

DESIGN REVIEW BOARD

Monday, October 17, 2022

7:30 p.m.

Virtual Meeting using Zoom

Meeting ID: 845-1987-6965

(Instructions for accessing below)

Under Governor Baker's Act "Extending Certain COVID-10 Measures Adopted During the State of Emergency", extending the "Executive Order Suspending Certain Provisions of the Open Meeting Law G.L. c. 30A, S20," issued June 16, 2021, and in effect until April 1, 2022, and extended again through July 15, 2022 meeting of public bodies may be conducted virtually provided that adequate access is provided to the public. On July 16, 2022 Lt. Gov. Karyn Polito, as acting governor, signed legislation to extend key pandemic-era accommodations, including remote local government meeting authorizations, through March 31, 2023 effective immediately.

**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: 845-1987-6965
Link: <https://us02web.zoom.us/j/84519876965>**

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: 845-1987-6965

HEARINGS:

Public notice is hereby given that Roche Bros. located at 377 Chestnut Street, has made application to the Design Review Board for a Special Permit pursuant to the Sign By-Law Section 5.5.3.1 a) (More than one permanent attached wall signs) and Section 5.5.4 (Signs exceeding 32 Sq. Ft. in a Business District) any other applicable sections of the By-law.

APPLICANTS:

Continued: Rick DeAngelis, Boston Properties located at 140 Kendrick Street and applying for site plan review of a solar garage roof with supplemental information.

Christina Moreau, Agnoli Sign Co., Inc. representing Supply New England located at 151 Reservoir Street and applying for signage.

Evans Huber, attorney with Frieze Cramer Rosen & Huber, LLP representing Coca-Cola located at 9 B Street and applying for site plan review.

REVIEW

No minutes to review.

Next Public Meeting – November 7, 2022 at 7:30pm via Zoom Webinar

PLAN B

RETAIL DESIGN AND PROJECT MANAGEMENT, LLC

12 Goose Lane • Tolland, CT 06084

Tel. 860.870.5380

Fax. 860.870.5382

ROCHE BROS. SUPERMARKET

NEEDHAM, MA

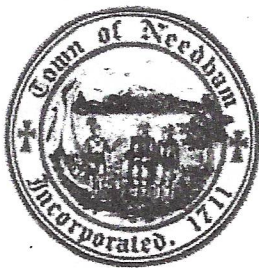
ROCHE BROS.' RESPONSE TO THE DESIGN REVIEW BOARD

Initial Signage was submitted to the Board and the Applicant is responding to concerns as follows:

- Allowable: 120' Frontage X 2 Square Feet = 240 Square Feet with a maximum of 32 Square Feet.
Existing Signage is 140 Square Feet in one (1) location.
- Initially submitted for five (5) locations as follows:
 - Sign A: 71.25 SF
 - Sign B: 17.5 SF
 - Sign C: 13.42 SF
 - Two (2) Signs D: 64 SF Each
 - *Total of 230.17 SF*
- Revised submission in response to the Design Review Board comments and requesting an application for a Special Permit:
 - Sign A: 57.8 SF, Reduced Area
 - Sign B: 12.1 SF, Reduced Height from 14" to 12"
 - Sign C: 9.1 SF, Reduced Height from 14" to 12"
 - Sign D1: 64 SF, Unchanged
 - Sign D2: Deleted
 - *The request is for Four (4) Signs*



09.27.2022



TOWN OF NEEDHAM

DESIGN REVIEW BOARD

Public Service Administration Building
500 Dedham Avenue
Needham, MA 02492
Application and Report

Property Location: 377 Chestnut Street Date 9/27/22

Owner: Roche Bros. Supermarkets

Address: 11 Hampshire Street, Mansfield, MA 02048

Telephone: 781.235.9400 City State Zip

Applicant: Plan B Retail Design (Charles Bomely)

Address: 12 Goose Lane, Tolland, CT 06084

Telephone: 860.870.5380 City State Zip

Designer/Installer: Plan B Retail Design

Address: 12 Goose Lane, Tolland, CT 06084

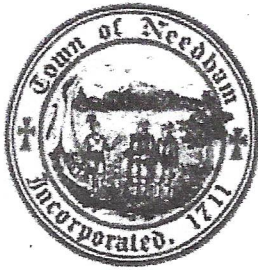
Telephone: 860-870-5380 City State Zip

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:

Sign A: Primary Facade signage, 57.8 SF, reading
Roche Bros. with logo and internally illuminated.
PURSUING SPECIAL PERMIT.

Please email completed application to elitchman@needhamma.gov



TOWN OF NEEDHAM

DESIGN REVIEW BOARD

Public Service Administration Building
500 Dedham Avenue
Needham, MA 02492
Application and Report

Property Location: 377 Chestnut Street **Date** 9/27/22

Owner: Roche Bros. Supermarkets

Address: 11 Hampshire Street, Mansfield, MA 02048

Telephone: 781, 235, 9400 Street City State Zip

Applicant: Plan B Retail Design (Charles Bomely)

Address: 12 Goose Lane, Tolland, CT 06084

Telephone: 860, 870, 5380 Street City State Zip

Designer/Installer: Plan B Retail Design

Address: 12 Goose Lane, Tolland, CT 06084

Street City State Zip

Telephone: 860-870-5380

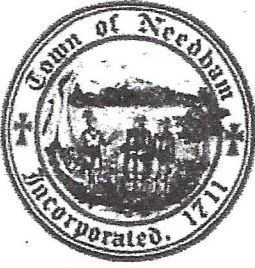
Type of Application
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☐ Planned Residential Development
☐ Residential Compound

Brief description of sign or project:

Sign B: Secondary signage, 12.1 SF, mounted above face
edge of Canopy and non-illuminated.

Pursuing Special Permit

Please email completed application to elitchman@needhamma.gov



TOWN OF NEEDHAM

DESIGN REVIEW BOARD

Public Service Administration Building

500 Dedham Avenue

Needham, MA 02492

Application and Report

Property Location: 377 Chestnut Street Date: 9/27/22

Owner: Roche Bros. Supermarkets

Address: 11 Hampshire Street, Mansfield, MA 02048

Telephone: 781.235.9400

Applicant: Plan B Retail Design (Charles Bomely)

Address: 12 Goose Lane, Tolland, CT 06084

Telephone: 860.870.5380

Designer/Installer: Plan B Retail Design

Address: 12 Goose Lane, Tolland, CT 06084

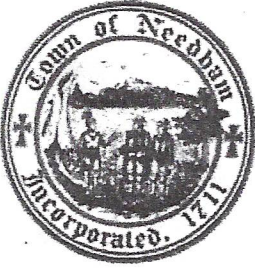
Telephone: 860-870-5380

Type of Application	
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☐	Minor Project
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☐	Flexible Subdivision
☐	Planned Residential Development
☐	Residential Compound

Brief description of sign or project:

Sign C: Secondary signage, 9'-1'-SF, mounted above
face edge of Canopy and non-illuminated.
PORGOING SPECIAL PERMIT

Please email completed application to elitchman@needhamma.gov



TOWN OF NEEDHAM

DESIGN REVIEW BOARD

Public Service Administration Building
500 Dedham Avenue
Needham, MA 02492
Application and Report

Property Location: 377 Chestnut Street Date: 9/27/22

Owner: Roche Bros. Supermarkets

Address: 11 Hampshire Street, Mansfield, MA 02048

Telephone: 781, 235, 9400

Applicant: Plan B Retail Design (Charles Bonely)

Address: 12 Goose Lane, Tolland, CT 06084

Telephone: 860, 870, 5380

Designer/Installer: Plan B Retail Design

Address: 12 Goose Lane, Tolland, CT 06084

Telephone: 860 - 870 - 5380

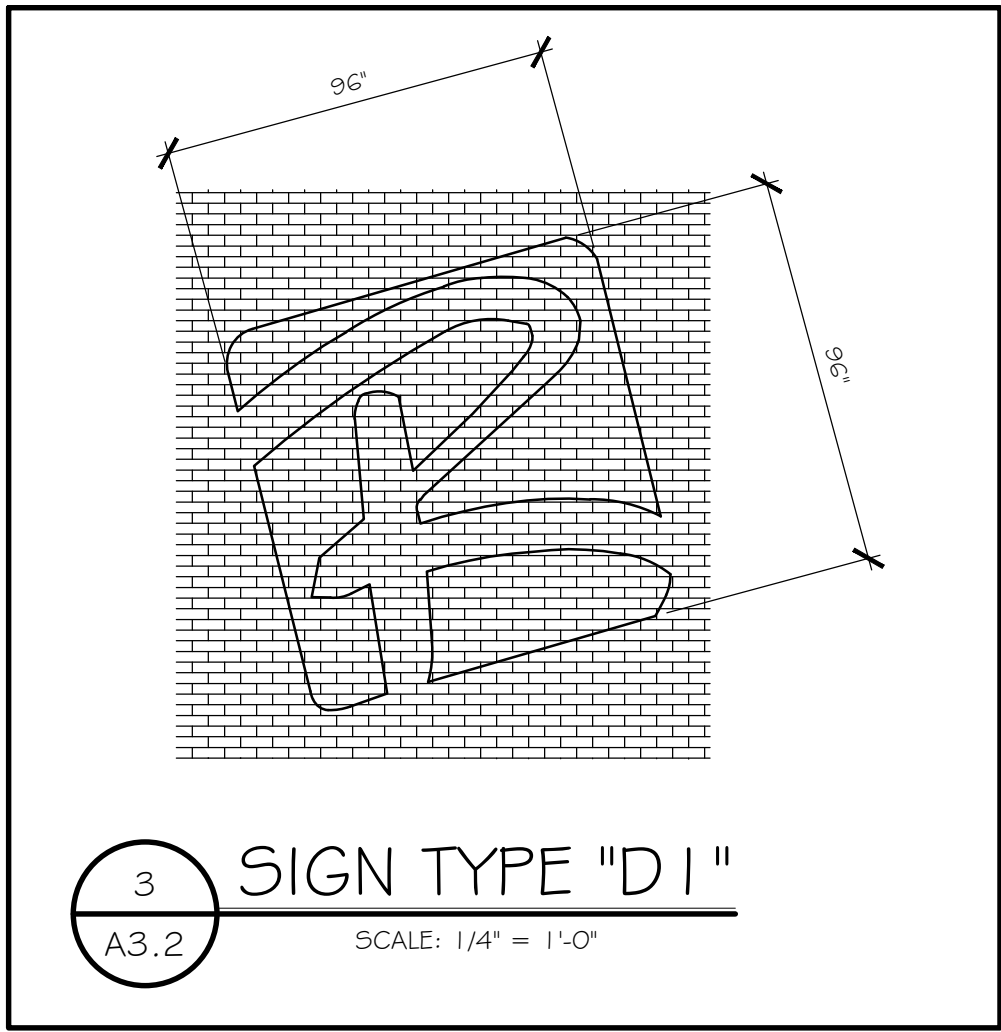
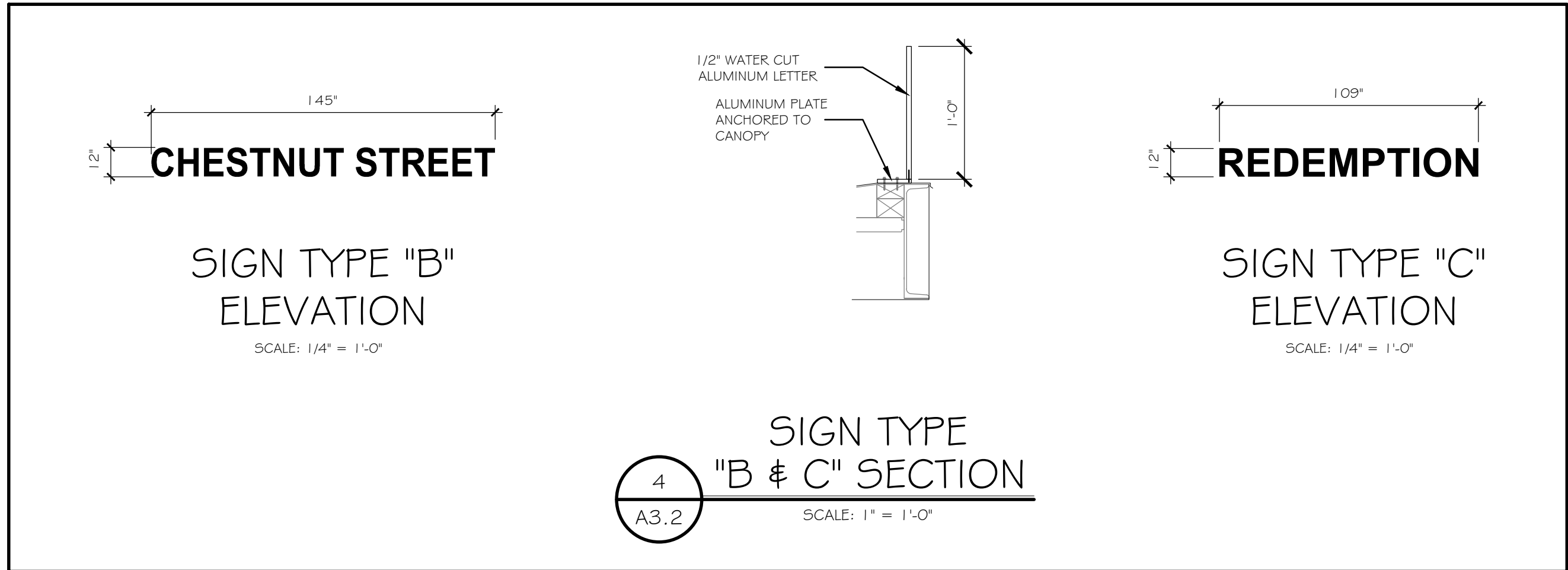
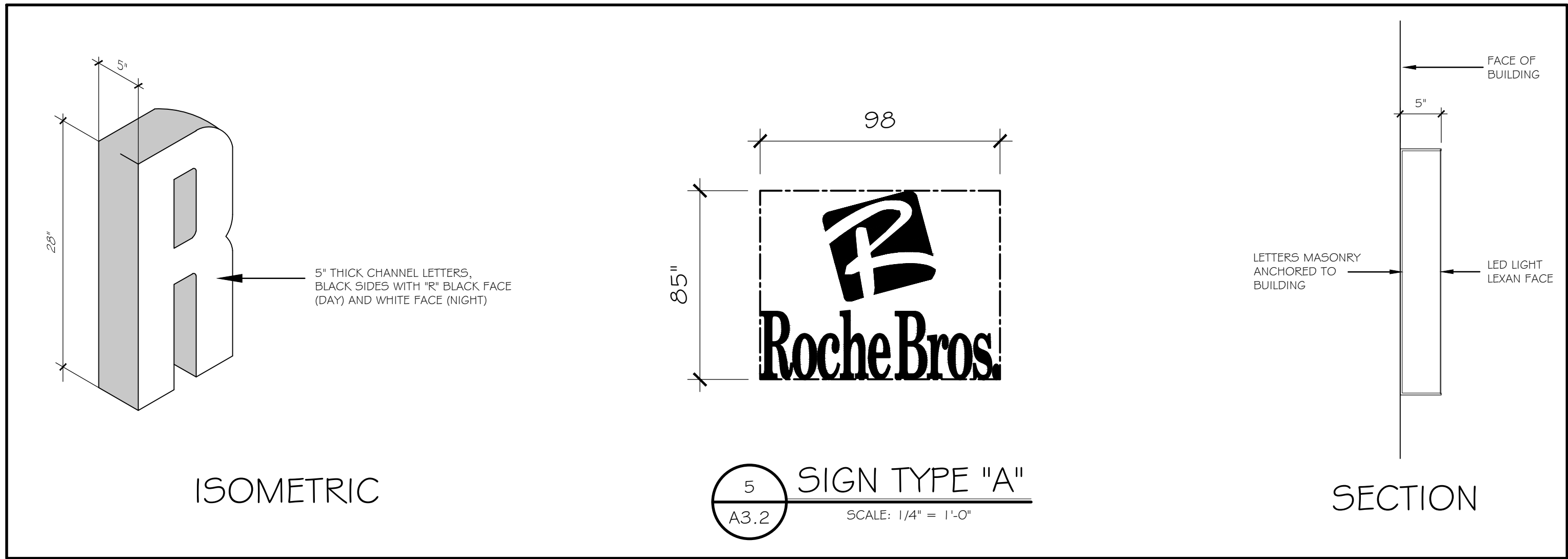
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Brief description of sign or project:

Sign D.1: Stencil painted in Washed Black on brick,
64 SF. PURSUING SPECIAL PERMIT

Please email completed application to elitchman@needhamma.gov

Z:\Misc\Projects\Roche Bros\Needham, MA\2132\A3.2_Sign Review - Alternate.dwg, Printed on: Sep 27, 2022, 11:05am by eldon03
Attached Vels: 2132-PB.dwg, 2132-EB.dwg, 2132-EC.dwg, Alternate-Sign.dwg, 2132-PH.dwg, 2132-COL.dwg
Sheet Title: Sign Type "A" Date: 27-Sep-2022, 10:53am



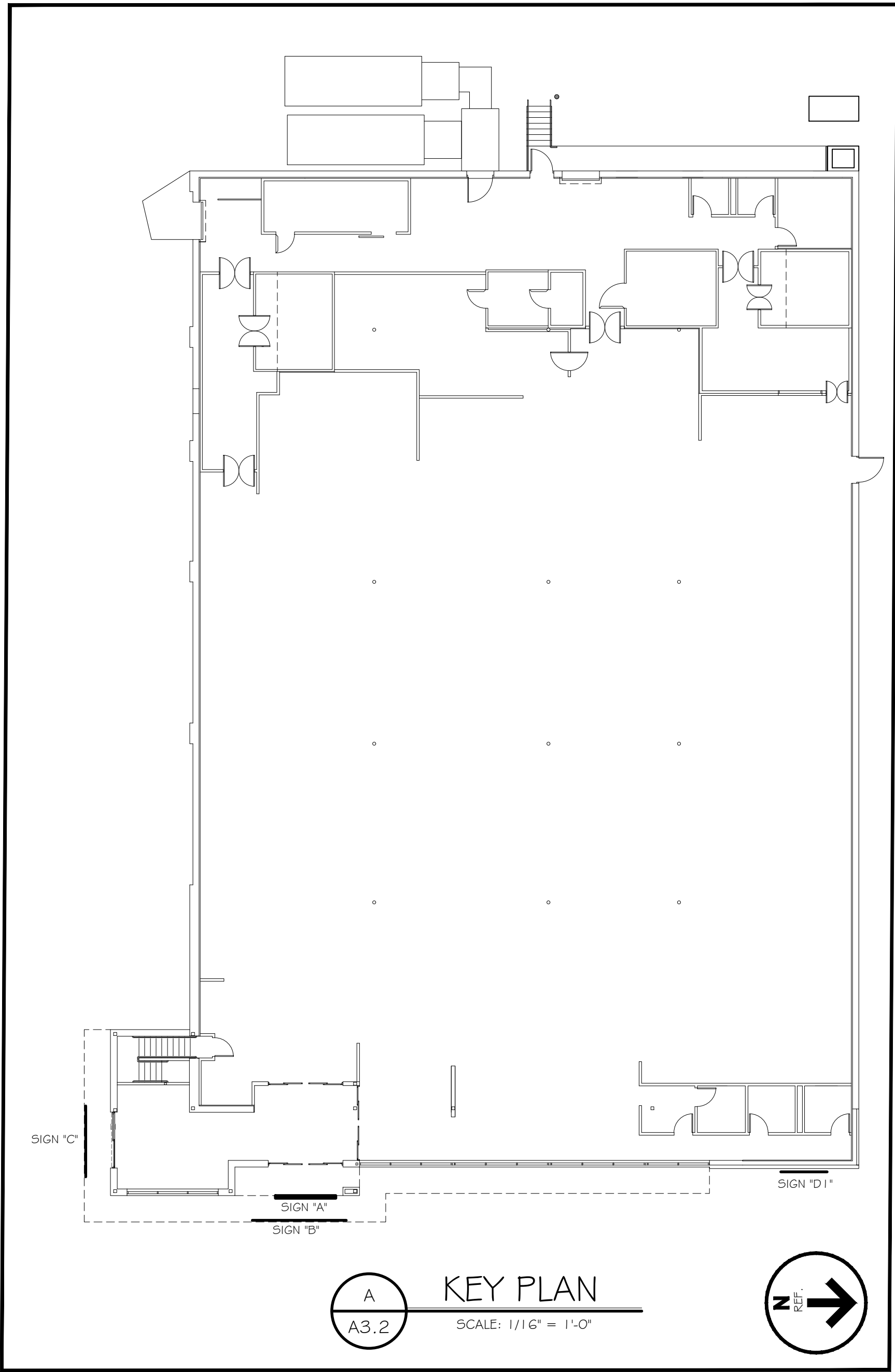
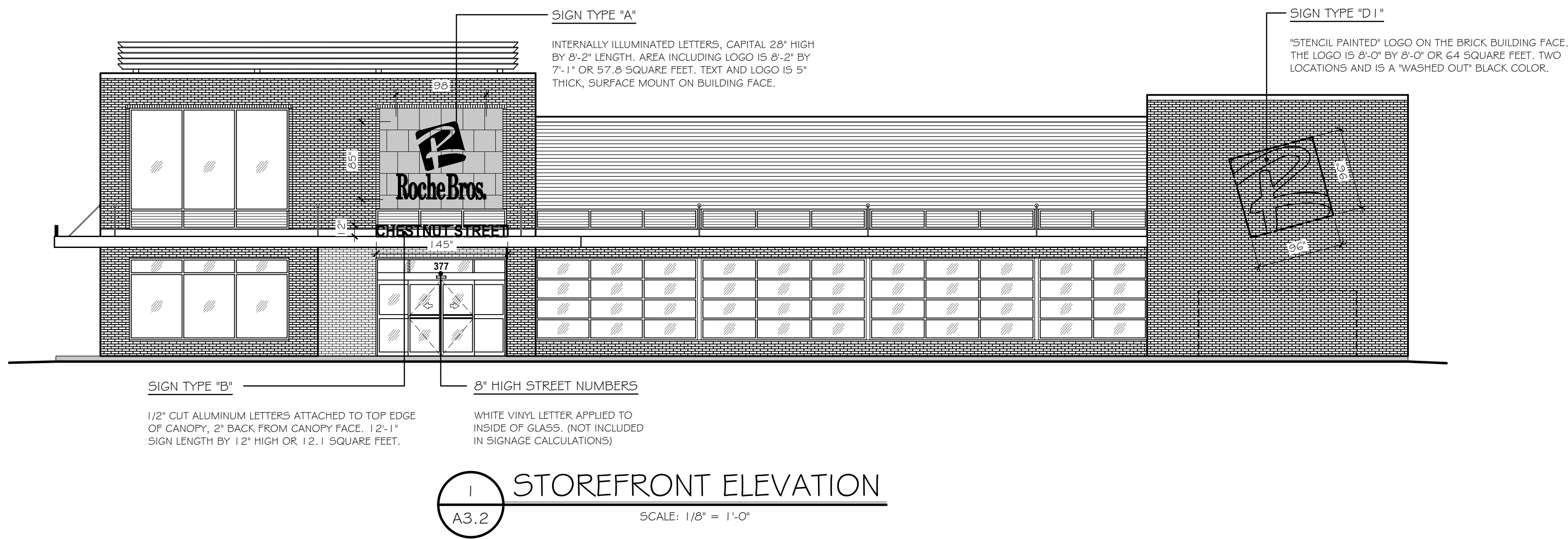
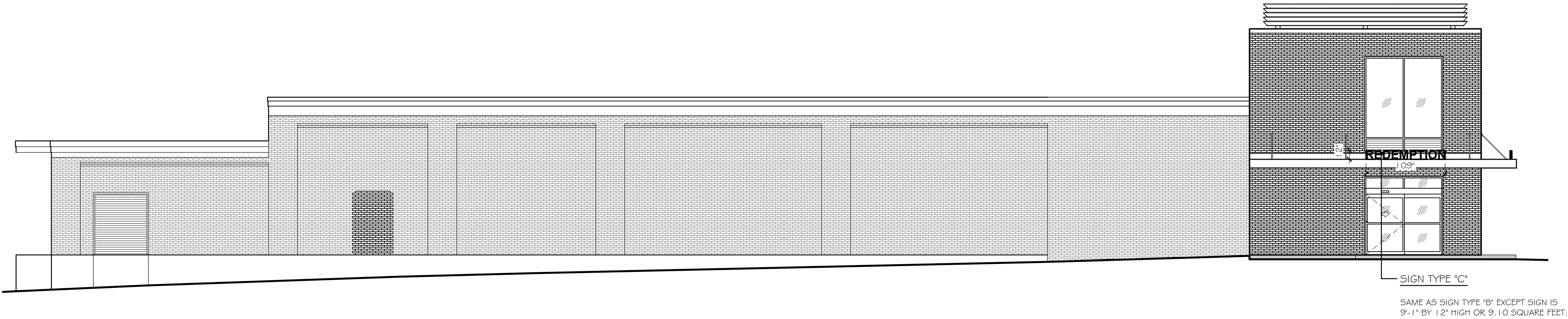
SIGN LEGEND

ALLOWABLE: 1 20' FRONTAGE X 2 SQUARE FEET = 240 SQUARE FEET.
MAXIMUM 32 SQUARE FEET

EXISTING SIGNAGE: 140 SQUARE FEET

SIZE REQUESTED: 143 SQUARE FEET

SIGN "A"	57.8 SQUARE FEET
SIGN "B"	12.1 SQUARE FEET
SIGN "C"	9.1 SQUARE FEET
SIGN "D1"	64 SQUARE FEET



DATE: Sep 27, 2022

PROJECT NO: 2132

SHEET NO:

A3.2

PLAN B RETAIL DESIGN
& PROJECT MANAGEMENT, LLC
12 Goose Lane, Tolland, CT 06084
Tel: 860.870.5380 Fax: 860.870.5382
e-mail: cbornely@planetbetail.com

PROPOSED EXTERIOR
SIGN ELEVATIONS
AND DETAILS

PROJECT NAME:

Roche Bros.
377 Chestnut Street
Needham, MA

SEAL:



ARCHITECT:

D. F. VALENTE
ARCHITECT
571 MAIN STREET, REAR
SOUTH MEAD, NC 27103
TELEPHONE 781-395-0120
FACSIMILE 781-395-5702

REVISIONS:

2022-05-16 - SET RELEASED FOR REVIEW



TOWN OF NEEDHAM

DESIGN REVIEW BOARD

Public Service Administration Building
500 Dedham Avenue
Needham, MA 02492
Application and Report

Property Location: 140 Kendrick Street Date: August 16, 2022

Owner: BP 140 Kendrick Street LLC c/o Boston Properties

Address: Suite 1900, 800 Boylston Street Boston MA 02199
Street City State Zip

Telephone: (617)512-0319 (cell)

Applicant: BP 140 Kendrick Street LLC attn: Frederick J. DeAngelis.

Address: 800 Boylston Street, Suite 1900 Boston MA 02199
Street City State Zip

Telephone: (617)512-0319

Designer/Installer: Sunwealth Power, Inc., attn: Marcel Rodgers

Address: 2067 Massachusetts Avenue Cambridge MA 02140
Street City State Zip

Telephone: (617)506-9612

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: Please see attached.

Please email completed application to elitchman@needhamma.gov

Brief Description of Project

The 140 Kendrick Street Project was originally approved and constructed pursuant to Special Permit/Site Plan Review issued by the Planning Board on June 15th, 1999. The Special Permit/Site Plan Review was amended by Amendment dated December 1, 2020 on Application No. 99-2. That Amendment approved the Owner's request to renovate the existing single tenant office space to allow multiple tenants to lease the buildings, including exterior improvements as shown on the Plans referred to in the Amendment consisting of adding entrance locations to the buildings, patio improvements, and accessible parking and landscape improvements at the new entrance locations. The Special Permit/Site Plan Review was further amended by Amendment to Decision dated July 12, 2022 for the construction and operation of a rooftop deck on the roof of the low rise building.

The current Application seeks a minor project site plan approval for the construction and operation of a roof over the parking garage which contains a solar array, all as shown on the plans submitted herewith. The roof meets all of the dimensional requirements of the Needham Zoning By-Law including, but not limited to, all height requirements and limitations. Concurrently herewith, the Applicant is filing an Application with the Needham Design Review Board for the Design Review Board's review and approval of this component of the Kendrick Street renovation.

BP 140 KENDRICK STREET LLC

Signature of Applicant (or representative)

By: 
Frederick J. DeAngelis, SVP & Senior Counsel

Address if not applicant

Telephone #

617-236-3333 and 617-512-0319 (cell)

Owner's permission if other than applicant

FREDERICK J. DEANGELIS, ESQUIRE
Senior Vice President & Senior Counsel

September 19, 2022

VIA FEDEX (Tracking No. 7779 7362 4585)

VIA EMAIL (elitchman@needhamma.gov)

Elisa Litchman
Administrative Specialist
Planning & Community Development
Town of Needham
500 Dedham Street, Suite 118
Needham, MA 02492

Boston

Los Angeles

New York

San Francisco

Washington, DC

RE: 140 Kendrick Street, Needham, Massachusetts
Application to Design Review Board

Dear Members of the Board:

Boston Properties and its affiliated property owning entities including the Applicant named herein, BP 140 Kendrick Street LLC (collectively called "BXP") have been leaders in developing onsite renewable energy systems at our properties. To date we have completed 13 projects totaling 8 megawatts (MW) of onsite solar photovoltaic capacity on rooftops, garages and surface parking in Massachusetts and New Jersey. We are a pioneer in developing solar roofs over garages, and delivered our first solar roof over a parking garage in Waltham at Bay Colony. Since then, we've completed a second phase at Bay Colony and a third garage project at CityPoint in Waltham.

We are proposing to install a similar solar garage roof on/over the existing garage at 140 Kendrick Street. The purpose of the solar roof is to:

- Provide onsite generation of renewable energy that will result in net zero carbon operation of 140 Kendrick Street Building A. This is our first fully net zero project and will serve as a model project for net zero carbon office building design and redevelopment.
- Generate approximately 1,300 megawatt-hours (MWh) of renewable energy onsite from 2,900 405 watt (W) modules.
- Advance the transition to a low carbon economy by building a high quality distributed energy generation system with storage (336 kW). This project is emblematic of projects BXP is pursuing to achieve carbon neutral operations by 2025 and to meet our climate action goals, which include a science-based emissions reduction target for the company.

BXP has extensive experience with these projects and has assembled a team of expert designers to design, permit and execute an exemplary garage solar roof system. We look forward to working with the Town of Needham to complete this important project at 140 Kendrick Street.

Enclosed herewith is our Application to the Design Review Board for design review. Also enclosed are the Plans prepared by Sunwealth Power, Inc., for the solar roof system and an Updated Parking Plan prepared by VHB showing the relocation of the three (3) parking spaces necessitated to accommodate the solar battery equipment. Six (6) sets of all plans are enclosed herewith.

In addition, a separate email is also being sent to you with a link to our Application to the Design Review Board along with all the requisite plans.

We are also submitting to the Planning Board an Application for Site Plan Review/Approval for the aforesaid solar garage roof and associated equipment and the relocation of three (3) parking spaces. A copy of that Application is enclosed.

If possible, please schedule us for the Design Review Board's October 3, 2022 hearing.

Lastly, please feel free to call me or email me with any questions or comments you may have.

Thank you for your cooperation.

Sincerely,

BP 140 KENDRICK STREET LLC

By 
Frederick J. DeAngelis
SVP & Senior Counsel

cc by email:

Christopher Hiserman (chiserman@bxp.com)

Ellesse Lunde (elunde@bxp.com)

PARASOL
STRUCTURES



sunwealth

Boston Properties

140 Kendrick St

Needham Heights, MA 02494

Francois Attal

August 16, 2022

Single Tilt 2°
System Size – 1,263.84 kWp DC

PARASOL
STRUCTURES



CLIENT: SUNWEALTH
CARPORT: PARASOL SOLFLEX

LOCATION: BOSTON PROPERTIES
140 KENDRICK ST
NEEDHAM HEIGHTS, MA 02494

PANELS: HANWHA G11.3 480WW
DATE: AUGUST 16, 2022



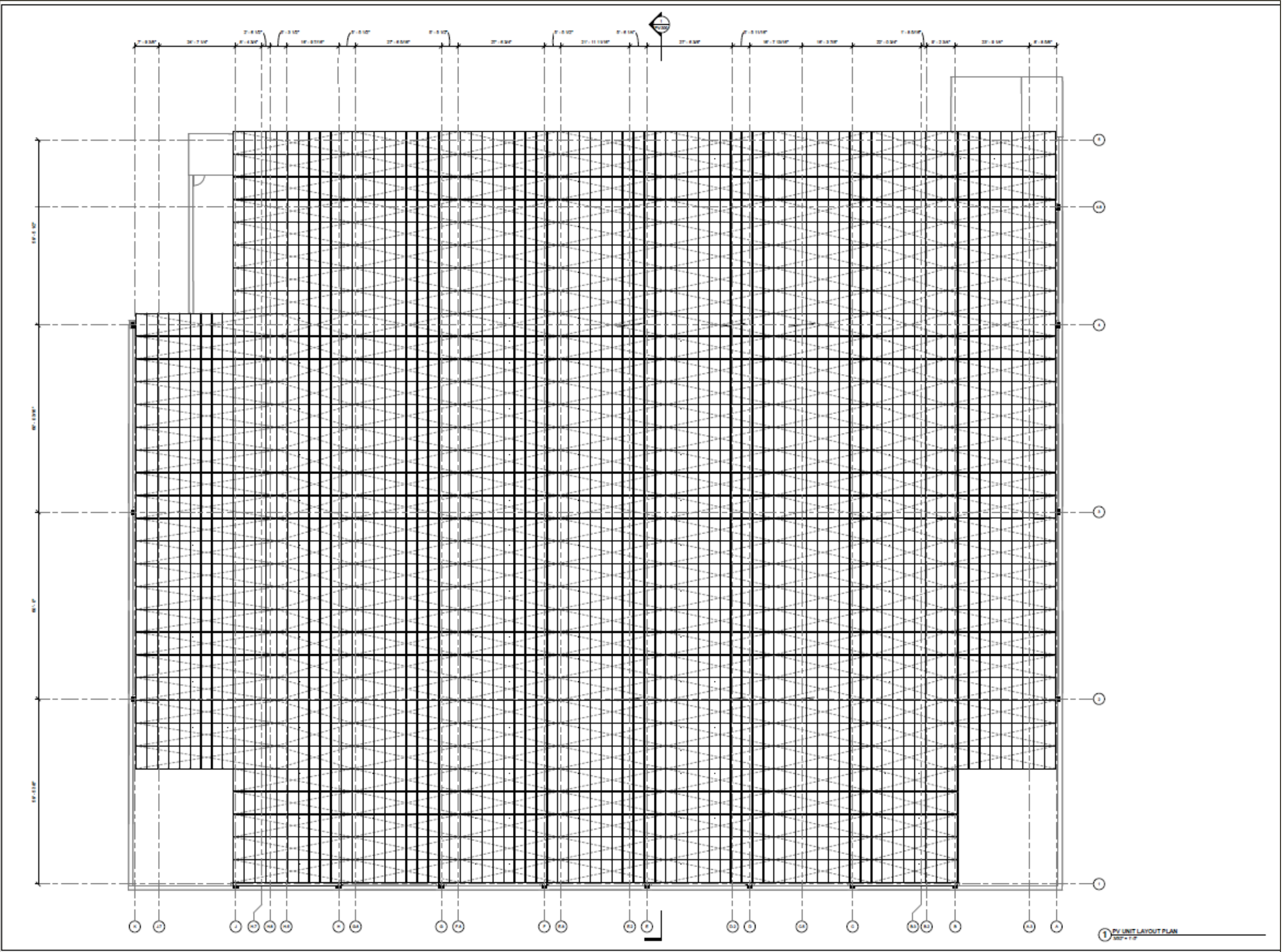
GENERAL NOTES:

1. Result of easement reports and underground utilities may affect final placement of solar arrays.
2. Conflicting trees and other obstructions will have to be removed, trimmed, or relocated
3. Detailed analysis of the effect of shade on arrays has not been performed.
4. Soil analysis has not been performed
5. It is assumed that the site is not in a flood plain.
6. Structural Analysis of the Garage has not been performed

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1. PRIOR TO THE START OF CONSTRUCTION, THE SITE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, SIZE AND DIMENSION OF ALL UTILITIES IN AREA WHERE WORK IS TO BE PERFORMED. SUBCONTRACTOR AND/OR PARASOL ASSUMES NEITHER THE RESPONSIBILITY FOR THE LOCATION OF ENCASED AND/OR HIDDEN UTILITIES SHOWN NOR THE LACK THEREOF.
2. ANY DISCREPANCIES IN REFERENCE, COORDINATES, ELEVATIONS, EXISTING DIMENSIONS, AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF PARASOL AND/OR OWNER'S REPRESENTATIVES BEFORE PROCEEDING WITH WORK.
3. ALL WORK SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH THE MOST RECENT LOCAL AND NATIONAL CONSTRUCTION STANDARDS AND BUILDING CODES.
4. IN INSTANCES WHERE THE AHJ PROVIDES NO DETAILED SPECIFICATIONS, THE MATERIALS AND METHODS OF CONSTRUCTION SHALL MEET AND CONFORM TO THE REQUIREMENTS OF LOCAL CODES AND UFC REQUIREMENTS.
5. THE CONTRACTOR SHALL VERIFY ALL INFORMATION PERTAINING TO EXISTING CONDITIONS BY ACTUAL MEASUREMENT AND OBSERVATION AT THE SITE. ALL DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THOSE SHOWN IN THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE ENGINEER OF RECORD AND PARASOL PRIOR TO FABRICATION.

1. PARASOL ANTICIPATES THAT THE TOPS OF ALL EXISTING CONCRETE PIERS AND WALLS SHALL BE AT ELEVATIONS SPECIFIED HEREIN.
2. INSTALLATION ERRORS IN PRECAST CONSTRUCTION ARE TO BE CORRECTED BY THE GENERAL CONTRACTOR PRIOR TO THE ARRIVAL OF THE ERECTION CREW AND PRIOR TO THE ERECTION OF THE STRUCTURE.
3. ANY EXISTING UTILITY FINDINGS THAT CONFLICT WITH THE RECORD OF KNOWN CONDITIONS SHALL BE REPORTED TO PARASOL AND/OR THE OWNER'S REPRESENTATIVE.

1. ALL STEEL FABRICATED FOR THIS PROJECT IS ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (A.E.S.S.)
2. PURLINS ARE TO BE FINISHED AS FOLLOWS:
 - A. HOT DIP GALVANIZING G90 PER ASTM 653
3. COLUMNS AND CROSSBEAMS ARE TO BE FINISHED AS FOLLOWS:
 - A. HOT DIP GALVANIZING PER ASTM 123
4. NUTS, BOLTS & WASHERS
 - A. HOT DIP GALVANIZING PER ASTM 153
5. FOR TOUCH UP AND CLEANING
 - A. USE SOLVENTS OR MECHANICAL CLEANING METHODS THAT COMPLY WITH THE STEEL STRUCTURES PAINTING COULCIS (SSPC)
 - B. WIRE BRUSH CLEAN WITH SOLVENTS RECOMMENDED BY FINISH MANUFACTURER AND TOUCH-UP WITH SAME FINISH SYSTEMS DESCRIBED ABOVE

1. IN COLD WEATHER CONDITIONS PLEASE NOTE THAT COMPLETION OF SOME TEMPERATURE DEPENDENT WORK MAY BE DELAYED UNTIL TEMPERATURES REACH 45 DEGREES F AND RISING THIS WORK MAY INCLUDE:

- A. BASE PLATE GROUTING
- B. PARGING
- C. LINE STRIPING
- D. TOUCH-UP PAINTING



Powered by
Q ANTAR DUD 3

Q ANTAR DUD 3

Q. PEAK DUO XL-G10.3 / BFG

475-190

Q. ANTAR DOUBLE BACK MODULE
WITH EXCELLENT RELIABILITY
AND EXCELLENT YIELD

SPECIAL ENERGY YIELD DATE OF UP TO 30%

Because Q. ANTAR XL solar cells with zero gap and front metal efficient use of light, although in the module were also for valuable increase boost.

LOW ELECTRICITY GENERATION COSTS

Due to Q. ANTAR XL's consistent cutting edge cell separation and maintenance, Q. ANTAR XL G10.3 technology for higher and more surface area, lower BOM costs, higher performance and lower electricity rate of up to 22.4%.

INNOVATIVE ALL WEATHER TECHNOLOGY

Optimal quality, whether to weather with excellent low light and temperature tolerance.

ENDURING HIGH PERFORMANCE

Long term and security with Q. ANTAR and Q. ANTAR Technology's Hot Spot Detection and Temperature Quality 104°C.

FRAME FOR VERSATILE APPLICATIONS

High heat resistance allows from concrete frame structures, enables use of a wide range of mounting structures and can be installed regardless of C/P for higher GAO/C/P and even with 2000W.

A RELIABLE INVESTMENT

Over 20 years module tested includes endurance with 12 year product warranty and improved 30 year performance warranty.

Manufactured by Q CELLS Solar Technology Inc. (Q CELLS) 2020-2021, ISO 9001:2015 registered
 authorized by Q CELLS Solar Technology Inc. (Q CELLS) 2020-2021, ISO 14001:2015 registered
 Q CELLS Solar Technology Inc. (Q CELLS) 2020-2021, ISO 9001:2015 registered

Engineered in Germany

Q CELLS
SOLAR POWER

ENGINEER'S STAMP

PROJECT TITLE	140 KENDRICK
PROJECT ADDRESS	140 KENDRICK STREET SHEPARD, MA 02904
PROJECT LOCATION & DRAWING LIST	

[illegible]

DESIGNED BY :	PARASOL
DRAWN BY :	NB
CHECKED BY :	KPFF
APPROVED BY :	KPFF
ORIGINAL SHEET SIZE :	42" x 30"
SCALE	
	
0 1/2" 1" 1/2" 2" 3" 4" 5" 6" 7" 8" 9" 10" 11" 12" 13" 14" 15" 16" 17" 18" 19" 20" 21" 22" 23" 24" 25" 26" 27" 28" 29" 30" 31" 32" 33" 34" 35" 36" 37" 38" 39" 40" 41" 42" 43" 44" 45" 46" 47" 48" 49" 50" 51" 52" 53" 54" 55" 56" 57" 58" 59" 60" 61" 62" 63" 64" 65" 66" 67" 68" 69" 70" 71" 72" 73" 74" 75" 76" 77" 78" 79" 80" 81" 82" 83" 84" 85" 86" 87" 88" 89" 90" 91" 92" 93" 94" 95" 96" 97" 98" 99" 100"	
DWG. NO.	
PV-000 COPYRIGHT PARASOL STRUCTURES, 2022 ALL RIGHTS RESERVED.	

DESIGN CRITERIA

CODE: 9th EDITION OF THE MA STATE BUILDING CODE (780 CMR) BASED ON THE 2015 IBC

GOVERNING JURISDICTION: NEEDHAM, MA

LIVE LOADS:

WIND ANALYSIS METHOD 2 - ANALYTICAL PROCEDURE
BASIC WIND SPEED V = 126 mph
IMPORTANCE FACTOR I_w = 1.0
WIND EXPOSURE C
OCCUPANCY CATEGORY II
GUST EFFECT FACTOR G = 0.85

SNOW DESIGN CRITERIA
P_s = 40 psf
I_s = 1.0
C_e = 1
P_f = 35 psf

SEISMIC ANALYSIS EQUIVALENT LATERAL FORCE PROCEDURE HAS BEEN USED:

SITE CLASSIFICATION = D
OCCUPANCY CATEGORY II
SEISMIC DESIGN CATEGORY B
IMPORTANCE FACTOR I_e = 1.2

S₁ = 0.252 g S_{0.1} = 0.289 g
S₁ = 0.063 g S_{0.1} = 0.191 g

SEISMIC LOAD RESISTING SYSTEM = OTHER MECHANICAL OR ELECTRIC COMPONENTS
RESPONSE MODIFICATION COEFFICIENT R_m = 1.5
COMPONENT AMPLIFICATION FACTOR a_m = 1.0
IMPORTANCE FACTOR I_e = 1.0
SEISMIC DESIGN FORCE F_p = 0.21 W

SCOPE OF WORK

1. SCOPE OF WORK INCLUDES THE DESIGN OF CANTILEVER STEEL SUPPORT STRUCTURES FOR PV PANELS AT AN EXISTING PARKING GARAGE.

GENERAL

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. DO NOT SCALE THE DRAWINGS. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES. IN CASE OF CONFLICT, MORE COSTLY REQUIREMENTS GOVERN FOR BIDDING. SUBMIT CLARIFICATION REQUEST PRIOR TO PROCEEDING WITH WORK.
2. ALL DRAWINGS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY DEVIATION FROM THE APPROVED SET OF CONTRACT DOCUMENTS SHALL ONLY BE MADE AFTER WRITTEN APPROVAL BY THE ENGINEER OF RECORD. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE.
3. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK, UNLESS NOTED OTHERWISE. DETAILS IN STRUCTURAL DRAWINGS ARE TYPICAL AS INDICATED BY CUTS, REFERENCES OR TITLES.
4. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING: LOCAL BUILDING CODE, ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK, AND THOSE CODES AND STANDARDS LISTED IN THESE NOTES AND SPECIFICATIONS.
5. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION THE CONTRACTOR SHALL PROVIDE. ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION, SUCH AS MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
6. ASTM SPECIFICATIONS ON THE DRAWINGS SHALL BE OF THE LATEST REVISION.
7. CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES, SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, ETC. IF ANY SUCH STRUCTURES ARE FOUND, STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
8. CONTRACTOR TO PROVIDE A LIST OF ALL PROPOSED SUBSTITUTIONS, WITH APPLICABLE MANUFACTURER'S ICC REPORTS TO ARCHITECT, ENGINEER OF RECORD AND GOVERNING JURISDICTION FOR REVIEW AND APPROVAL BEFORE FABRICATION.
9. NOTICE TO THE APPLICANT / OWNER / OWNER'S AGENT / ARCHITECT: BY USING THIS PERMITTED CONSTRUCTION DRAWINGS FOR CONSTRUCTION / INSTALLATION OF THE WORK SPECIFIED HEREIN, YOU AGREE TO COMPLY WITH THE REQUIREMENTS OF THE GOVERNING JURISDICTION FOR SPECIAL INSPECTIONS, STRUCTURAL OBSERVATIONS, CONSTRUCTION MATERIAL TESTING, AND OFF-SITE FABRICATION OF BUILDING COMPONENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS AND AS REQUIRED BY THE GOVERNING BUILDING CODES.
10. NOTICE TO THE CONTRACTOR / BUILDER / INSTALLER / SUBCONTRACTOR / OWNER-BUILDER: BY USING THIS PERMITTED CONSTRUCTION DRAWINGS FOR CONSTRUCTION / INSTALLATION OF THE WORK SPECIFIED HEREIN, YOU ACKNOWLEDGE AND ARE AWARE OF THE REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS. YOU AGREE TO COMPLY WITH THE REQUIREMENTS OF THE GOVERNING JURISDICTION FOR SPECIAL INSPECTIONS, STRUCTURAL OBSERVATIONS, CONSTRUCTION MATERIAL TESTING, AND OFF-SITE FABRICATION OF BUILDING COMPONENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS AND AS REQUIRED BY THE GOVERNING BUILDING CODES.

SPECIAL INSPECTION

THE FOLLOWING ELEMENTS OF CONSTRUCTION SHALL REQUIRE SPECIAL INSPECTION PER CHAPTER 17 OF THE CODE.

STEEL: SPECIAL INSPECTION TASK	CONTINUOUS	PERIODIC
1. MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS: A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS. B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE.	- -	X X
2. INSPECTION OF HIGH-STRENGTH BOLTING (SEE NOTES F & G): A. SNUG-TIGHT JOINTS B. PRETENSIONED AND SLIP-CRITICAL JOINTS CONFORMING TO 1704.3.3.2 C. PRETENSIONED AND SLIP-CRITICAL JOINTS NOT CONFORMING TO 1704.3.3.2	- - X	X X -
3. MATERIAL VERIFICATION OF STRUCTURAL STEEL AND COLD-FORMED STEEL DECK: A. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS CONFORMING TO AISC 360, LATEST EDITION B. FOR OTHER STEEL, IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS. C. MANUFACTURERS' CERTIFIED TEST REPORTS.	- - -	X X X
4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS: A. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE.	- -	X X
5. INSPECTION OF WELDING: A. STRUCTURAL STEEL AND COLD-FORMED STEEL DECK: 1) COMPLETE AND PARTIAL PENETRATION GROOVE WELDS. 2) MULTIPASS FILLET WELDS 3) SINGLE-PASS FILLET WELDS > 5/16" 4) PLUG AND SLOT WELDS 5) SINGLE-PASS FILLET WELDS < 5/16" 6) VISUAL INSPECTION OF HSS SEAM WELDS. NON-DESTRUCTIVE TESTING OF SEAM WELDS MAY BE REQUIRED BY THE ENGINEER OF RECORD IF ANY OF THE SEAM WELDS APPEAR TO BE DEFECTIVE. 7) SHOP WELDING: SPECIAL INSPECTION IS NOT REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED BY THE GOVERNING JURISDICTION.	- X X X - - X	- - - - X -

STEEL: SPECIAL INSPECTION TASK	CONTINUOUS	PERIODIC
1. POST-INSTALLED ANCHORS IN HARDENED CONCRETE (SEE NOTE H).	-	X
2. HIGH STRENGTH GROUT UNDER COLUMN BASE PLATES.	-	X

1. THE SPECIAL INSPECTIONS IDENTIFIED ON PLANS ARE, IN ADDITION TO, AND NOT A SUBSTITUTE FOR, THOSE INSPECTIONS REQUIRED TO BE PERFORMED BY THE GOVERNING JURISDICTION, SPECIALLY INSPECTED WORK WHICH IS INSTALLED OR COVERED WITHOUT THE APPROVAL OF AN INSPECTOR FROM THE GOVERNING JURISDICTION IS SUBJECT TO REMOVAL OR EXPOSURE.
2. FOR CONTINUOUS INSPECTION, WHEN WORK IN MORE THAN ONE CATEGORY OF WORK REQUIRING SPECIAL INSPECTION IS TO BE PERFORMED SIMULTANEOUSLY, OR THE GEOGRAPHIC LOCATION OF THE WORK IS SUCH THAT IT CANNOT BE CONTINUOUSLY OBSERVED IN ACCORDANCE WITH THE PROVISIONS OF THE CODE, IT IS THE AGENT'S RESPONSIBILITY TO EMPLOY A SUFFICIENT NUMBER OF INSPECTORS TO ASSURE THAT ALL WORK IS INSPECTED IN ACCORDANCE WITH THOSE PROVISIONS.
3. THE SPECIAL INSPECTORS MUST BE CERTIFIED BY THE GOVERNING JURISDICTION IN THE CATEGORY OF WORK REQUIRED TO HAVE SPECIAL INSPECTION. EXCEPTIONS:
a. WHEN WAIVED BY THE GOVERNING JURISDICTION
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM THE SPECIAL INSPECTOR OR INSPECTION AGENCY AT LEAST ONE WORKING DAY PRIOR TO PERFORMING ANY WORK THAT REQUIRES SPECIAL INSPECTION. ALL WORK PERFORMED WITHOUT REQUIRED SPECIAL INSPECTION IS SUBJECT TO REMOVAL.
5. A CERTIFICATE OF SATISFACTORY COMPLETION OF WORK REQUIRING SPECIAL INSPECTION MUST BE COMPLETED AND SUBMITTED TO THE GOVERNING JURISDICTION AND ENGINEER OF RECORD.
6. PROVIDE SPECIAL INSPECTION FOR CONNECTIONS BOLTED WITH A325 AND A490 BOLTS. INSPECTIONS SHALL BE DONE PER APPROVED NATIONALLY RECOGNIZED STANDARDS AND THE REQUIREMENTS OF THE CODE AND THE GOVERNING JURISDICTION. WHILE THE WORK IS IN PROGRESS, THE SPECIAL INSPECTOR SHALL DETERMINE THE BOLTS, NUTS, WASHERS AND PAINT; BOLTED PARTS; AND INSTALLATION AND TIGHTENING MEET THE STANDARDS REQUIREMENTS.
7. THE SPECIAL INSPECTOR FOR HIGH STRENGTH BOLTED CONNECTIONS SHALL:
a. OBSERVE THE CALIBRATION PROCEDURES WHEN SUCH PROCEDURES ARE REQUIRED BY THE PLANS OR SPECIFICATIONS.
b. MONITOR THE INSTALLATION OF BOLTS TO DETERMINE THAT ALL PLIES OF CONNECTED MATERIALS HAVE BEEN DRAWN TOGETHER.
c. MONITOR THAT THE SELECTED PROCEDURE IS PROPERLY USED TO TIGHTEN ALL BOLTS.
8. THE SPECIAL INSPECTOR FOR EPOXY ANCHORS SHALL VERIFY THE DRILLING OF ANY HOLES, THE CLEANLINESS OF THE HOLE, THE MOISTURE IN THE HOLE, MIXING THE EPOXY, THE BRAND OF EPOXY, AND THE PROPER MATERIAL FOR ASSEMBLY.
9. THE SPECIAL INSPECTOR SHALL PROVIDE PERIODIC REPORTS AND A FINAL REPORT TO THE STRUCTURAL ENGINEER.
10. THE SPECIAL INSPECTOR SHALL ENSURE THAT ALL DEFICIENCIES NOTED BY THE STRUCTURAL ENGINEER IN STRUCTURAL OBSERVATION REPORTS ARE CORRECTED. SUCH COMPLIANCE SHALL BE REFERENCED IN SPECIAL INSPECTOR REPORT.
11. THE CONSTRUCTION MATERIALS TESTING LABORATORY MUST BE APPROVED BY THE GOVERNING JURISDICTION FOR TESTING OF MATERIALS, SYSTEMS, COMPONENTS AND, EQUIPMENTS.
12. A PROPERTY OWNER'S FINAL REPORT FORM FOR WORK REQUIRED TO HAVE SPECIAL INSPECTIONS, TESTING AND STRUCTURAL OBSERVATIONS MUST BE COMPLETED BY THE PROPERTY OWNERS AGENT OF RECORD, ARCHITECT OF RECORD OR, ENGINEER OF RECORD AND SUBMITTED TO THE GOVERNING JURISDICTION.
13. PERIODIC INSPECTION SHALL OCCUR FREQUENTLY ENOUGH TO INSPECT ALL OF THE INSTALLED ITEMS AND TO PERIODICALLY WITNESS THE INSTALLATION OF THE ITEMS

STRUCTURAL OBSERVATION

STRUCTURAL OBSERVATION PER THE REQUIRMENTS OF THE CODE IS REQUIRED. THE STRUCTURAL ENGINEER WILL VISIT THE PROJECT AT THE FOLLOWING STAGES OF CONSTRUCTION.

ITEM	STAGE
STRUCTURAL STEEL	AFTER ERECTION

- a. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE INSPECTIONS REQUIRED BY THE CODE.
- b. ALL OBSERVED DEFICIENCIES SHALL BE REPORTED IN WRITING TO THE OWNER'S REPRESENTATIVE, SPECIAL INSPECTOR, AND CONTRACTOR. THE STRUCTURAL OBSERVER SHALL SUBMIT A FINAL WRITTEN STATEMENT TO THE GOVERNING JURISDICTION THAT SITE VISITS HAVE BEEN MADE AND IDENTIFYING ANY REPORTED DEFICIENCIES THAT HAVE NOT BEEN RESOLVED. THE STRUCTURE WILL NOT BE IN COMPLIANCE UNTIL THE DESIGNER HAS NOTIFIED THE GOVERNING JURISDICTION THAT ALL DEFICIENCIES ARE RESOLVED.

SHOP DRAWINGS/SUBMITTALS

1. THE STRUCTURAL SHOP DRAWING REVIEW IS INTENDED TO HELP THE ENGINEER VERIFY THE DESIGN CONCEPT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHECK THEIR OWN SHOP DRAWINGS.
2. THE STRUCTURAL SHOP DRAWINGS WILL BE RETURNED FOR RESUBMITTAL IF A CURSORY REVIEW SHOWS MAJOR ERRORS WHICH SHOULD HAVE BEEN FOUND BY THE CONTRACTOR'S CHECKING.
3. THE FOLLOWING SHOP DRAWINGS ARE NOT REQUIRED FOR SUBMITTAL FOR STRUCTURAL REVIEW.
a. SHORING AND BRACING
b. STRUCTURAL STEEL MILL REPORTS
4. THE FOLLOWING SHOP DRAWINGS (AND CALCULATIONS WHEN APPLICABLE) ARE REQUIRED FOR SUBMITTAL FOR STRUCTURAL REVIEW.
a. GROUT MIX DESIGNS, INCLUDING STRENGTH AND SHRINKAGE TEST RESULTS
b. STRUCTURAL STEEL
c. WELDING PROCEDURE SPECIFICATIONS (SEE NOTE 9 BELOW)
d. PV PANEL CUTSHEET
5. ANY SUBMITTAL OF A DETAIL SHEET WITH ADDED INFORMATION NOT SHOWN ON PLANS SHALL BE ACCOMPANIED BY LOCATION PLAN IDENTIFYING THE MEMBERS INVOLVED AND CLOUDING AROUND ADDED INFORMATION.
6. ANY ENGINEERING SUBMITTED FOR REVIEW SHALL BE APPROPRIATELY SEALED. FULL RESPONSIBILITY OF SUCH ENGINEERING RESTS WITH THE PERSON SEALING THE DESIGN.
7. THE SHOP DRAWINGS SHALL REFERENCE THE DATE OF THE DESIGN USED TO PRODUCE THE SUBMITTAL.
8. CONTRACTOR/SUBCONTRACTOR TO PROVIDE A DIGITAL COPY (PDF) OF SHOP DRAWINGS FOR REVIEW BY THE ENGINEER OF RECORD. REDLINED DIGITAL SET WILL BE RETURNED TO THE CONTRACTOR WITH REDLINES FOR REPRODUCTION AND DISTRIBUTION.
9. WPS CHECK LIST

GENERAL

- a. SUPPORTING FOR NO.
b. PROCESS (SMAW, FCAW, ETC)

JOINT DESIGN & BASE MATERIAL

- a. JOINT TYPE (CORNER, BUTT, LAP, T)
b. MAX ROOT OPENING
c. BACKING (THICKNESS, MATERIAL TYPE)
d. GROOVE ANGLE
e. TOTAL # OF PASSES
f. BASE MATERIAL SPEC, GRADE & THICKNESS
g. WPS SHOULD INCLUDE FIGURE
h. MAX ROOT & FIL PASS THICKNESS

FILLER MATERIAL & SHIELDING

- a. ELECTRODE SPECIFICATION (AWS A5.1, A5.20, ETC)
b. ELECTRODE CLASSIFICATION (E7018, E71T-1, ETC)
c. ELECTRODE DIAMETER (5/32", 3/16", ETC) AND STICK-OUT (IF APPLICABLE)
d. SHIELDING GAS (IF APPLICABLE) (GAS COMPOSITION, FLOW RATE)
e. FLUX, IF APPLICABLE
f. AS WELDED TOUGHNESS (SUCH AS 20 FT-LBS @ -20 DEGREES) PER FILLER SPECS

PREHEAT

- a. MIN & MAX PREHEAT TEMPERATURE
b. MIN & MAX INTERPASS TEMPERATURE

ELECTRICAL PARAMETERS

- a. POLARITY (AC, DC+, DC-)
b. WELDING CURRENT (AMPERAGE)/WIRE FEED SPEED (IPM)
c. ARC VOLTAGE (VOLTS)
d. TRAVEL SPEED (IPM) (FCAW/GMAW)

TECHNIQUE/MISC

- a. WEAVE/STRINGER, MULTIPASS/SINGLE PASS
b. PEENING
c. POSITION (F, H, V, O)
d. VERTICAL PROGRESSION (IF APPLICABLE)

NOTES:

1. THE ABOVE LIST SHOWS THE MINIMUM VARIABLES. OTHER VARIABLES MAY BE INCLUDED.
2. OTHER VARIABLES MAY BE REQUIRED PER STRUCTURAL PLANS OR SPECS. SEE D1.1 ANNEX IV, ANNEX E, AND TABLE 4.5 FOR QUALIFIED WPS. ANNEX F AND TABLE 3.67 FOR PREQUALIFIED WPS.

STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED BY AN APPROVED AND LICENSED FABRICATOR IN ACCORDANCE WITH THE LATEST EDITION OF AISC 360 (EXCLUDING SECTION A4).
2. ALL STRUCTURAL STEEL SHALL CONFORM TO THE ASTM DESIGNATION AS INDICATED BELOW (U.N.O.):

DESCRIPTION	DESIGNATION
ALL BASE PLATES, CAP PLATES	A572, GRADE 50
ALL ANGLES AND CHANNELS	A36, U.N.O.
ALL WF SECTIONS	A992, GRADE 50
HSS SECTIONS	A500, GRADE B
HIGH STRENGTH BOLTS	A325
MACHINE BOLTS AND THREADED RODS	A307
MISC. PLATES	A572, GRADE 50
ANCHOR BOLTS	F1554, GRADE 105

3. THE STRUCTURAL STEEL FABRICATOR SHALL FURNISH SHOP DRAWINGS OF ALL STEEL FOR ARCHITECT'S AND STRUCTURAL ENGINEER'S REVIEW BEFORE FABRICATION.
4. HOLES IN STEEL SHALL BE AS FOLLOWS, UNLESS:
a. FOR NOMINAL BOLT SIZE LESS THAN 1", HOLE DIAMETER SHALL BE 1/16" LARGER.
b. FOR NOMINAL BOLT SIZE EQUAL TO OR LARGER THAN 1", HOLE DIAMETER SHALL BE 1/8" LARGER.
c. COLUMN BASE PLATE HOLES MAY BE OVERSIZED PER AISC MANUAL TB 14-2.
5. ALL STRUCTURAL STEEL SURFACES THAT ARE ENCASED IN CONCRETE, MASONRY, OR SPRAY ON FIREPROOFING, OR ARE ENCASED BY BUILDING FINISH, SHALL BE LEFT UNPAINTED.
6. ALL STRUCTURAL STEEL AND MISCELLANEOUS METAL EXPOSED TO THE WEATHER SHALL BE HOT DIP GALVANIZED AFTER FABRICATION. GALVANIZING AT FIELD WELDS SHALL BE REPAIRED WITH A GALVANIZING REPAIR PAINT ACCORDING TO ASTM A780.
7. PROVIDE BEVELED WASHERS PER ANSI B18.23.1 AS REQUIRED ON SLOPED SURFACES.
8. STRUCTURAL MEMBERS AND CONNECTIONS EXPOSED TO VIEW IN THE COMPLETED STRUCTURE SHALL BE DESIGNATED ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) WHERE NOTED ON PLAN.
9. WELDING:
a. ALL WELDING IS TO BE DONE BY CERTIFIED WELDERS USING E70XX ELECTRODES (U.N.O.). ALL WELDS SHALL BE IN CONFORMITY WITH THE PROJECT SPECIFICATIONS AND THE CODE FOR WELDING IN BUILDING CONSTRUCTION (AWS D1.1 LATEST REVISION) OF THE AMERICAN WELDING SOCIETY. SEE SPECIAL INSPECTION SECTION FOR WELDING INSPECTION REQUIREMENTS.
b. WELD LENGTHS CALLED FOR ON PLANS ARE THE NET EFFECTIVE LENGTH REQUIRED, WHERE FILLET WELD SYMBOL IS GIVEN WITHOUT INDICATION OF SIZE, USE MINIMUM SIZE WELDS AS SPECIFIED IN AISC MANUAL OF STEEL CONSTRUCTION, LATEST EDITION.
c. WELDS TERMINATING AT ENDS OR SIDES, WHERE PRACTICAL, SHALL BE RETURNED CONTINUOUSLY AROUND CORNERS A DISTANCE 2 TIMES THE NOMINAL SIZE OF THE WELD PER AISC 360 SECTION J2.2B, U.N.O.
d. ALL FULL-PENETRATION FIELD WELDS SHALL BE ULTRASONICALLY TESTED.
e. ALL TWO-SIDED FILLET WELDS SHOWN SHALL BE WELDED WITH THE SAME (GIVEN) WELD SIZE ON BOTH SIDES.
f. ALL UNSIZED GROOVE OR BUTT WELDS SHOWN SHALL BE COMPLETE PENETRATION. ALL PROVISIONS OF AWS SHALL BE OBSERVED INCLUDING REQUIREMENTS FOR BACK-UP PLATES AND WELD TRANSITIONS WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN.
g. A WRITTEN WELDING PROCEDURE SPECIFICATION SHALL BE SUBMITTED TO THE TESTING LABORATORY. IT SHALL INCLUDE ALL WELDING PROCEDURES TO BE USED AS DESCRIBED IN AWS, CHAPTER 4.
h. SPECIAL CONSIDERATION SHALL BE GIVEN TO WELDING TECHNIQUE AND SEQUENCE, PARTICULARLY WHERE THERE IS A POTENTIAL FOR LAMELLAR (THROUGH-THICKNESS) TEARING.
i. WHERE FIELD WELDING IS INDICATED, THE FIELD DESIGNATION IS GIVEN AS A RECOMMENDATION ONLY.
11. ALL ANCHOR BOLTS SHALL BE HEADED STUD BOLTS OR THREADED RODS WITH NUTS. J BOLTS ARE NOT ACCEPTABLE IN ANY APPLICATION.
12. GROUT OTHER THAN FOR MASONRY CELLS SHALL BE NON-SHRINK, NON-METALLIC GROUT, MEETING ASTM C-1107, MIXED AND INSTALLED PER MANUFACTURERS' SPECIFICATIONS. MINIMUM COMPRESSIVE STRENGTH SHALL BE 8,000 PSI IN 28 DAYS, UNLESS APPROVED BY THE STRUCTURAL ENGINEER.

COLD-FORMED STEEL

1. GENERAL

- A. ALL COLD-FORMED METAL FRAMING CONSTRUCTION SHALL BE IN ACCORDANCE WITH AISI SPECIFICATIONS FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, * CURRENT EDITION.
- B. ALL COLD-FORMED STRUCTURAL MEMBERS SHALL BE PER ICC ECR-3064P.
- C. ALL COLD-FORMED STEEL SHALL CONFORM TO THE FOLLOWING:

43 MIL AND LIGHTER	ASTM A653 GR 33
54 MIL AND HEAVIER	ASTM A653 GR 55

- D. ALL COLD-FORMED STEEL SHALL HAVE A MINIMUM COATING CONFORMING TO THE FOLLOWING:

LOAD-BEARING AND EXTERIOR STRUCTURAL MEMBERS	COATING PROTECTION G90 PLUS AN APPROVED COATING PER CURRENT ASTM C655
--	---

- E. WELDING IS NOT PERMITTED UNLESS SPECIFICALLY APPROVED BY ENGINEER OF RECORD.
- F. ALL APPROVED WELDING SHALL BE PERFORMED BY WELDERS CERTIFIED FOR ALL APPROPRIATE DIRECTIONS COMPLYING WITH AWS D1.3. WELDING RODS SHALL CONFORM TO THE FOLLOWING:

43 MIL AND LIGHTER	E60XX
54 MIL AND HEAVIER	E70XX OR E6013
COLD-FORMED TO STRUCTURAL STEEL	E70XX LOW HYDROGEN

- G. WIRE TYING OF FRAMING COMPONENTS SHALL NOT BE PERMITTED.

H. TEMPORARY BRACING REQUIREMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR.

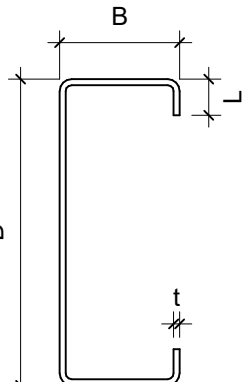
- I. ALL SCREWS SHALL BE FULLY DRIVEN AND PROTRUDE THE LARGER OF 3 THREADS OR 1/4" THROUGH THE LAST MATERIAL JOINED. THERE SHALL BE NO SPACE BETWEEN JOINING MEMBERS AT THE SCREW LOCATION.

2. LOAD-BEARING AND EXTERIOR STRUCTURAL MEMBERS

- A. FIELD CUTS THROUGH FLANGES OF STUD OR TRACK SHALL NOT BE PERMITTED UNLESS SPECIFICALLY APPROVED BY THE ENGINEER OF RECORD.
- B. ALL FIELD CUTTING OF MEMBERS SHALL BE BY SAWING OR SHEARING. TORCH OR PLASMA CUTTING OF MEMBERS SHALL NOT BE PERMITTED.
- C. ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS OR AS REQUIRED ON AN ANGULAR FIT AGAINST ABUTTING MEMBERS. MEMBERS SHALL BE HELD POSITIVELY IN PLACE UNTIL PROPERLY FASTENED.
- D. SPLICING OF STUDS, JOISTS, OR OTHER LOAD CARRYING MEMBERS SHALL NOT BE PERMITTED UNLESS SPECIFICALLY APPROVED BY THE ENGINEER OF RECORD.
- E. IF ADDITIONAL HOLES ARE REQUIRED IN LOAD CARRYING MEMBERS, CONTACT THE ENGINEER OF RECORD FOR GUIDANCE BEFORE CUTTING HOLES.
- F. WHEN CLIP ANGLES ARE USED TO ATTACH A COMPONENT TO THE PRIMARY STRUCTURE, THE CLIP ANGLE SHALL BE FASTENED TO THE PRIMARY STRUCTURE FIRST, THEN THE COMPONENT SHALL BE BROUGHT TO BEAR ON THE STRUCTURE AND FASTENED TO THE CLIP ANGLE.
- G. EACH FRAMING MEMBER AND BUNDLES OF LIKE MEMBERS SHALL BE IDENTIFIED WITH THE MANUFACTURER'S NAME, YIELD STRENGTH, MINIMUM UNCOATED BASE METAL THICKNESS, PROTECTIVE COATING WEIGHT AND STUD SIZE EMBOSSED OR STAMPED ON THE WEB OF EACH SECTION AT A MAXIMUM OF 48" O.C. STUD MUST BE DESIGNED TO MEET THE REQUIREMENTS OF CODE SECTION 2209.

3. ALL CALCULATED MEMBER PROPERTIES PER AISI SPECIFICATIONS ARE BASED ON THE FOLLOWING THICKNESSES:

MINIMUM THICKNESS	REFERENCE GAUGE	DESIGN THICKNESS
33 MIL	20 GA	0.0346"
43 MIL	18 GA	0.0451"
54 MIL	16 GA	0.0566"
68 MIL	14 GA	0.0713"
97 MIL	12 GA	0.1017"
118 MIL	10 GA	0.1242"



MINIMUM SECTION PROPERTIES FOR CEE SHAPES								
SHAPE	D (in)	B (in)	L (in)	t (in)	A (in ²)	Wt (plf)	I _x (in ⁴)	I _y (in ⁴)



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kpff
Consulting Engineers
PROFESSIONAL ENGINEER
REGISTERED PROFESSIONAL ENGINEER
STATE OF MASSACHUSETTS

KPFF Job # : 2000519

ENGINEER'S STAMP

PROJECT TITLE
140 KENDRICK
PROJECT ADDRESS
140 KENDRICK STREET
NEEDHAM, MA 02464
SHEET TITLE
GENERAL STRUCTURAL NOTES

DATE
08/02/2022

SYN

ISSUED SET / REVISIONS

DESCRIPTION
3RD DESIGN SUBMISSION

DESIGNED BY
PARASOL

DRAWN BY
NB

CHECKED BY
KPFF

APPROVED BY
KPFF

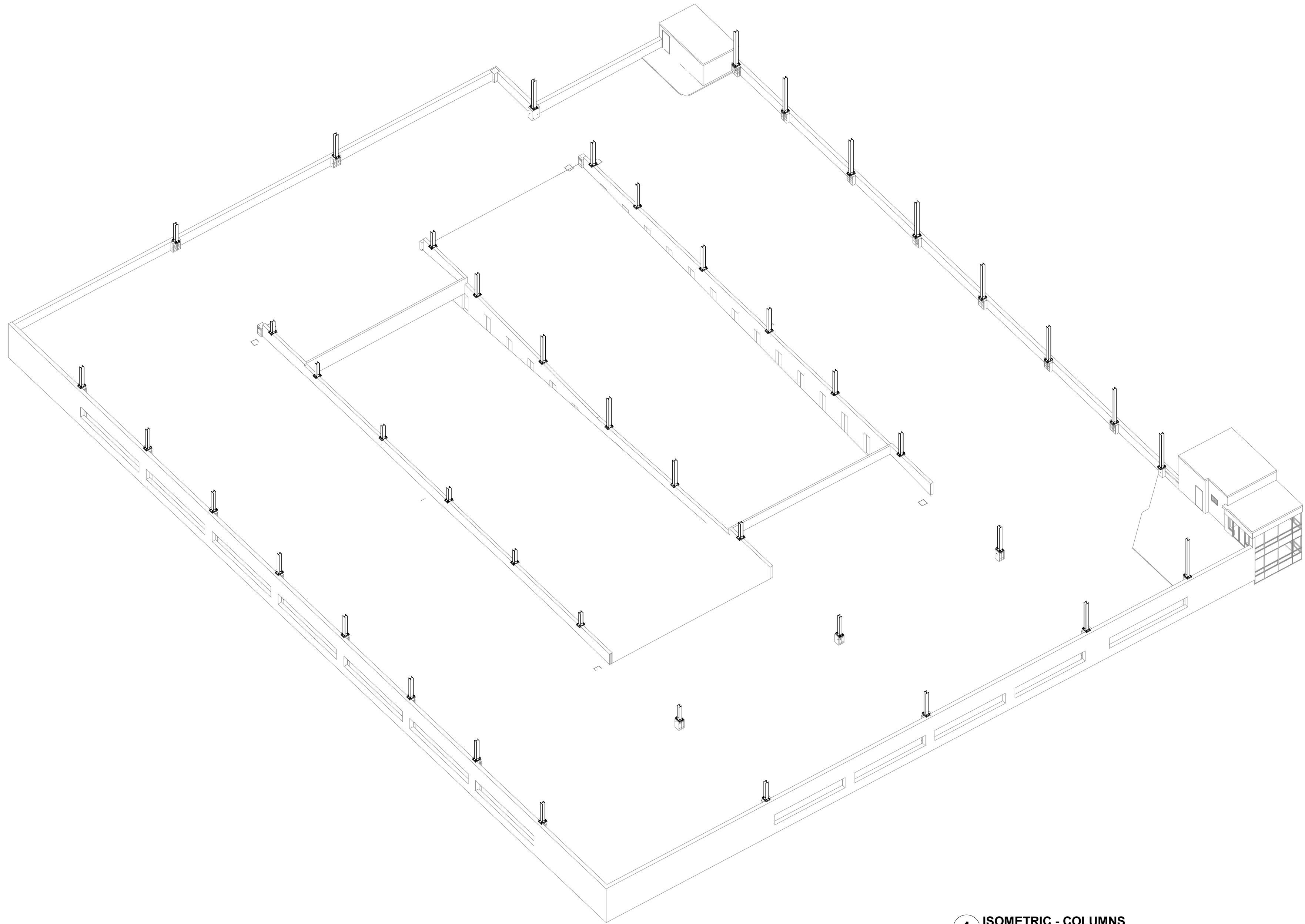
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SCALE
0 1/2" 1"

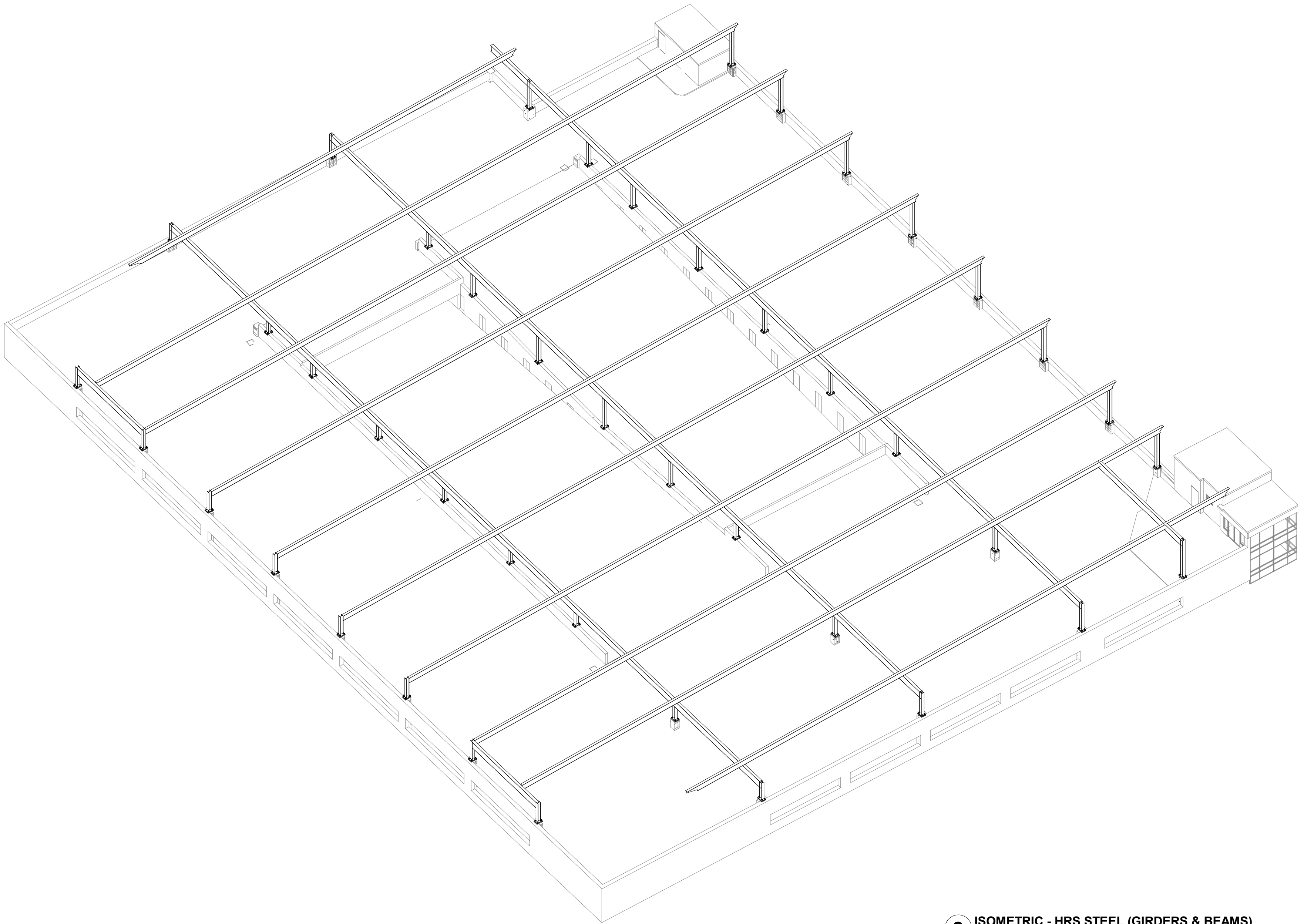
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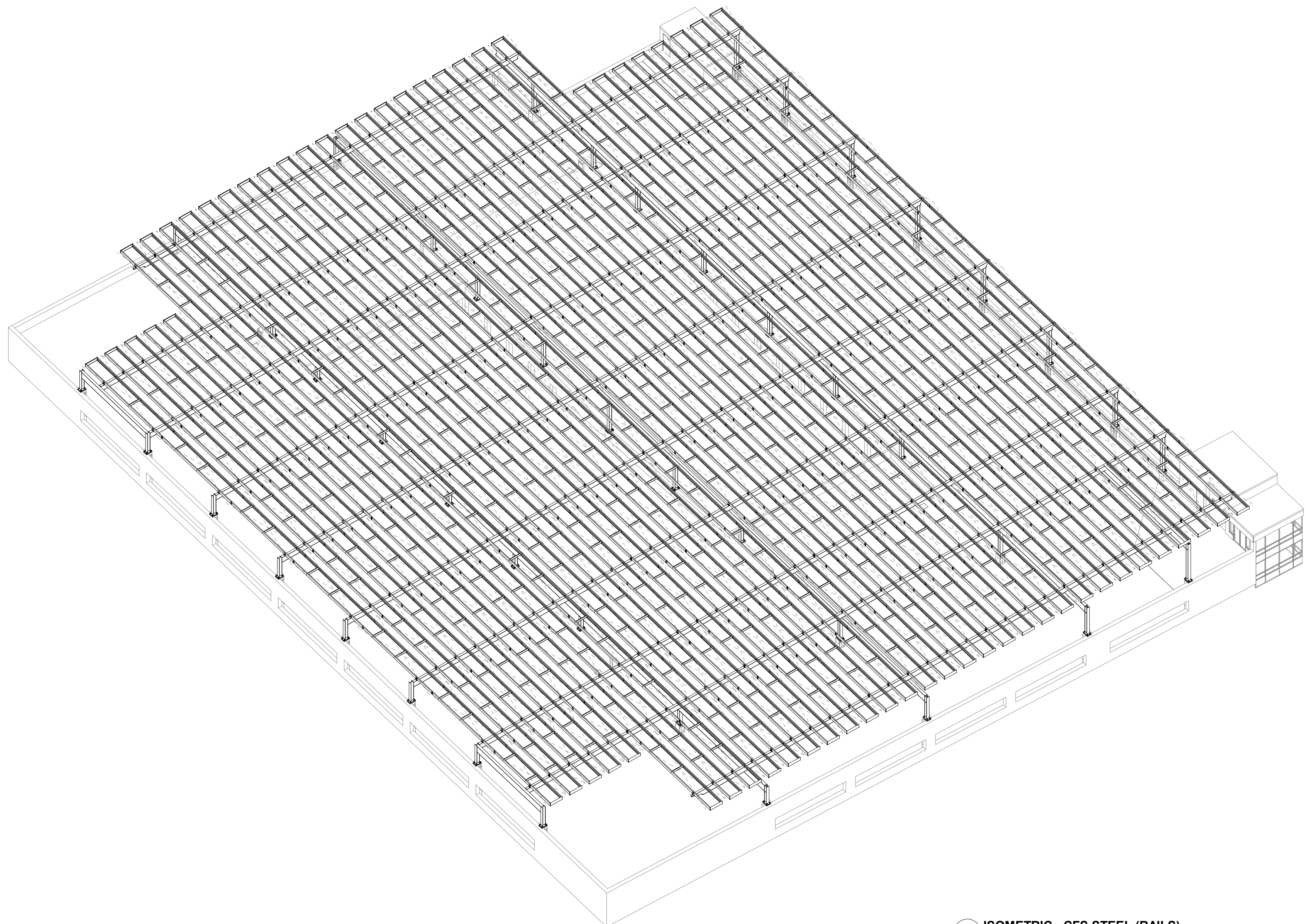
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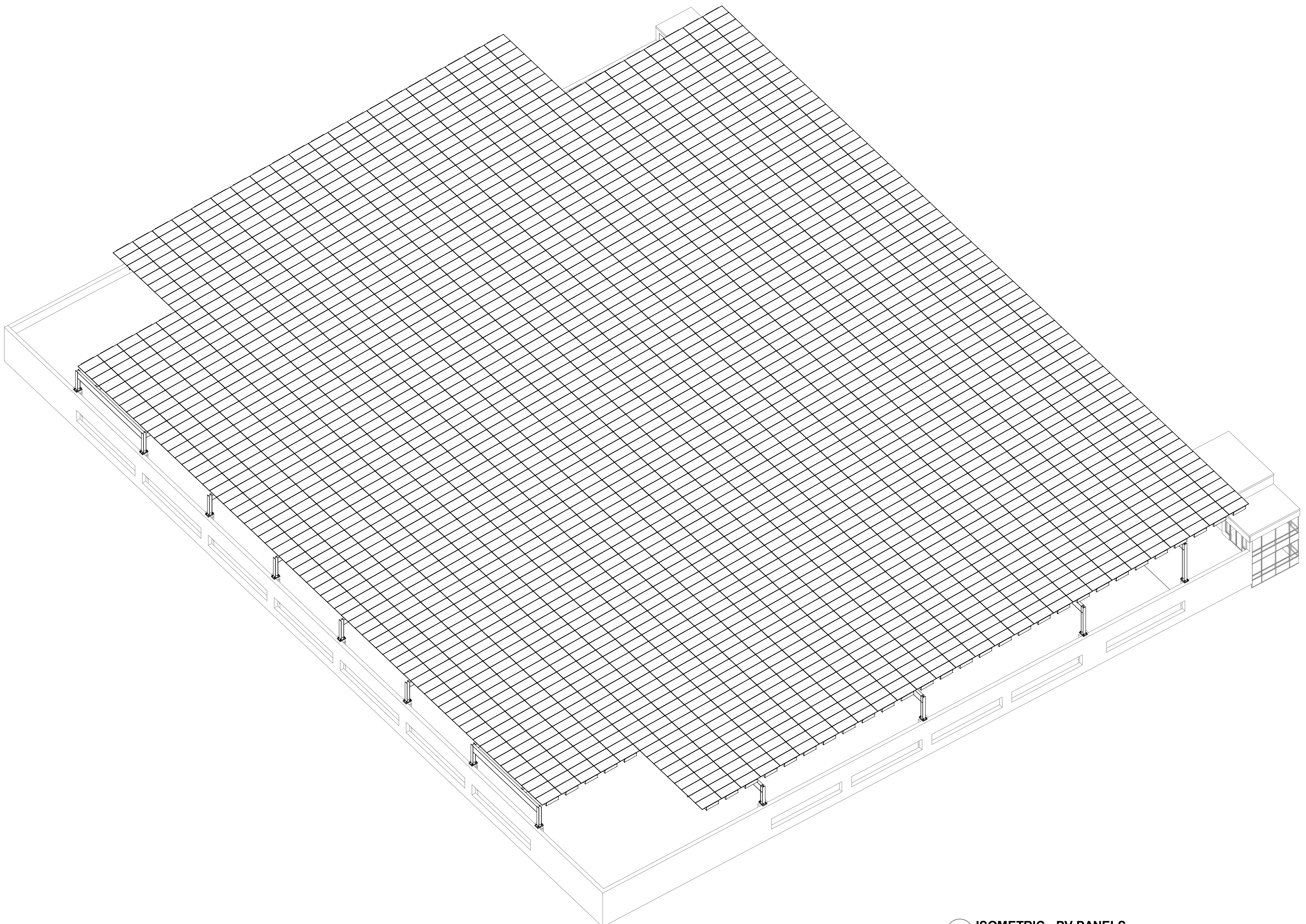
1 ISOMETRIC - COLUMNS
N.T.S.



2 ISOMETRIC - HRS STEEL (GIRDERS & BEAMS)
N.T.S.



3 ISOMETRIC - CFS STEEL (RAILS)
N.T.S.



4 ISOMETRIC - PV PANELS
N.T.S.



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KPFF Job # : 2000519

ENGINEER'S STAMP

PROJECT TITLE
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NEEDHAM, MA 02464
SHEET TITLE
ISOMETRICS

DATE
03/03/2022

ISSUED SET / REVISIONS
DESCRIPTION
30% DESIGN SUBMISSION

SYM

DESIGNED BY PARASOL

DRAWN BY NB

CHECKED BY KPFF

APPROVED BY KPFF

ORIGINAL SHEET SIZE: 42" x 30"

SCALE

0 1/2" 1"

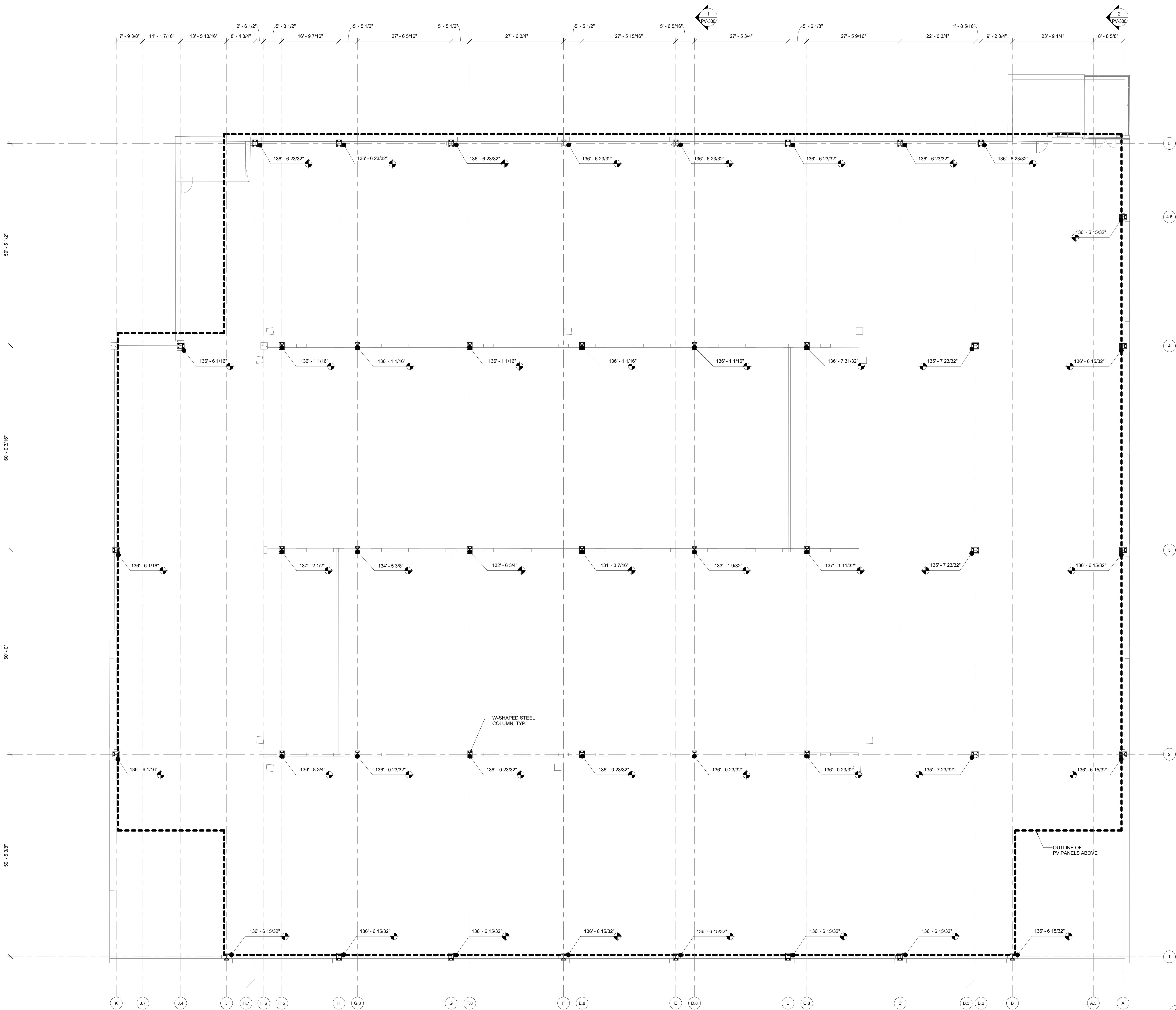
DATE: 03/03/2022

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1 COLUMN LAYOUT PLAN
3/32" = 1'-0"



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NEEDHAM, MA 02464
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DESCRIPTION
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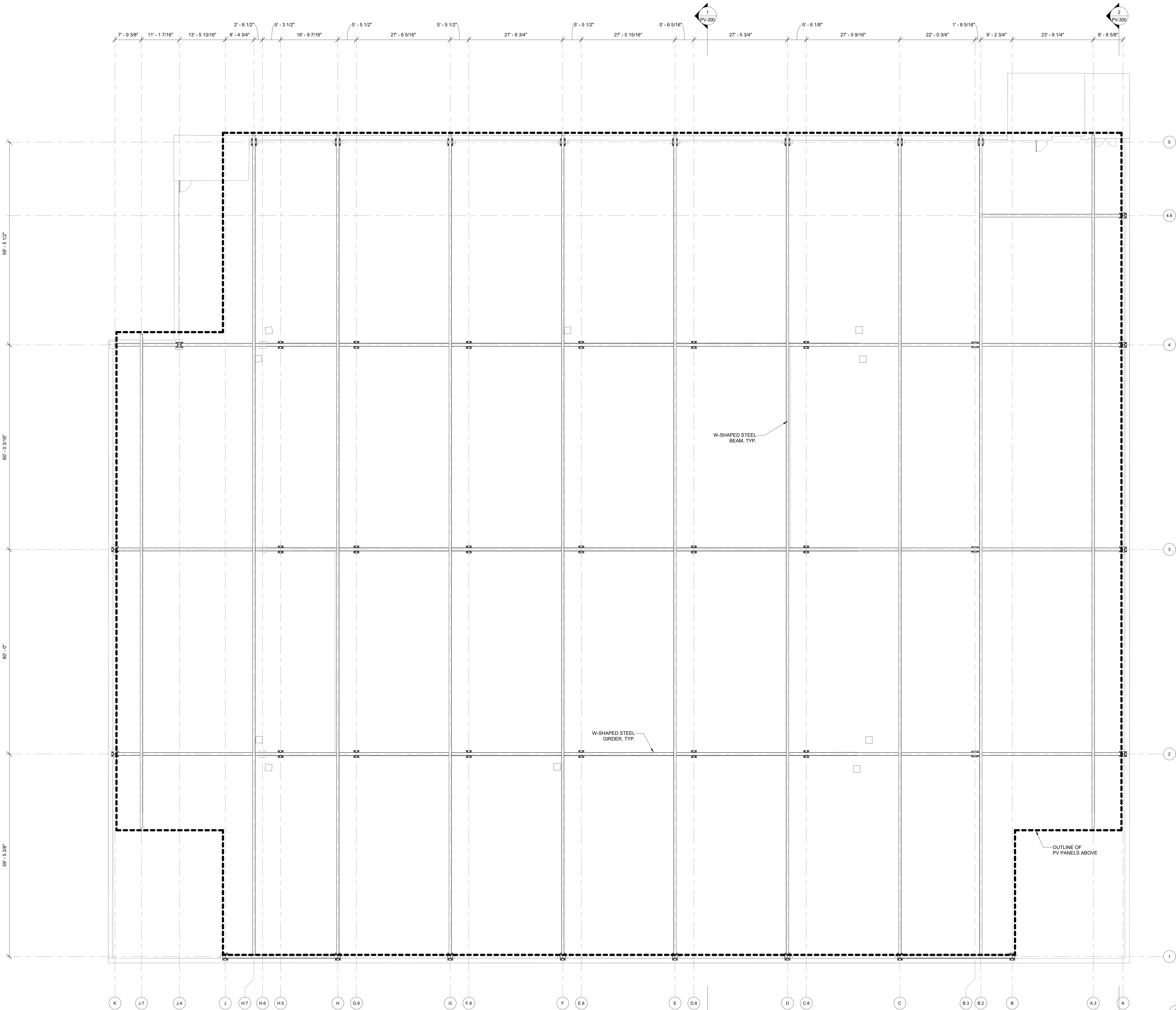
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1 HRS FRAMING LAYOUT PLAN (GIRDERS & BEAMS)
3/32" = 1'-0"



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140 KENDRICK
PROJECT ADDRESS
140 KENDRICK STREET
NEEDHAM, MA 02464
SHEET TITLE
HRS FRAMING LAYOUT PLAN (GIRDERS & BEAMS)

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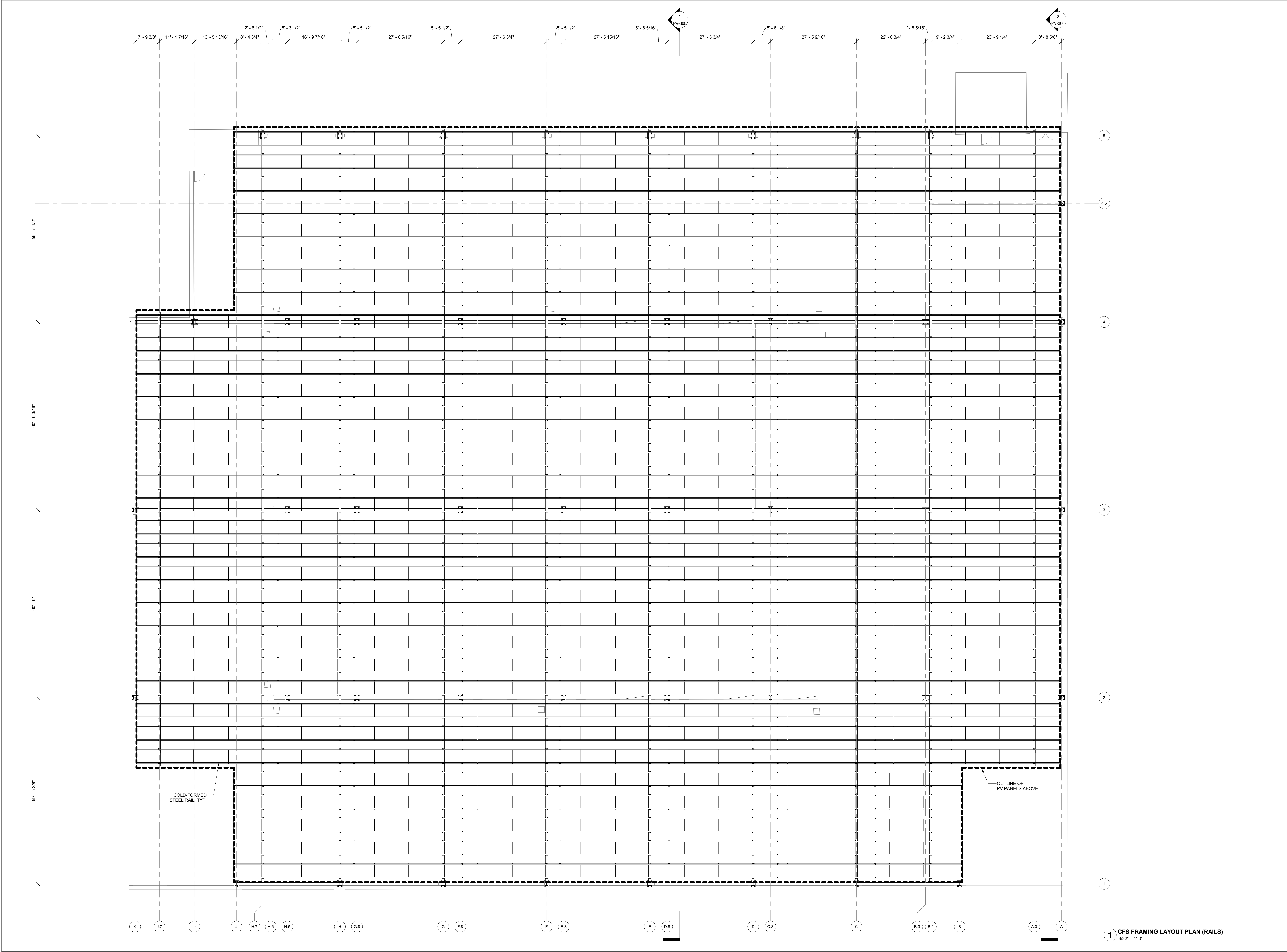
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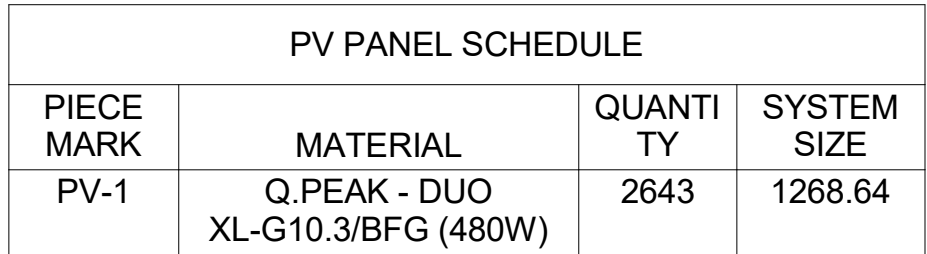
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CFS FRAMING LAYOUT PLAN (RAILS)	SHEET TITLE

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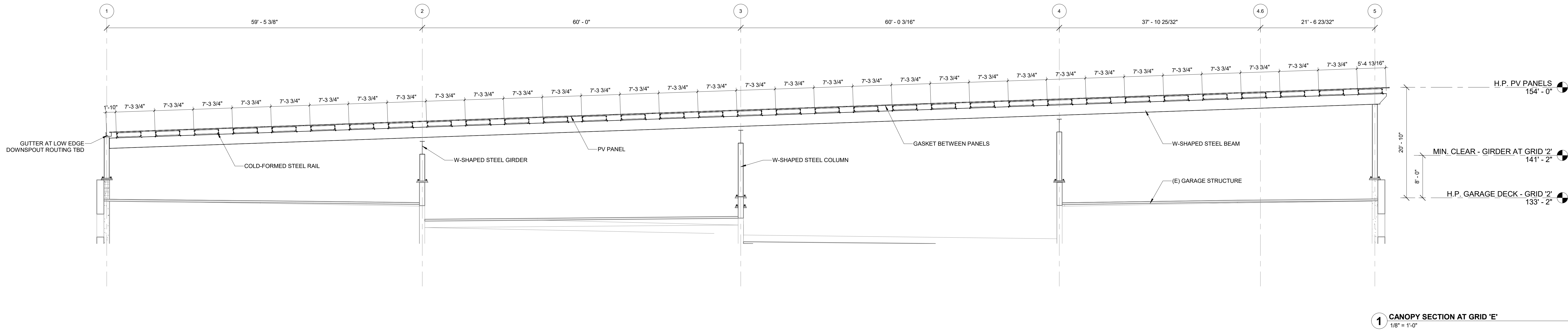
INCHES NOT ONE INCH, DRAWING IS NOT TO SCALE

PV-103

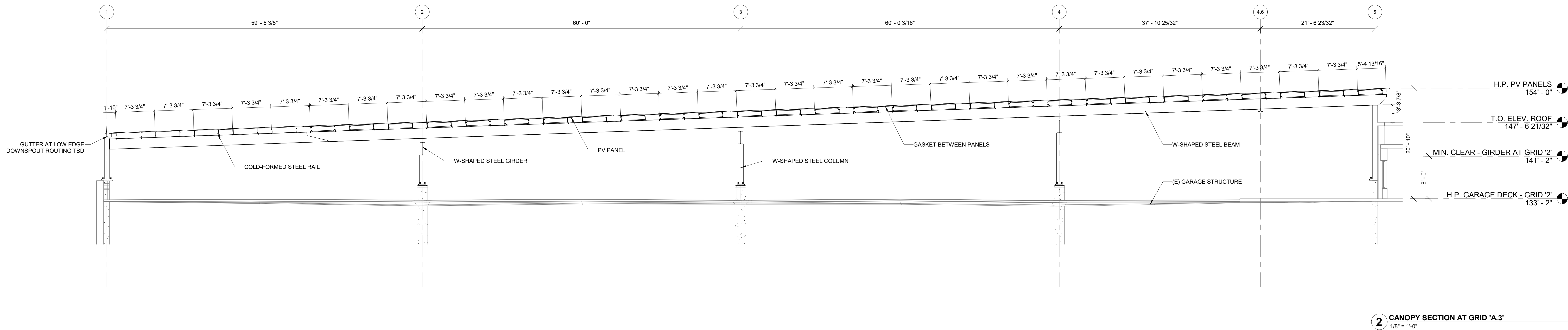
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1 PV UNIT LAYOUT PLAN

CANOPY SLOPE = 2 DEG.



CANOPY SLOPE = 2 DEG.



From: [Rick DeAngelis](#)
To: [Alexandra Clee](#); [Lee Newman](#); [Elisa Litchman](#); [David Roche](#)
Cc: nskoly@vhb.com; [Marcel Rodgers](#); [Ellesse Lunde](#); [Christopher Hiserman](#); [Madeleine Timin](#); [Roxane Argueta](#)
Subject: 140 Kendrick Street- Solar Roof Drainage
Date: Monday, September 26, 2022 8:55:48 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[C2.0_DRAIN.pdf](#)

All

Attached is a plan prepared by VHB detailing the new HDPE drainage pipe and downspout connections which will replace the existing concrete drainage pipe .

This replacement pipe will have the roof tied into it and the pipe will collect the same volume of water as previously collected from the top deck/ story of the garage which in the past fell to the pavement and went into ground level drains.

The new pipe and system will collect the water from the solar canopy and avoid water falling onto the garage surface. This in turn will prevent grit/sand/oils from entering the drainage system by avoiding contact with that surface.

This plan is submitted in response to David Roche's questions as to how we are handling storm water drainage from the new roof.

Please add this plan to both our Design Review Board submission and to our Planning Board submission.

Please do not hesitate to call or email with any questions you may have.

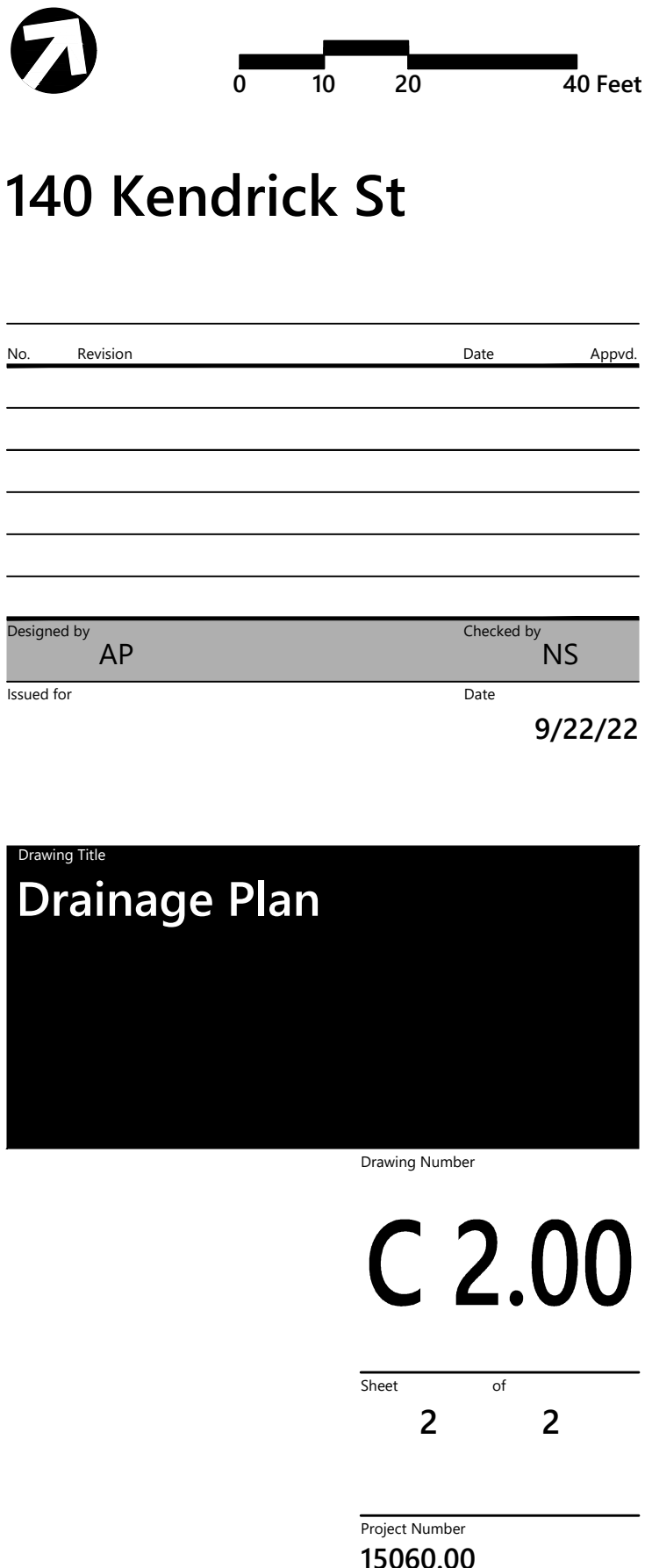
Rick DeAngelis

627-512-0319

Nicholas Skoly, P.E.

Project Manager

Land Development



October 12, 2022

Request for rendering at the top of Kendrick Street

At the top of Kendrick Street, views of the garage and therefore the proposed solar canopy structure are largely obstructed by existing trees and vegetation. The following are Google Street images of the views when traveling east along Kendrick Street from the I-95 overpass. Compared to the third image, the fourth image shows a rendering of the solar canopy structure.



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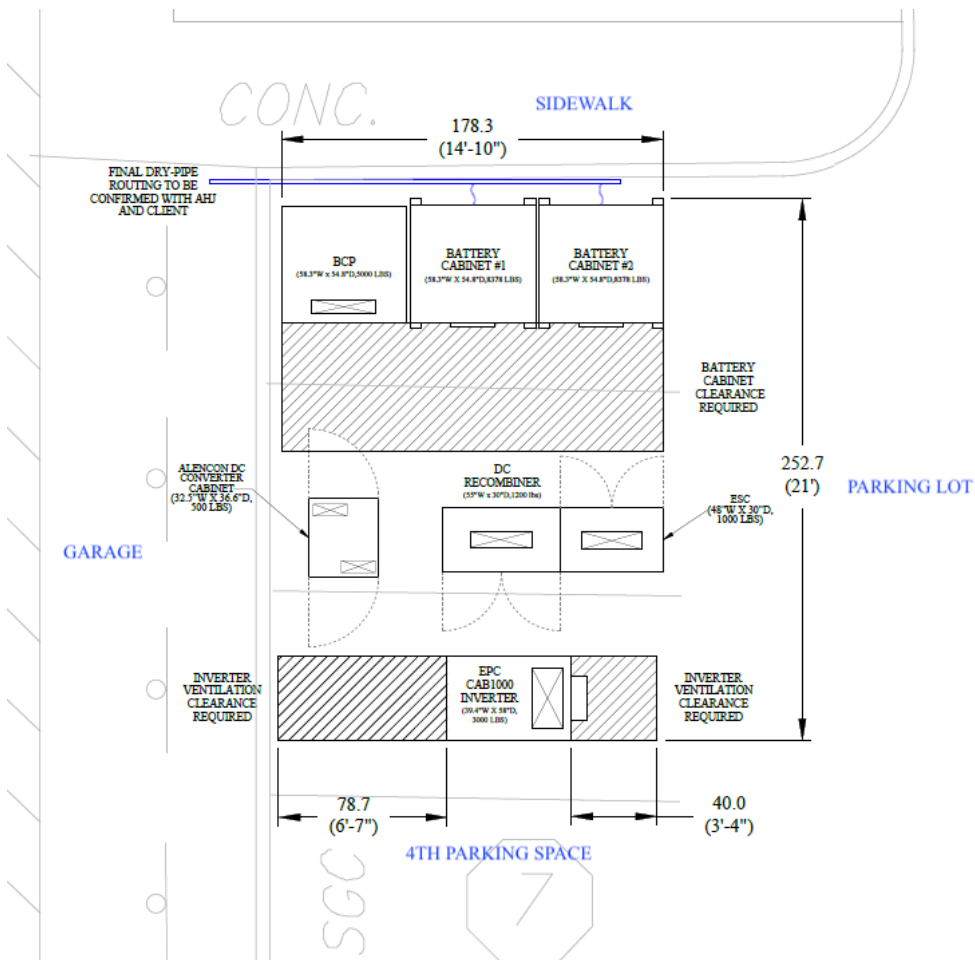


Request Rendering of Electrical Equipment

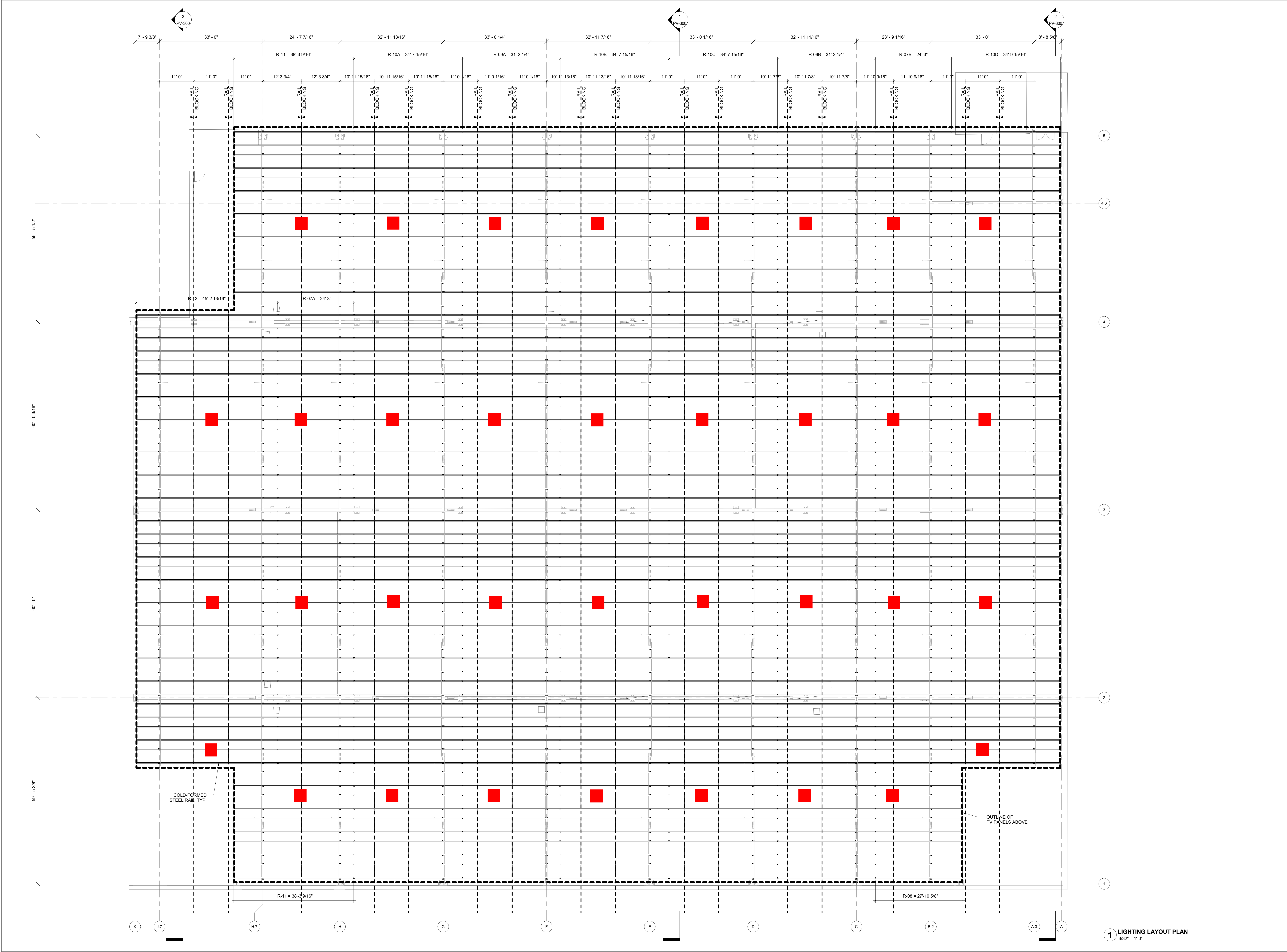
The electrical equipment supporting the solar canopy project and the accompanying battery storage system will occupy three parking spaces adjacent to Eversource's existing electrical transformer. Included below are:

1. Photos of the existing parking lot containing Eversource's existing electrical transformer and the three parking spaces to which the solar and battery storage system will be confined
2. A plan containing the proposed layout of the electrical equipment supporting the solar project and battery storage system
3. A rendering of the electrical equipment and bollards in the context of the solar canopy project.









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SHEET TITLE
LIGHTING LAYOUT PLAN

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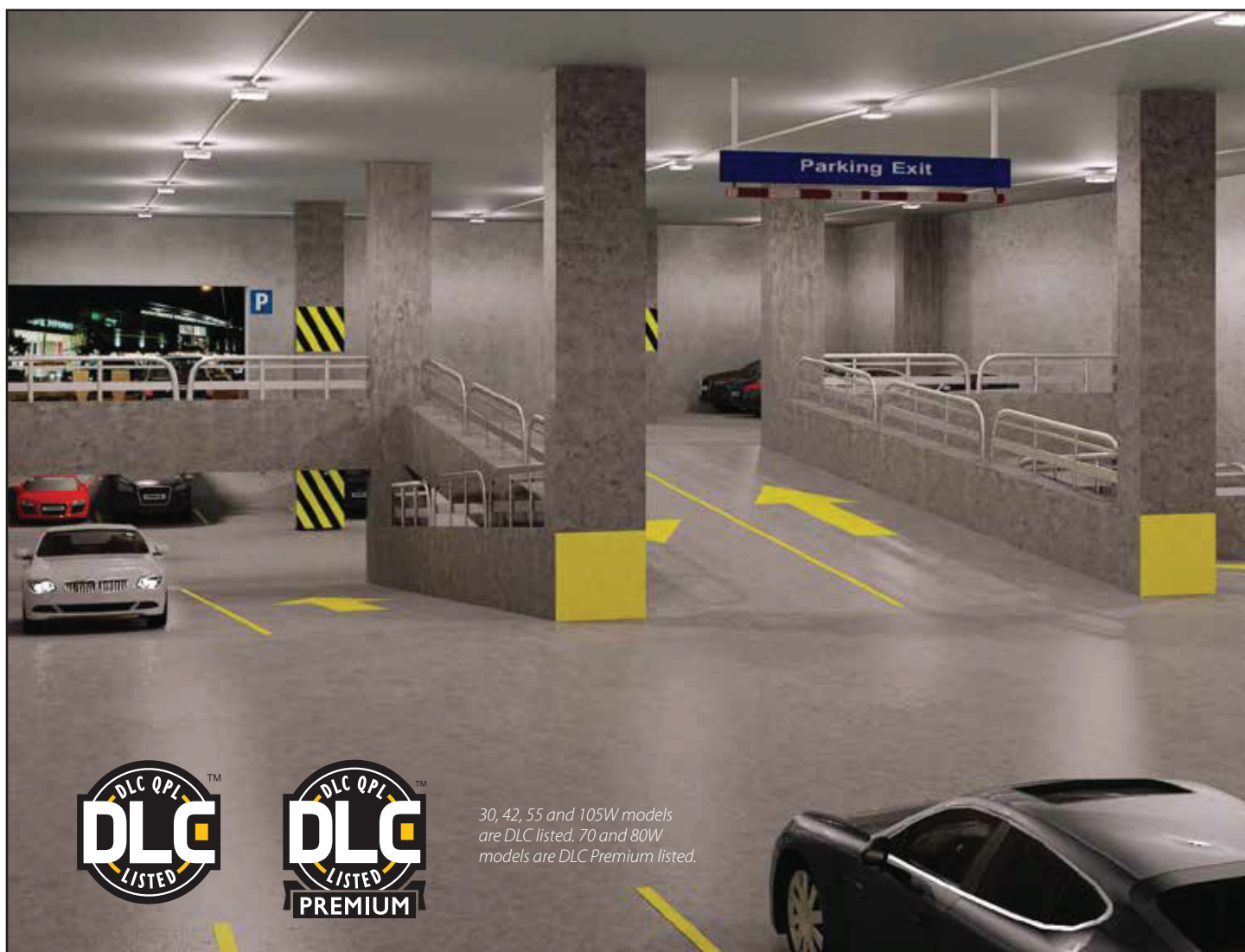
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LIGHTING
RABLIGHTING.COM 888 722-1000

PORTO

- Integrated photo/motion sensor control available
- Replaces up to 400W MH
- Ultra-high efficiency up to 118 lm/W
- Available in 2 sizes and 5 wattages: 30, 42, 55, 70, 80 and 105W
- Pendant and surface mount
- Low glare, vandal-resistant polycarbonate lens
- 20% uplight eliminates “cave effect”



IP66
RATING



18" PORTOs with higher wattages can be used where higher ceilings exist (over ramps) while 14" PORTOs are suitable for standard 8-10' ceilings.

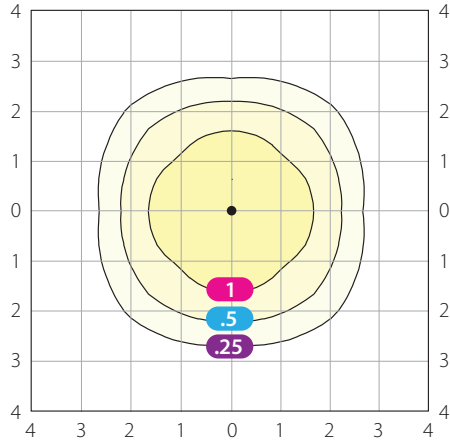
Photometrics

14" PORTO

PORTO 30W

10' Mounting Height
5000K

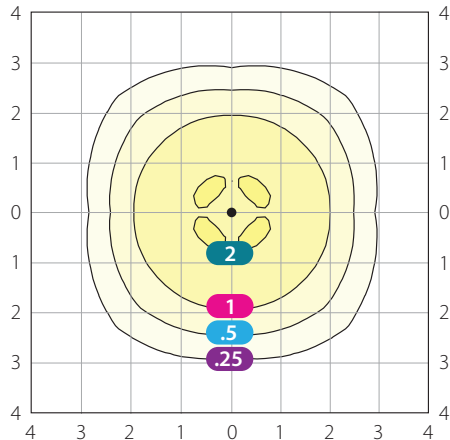
Photometric Report
#RAB00790



PORTO 42W

10' Mounting Height
5000K

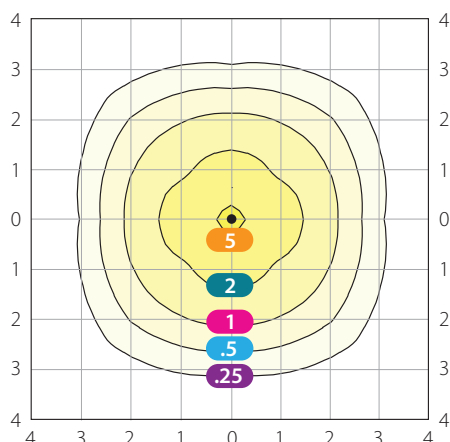
Photometric Report
#RAB00773



PORTO 55W

10' Mounting Height
5000K

Photometric Report
#RAB00765



Mounting Height	8	9	10	11	12
Multiplier	1.6	1.2	1.0	0.8	0.7

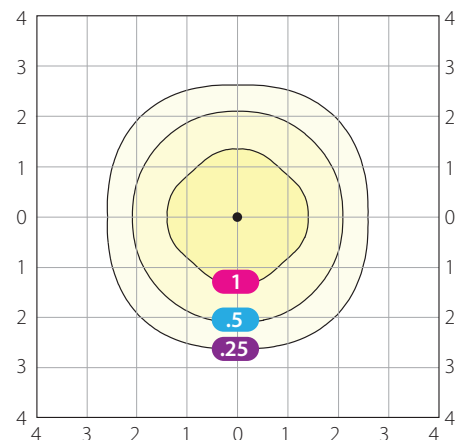
Grid scales: Multiples of mounting height
Values shown in footcandles

18" PORTO

PORTO 70W

16' Mounting Height
5000K

Photometric Report
#RAB00992

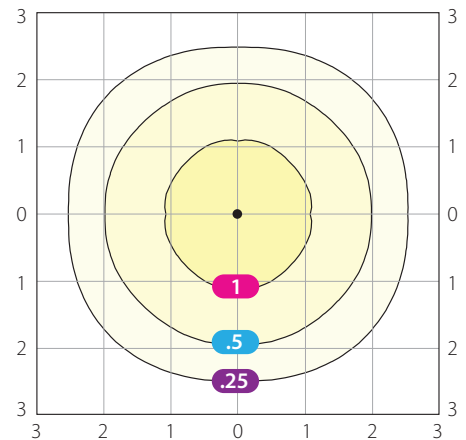


Mounting Height	14	16	18	20	22
Multiplier	1.3	1.0	0.8	0.6	0.5

PORTO 80W

18' Mounting Height
5000K

Photometric Report
#RAB00998

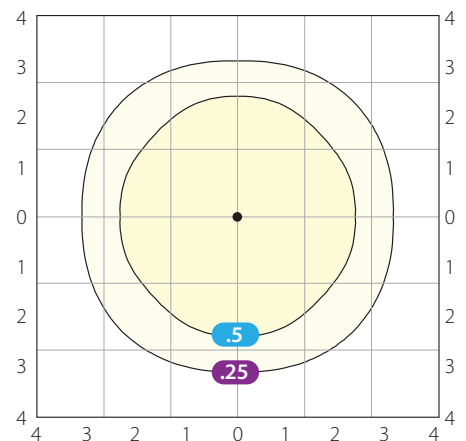


Mounting Height	14	16	18	20	22
Multiplier	1.7	1.3	1.0	0.8	0.7

PORTO 105W

22' Mounting Height
5000K

Photometric Report
#RAB00991



Mounting Height	14	16	18	20	22
Multiplier	2.5	1.9	1.5	1.2	1.0

Grid scales: Multiples of mounting height
Values shown in footcandles

PORTO™ Specifications

UL Listing: Suitable for wet locations

LEDs: Long-life, high-efficiency surface mount LEDs

Lifespan: 100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

IP Rating: IP66, protected against dust and water ingress

Drivers:

30W: Constant current, Class 2, 100 - 277V and 480V, 50/60 Hz, 120V: 0.25A, 208V: 0.13A, 240V: 0.12A, 277V: 0.11A, 480V: 0.12A, surge protection 4kV, THD ≤20%, pF 99%

42W: Constant current, Class 2, 100 - 277V and 480V, 50/60 Hz, 120V: 0.36A, 208V: 0.19A, 240V: 0.18A, 277V: 0.17A, 480V: 0.13A, surge protection 4kV, THD ≤20%, pF 99%

55W: Constant current, Class 2, 100 - 277V and 480V, 50/60 Hz, 120V: 0.50A, 208V: 0.33A, 240V: 0.32A, 277V: 0.31A, 480V: 0.13A, surge protection 4kV, THD ≤20%, pF 99%

70W: Constant current, Class 2, 100 - 277V and 480V, 50/60 Hz, 120V: 0.59A, 208V: 0.37A, 240V: 0.32A, 277V: 0.27A, 480V: 0.15A, surge protection 4kV, THD ≤20%, pF 90%

80W: Constant current, Class 2, 100 - 277V and 480V, 50/60 Hz, 120V: 0.68A, 208V: 0.42A, 240V: 0.36A, 277V: 0.31A, 480V: 0.23A, surge protection 4kV, THD ≤20%, pF 90%

105W: Constant current, Class 2, 100 - 277V and 480V, 50/60 Hz, 120V: 0.87A, 208V: 0.52A, 240V: 0.45A, 277V: 0.38A, 480V: 0.23A, surge protection 4kV, THD ≤20%, pF 90%

14" PORTO 30W

Color Temperature	5000K	4000K	3000K
Input Watts	29	29	29
Output Lumens	3,455	3,151	3,136
Lumens Per Watt	118	108	107
Color Accuracy (CRI)	74	73	72

14" PORTO 42W

Color Temperature	5000K	4000K	3000K
Input Watts	43	43	43
Output Lumens	4,833	4,382	4,316
Lumens Per Watt	112	103	101
Color Accuracy (CRI)	74	73	72

14" PORTO 55W

Color Temperature	5000K	4000K	3000K
Input Watts	59	57	58
Output Lumens	6,085	5,303	5,234
Lumens Per Watt	103	93	91
Color Accuracy (CRI)	75	73	72

18" PORTO 70W

Color Temperature	5000K	4000K	3000K
Input Watts	71	70	71
Output Lumens	7,835	7,715	7,642
Lumens Per Watt	111	110	108
Color Accuracy (CRI)	74	73	71

18" PORTO 80W

Color Temperature	5000K	4000K	3000K
Input Watts	82	80	81
Output Lumens	8,754	8,479	8,384
Lumens Per Watt	107	106	104
Color Accuracy (CRI)	74	73	71

18" PORTO 105W

Color Temperature	5000K	4000K	3000K
Input Watts	104	104	103
Output Lumens	10,208	10,162	9,950
Lumens Per Watt	98	98	96
Color Accuracy (CRI)	74	73	71

Ambient Temperature: Suitable for use in 40°C ambient temperatures.

Cold Weather Starting: The minimum starting temperature is -40°C.

Thermal Management: Superior thermal management with external Air-Flow fins

Housing: Die-cast aluminum and sheetmetal housing

Mounting: Die-cast aluminum backbox with (4) 1/2" conduit openings with plugs. Hinged tether for easy installation and wiring. Also accommodates 1/2" or 3/4" NPS pendants (*provided by others*).

Lens: High-transmission and vandal-resistant polycarbonate frosted lens

Reflector: Specular polycarbonate

Gaskets: High-temperature silicone gaskets

Color Stability: LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity: RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2015.

Finish: Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contain no VOC or toxic heavy metals.

Green Technology: Mercury and UV free, and RoHS compliant. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

IESNA LM-79 & LM-80 Testing: RAB LED luminaires have been tested in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

California Title 24: PORTO models with integrated multi-level motion sensor comply with 2013 California Title 24 building and electrical codes as commercial indoor fixtures for corridors, stairwells, warehouses and covered parking garages.

Multi-level sensor specifications

UL: Suitable for wet locations as factory installed

IP Rating: IP66, protected against dust and water ingress

Power consumption: 1W

0-10V sinking current: 50mA

Adjustable high and low modes: High: 0-10V; Low: off, 0-9.8V

Adjustable time delay: Amount of time in high mode with no motion before switching to low mode: 1 - 30 min.

Adjustable cut off delay: Time in which the fixture will remain on low mode with no motion before turning off and waiting for new motion to turn on: None, 1 - 60 min., 1 - 5 hrs.

Adjustable sensitivity: None, low, medium, maximum

Adjustable setpoint: None, 1 to 250 fc, auto

Adjustable ramp up and fade down times: 1 - 60 sec.

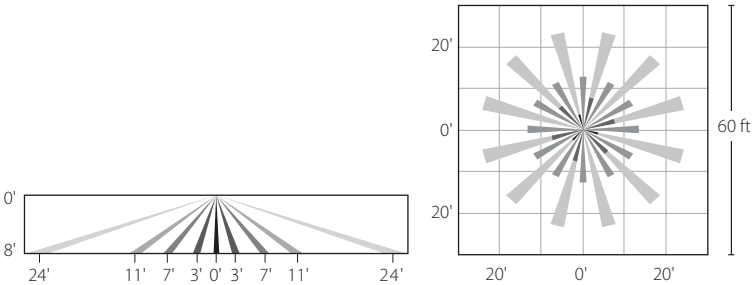
Operating temperature: -40°F to 167°F (-40°C to 75°C)

Operating Humidity: 20% to 90% noncondensing

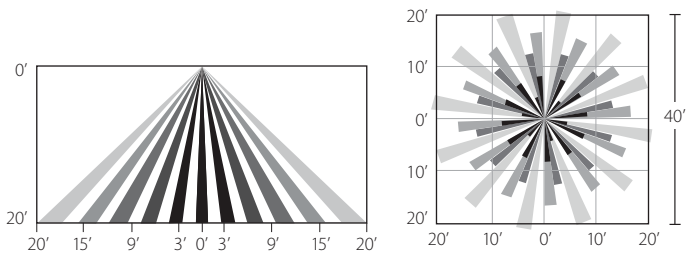
Relay life rating: 200,000 cycles (120/277VAC), 50,000 cycles (230VAC)

Photo/motion sensor detection coverage

SENSOR FOR 14" PORTO

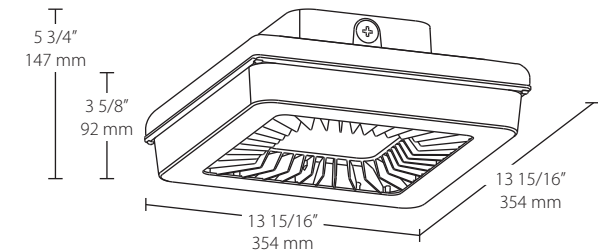


SENSOR FOR 18" PORTO

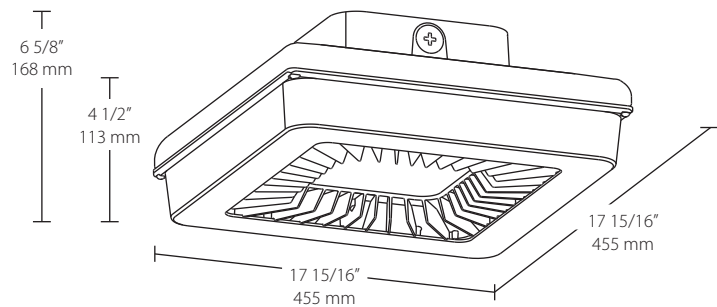


Dimensions & weight

Weight: 10.6 lbs.



Weight: 19.6 lbs.



Ordering information

Product Family	Wattage	Color Temperature	Finish	Driver Options	Sensor Options
PRT					
	30 30W (14" x 14")	Blank 5000K	Blank Bronze	Blank 120-277V, 0-10V Dimming	/WS Multi-Level Motion Sensor for 14" *
	42 42W (14" x 14")	N 4000K	W White	/480 480V, 0-10V Dimming	/WS2 Multi-Level Motion Sensor for 18" *
	55 55W (14" x 14")	Y 3000K		/E2 120-277V Battery Backup	/PCS 120V Swivel Photocell
	70 70W (18" x 18")				/PCS2 277V Swivel Photocell
	80 80W (18" x 18")				/PCS4 480V Swivel Photocell
	105 105W (18" x 18")				/LC Lightcloud Controller
					/LCS Lightcloud Sensor

*Only available for 120-277V



Hinged tether frees hands for easy wiring & quick installation.



One model accommodates 1/2" or 3/4" NPS pendant, or surface mount (*pendant by others*).



Delivers 20% uplight, eliminating the 'cave effect' that results when ceilings remain darkened.



Integrated photo/motion sensor control

- High/low modes: 10V / 1V
- Time delay dims light 5 minutes after detecting motion
- Cutoff turns fixture off after 1 hour of vacancy
- Detection pattern:
For 14" PORTO - 360° and 48' diameter at 8' mounting height
For 18" PORTO - 360° and 40' diameter at 20' mounting height



Adjust settings using handheld wireless configuration tool (Order using catalog #WSREM)

- High/low modes fully adjustable from 0 to 10V
- Time delay can be set to dim lights 30 seconds to 30 minutes after motion is no longer detected
- Optional cutoff delay turns fixture off after a preset period of vacancy
- Configure control settings to react to ambient light levels
- Ramp up and fade down times can be customized



This ultra high efficiency LED garage light delivers up to 118 lumens per Watt. Available in 30, 42 and 55 Watt versions that replace 70 to 175 Watt metal halide fixtures. Fixture measures 14" L x 14" W.

Color: Bronze

Weight: 10.4 lbs

Project:

Type:

Prepared By:

Date:

Driver Info

Type	Constant Current
120V	0.25A
208V	0.13A
240V	0.12A
277V	0.11A
Input Watts	29.4W

LED Info

Watts	30W
Color Temp	5000K (Cool)
Color Accuracy	78 CRI
L70 Lifespan	100,000 Hours
Lumens	3,832
Efficacy	130.3 lm/W

Technical Specifications

Compliance

UL Listed:

Suitable for wet locations

Construction

Lens:

Frosted polycarbonate

Gaskets:

High-temperature silicone

IP Rating:

Ingress protection rating of IP66 for dust and water

Ambient Temperature:

Suitable for use in up to 40°C (104°F)

LED Characteristics

LEDs:

Long-life, high-efficacy, surface-mount LEDs

Other

Equivalency:

Equivalent to 100W Metal Halide

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Electrical

Drivers:

Constant Current, Class 2 100V - 277V, 50/60 Hz. THD <20%.

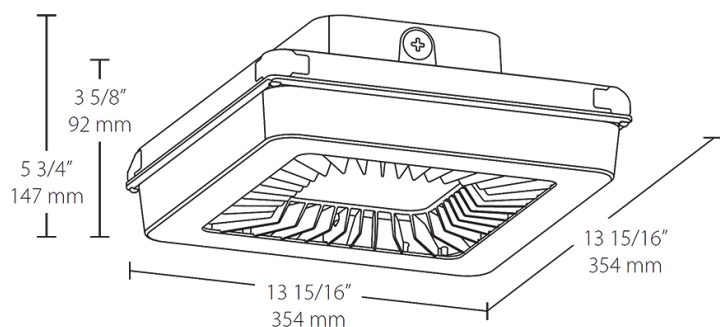
THD:

7.4% at 120V, 17.1% at 277V

Power Factor:

99.2% at 120V, 90.9% at 277V

Dimensions



Features

- Ultra-high efficiency
- Pendant or surface mount
- Low glare, vandal-resistant polycarbonate lens
- 20% uplight eliminates "cave effect"
- 100,000-Hour LED lifespan
- 5-Year, No-Compromise Warranty

Ordering Matrix

Family	Wattage	Color Temp	Finish	Driver Options	Sensor Options	Other Options
PRT	30					
	55 = 55W (14" x 14")	Blank = 5000K (Cool)	Blank = Bronze	Blank = 120-277V On/Off	Blank = No Option	USA = BAA Compliant
	70 = 70W (18" x 18")	N = 4000K (Neutral)	W = White	/480 = 480V On/Off	/WS = Multi-Level Motion Sensor for 14" ¹	Blank = Standard
	80 = 80W (18" x 18")	Y = 3000K (Warm)		/D10 = 120-277V w/ 0-10V Dimming	/WS2 = Multi-Level Motion Sensor for 18" ¹	
	105 = 105W (18" x 18")			/480/D10 = 480V w/ 0-10V Dimming	/PCS = 120V Swivel Photocell	
	30 = 30W (14" x 14")			/E2 = Battery Backup	/PCS2 = 277V Swivel Photocell	
	42 = 42W (14" x 14")			/D10/E2 = 0-10V Dimming w/ Battery Backup	/PCS4 = 480V Swivel Photocell	
					/LC = Lightcloud® Controller	
					/LCS = Lightcloud® Sensor	

¹ Only available for 120-277V with 0-10V dimming driver.



TOWN OF NEEDHAM

DESIGN REVIEW BOARD

Public Service Administration Building
500 Dedham Avenue
Needham, MA 02492
Application and Report

Property Location: 151 RESERVOIR RD Date: 10/4/22

Owner: 155 FH RESERVOIR TRUST

Address: 919 GREAT PLAIN AVE. Needham, MA
Street City State Zip
Telephone: 781-444-1107 x 114 02942

Applicant: SUPPLY New England

Address: 151 RESERVOIR RD Needham, MA
Street City State Zip
Telephone: 508-838-6749 CHRIS AUBA

Designer/Installer: AGNOLI SIGN CO, INC.

Address: 722 WORTHINGTON ST, SPRINGFIELD, MA
Street City State Zip 01105

Telephone: 413-732-5111

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:

1- 42" x 96" ALUMINUM BELT SIGN ON
FRONT OF BUILDING.

Please email completed application to elitchman@needhamma.gov



42" x 96"
ALUMINUM BELT SIGN
LAMINATED PRINT - COLORS TBD
1 1/2" DURANODIC MOLDING

EXISTING



PROPOSED

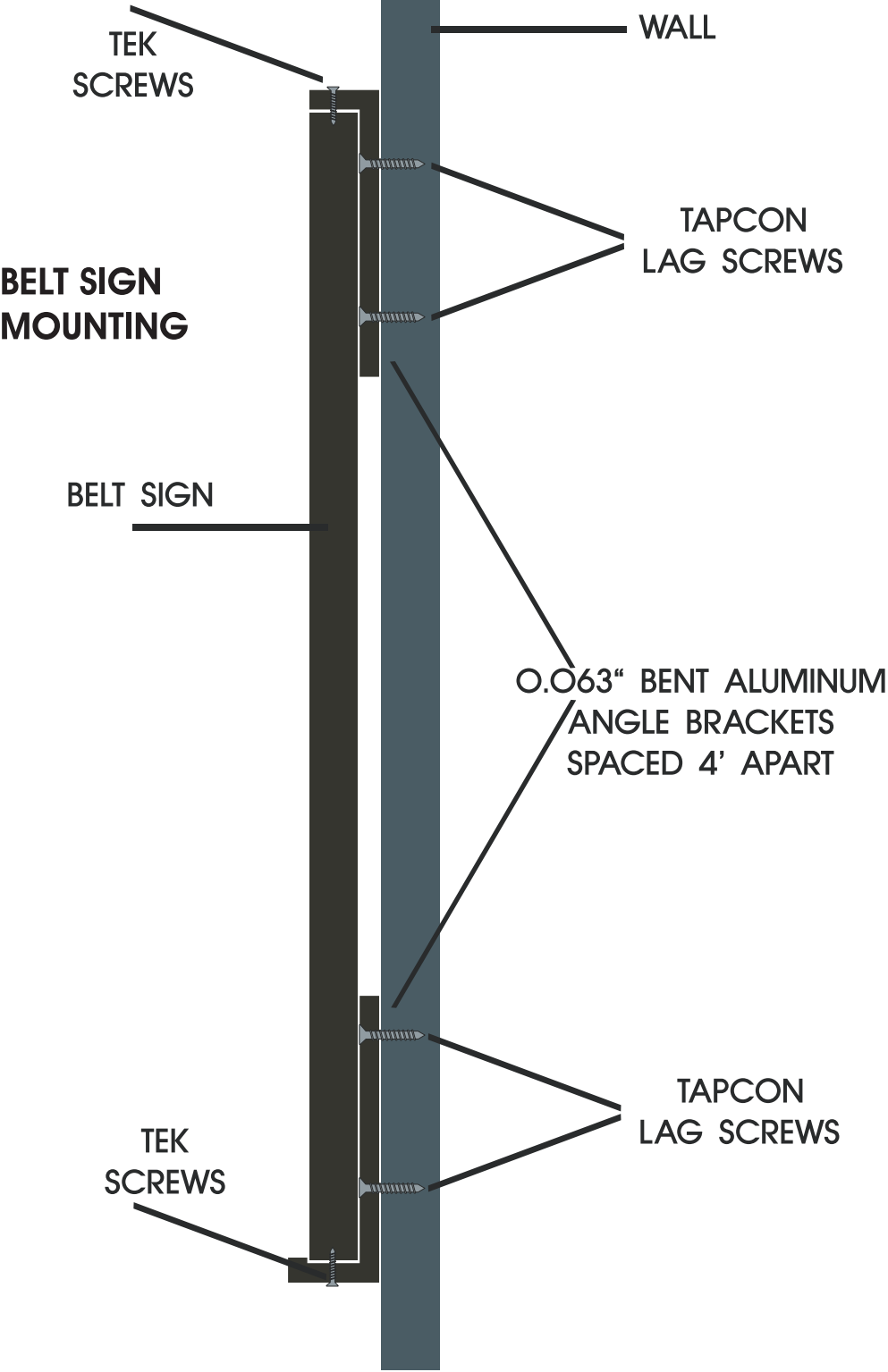


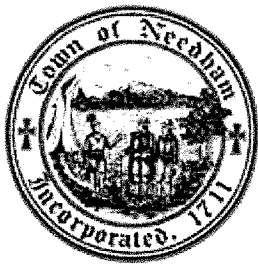
Supply
NEW ENGLAND
Where the pros go

B









TOWN OF NEEDHAM

DESIGN REVIEW BOARD

Public Service Administration Building
500 Dedham Avenue
Needham, MA 02492
Application and Report

Property Location: 9B Street, Needham **Date:** 9/20/22

Owner: Coca Cola Beverages Northeast, Inc.

Address: 1 Executive Park Drive, Bedford, MA 03110
Street City State Zip
Telephone: 603-413-7623

Applicant: See above

Address: *Street City State Zip*
Telephone:

Designer/Installer: N/A

Address: *Street City State Zip*

Telephone:

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:

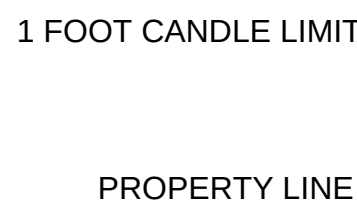
See Exhibit A attached hereto.

Please email completed application to elitchman@needhamma.gov

EXHIBIT A

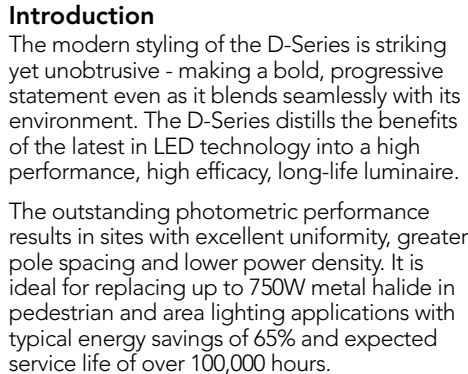
The applicant is proposing to renovate the existing building by removing the existing 14,500 s.f. office wing and incorporating those functions with the building, removal of 44,985 s.f. of the existing Fleet Services wing, associated storage and former railroad bay to be replaced by 14,610 s.f. attached new single story Fleet Services wing and addition of 14 loading docks. Interior renovations will include incorporation of a new automated product retrieval system and interior office fit up. Exterior façade improvement will incorporate a combination of reskinning of the building with an architectural metal panel system, painting and new signage.

Site improvements will provide for new parking lots at the west end of the site with new site lighting, landscaping, decorative fencing and hardscaping. Existing paved areas will be repaired, overlayed and improved as required. Existing outbuildings previously used for production wastewater processing will be removed.

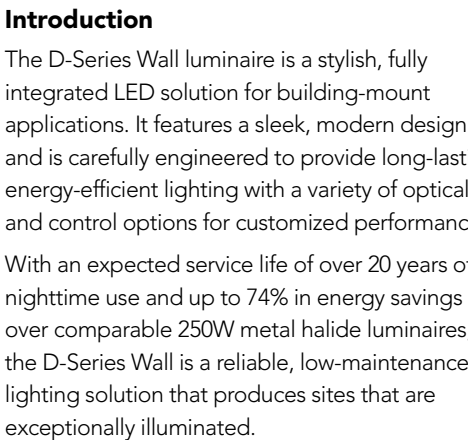
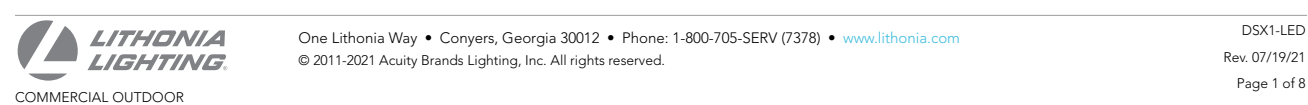


Scale - 1" = 30ft

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
parking	✕	2.8 fc	12.0 fc	0.3 fc	40.0:1	9.3:1
walkway	✕	5.7 fc	22.2 fc	0.8 fc	27.8:1	7.1:1
property line	+	0.3 fc	0.8 fc	0.0 fc	N/A	N/A



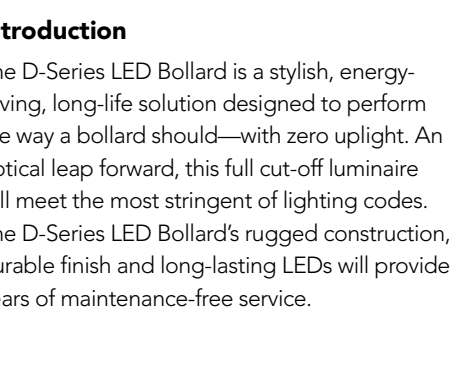
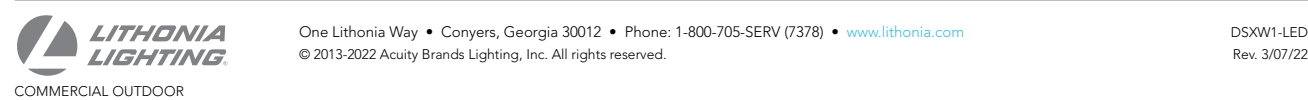
EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

[illegible]

EXAMPLE: DSXW1 LED 20C 1000 40K T3M MVOLT DDBTXD

Other Options		Finish Required							
Shipped installed		Shipped separately *							
SI	Single flex (136, 277 or 347V) ⁽¹⁴⁾	BSW	Bird's nest spikes	000B0	Dark bronze	D53A0	Sandstone	DW620	Textured white
DF	Double flex (208, 240 or 480V) ⁽¹⁴⁾	VE	Vandal guard	000R0	Black	000T0	Textured dark bronze	D53T0	Textured sandstone
HS	House-side shield ⁽¹⁵⁾	DEL	Officed drop lens	0N1V0	Natural aluminum	081B0	Textured black		
				0W930	White	0N1T0	Textured natural aluminum		

Accessories	NOTES
Accessories and Required equipment	2DC 1000 v1 not available with P&H, P&H, PEPC or PEHPCN MAXC: their spare parts are in the catalog from 12-07-2009 onwards 1 Single Gas 1000 v1, 2000 v1, 277 v1 and 3000 v1 optional. Double Gas 1000 v1 optional 200, 240 and 480 v1 optional. Only available with 2DC 1000 v1 and 3000 v1 2 Gas 1000 v1 optional 200, 240 and 480 v1 optional 3 Gas 1000 v1 optional 200, 240 and 480 v1 optional 4 Gas 1000 v1 optional 200, 240 and 480 v1 optional 5 Gas 1000 v1 optional 200, 240 and 480 v1 optional 6 Gas 1000 v1 optional 200, 240 and 480 v1 optional 7 Not available with 2DC6C 8 Not available with 2DC6C 9 Not available with 2DC6C 10 Not available with 2DC6C



EXAMPLE: DSYB LED 16C 700 40K SYM MVOLT DDBYD

Accessories		NOTES
Ordered and shipped separately.		
AKAS 1	Anchor bolts for ESE®	1 Only available in the 12C, ASY version.

NOTES

- NOTES**
- 1 Only available in the 12C, AS5 version.
 - 2 Only available in the 5AC, SYM version.
 - 3 Only available with 450 AMBLIN version.
 - 4 Not available with ELWCW.
 - 5 MIOCLT driver operates on any line voltages. Specifically 120, 208, 240 or 277 volts with fusing (CF, DF, optional, or photo).
 - 6 Not available with 547X. Not available with 450 AMBLIN.
 - 7 Single phase (SP) requires 120, 277, or 3 phase (3P) requires 208 or 240 voltage or more.
 - 8 MRAS U not available with L/MSA option.



W GROUP FACILITY SOLUTIONS
 111 DRIVE, BOX 3, CONCORD, NEW HAMPSHIRE
 PHONE: (603) 225-0010 FAX: (603) 225-0761

#	DATE	BY	REVISION
0	08/29/22		ISSUED TO PLANNING BOARD



AST, INC.

SALES CENTER RENOVATIONS

FRONT PARKING PHOTOMETRIC PLAN



PROJECT NO. 2103141

ISSUED	08/29/22
--------	----------

SCALE AS NOTED

DRAWN BY: DEM

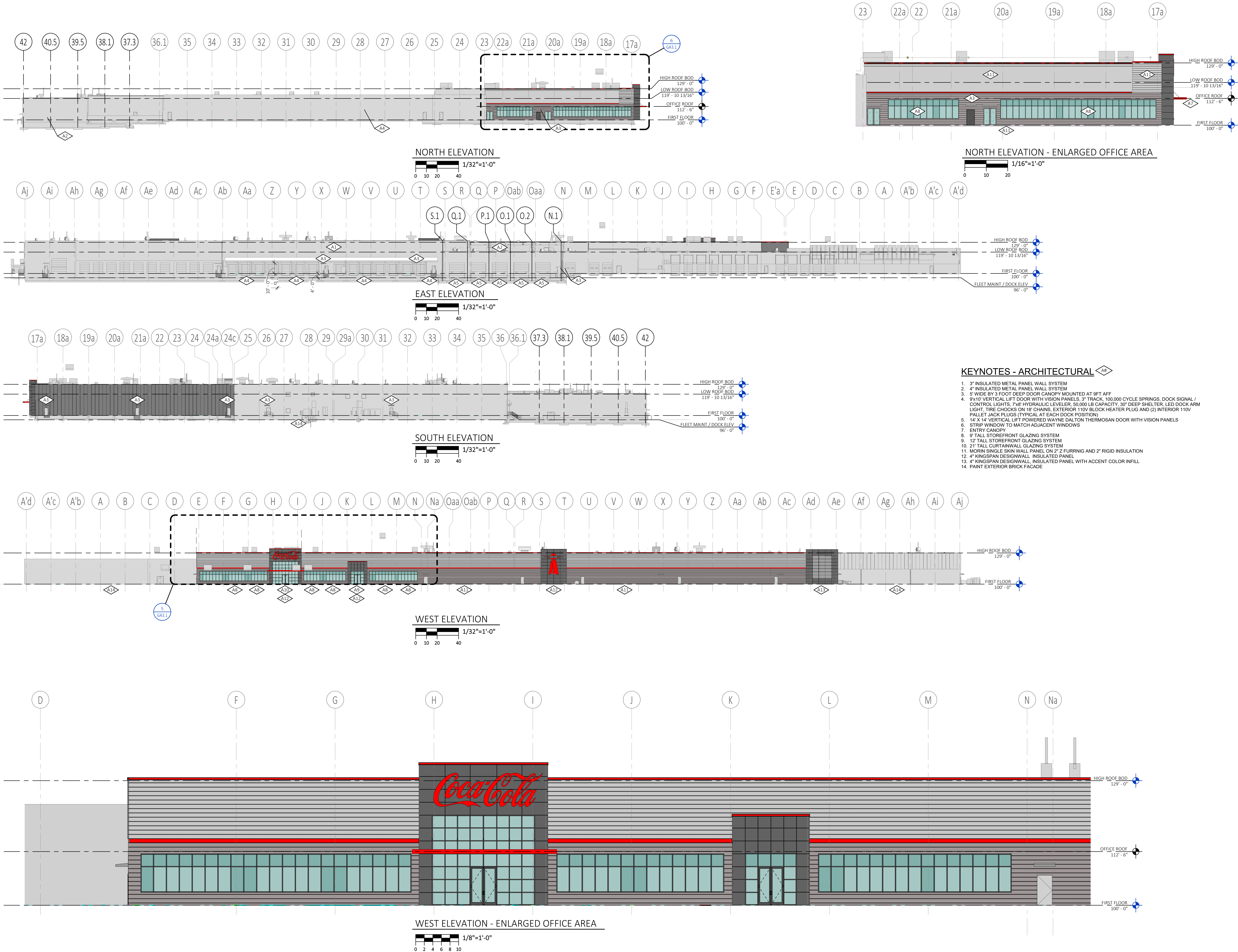
DRAWING NO.

51.00

E1.02

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FACILITY SOLUTIONS, INC.

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DATE	BY	REVISION
02/14/2022	IN	BASE OF DESIGN - GENERAL ARRANGEMENT
02/24/2022	IN	ISSUED TO PLANNING BOARD



CLIENT	COCA-COLA BEVERAGES NORTHEAST, INC. ONE EXECUTIVE PARK DR., SUITE 350 BEDFORD, NH
PROJECT	SALES CENTER RENOVATIONS NEEDHAM HEIGHTS, MA
DRAWING TITLE	PROPOSED EXTERIOR ELEVATIONS

PROJECT NO.	2103141
ISSUED	00/00/00
SCALE	AS NOTED
DRAWN BY	CN

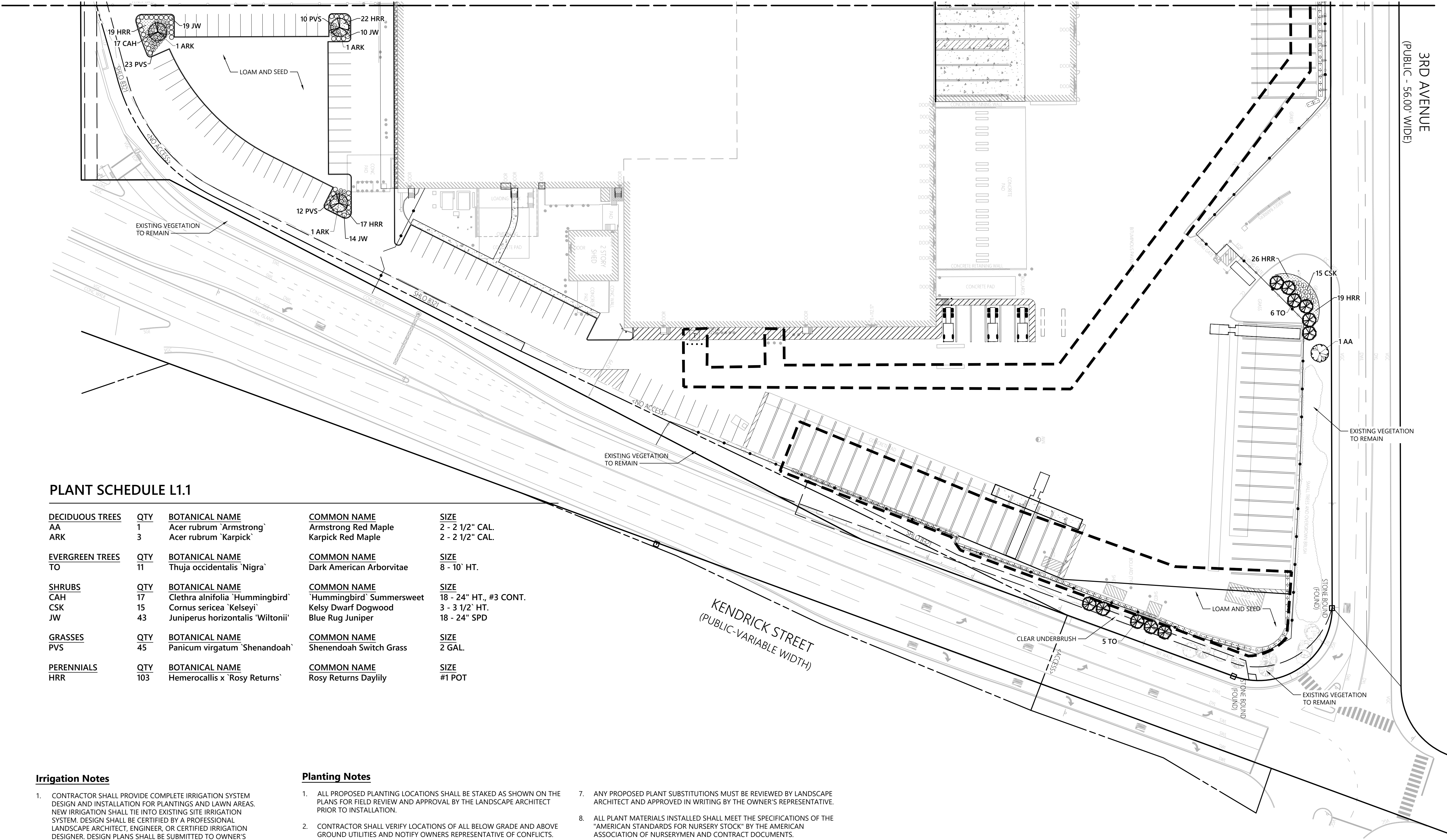
DRAWING NO.

GA3.1



101 Walnut Street
PO Box 9151
Watertown, MA 02471
617.924.1770

Match Line See Sheet L1.2



PLANT SCHEDULE L1.1

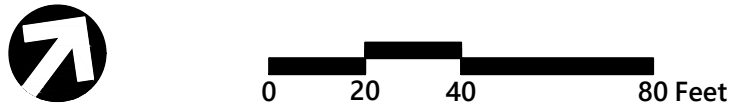
DECIDUOUS TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
AA	1	Acer rubrum 'Armstrong'	Armstrong Red Maple	2 - 2 1/2" CAL.
ARK	3	Acer rubrum 'Karpick'	Karpick Red Maple	2 - 2 1/2" CAL.
EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
TO	11	Thuja occidentalis 'Nigra'	Dark American Arborvitae	8 - 10' HT.
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE
CAH	17	Clethra alnifolia 'Hummingbird'	'Hummingbird' Summersweet	18 - 24" HT., #3 CONT.
CSK	15	Cornus sericea 'Kelseyi'	Kelsy Dwarf Dogwood	3 - 3 1/2' HT.
JW	43	Juniperus horizontalis 'Wiltonii'	Blue Rug Juniper	18 - 24" SPD
GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
PVS	45	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass	2 GAL.
PERENNIALS	QTY	BOTANICAL NAME	COMMON NAME	SIZE
HRR	103	Hemerocallis x 'Rosy Returns'	Rosy Returns Daylily	#1 POT

Irrigation Notes

- CONTRACTOR SHALL PROVIDE COMPLETE IRRIGATION SYSTEM DESIGN AND INSTALLATION FOR PLANTINGS AND LAWN AREAS. NEW IRRIGATION SHALL TIE INTO EXISTING SITE IRRIGATION SYSTEM. DESIGN SHALL BE CERTIFIED BY A PROFESSIONAL LANDSCAPE ARCHITECT, ENGINEER, OR CERTIFIED IRRIGATION DESIGNER. DESIGN PLANS SHALL BE SUBMITTED TO OWNER'S REPRESENTATIVE FOR APPROVAL.
- CONTRACTOR AND IRRIGATION DESIGNER SHALL MEET WITH OWNER TO REVIEW EXISTING IRRIGATION HEAD MODELS, EXISTING CONTROLLER AND WATER SUPPLY, AND SHALL INCLUDE CONTROLLER EXPANSION MODULES OR OTHER ADJUSTMENTS TO EXISTING SYSTEM, IF REQUIRED, IN HIS BID.
- CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE COMPLETE INSTALLATION OF THE IRRIGATION SYSTEM.
- CONTRACTOR SHALL PROVIDE DRAWINGS, MATERIAL SPECIFICATIONS, SCHEMATICS, AND OTHER LITERATURE AS MAY BE REQUIRED, FOR ALL CONDUIT, CONTROLS, TIMERS, VALVES, SPRINKLER HEADS, CONNECTORS, WIRING, RAIN GAUGE, ETC. TO THE OWNER'S CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO INSTALLATION.
- CONTRACTOR SHALL COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR AND SUB CONTRACTORS.
- SITE CONTRACTOR SHALL PROVIDE 4" SCHEDULE 40 PVC SLEEVES UNDER PAVEMENT TO PROVIDE ACCESS FOR IRRIGATION LINES TO ALL IRRIGATED AREAS.

Planting Notes

- ALL PROPOSED PLANTING LOCATIONS SHALL BE STAKED AS SHOWN ON THE PLANS FOR FIELD REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL BELOW GRADE AND ABOVE GROUND UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
- NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY CONFLICT.
- A 3-INCH DEEP MULCH PER SPECIFICATION SHALL BE INSTALLED UNDER ALL TREES AND SHRUBS, AND IN ALL PLANTING BEDS, UNLESS OTHERWISE INDICATED ON THE PLANS, OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
- ALL TREES SHALL BE BALLED AND BURLAPPED, UNLESS OTHERWISE NOTED IN THE DRAWINGS OR SPECIFICATION, OR APPROVED BY THE OWNER'S REPRESENTATIVE.
- FINAL QUANTITY FOR EACH PLANT TYPE SHALL BE AS GRAPHICALLY SHOWN ON THE PLAN. THIS NUMBER SHALL TAKE PRECEDENCE IN CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND ON THE PLAN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLANT LIST AND PLANT LABELS PRIOR TO BIDDING.
- ANY PROPOSED PLANT SUBSTITUTIONS MUST BE REVIEWED BY LANDSCAPE ARCHITECT AND APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE.
- ALL PLANT MATERIALS INSTALLED SHALL MEET THE SPECIFICATIONS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND CONTRACT DOCUMENTS.
- ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF FINAL ACCEPTANCE.
- AREAS DESIGNATED "LOAM & SEED" SHALL RECEIVE MINIMUM 6" OF LOAM AND SPECIFIED SEED MIX. LAWNS OVER 2:1 SLOPE SHALL BE PROTECTED WITH EROSION CONTROL FABRIC.
- ALL DISTURBED AREAS NOT OTHERWISE NOTED ON CONTRACT DOCUMENTS SHALL BE LOAM AND SEED OR MULCHED AS DIRECTED BY OWNER'S REPRESENTATIVE.
- THIS PLAN IS INTENDED FOR PLANTING PURPOSES. REFER TO SITE / CIVIL DRAWINGS FOR ALL OTHER SITE CONSTRUCTION INFORMATION.
- AREAS DESIGNATED "WETMIX" SHALL RECEIVE A LIGHT MULCH OF CLEAN, WEED FREE STRAW



Coca-Cola Site

9 B Street
Needham, Massachusetts 02494

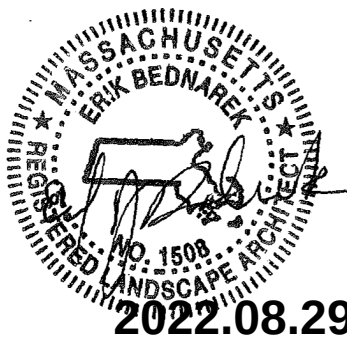
No.	Revision	Date	Appr.

Designed by	Checked by
	EB

Issued for Date
Site Plan Review August 29, 2022

Not Approved for Construction

Drawing Title
Planting Plan



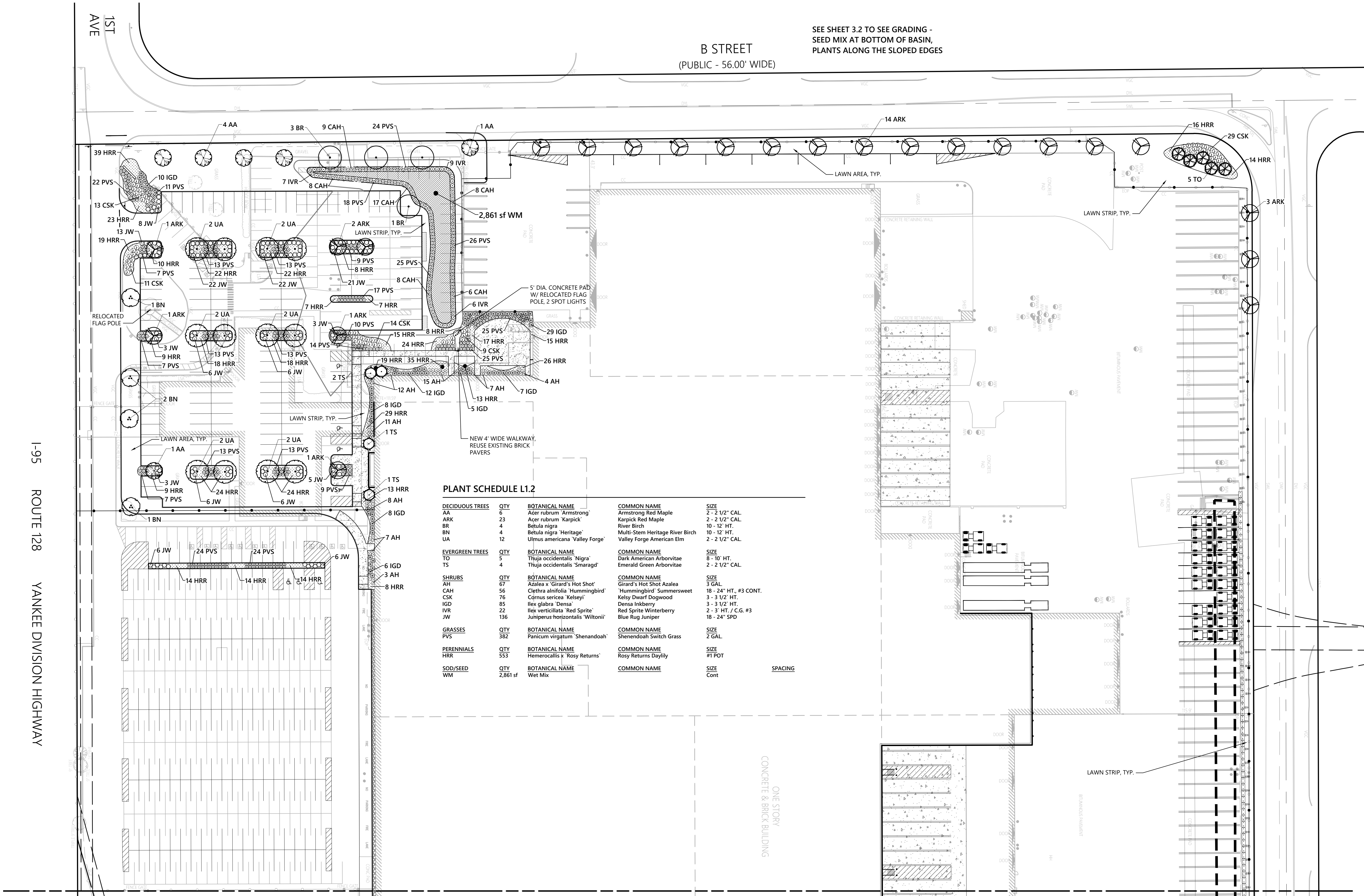
L1.1

Sheet 13 of 15

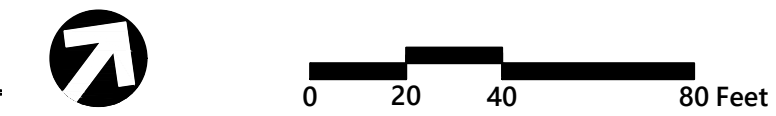
Project Number
15571.00



101 Walnut Street
PO Box 9151
Watertown, MA 02471
617.924.1770



Match Line See Sheet L1.1

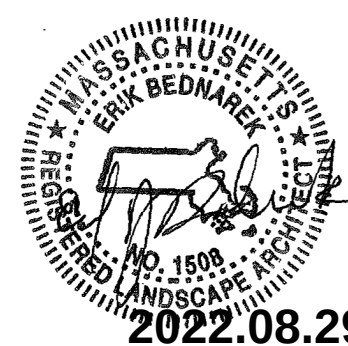


Coca-Cola Site
9 B Street
Needham, Massachusetts 02494

No.	Revision	Date	Appr'd.

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Issued for _____ Date August 29, 2022

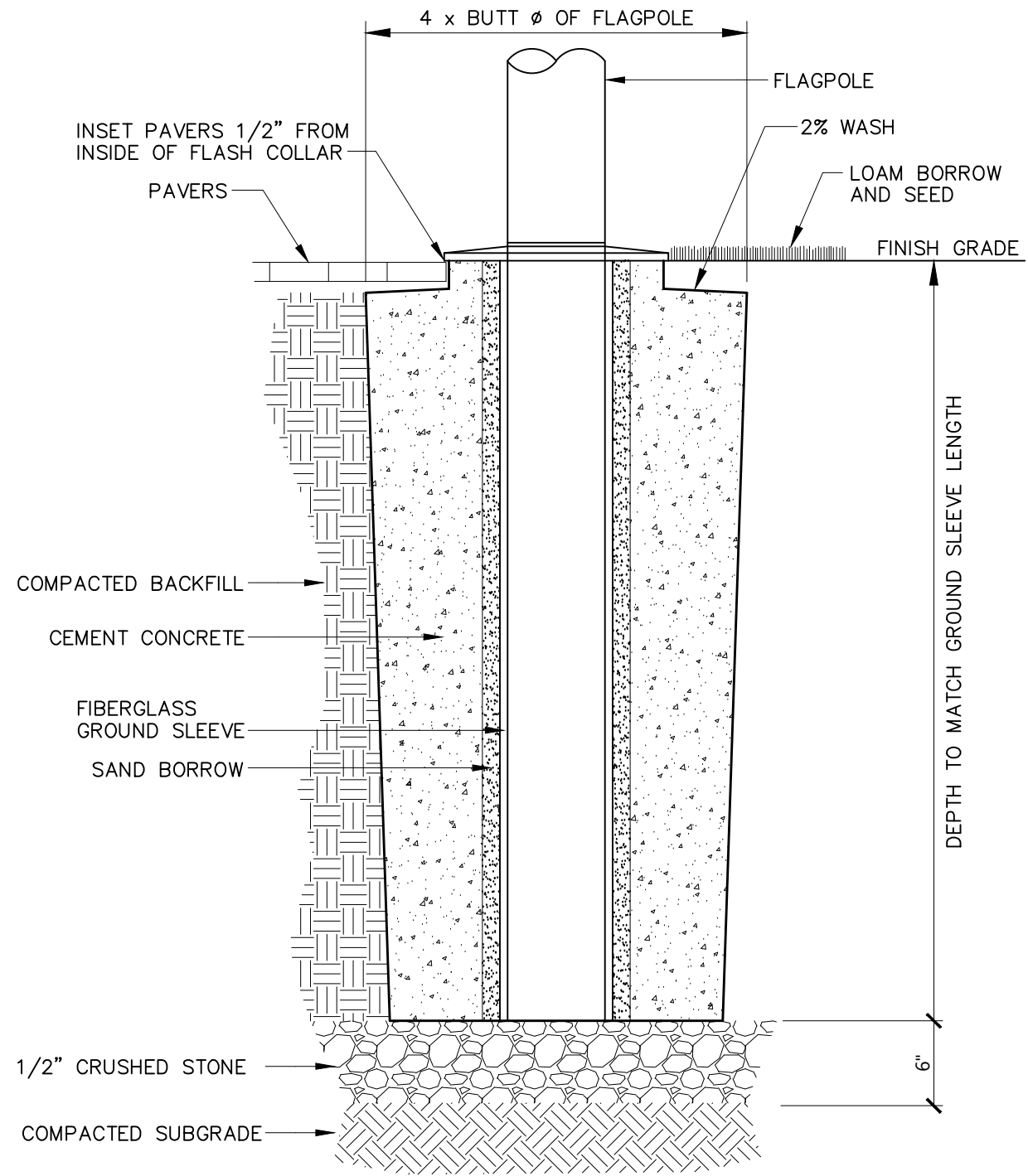
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Drawing Title
Planting Plan
Drawing Number



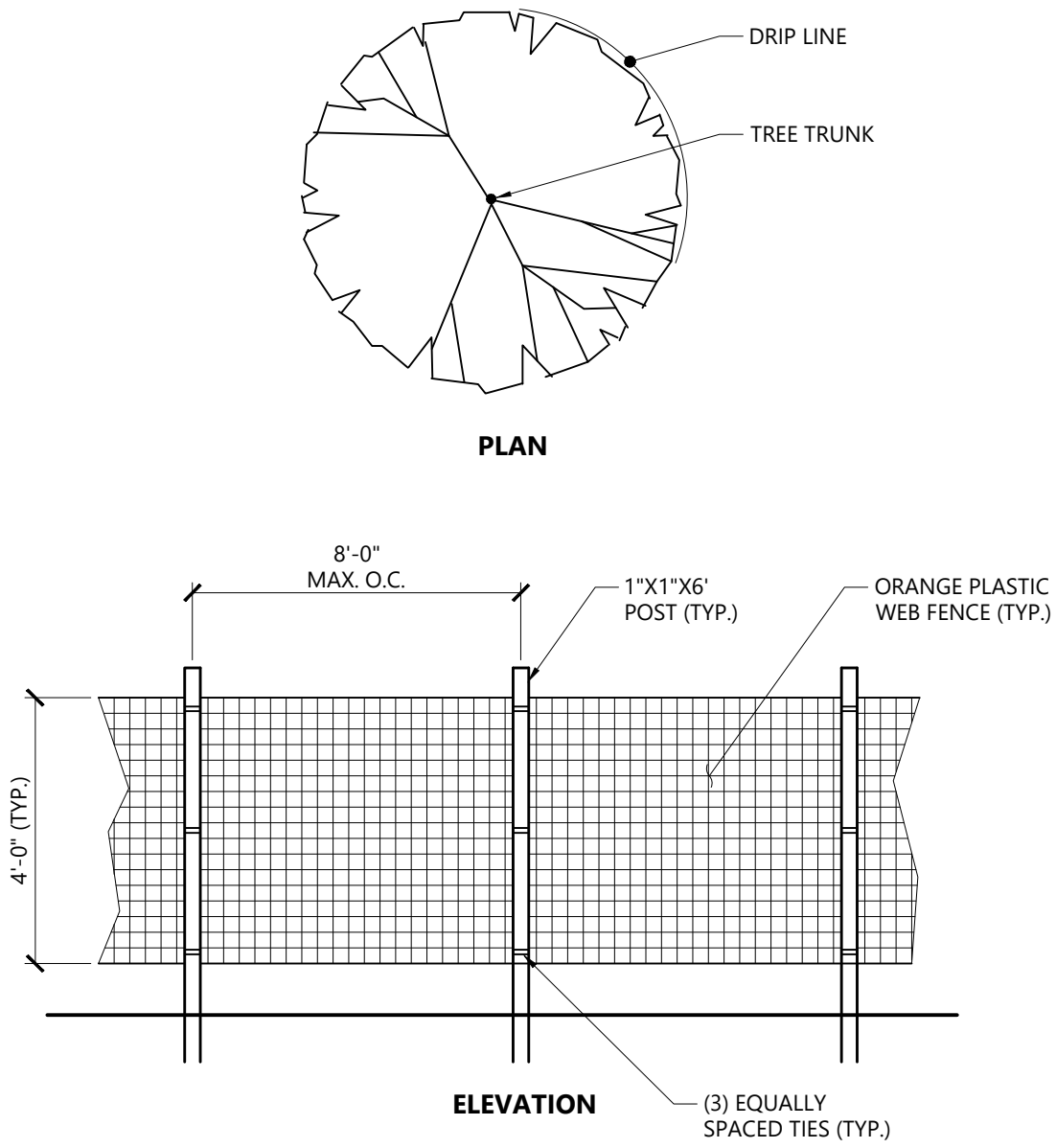
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Sheet 14 of 15

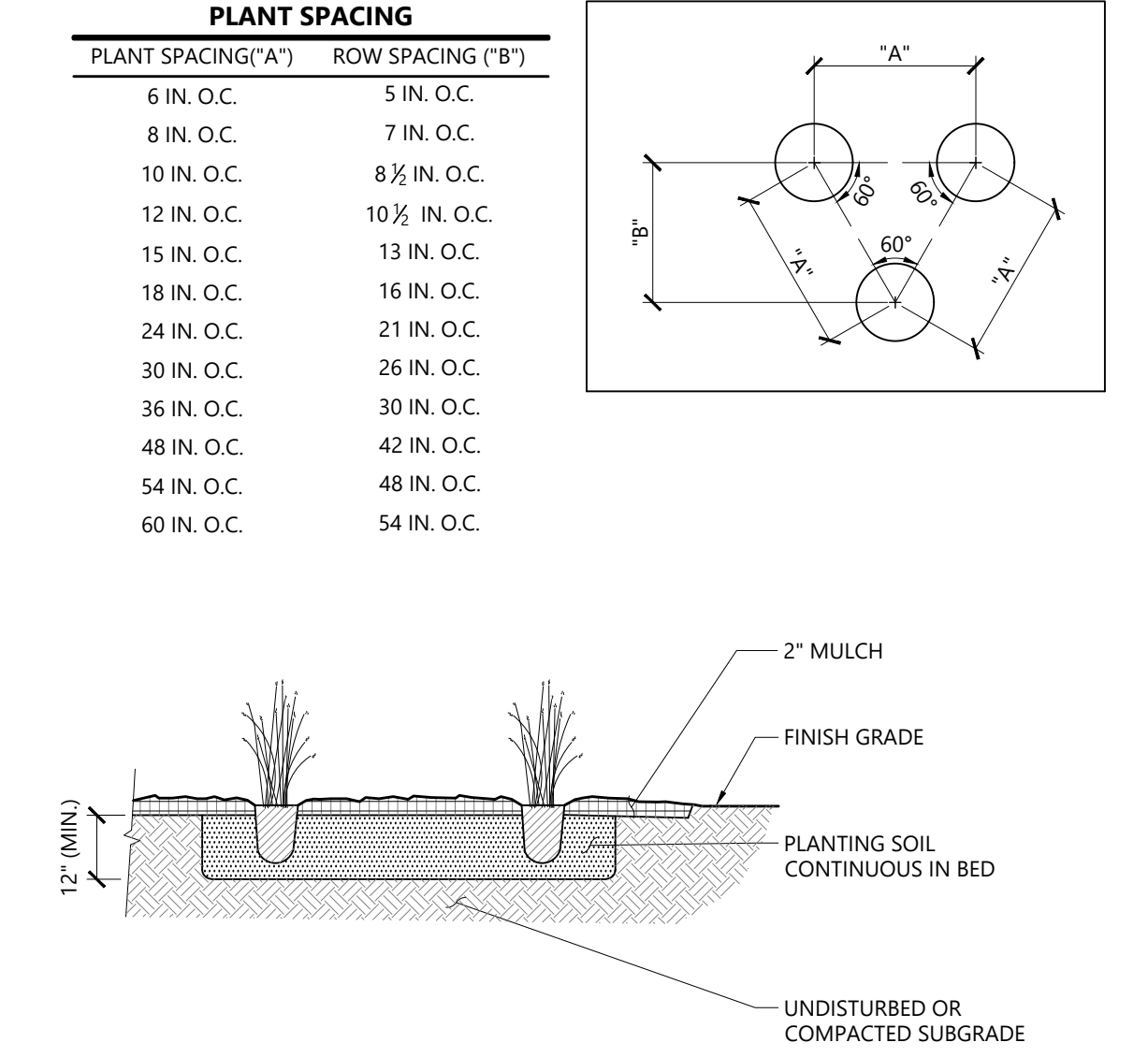
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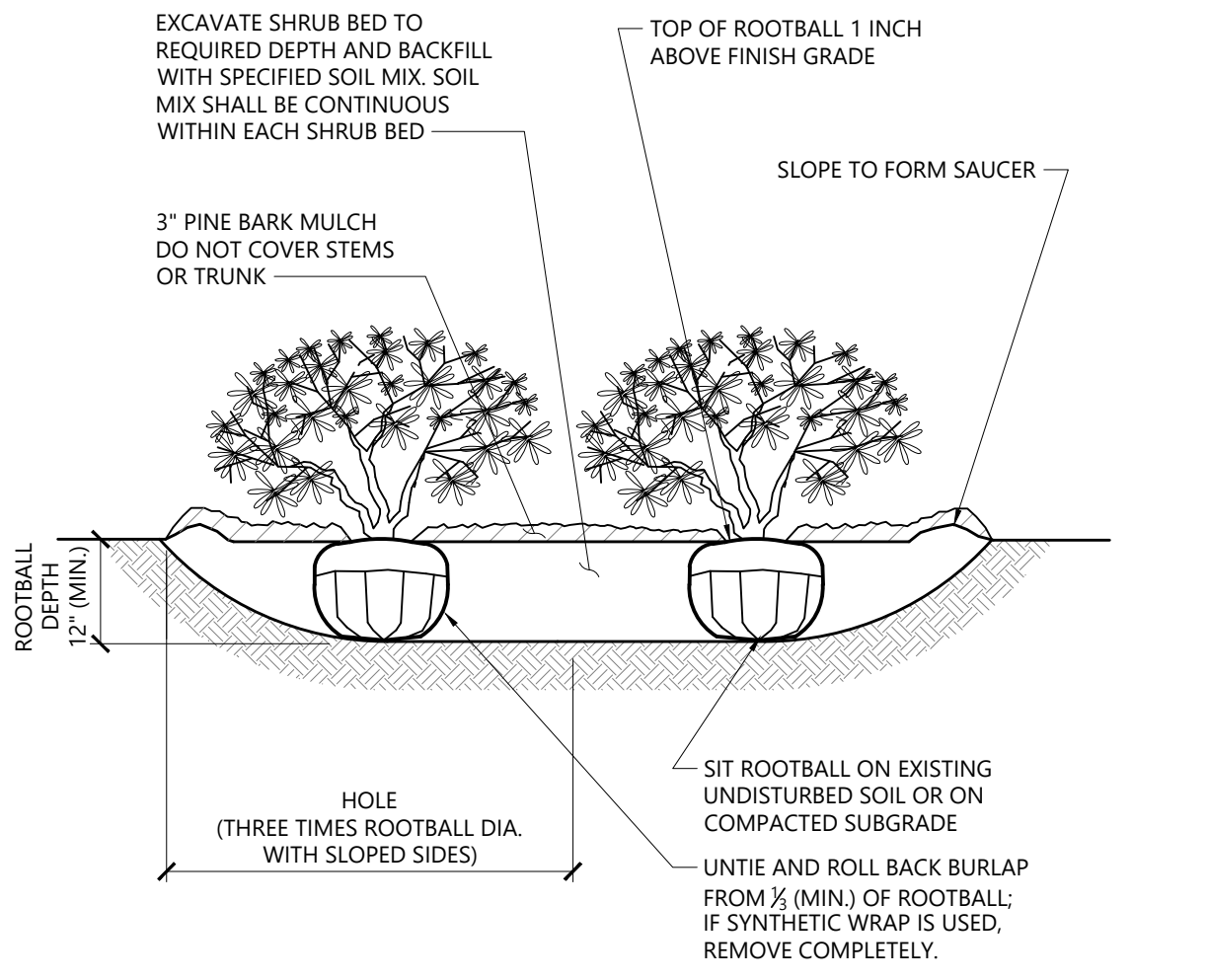
Flagpole Footing 9/21
N.T.S. Source: VHB LD_



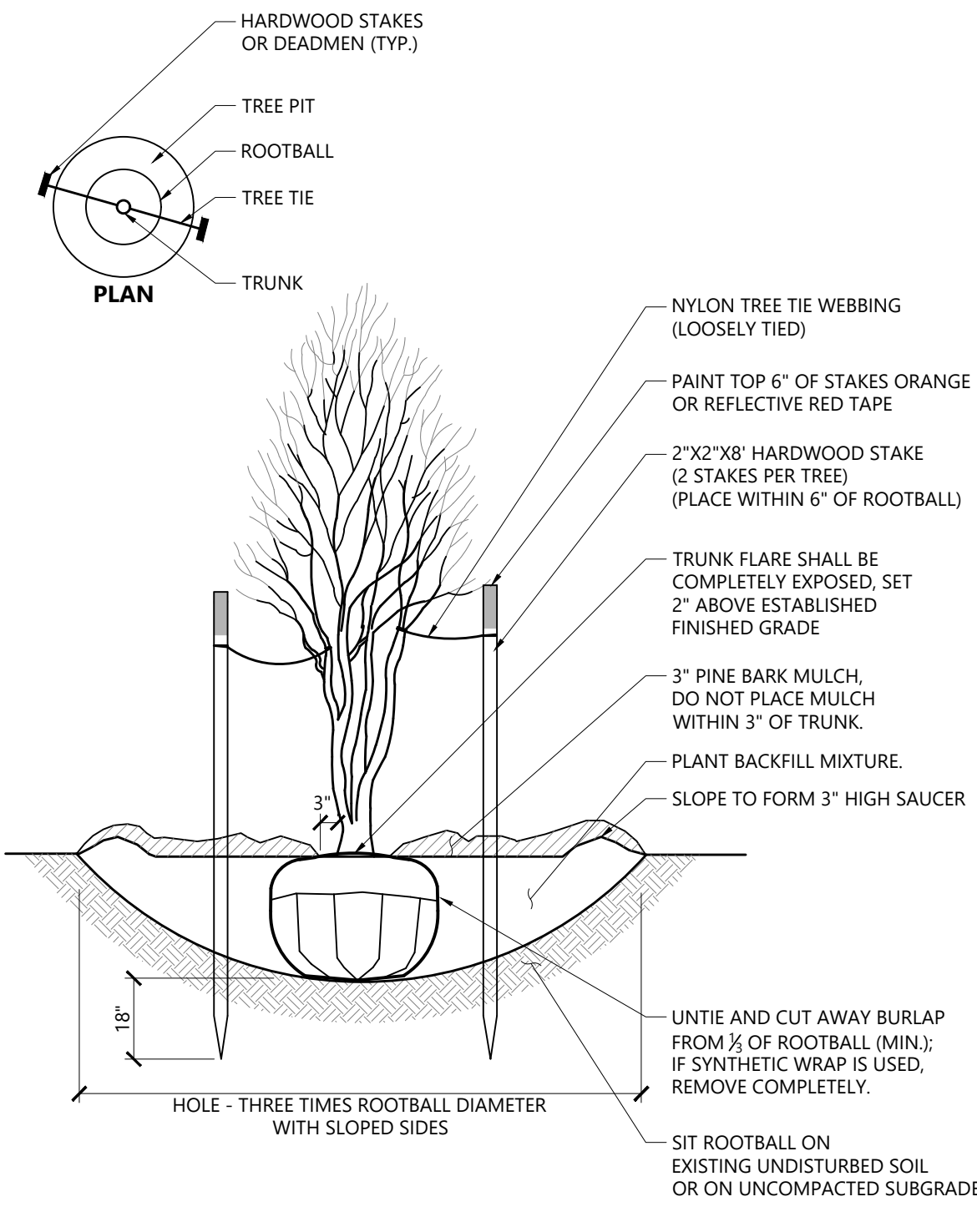
Tree Protection Fence 1/16
N.T.S. Source: VHB LD_610



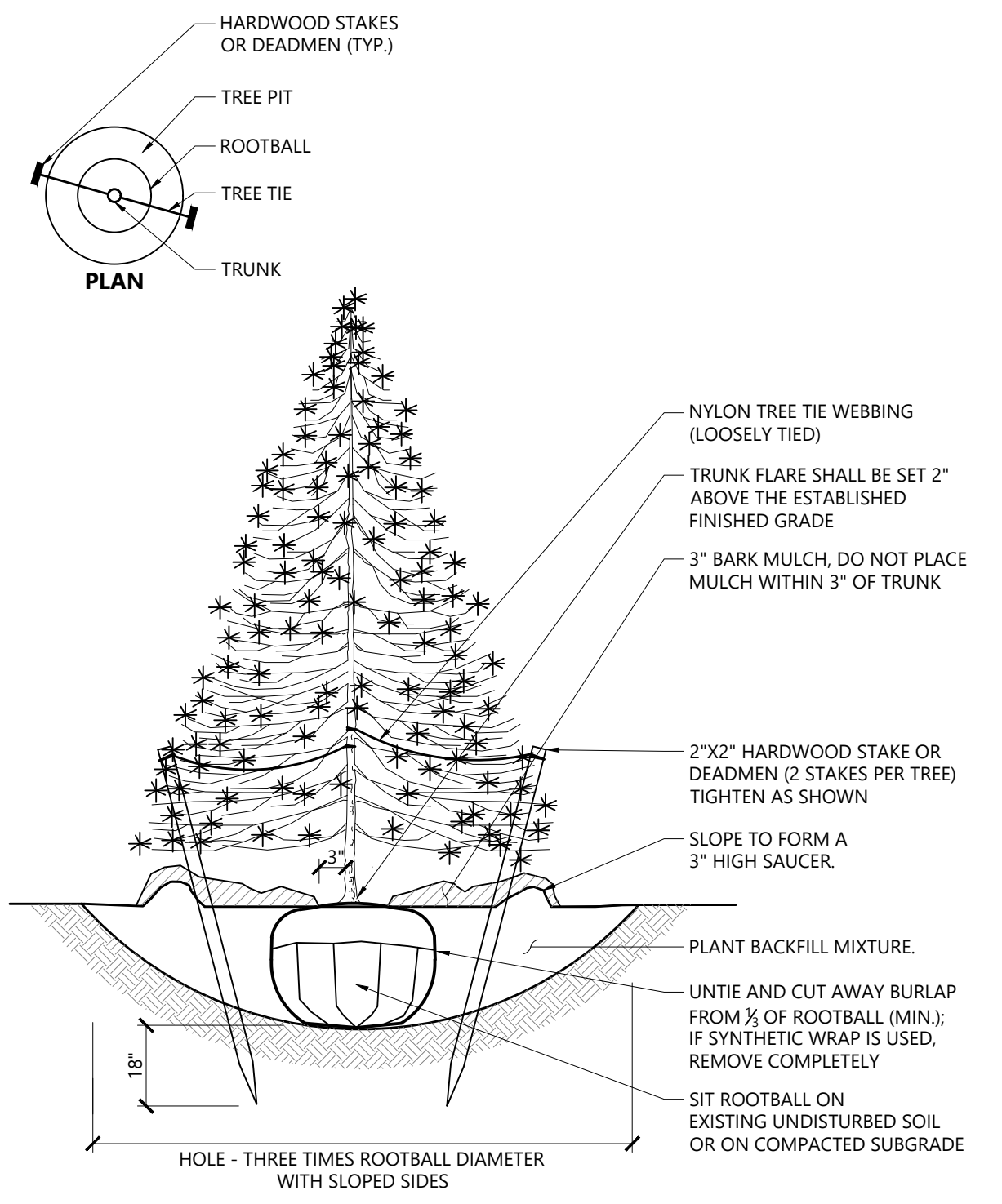
Perennial and Ornamental Grass Planting 1/16
N.T.S. Source: VHB LD_618



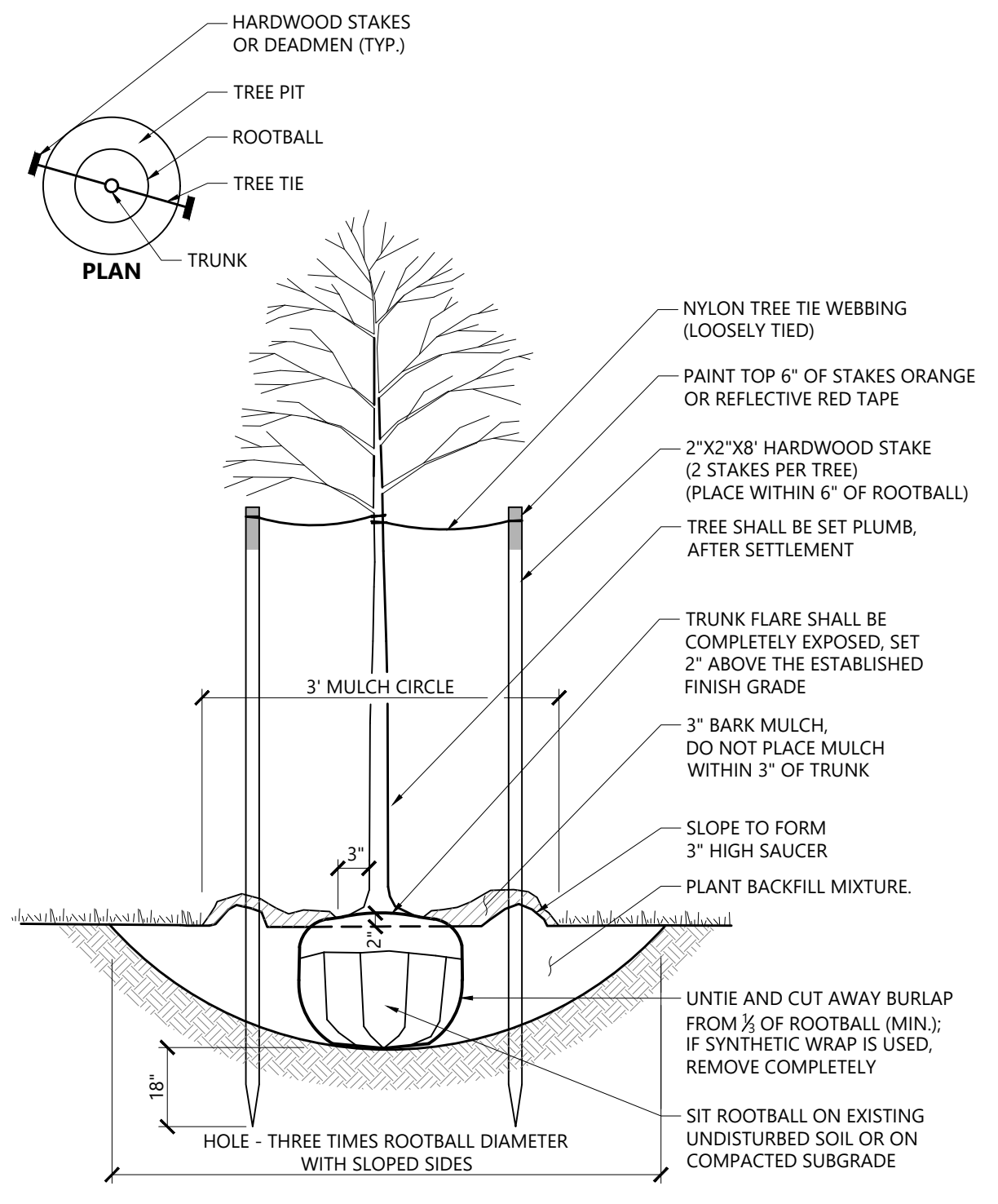
Shrub Bed Planting 1/16
N.T.S. Source: VHB LD_601



Multistem Tree Planting 9/21
N.T.S. Source: VHB LD_606



Evergreen Tree Planting 9/21
N.T.S. Source: VHB LD_604



Tree Planting (For Trees Under 4" Caliper) 9/21
N.T.S. Source: VHB LD_602

Coca-Cola Site
9 B Street
Needham, Massachusetts 02494

No.	Revision	Date	Appr'd

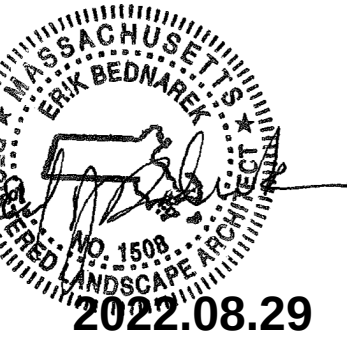
Designed by: _____ Checked by: **FD**
Issued for: _____ Date: **August 29, 2022**

Site Plan Review

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Planting Details

Drawing Number



An architectural rendering of a large, modern industrial building, identified by the Coca-Cola logo on its facade. The building features a long, low profile with a grey metal roof and a dark base. A prominent red Coca-Cola script logo is mounted on a dark vertical section of the building. To the right, another vertical section displays a red silhouette of a person in a uniform. The building is surrounded by a large, dark asphalt parking lot with yellow parking lines. Several cars are parked in the lot, including a white SUV, a black sedan, and a silver sedan. A green lawn area with some trees and shrubs is visible to the left of the parking lot. The sky is blue with scattered white clouds.

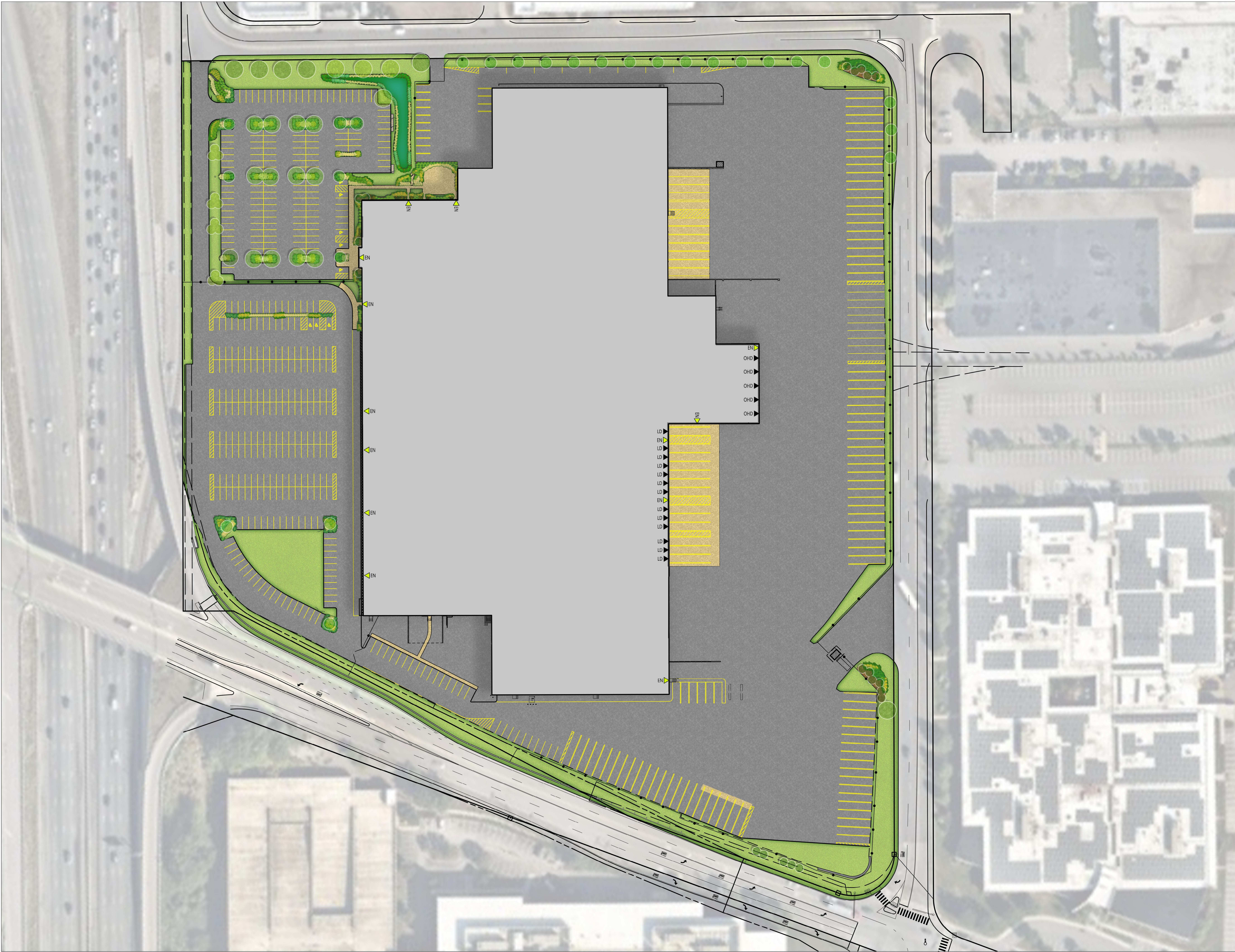
 **Design Group**

DESIGN GROUP FACILITY SOLUTIONS, INC.
5 CHENELL DRIVE, BOX 3, CONCORD, NEW HAMPSHIRE 03301
PHONE: (603) 225-0010 FAX: (603) 225-0761

[illegible]

CLIENT	COCA-COLA BEVERAGES NORTHEAST, INC. ONE EXECUTIVE PARK DR., SUITE 330 BEDFORD, NH
PROJECT	SALES CENTER RENOVATIONS NEEDHAM HEIGHTS, MA
DRAWING TITLE	PROPOSED RENDERING FROM RT 128

PROJECT NO. 2103141	
ISSUED	00/00/00
SCALE	AS NOTED
DRAWN BY	CN
DRAWING NO.	
GA4.1	
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Drawing Title

Color Site Plan

Drawing Number

