for front yards. Site plan review for all medium-solar arrays.

Stephen Frail
29 Powers Street

[Solar Design Awards | Architectural Solar Projects - Lumos Solar](#)

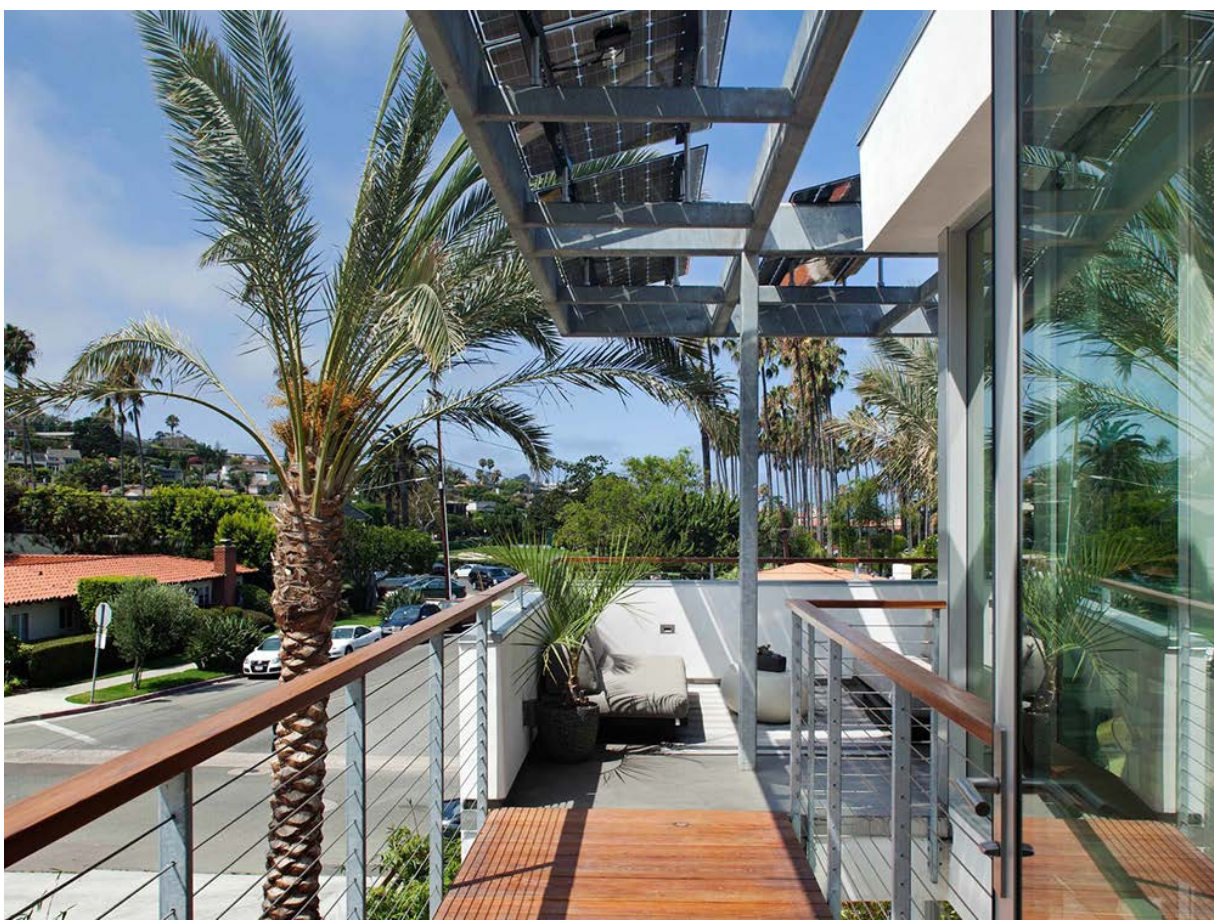


Solar Design Awards | Architectural Solar Projects - Lumos Solar

Our cutting edge, highest efficiency Solar Panels win awards for architectural aesthetics, product innovation, f...













October 27, 2023

Dear Neighbor,

The Planning Department has received notice that 78 Crafts Street, LLC (the Applicant) has filed a request for a determination of Project Eligibility with the Massachusetts Housing Finance Agency (MassHousing) for a site encompassing consisting of parcels at 78 Crafts Street, 68-70 Crafts Street, 78-84 Crafts Street, 9 Maguire Court, 13-15 Maguire Court, 17-19 Maguire Court, portion of 24 Maguire Court, 31-31R Maguire Court, 63 Court Street and 67-67R Court Street in Newton. As currently proposed, the development would consist of five buildings with a total of 307 units rental housing. Four buildings will include the 307 mixed-income rental apartments and one building will include a dedicated parking structure. Twenty percent (20%) of the units will be made affordable to households earning up to 50% of area median income (AMI) and Eighty percent (80%) of the units will not have any income restrictions.

The Planning Department will be compiling a letter addressing comments and concerns with the project to MassHousing. MassHousing must make the findings set forth on the attachment to this letter in order to make a determination of Project Eligibility. Comments relevant to the required findings that would assist the Planning Department as we consider the applicants request should be submitted by 5 p.m. on Friday, November 17th. Please direct any comments to bbelsanti@newtonma.gov. Comments will be used to inform the content of the Planning Department's letter, as well as compiled and attached to our letter.

The Applicant's full application can be viewed online at: <https://www.newtonma.gov/government/planning/development-review/high-interest-projects/crafts-street-78/-fsiteid-1#/>. General information on the Comprehensive Permit process is also available on this webpage.

Please feel free to contact Jennifer Caira, Deputy Director of Planning, with any questions about this project. She can be reached at 617-796-1121, or jcaira@newtonma.gov

Sincerely,



Barney Heath
Director of Planning and Development

From: [Myles Tucker](#)
To: scott520@hotmail.com
Cc: [Planning](#); [Cheryl Gosmon](#)
Subject: RE: Board Meetings
Date: Monday, December 4, 2023 9:39:37 AM
Attachments: [image001.png](#)
[image002.png](#)

Hi Scott,

I've cc'd the Planning and Community Development staff and Cheryl Cosmon, the Executive Director of the Housing Authority, to help answer your question re: these plans for the Linden/Chambers redevelopment posed below.

--

Myles Tucker
He/Him/His
Support Services Manager

Town of Needham
Town Hall
1471 Highland Avenue
Needham, MA 02492
Tel: 781-455-7500, Extension 204
www.needhamma.gov



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From: Scott Schwartz <scott520@hotmail.com>
Sent: Saturday, December 2, 2023 12:26 AM
To: Office of the Town Manager <OTM@needhamma.gov>
Subject: Board Meetings

Hello,

In regard to the following proposal, are they renovating the 152 studio apartments? Also, will the 95 additional units be studio apartments? Do they need to cut trees in order to add the additional 95 units?

On Wednesday, December 6th, the [Planning Board](#) and the [Needham Housing Authority](#) (NHA) will hold a joint community meeting on the Linden and Chambers Street Redevelopment Project at 7 pm at Broadmeadow Elementary School and via Zoom. The purpose of this meeting is to seek input from residents and Town Meeting members on NHA's design plans for the project which includes replacing 152 studio apartments and adding an additional 95 units for a total of 247 units.

In regard to the following proposal, what is a Town's Tax Classification?

The [Select Board](#) will be holding a public hearing regarding the Town's Tax Classification at its regular meeting on Tuesday, December 5th. The hearing will begin at 7 pm on December 5th at Town Hall in Powers Hall and via Zoom. The Board is interested in hearing the opinions of residents from a variety of backgrounds and welcomes any resident or interested party to provide testimony.

How to Provide Feedback at a Public Hearing

You may attend the hearing in person to share your comments or, if you're attending the meeting by Zoom, please raise your virtual hand to ask to speak. You may also email your comments in advance of the hearing at selectboard@needhamma.gov.

Questions about this can be directed to the Town Manager's office at otm@needhamma.gov.