CITY OF PROVIDENCE BUILDING BOARD OF REVIEW

INSPECTION & STANDARDS RECEIVED

APPLICATION APPEALING THE DECISION OF THE BUILDING OFFICIAL, OR APR 07 2025 FOR A VARIATION OR MODIFICATION FROM CERTAIN SECTIONS OF THE RI STATE BUILDING CODE

Che	Check Type of Building Board Application: Variance – variation from, or modification of, certain sections of the RI State Building Code				
	Appeal of a decision of the Building Off				
	If a section of the application is not appl	icable, please indicate this by using N/A in that field.			
Δn	Joseph J. Watson, P.E Jense	Applicant Mailing Address			
	•				
	ail:	Street: 117 Metro Center Blvd, Ste 1002			
Pho	one: 401-736-8992	City, State, Zip: Warwick, RI 02886			
Ow	ner:	Owner Mailing Address			
	ail:	Street: South Street Landing, 350 Eddy St, Bo			
Pho	one:	City, State, Zip: Providence, RI 02903			
	pellant:ail:	Appellant Mailing Address Street:			
	one:	City, State, Zip:			
	orney:				
Em	ail:	Street:			
Pho	one:	City, State, Zip:			
1.	Subject Department of inspection + Stand	ards Permit Number:BLDG-24-1743			
	Street Address of Subject Property: 233	Richmond Street			
2.	Assessor's Plat and Lot Numbers of Subject	et Property: 021 - Awaiting Lot Consolidation			
3.	Base Zoning District(s):				
	Overlay District(s): I-3E, I-3H				

4.	Date owner purc	chased the Propert	y: <u>1/4/2007</u>		
5.	Building constru	ction type(s): Type	e IB		
6.					
	Lot #	Width	Depth	Total area	sq. ft.
		Width			
7.	Size of existing s	tructure(s) located	on the Property:		
	Principal Structur	e:	Accessory Struc	ture:	
	Area of Footprint	N/A			
	Overall Height N	N/A /A	Overall Height	N/A	
	# of Stories N/A		# of Stories N/A	1	
8.	Size of proposed	structure(s) locate	d on the Property:		
	Principal Structur	, ,	Accessory Struc	ture:	
		36522		nt N/A	
	Overall Height 1	55.6	Overall Height	N/A	
	# of Stories 8		# of Stories N/A		
9.	Present Legal Zoi	ning Use of the Pro	perty: Educational Fac	cility - University or Col	lege
10.	Proposed Zoning	Use of the Propert	v: Educational Facility	· - University or College)
		•			
11.	Number of Parki	ng Spaces:			
	# of existing space	es <u>26</u>	# of proposed sp	paces 5	
12.		· · · · · · · · · · · · · · · · · · ·	ncerning the Property u	nder any of the followin	g:
	Providence	Zoning Ordinance	RI State Bu	ilding or Property Mainte	enance Code(s)
13.	Summarize all ch	anges proposed foi	the Property (use, cons	struction/renovation, sit	e alteration):
	Construct a new	/ 8-story high-rise	facility to support Brov	wn University. The build	ding will be a
				ground level. It will hou	
				ment enclosure, and b	oth
	nazardous and i	non-hazardous ma	ateriais storage.		
14.	If application is fo	r variance, list RI S	tate Building Code Secti	ions from which a varian	iversity or College sity or College of the following: Property Maintenance Code(s renovation, site alteration): rsity. The building will be a evel. It will house sting rooms, a loading and
5. 6. 7. 8.		•	-		_
	1011.8				
		V			:
	·				
					· · ·

QUESTIONS 15 AND 16 TO BE ANSWERED ONLY IF APPLICATION IS AN APPEAL

12. IF a	application is an appeal of a decision of the Building Official, please indicate if:
	Appellant is the Owner of the subject Property
	Appellant is an aggrieved party that is not the Owner of the subject Property
	application is an appeal of a decision of the Building Official, please indicate the grounds for the peal:
Re	efer to attached document.
_	
15	MORE ROOM IS NEEDED TO ANSWER ANY OF THE ABOVE QUESTIONS, PLEASE SUBMIT AN

The undersigned acknowledge(s) and agree(s) that members of the Building Board of Review and its staff may enter upon the Property in order to view the Property prior to any hearing on the application.

ADDENDUM TO THIS APPENDIX WITH COMPLETE RESPONSES.

The undersigned further acknowledge(s) that the statements herein and in any attachments or appendices are true and accurate, and that providing a false statement in this application may be subject to criminal and/or civil penalties as provided by law, including prosecution under the State and Municipal False Claims Acts. Owner(s)/Applicant(s) are jointly responsible for any false statements.

Owner(s):	Applicant(s)/Appellant(s):
Brown University	Jensen Hughes
Type Name	Type Name
Paul Dietel	Joseph J. Watson
Signature Signed by: 04/02/2025 4800000FF978431	10:17 AM EDT Joseph J. Watson
Type Name	Type Name

All applicable requirements listed and described on the Instruction Sheet shall be met or this application will not be considered complete.

Please contact the Office of the Boards of Review with questions:

Telephone – 401-680-5375

Email – bsath@providenceri.gov

A fillable PDF copy of this document can be found online at the Boards of Review webpage linked from the Department of Inspection + Standards: https://www.providenceri.gov/inspection-standards/



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melissa enos1@brown.edu

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Signer Events

Paul Dietel

paul dietel@brown.edu

AVP Planning Design and Construction

Brown University

Security Level: Email, Account Authentication

(None)

Paul Dietel 486D6A6FF578431

Signature Adoption: Pre-selected Style Using IP Address: 192.91.235.193

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Carbon Copy Events

Certified Delivery Events

Bill Lynch

Bill_Lynch@brown.edu

Brown

Security Level: Email, Account Authentication

(None)

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Witness Events

Signature

Timestamp

Notary Events

Signature

Timestamp

Envelope Summary Events

Envelope Sent

Certified Delivered Signing Complete Completed

Payment Events

Status

Hashed/Encrypted Security Checked Security Checked

Security Checked

Status

Timestamps

4/2/2025 10:16:05 AM 4/2/2025 10:17:44 AM 4/2/2025 10:17:48 AM

4/2/2025 10:17:48 AM

Timestamps



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If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

Consequences of changing your mind

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. Further, you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

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Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through the DocuSign system all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

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You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:

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To let us know of a change in your email address where we should send notices and disclosures electronically to you, you must send an email message to us at adm_cgrossi@brown.edu and in the body of such request you must state: your previous email address, your new email address. We do not require any other information from you to change your email address.

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To inform us that you no longer wish to receive future notices and disclosures in electronic format you may:

i. decline to sign a document from within your signing session, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;

ii. send us an email to adm_cgrossi@brown.edu and in the body of such request you must state your email, full name, mailing address, and telephone number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

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To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please confirm that you have read this ERSD, and (i) that you are able to print on paper or electronically save this ERSD for your future reference and access; or (ii) that you are able to email this ERSD to an email address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format as described herein, then select the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

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- You can access and read this Electronic Record and Signature Disclosure; and
- You can print on paper this Electronic Record and Signature Disclosure, or save or send this Electronic Record and Disclosure to a location where you can print it, for future reference and access; and
- Until or unless you notify Brown University as described above, you consent to receive
 exclusively through electronic means all notices, disclosures, authorizations,
 acknowledgements, and other documents that are required to be provided or made
 available to you by Brown University during the course of your relationship with Brown
 University.

REPORT

BROWN UNIVERSITY ILSB

Alternative Design Request



Rhode Island State Building Code (RISBC) Section 104.11 details that an alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of the RISBC, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in the RISBC in quality, strength, effectiveness, fire resistance, durability and safety. Alternative designs are requested to be utilized in the new Integrated Life Science Building located at 233 Richmond Street in Providence. The alternative designs requested and supporting documentation are outlined within this report.

PREPARED FOR

Providence Building 560 Jefferson Blvd, Warwick, RI 02886

Date: 03/14/2025

PREPARED BY

Jensen Hughes 117 metro Center Blvd. Suite 1002 Warwick, RI 28006



1.0 Introduction

Rhode Island State Building Code (RISBC) Section 104.11 details that the provisions of the RISBC are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by the RISBC, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

JENSEN HUGHES, on behalf of Brown University, requests the use of alternative designs in the new Integrated Life Sciences Building 233 Richmond Street in Providence. This document is intended to outline the requests and provide supporting documentation that will assist in the approval of the request.

2.0 Project Description

The project will include constructing a new building, the Integrated Life Sciences Building (ILSB), at 233 Richmond Street in Providence, Rhode Island. The ILSB will be owned by Brown University and will be used to serve as a research building with spaces open to the public on the ground level. The ILSB will house non-production laboratories, supporting office spaces, large meeting rooms, a loading and shipping bay, a story used entirely for mechanical equipment enclosure, and both hazardous and non-hazardous materials storage. Future fit-out of upper levels of the building is expected to be limited to similar related activities currently designated for Levels 2 through 7 – non-production laboratory research and development tenants.

2.1 APPLICABLE CODES

The building is permitted under the following codes and standards:

- + Rhode Island State Building Code, based on the amended 2018 edition of the *International Building Code* (RISBC-1)
- The Rhode Island Fire Safety Code (RIFSC) which includes:
 - Rhode Island Fire Code (RIFC: NFPA 1 2018) as referenced by the Rhode Island State Fire Safety Code, and
 - Rhode Island Life Safety Code (RILSC: NFPA 101 2018) as referenced by the Rhode Island State Fire Safety Code.

2.2 BUILDING DESCRIPTION

The new building will be eight (8) stories in height above grade with a mechanical penthouse. The highest occupied level of the building will be more than 75 ft above the lowest level of fire department vehicle access. As such, the building will be classified as a high-rise building.

The building will be built of Type IB construction in accordance with the RISBC and Type II (222) in accordance with NFPA 220, as referenced by the RIFSC. This building will comply with the RISBC-1 as a non-separated

mixed-use Group A/B/F-2/S-2/S-1 occupancies. The building will be classified as a mixed occupancy Business, General Industrial, Storage, and Assembly occupancy per RILSC. The main features / spaces and occupancy classification of the building are outlined in Table 1 below:

Table 1: Use and Occupancy Classifications

Area	RISBC-1	RILSC
Gallery/ Lobby	Group A-3	Assembly
Public Forum, 30 people meeting room	Group A-3	Assembly
Café	Group B	Business
Locker Rooms	Group B	Business
Circulation Areas & Corridor Seating (Lab Floors)	Group B	Business
Collaboration & Conference Rooms	Group B ¹	Business
Offices, Workstations	Group B	Business
Computational Research Spaces	Group B	Business
Research Lab Stations & Research Support	Group B	Business ²
Animal Holding	Group B	Business
Vivarium Procedural Rooms	Group B	Business
Vivarium Lab and specialty rooms	Group B	Business
Educational Lab	Group A-3	Assembly
Human Subject	Group B	Business
Shipping/ Receiving area	Group S-2	Storage
Storage, moderate-hazard materials (Combustible)	Group S-1	Storage ³
Storage, low-hazard materials (non-combustibles)	Group S-2	Storage
Radioactive Waste, Flammable Chemicals, Flammable chemical waste, Infectious Waste	Group H-3/4	High Hazard Storage
Mechanical equipment	Group F-2	Industrial

Notes:

- A room or space used for assembly purposes with an occupant load of less than 50 persons and accessory to another occupancy shall be classified as a Group B or part of that occupancy [RISBC 303.1.2, RILSC A.6.1.2.1].
- Per NFPA 45 5.3, Class Å, B, or C laboratory units shall be classified as Industrial occupancies. Class D laboratory units shall be classified as Business occupancies.
- 3. Storage of hazardous materials not exceeding permitted maximum allowable quantities (MAQ)

2.3 BUILDING SAFETY FEATURES

The building will be equipped with several fire safety features and systems. The major functions and systems include the following as detailed in Table 2.

Table 2: Fire Protection Features

Fire Prote	ction Feature
Automatic S	prinkler System
Dry Sprir	kler System
Standpi	pe System
Fire Ext	inguishers
	n System with Emergency Communication
Fire Com	mand Center
Smoke Control Syster	n for Stair Pressurization
Emergeno	y Generators
Emergency Lig	hts and Exit Signs

3.0 Alternative Design Request

Jensen Hughes, on behalf of Brown University, requests the following alternative designs to be utilized in the new ILSB located at 233 Richmond Street in Providence. The alternative designs and supporting documentation are summarized in Table 3 and outlined in detail below:

Table 3: Alternative Design Requests

Alternative Design	System	Item Addressed	Location	Code Section
1	Exit Construction	Spiral Stair Vertical Rise	5th and 6th Floor	RISBC Section 1011.8

3.1 DESIGN REQUEST 1: SPRIAL STAIRCASE

A convenience spiral staircase has been incorporated into the design plans between the 5th and 6th floors. The spiral stair is not a required means of egress and is provided for convenience only to connect the open portions of the two (2) floor levels.

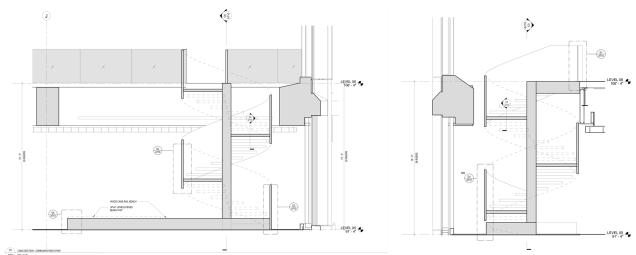


Figure 1 - Communicating Stair View to East

Figure 2 - Section to South

Code Requirements

The RISBC requires all new stair assemblies to have a maximum height of 12 ft between landings Section 1011.8. "A flight of stairs shall not have a vertical rise greater than 12 feet (3658 mm) between floor levels or landings."

Request

It is requested to use an alternative design for the construction of the spiral staircase. We request that the spiral staircase be permitted to include a 15 ft height between landings.

Alternative Design Methods

The following alternative design methods were utilized to justify the request:

- Engineering Evaluation
- Literature Review

Discussion

The elevation difference between the 5th floor and the 6th floor is 15-feet. The proposed design includes a continuous run of the spiral stairs without a landing. The Commentary of the 2018 IBC notes the following about landing spacing: "The limited height provides a reasonable interval for users with physical limitations to rest on a level surface and also serves to alleviate potential negative psychological effects of long and uninterrupted stairway flights." Unlike traditional stairs with straight runs, or switchbacks, the proposed spiral stairs do not include long and uninterrupted stairway flights. The installation of intermediate landings introduces a technical difficulty for maintaining proper headroom in the spiral stairway.

Further, as this is not a means of egress, use of the stair is not required to exit the building. There is an exit stair within 25-ft of the spiral stair.

4.0 Conclusion

The project will include constructing a new building, the Integrated Life Sciences Building (ILSB), at 233 Richmond Street in Providence, Rhode Island. Rhode Island State Building Code (RISBC) Section 104.11 details that the provisions of the RISBC are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by the RISBC, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

JENSEN HUGHES, on behalf of Brown University, requests the use of alternative designs in the new ILSB located at 233 Richmond Street in Providence. The proposed alternative designs are detailed above. Based on the information outlined in this report, the proposed configurations provide an equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety over those prescribed by the RISBC.

- End of Report -

Jensen Hughes appreciates the opportunity to assist Brown University. If you have any questions, please contact me at 401-214-3168 or jwatson@jensenhughes.com.

Sincerely,

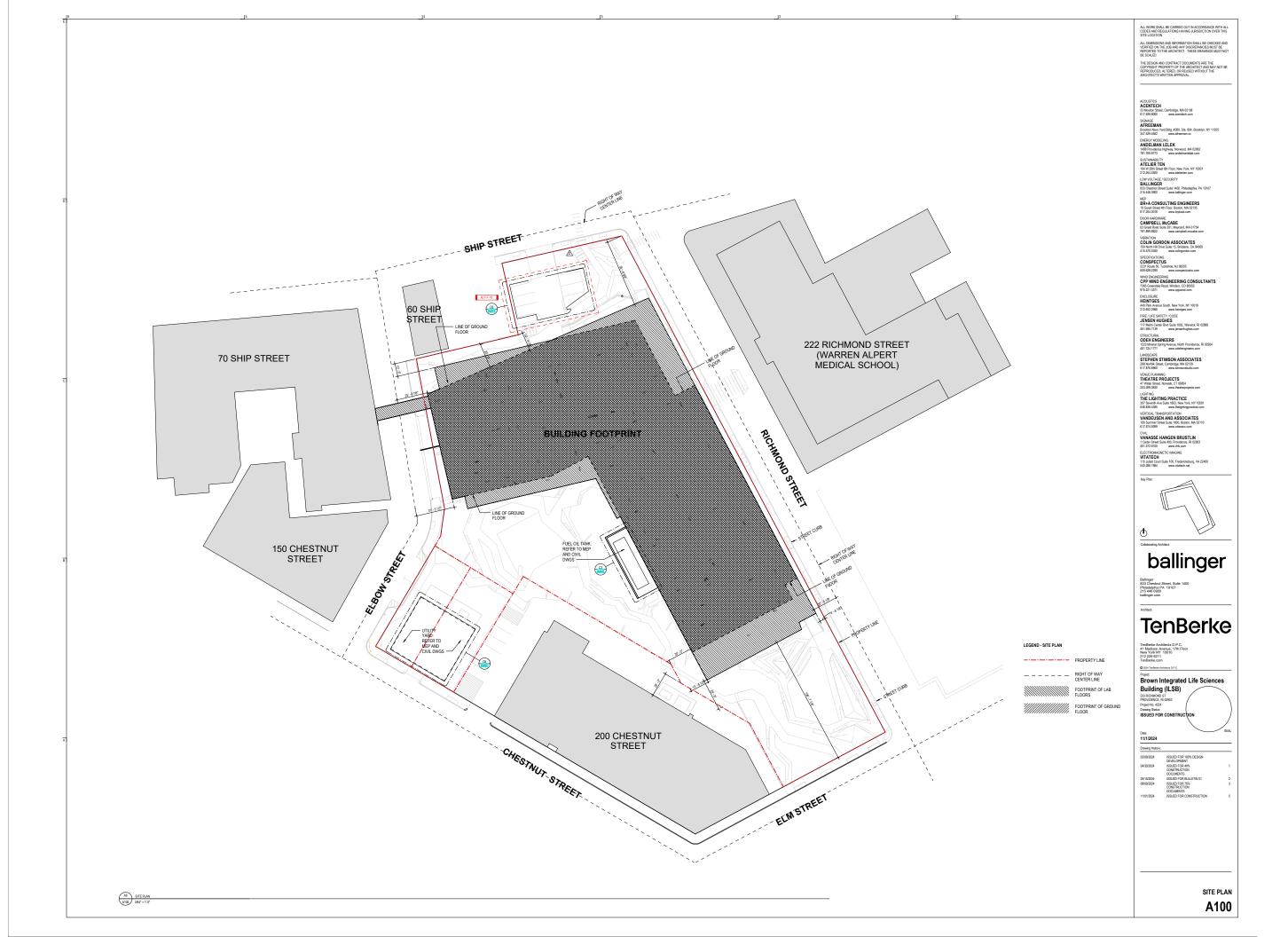
JENSEN HUGHES

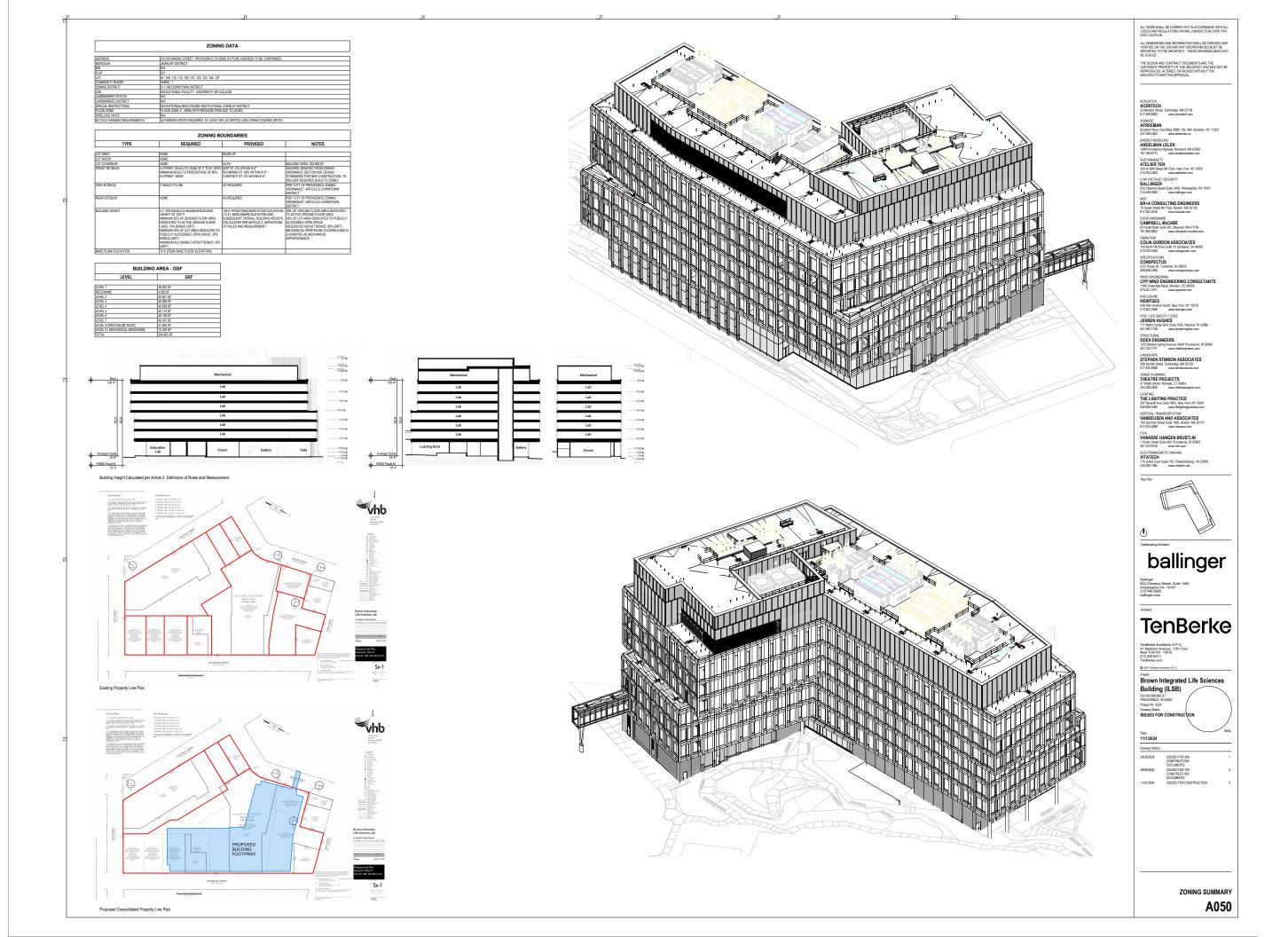
Prepared by:

Joseph J. Watson, P.E.

Ga. J. With

Principal Fire Protection Engineer





BRILLING COSES.

- SICH - PROCES IS, AND STATE BUILDING CODE (RISBO,) WHICH ADOPTS AND AMERICS THE 2018 INTERNATIONAL BUILDING CODE

- SICH - PROCES IS, AND STATE FUNDENCE OF RISBO, WHICH ADOPTS AND AMERICS THE 2018 INTERNATIONAL PURMENCE CODE

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- SICH - PROCES IS, AND STATE IS EXCHANGED CODE (RISBO,) WHICH ADOPTS AND AMERICS THE 2018 INTERNATIONAL PLANS

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FIRE SAFETY CODES:

RINDID ISLAND FIRE CODE (RIFC), WHICH ADOPTS AND AMENDS THE 2018 NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 1, FIRE CODE
RINDID ISLAND LIFE SAFETY CODE (RILCS), WHICH ADOPTS AND AMENDS THE 2018 NFPA 101, LIFE SAFETY CODE

2. THE CONTRACTOR SHALL NOTIFY THE RELEVANT SPECIAL INSPECTOR IN WRITING AT LEAST 72 HOURS BEFORE THE COMMENCEMENT OF ANY WORK REQUIRING SPECIAL INSPECTION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR, AND BEAR RELATED COSTS TO ASSURE THAT ALL CONSTRUCTION OR WORK SHALL REMAIN ACCESSIBLE AND EXPOSED FOR INSPECTION PURPOSES UNTIL THE REQUIRED INSPECTION IS COMPLETED.

4 INSPECTIONS AND TESTS PERFORMED LINDER "SPECIAL INSPECTION" SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO COMPLY WITH THE CONTRACT DOCUMENTS.

5. THE CONTRACTOR MUST COORDINATE WITH THE OWNER TO PROVIDE ACCESS AND SCHEDULE THE WORK FOR INSPECTION BY THE SPECIAL INSPECTOR.

6. 2019 RHODE ISLAND BUILDING CODE SPECIAL INSPECTIONS:

PERMITTING APPROACH

ON-SITE FUEL STORAGE

TWANS THE SELECTION PROVIDED BY ILL 2001 HEAD PROGRAMMY TO THE SELECTION DESCRIPTION FOR REF SELECT.

1 FORMER THAN TO RECORD HEAD LAND THAN BOOKERS HER, WITHOUT BOTH AND PROVIDED HEAD PROVIDED HEAD

DOUBLE INVALED TANK INLL REDUCE THE NEED FOR SPILL CONTROL. PER FM GLOBAL DATASHEET 7.88. THE TANK HAS A CAPACITY OF 25,000 GALLONS, HAS AN OUTER DAMETER OF 10-6", A HEIGHT OF 11-4", AND A LENGTH OF 42 - THESE TANKS AND LET ZONE THE TANK HAS A CAPACITY OF 25,000 GALLONS, HAS AN OUTER DAMETER OF 10-6", A HEIGHT OF 11-4", AND A LENGTH OF 42 - THESE TANKS AND LET ZONE THE TANK HAS A CAPACITY OF 25,000 GALLONS, HAS AN OUTER DAMETER OF 10-6", A HEIGHT OF 11-4", AND A LENGTH OF 42 - THESE TANKS AND LET ZONE THE TANK HAS A CAPACITY OF 25,000 GALLONS, HAS AN OUTER DAMETER OF 10-6", A HEIGHT OF 11-4", AND A LENGTH OF 42 - THESE TANKS AND LET ZONE THE TANK HAS A CAPACITY OF 25,000 GALLONS, HAS AN OUTER DAMETER OF 10-6", A HEIGHT OF 11-4", AND A LENGTH OF 42 - THESE TANKS AND LET ZONE THE TANK HAS A CAPACITY OF 25,000 GALLONS, HAS AN OUTER DAMETER OF 10-6", A HEIGHT OF 11-4", AND A LENGTH OF 42 - THESE TANKS AND LET ZONE THE TANK HAS A CAPACITY OF 25,000 GALLONS, HAS AN OUTER DAMETER OF 10-6", A HEIGHT OF 11-4", AND A LENGTH OF 42 - THESE TANKS AND LET ZONE THE TANK HAS A CAPACITY OF 25,000 GALLONS, HAS AN OUTER DAMETER OF 10-6", A HEIGHT OF 11-4", AND A LENGTH OF 42 - THESE TANKS AND LET ZONE THE TANK HAS A CAPACITY OF 25,000 GALLONS, HAS AN OUTER DAMETER OF 10-6", A HEIGHT OF 11-4", AND A LENGTH OF

THE SECOND-FLOOR SHELL SPACE WILL HAVE A BRODGE CONNECTING THE LISB TO THE THRO LEVEL OF THE ADJACENT BUILDING LICKLED AT 70 SHIP STREET. THIS CONNECTING BRIDGE WILL SERVE AS A HORIZONTAL EXIT. HORIZONTAL DITS ARE NOT PERMITTED TO SERVE AS THE OUT MEMORY OF EGRESS FROM A PORTION OF A BUILDING, AND IN PORTIONS OF A BUILDING REQUIRING MORE THAN ONE DITS AND HORIZONTAL DITS AND A HORIZONTAL DITS (HORIZONTAL DITS AND HORIZONTAL DITS AND HORIZONTA

THERE ARE TWO 2000 KW DIESEL POWERED GENERATORS LOCATED ON THE ROOF. THESE GENERATORS ARE PROVIDING THE ELECTRICAL POWER TO THE EMERGENCY LIGHTING AND EXIT SIGN SYSTEM UMINATION OF THE MEANS OF EGRESS INCLUDING EMERGENCY LIGHTING IS REQUIRED (RISBC-1 §1008.1; RILSC §7.8; §7.9).

EMERGENCY EGRESS PATH LIMINATION IS REQUIRED IN DOTI ACCESS CORRODORS. PASSASSIANS, AND AGES IN BY HOURS AND SPACES HAND HAVE REQUIRED TO HAVE TWO OR MORE MEANS OF EXCESS CORRODORS. AND ATT ENCASS CORRODORS. AND EXTENSIONS, AND AGES THE NORMAN AND EXTENSIONS AN

EXITS AND EXIT ACCESS MUST BE ILLUMINATED AT A MINIMUM OF 1 FOOT-CANDLE AT THE FLOOR LEVEL IN ACCORDANCE WITH RISBC-1 \$1008.2.1 AND RILSC \$7.8 AND \$7.9. EMERGENCY LIGHTING IS REQUIRED TO PROVIDE POWER FOR A DURATION OF NOT LESS THAN 90 MINUTES PER RISBC-1 §1008.3 AND RILSC §7.9.2.

THE RIFC, RISBC-1 AND NFPA 45 REGULATE THE QUANTITIES OF HAZARDOUS MATERIALS UNDER TWO COMPLIANCE APPORACHES LISTED BELOW

CONTROL AREA APPROACH, UNDER WHICH HAZARDOUS MATERIALS ARE LIMITED IN QUANITITY BY FIRE COMPARTMENT WITHIN THE BUILDING

GROUP H, MIGH MAZARD OCCUPANCY APPROACH, IF THE THRESHOLD QUANTITIES WITHIN CONTROL AREAS MUST BE EXCEEDED FOR THE INTENDED USE OF THE SPACE, ADDITIONAL PROTECTIONS ARE REQUIRED TO SUPPORT THE MOREO QUANTITIES OF HAZARDOUS MATERIALS.

THE BUILDING IS TO BE DESIGNED, INCLUDING FUTURE FIT OUT ACTIVITY, IN ACCORDANCE WITH THE CONTROL AREA APPROACH. ALL HAZARDOUS MATERIAL QUANTITIES MUST BE WITHIN STPULATED MAD LIMITS IN ADDITION TO THE CONTROL AREA APPROACH, THE PROPOSED LIBERGIST AND SHOCKS IN THE BUILDING WILL NEED TO COMPLY WITH THE REGULATORY REQUIREMENTS FOUND IN MPPA 45 PET THE RIFE IZENDED THEORY GROUPE FOUNDED INCENSES 1.8 MAD ADDITIONAL TO THE PROPOSED LIBERGIST AND A

FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS					
BUILDING ELEMENT TYPE IB FIRE-RESISTANCE RATING (HOURS) FM GLOBAL REQUIREMENTS					
MARY STRUCTURAL FRAME	2	9			
RING WALLS - EXTERIOR	2	2			
RING WALLS - INTERIOR	2	2			
IBEARING WALLS - EXTERIOR	FIRE SEPARATION DISTANCE DEPENDENT	FIRE SEPARATION DISTANCE DEPENDENT			
IBEARING WALLS - INTERIOR	0	0			
IOR CONSTRUCTION AND ASSOCIATED SECONDARY MBERS IOCIATED SECONDARY MEMBERS	2	2			
OF CONSTRUCTION AND COCIATED SECONDARY MEMBERS AND ASSOCIATED CONDARY MEMBERS	1	1			

RAME ELEMENTS SUPPORTING ROOF ONLY SHALL BE PERMITTED TO BE NO LESS THAN 1-HOUR FIRE-RESISTANCE RATE

REQUIRED FIRE RATED CONSTRUCTION							
BUILDING COMPONENT	FIRE RESISTANCE RATING	TYPE OF WALL	REQUIRED FIRE RATED SUPPORTING CONSTRUCTION				
	•						
STAIRWELL			YES				
SHAFT ENCLOSURE	2 HOURS	FIRE BARRIER	YES				
OCCUPANY SEPARATIONS	1 HOUR OR 2 HOURS	FIRE BARRIER	YES				
CONTROL AREAS	1 HOUR OR 2 HOURS	FIRE BARRIER	YES				

FIRE PROECTION RATINGS FOR OPENINGS				
TYPE OF ASSEMBLIY	REQUIRED FIRE PROTECTION RATING			
2-HOUR FIRE BARRIERS	11/2 HOURS			
2-HOUR ENCLOSURES FOR SHAFTS, INTERIOR EXIT STAIRWAYS	1 1/2 HOURS			
1-HOUR FIRE BARRIERS	34 HOUR			

USE AND OCCUPANCY CLASSIFICATIONS						
AREA NAME RISBC-1 RILSC						
GALLERY/LOBBY	GROUP A-3	ASSEMBLY				
PUBLIC FORUM, LARGE MEETING ROOM	GROUP A-3	ASSEMBLY				
CAFE	GROUP B	BUSINESS				
LOCKER ROOMS	GROUP B	BUSINESS				
CIRCULATION AREAS & CORRIDOR SEATING (LAB FLOORS)	GROUP B	BUSINESS				
COLLABORATION & CONFERENCE ROOMS	GROUP B	BUSINESS				
OFFICES, WORKSTATIONS	GROUP B	BUSINESS				
COMPUTATIONAL RESEARCH SPACES	GROUP B	BUSINESS				
RESEARCH LAB STATIONS & RESEARCH SUPPORT	GROUP B	BUSINESS				
ANIMAL HOLDING	GROUP B	BUSINESS				
VIVARIUM PROCEDURAL ROOMS	GROUP B	BUSINESS				
VIVARIUM LAB AND SPECIALTY ROOMS	GROUP B	BUSINESS				
EDUCATION LAB	GROUP A-3	ASSEMBLY				
HUMAN SUBJECT	GROUP B	BUSINESS				
SHIPPING/RECEILING AREA	GROUP S-2	STORAGE				
STORAGE, MODERATE HAZARD MATERIALS (COMBUSTIBLE)	GROUP S-1	STORAGE				
STORAGE, LOW-HAZARD MATERIALS (COMBUSTIBLE)	GROUP S-2	STORAGE				
WASTE, FLAMMABLE CHEMICALS, FLAMMABLE CHEMICAL WASTE, INFECTIOUS WASTE	GROUP H-3/4	HIGH HAZARD STORAGE				

A norm or space used for assembly purposes with an occupant load of less than 50 persons and accessory to another companey, shall be classified as a Group B or goard of that occupancy [RISSC 303.1.2, RLSC A.S. 12.1].

2. Per ISPR 45.3. Class A.B. or C. biochostry units shall be classified as fluidistic occupancies. Class D libroratory units shall be classified as Business occupancies.

3. Roman of Invasions companies and companies and companies and companies and companies. Class D libroratory units shall be classified as Business occupancies.

FULLY SPRINKLERED TYPE IB CONSTRUCTION								
TYPE 1B CONSTRUCTION GROUP A-3 GROUP B GROUP F-2 GROUP S-1 GROUP S-2 GROUP H-3 GROUP						GROUP H-4		
ALLOWABLE HEIGHT, IN FEET [RISBC-1 TABLE 504.3]	180 FT	180 FT	180 FT	180 FT	180 FT	160 FT	180 FT	
ALLOWABLE HEIGHT, IN STORIES [RISBC-1 TABLE 504.4]							8 STORIES	
ALLOWABLE AREA PER STORY [RISBC-1 TABLE 506.2]	UNLIMITED FT2	UNLIMITED FT2	UNLIMITED FT2				UNLIMITED FT2	
TABLE ALLOWARIE BUILDING AREA (DISSION 1 506 2 3)	LINE IMITED	LINE IMITED	LINI IMITED	EXPANSION CALCULATION REG	DESCRIPTIONS AREAS ARE AL	READY COMPLYING,	UNLIMITED	

BUILDING HEIGHT			
LOCATION	BH REQUIRED	BH PROVIDED	BH NOTES
GRADE PLAN ELEVATION	PER RIBC SECTION 201	18'-9" NAVD	
BUILDING ROOF ELEVATION		174'-4" NVAD	
BUILDING HEIGHT		155'-7"	

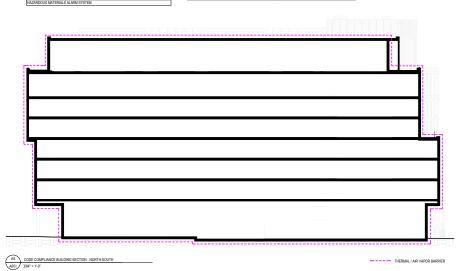
DEAD ENDS, COMMON PATH OF TRAVEL AND TRAVEL DISTANCE LIMITATIONS			
USE GROUP	DEAD END LIMIT (FT)	COMMON PATH OF TRAVEL LIMIT (FT)	TRAVEL DISTANCE LIMIT (FT)
•			
ASSEMBLY	20	20	250
BUSINESS	50	100	300
HIGH HAZARD (H-3)	20	25	150
IHIGH HAZARD (H-4)	20	25	175
INDUSTRIAL	50	100	250
STORAGE	100	100	400

MINIMUM REQUIREMENTS FOR WALL AND CEILING FINISHES				
OCCUPANCY TYPE	EXITS	CORRIDORS AND ENCLOSURES FOR EXIT ACCESS STAIRWAYS/RAMPS	OTHER ROOMS AND ENCLOSED SPACES	
GROUP A-3/ASSEMBLY	A	A, B	A, B, C (1)	
GROUP BIBUSINESS	A,B	A, B, C	A, B, C	
GROUP R-2/INDUSTRIAL	A.B	A, B, C	A, B, C	
GROUP HIHIGH HAZARD	A, B	A, B	A, B, C	
GROUP SISTORAGE	A.B	A, B, C	A, B, C	

Notes:

1. In assembly areas over 300 occupants, only Class A ad B interior finishes are permitted.

FIRST PROTECTION SYSTEM		HIGH-RISE BUILDING		
SYSTEM		REQUIREMENTS	PROVIDED IN THE BULDING	
AUTOMATIC SPRINKLER SYSTEM	_	FIRE COMMAND CENTER	YES	
AUTOMATIC CLASS I STANDPIPE SYSTEM		STAIR PRESSURIZATION	YES	
FIRE DETECTION SYSTEM		ELEVATOR LOBBY (USING SMOKE GUARD PRODUCT)	YES	
EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM		POST FIRE SMOKE REMOVAL SYSTEM	YES	
MUNICIPALLY CONNECTED FA SYSTEM		INCREASED BOND STRENGTH FOR SFRM	YES	
STAIRPRESURIZATION SYSTEM		LUMINOUS EGRESS PATH MARKINGS	YES	
HAZARDOLIS MATERIALS ALARM SYSTEM		•		



		Water C	losets			Drinking	Service
Level	Use Catergories	Female	Male	Lavatories	Showers	Fountains	Sinks
	Assembly (A-3)	10.139	5.272	6.59	0	2.638	1
	Business (B)	0.5	0.5	1	0	0.204	0
	Industrial (F-2)	0.237	0.237	0.475	0	0.119	0
Ground Floor+ Mezzanine	Storage (S-2)	0.368	0.368	0.735	0	0.074	0
	Hazard (H)	0.006	0.006	0.012	0	0.003	0
	Required	11.25	6.383	8.812	0	3.038	1
	Provided	18	3	12	0	4	2
	Business (B)	2.75	2.75	3.8	0	2.25	1
Level 2	Required	3	3	4	0	3	1
	Provided	8		8	0	4	1
	Business (B)	2.75	2.75	3.8	0	2.25	1
Level 3	Required	3	3	4	0	3	1
	Provided	8		8	0	4	1
	Business (B)	2.75	2.75	3.8	0	2.25	1
Level 4	Required	3	3	4	0	3	1
	Provided	8		8	0	4	1
Level 5	Business (B)	2.75	2.75	3.8	0	2.25	1
	Required	3	3	4	0	3	1
	Provided	8		8	0	4	1
Level 6	Business (B)	2.75	2.75	3.8	0	2.25	1
	Required	3	3	4	0	3	1
	Provided	8		8	0	4	1
	Business (B)	1.5	1.5	2.8	0	1	1
Level 7	Required	1.5	1.5	3	0	1	1
	Provided	5		5	0	2	1

FLOORS 7 CALCULATION IS BASED ON AN ANTICIPATED POPULATION OF NOT TO EXCEED 100 OCCUPANTS.

LIST OF ALTERNATIVE DESIGN REQUESTS			
TOPIC	STATE FIRE BOARD	PROVIDENCE BUILDING BOARD	
NFPA 150-2019 EDITION	YES	N/A	
TRAVEL DISTANCE ON VIVARIUM FLOOR EXCEEDS 100-FT (NFPA 150-2019, SECTION 8.7-1)	YES	NA	
RED LENS IN ANIMAL CARE AREAS (NFPA 150-2019, SECTION 13.3.4.3.2)	YES	N/A	
HVAC MANUAL SHUTDOWN (RILSC SECTION 9.2.5)	NO	NA	
SPIRAL STAIR VERTICAL RISE 15' (RISBC 1011.8 & RILSC 7.2.2.2.1.1)	YES	YES	
SHAFT TERMINATION IN LEVEL 8 MECH ROOMS	NO	NO - APPROVED BY MECHANICAL INSPECTOR	
MIXING OF GENERAL AND LABORATORY SCALE HAZARDOUS EXHUAST AIR OUTSIDE OF SHAFTS	NO	NO - APPROVED BY MECHANICAL INSPECTOR	
GENDER NEUTRAL RESTROOMS: CODE REQUIRES SEPARATE FACILITIES FOR EACH SEX (RISPC-403.2)	N/A	YES	

TYPE OF ASSEMBLY DETAILS - STEEL BEAM preserve. ROOF ASSEMBLY COMPOSITE DECK ASSEMBLY SLAB ON DECK SPRAY-ON FIREPROOFING COMPOSITE DECK ASSEMBLY - STEEL BEAM SPRAY-ON EIREPROOFING COLUMN, BEAM & TRUS: PRIMARY MEMBERS COLUMN, BEAM & TRU PRIMARY MEMBERS COLUMN, BEAM & TRUS PRIMARY MEMBERS

ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH ALL CODES AND REGULATIONS HAVING JURISDICTION OVER THIS SITE LOCATION.

ACOUSTICS
ACENTECH
33 Moulton Street, Cambridge, MA 02138
617.499.8000 www.acentech.com

SIGNAGE

AFREEMAN
Brooklyn Navy Yard Bldg, #280, Ste. 804, Brooklyn, NY 11205
347.529.4562 www.afreeman.co

ENERGY MODELING
ANDELMAN LELEK
1408 Providence Highway, Norwood, MA 02062
781.789.8773 www.andelmanlelek.com

SUSTAINABILITY

ATELIER TEN

104 W 29th Street 8th Floor, New York, NY 10001
212:254.4500 www.atefierten.com

MEP BR+A CONSULTING ENGINEERS 10 Guest Street 4th Floor, Boston, MA 02135 617.254.0016 www.biplusa.com

DOOR HARDWARE CAMPBELL McCABE

VIBRATION
COLIN GORDON ASSOCIATES
150 North Hill Drive Suite 15, Brisbane, CA 9400
415.570.0350 www.colingcrdon.com

SPECIFICATIONS
CONSPECTUS
2231 Route 50, Tuckahoe, NJ 08250
609.628.2390 www.conspectusinc.com

HEINTGES
440 Park Avenue South, New York, NY 10016
212.662.2966 www.heintges.com

FIRE / LIFE SAFETY / CODE
JENSEN HUGHES
117 Metro Center Blvd Suite 1002, Warwick, RI 02886
401.595,7139 www.jensenhughes.com

STRUCTURAL

ODEH ENGINEERS

1223 Mineral Spring Avenue, North Providence, RI 02904
401.724.1771 www.odehengineers.com

VENUE PLANNING THEATRE PROJECTS 47 Water Street, Norwalk, CT 06854 203.299.0830 www.theatreps

LIGHTING
THE LIGHTING PRACTICE
307 Seventh Ave Suite 1803, New York, NY 10001
646.838.4385 www.thelightingpractice.com

VERTICAL TRANSPORTATION
VANDEUSEN AND ASSOCIATES
100 Summer Street Suite 1600, Boston, MA (211)
617.574.5099 www.vdassoc.com

CIVIL

VANASSE HANGEN BRUSTLIN

1 Cadar Street Suite 400, Providence, RI (22903

401-272-8100 www.whb.com

ELECTROMAGNETIC IMAGING

VITATECH

115, Iuliad Court Suite 105 Fredericksburn VA

VITATECH 115 Juliad Court Suite 105, Fredericksburg, VA 22406 540.286.1984 www.vitatech.net



ballinger

TenBerke

TenBerke Architects D.P.C. 41 Madison Avenue, 17th Floor New York NY 10010 212 229 9211 TenBerke.com

Brown Integrated Life Sciences Building (ILSB)

11/1/2024

Drawing History: 02/09/2024 ISSUED FOR 100% DESIGN DEVELOPMENT 04/30/2024

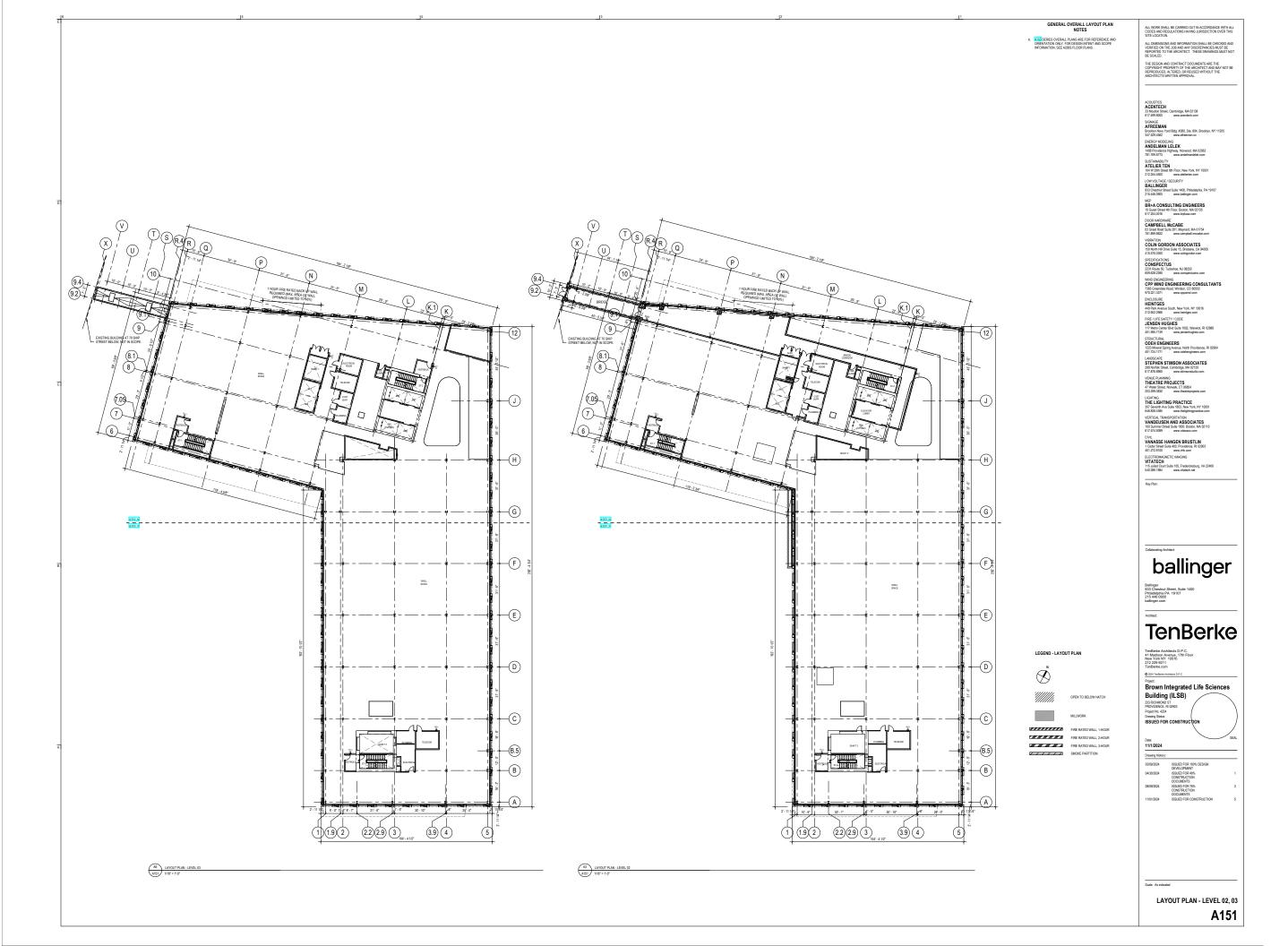
CODE COMPLIANCE SUMMARY

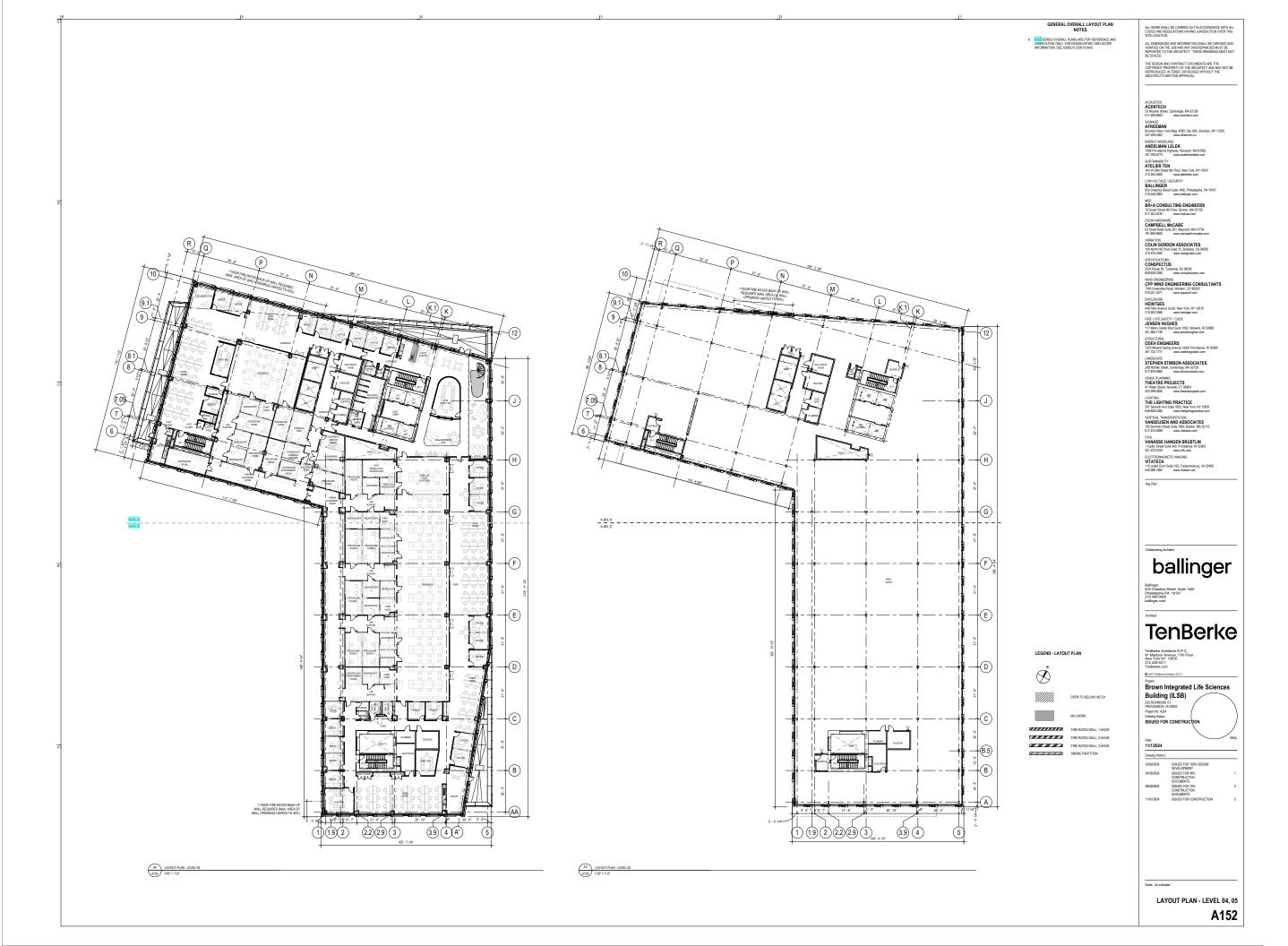
A051

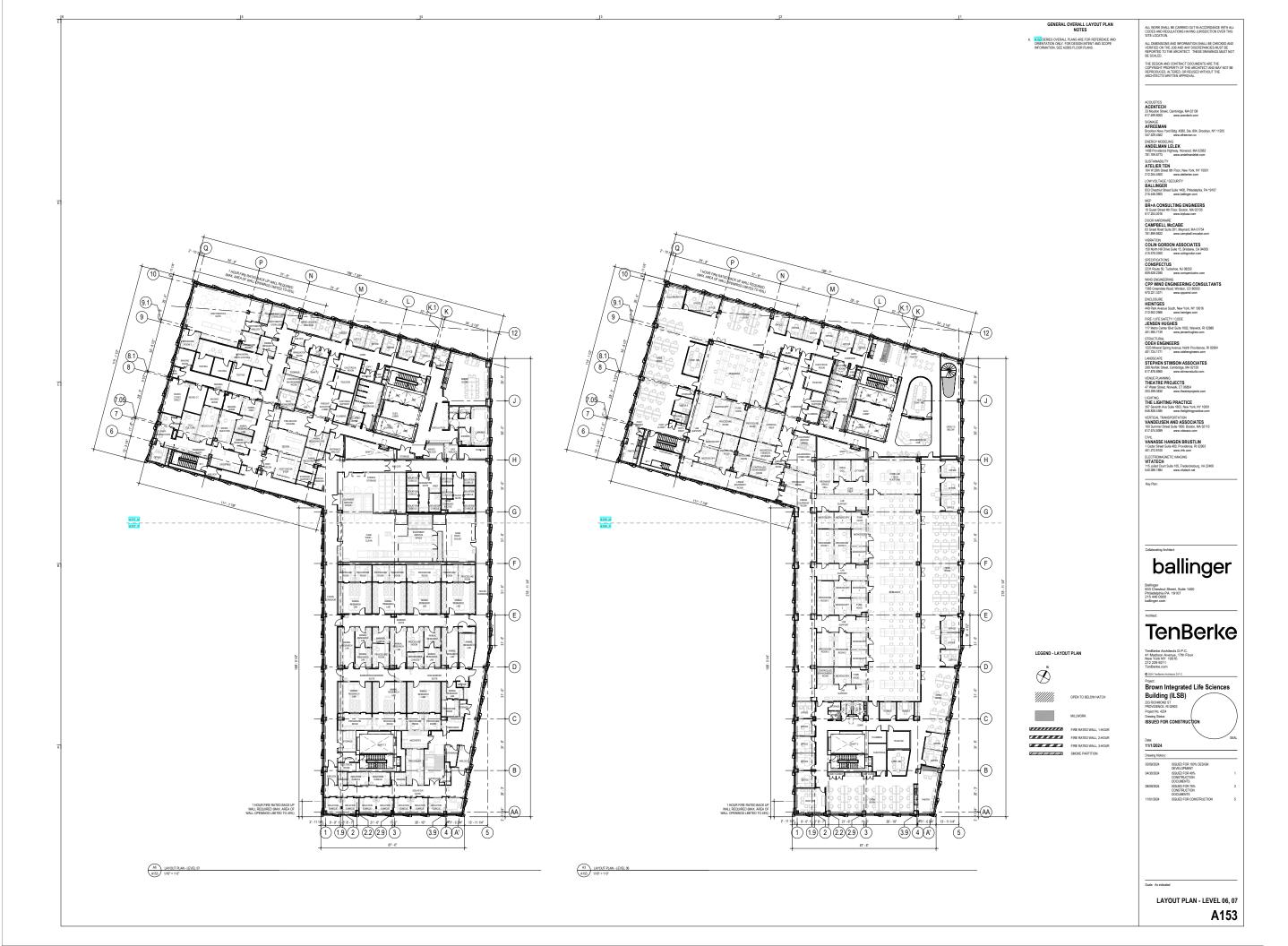
A6 CODE COMPLIANCE BUILDING SECTION - EAST-WEST 384" = 1"-0"

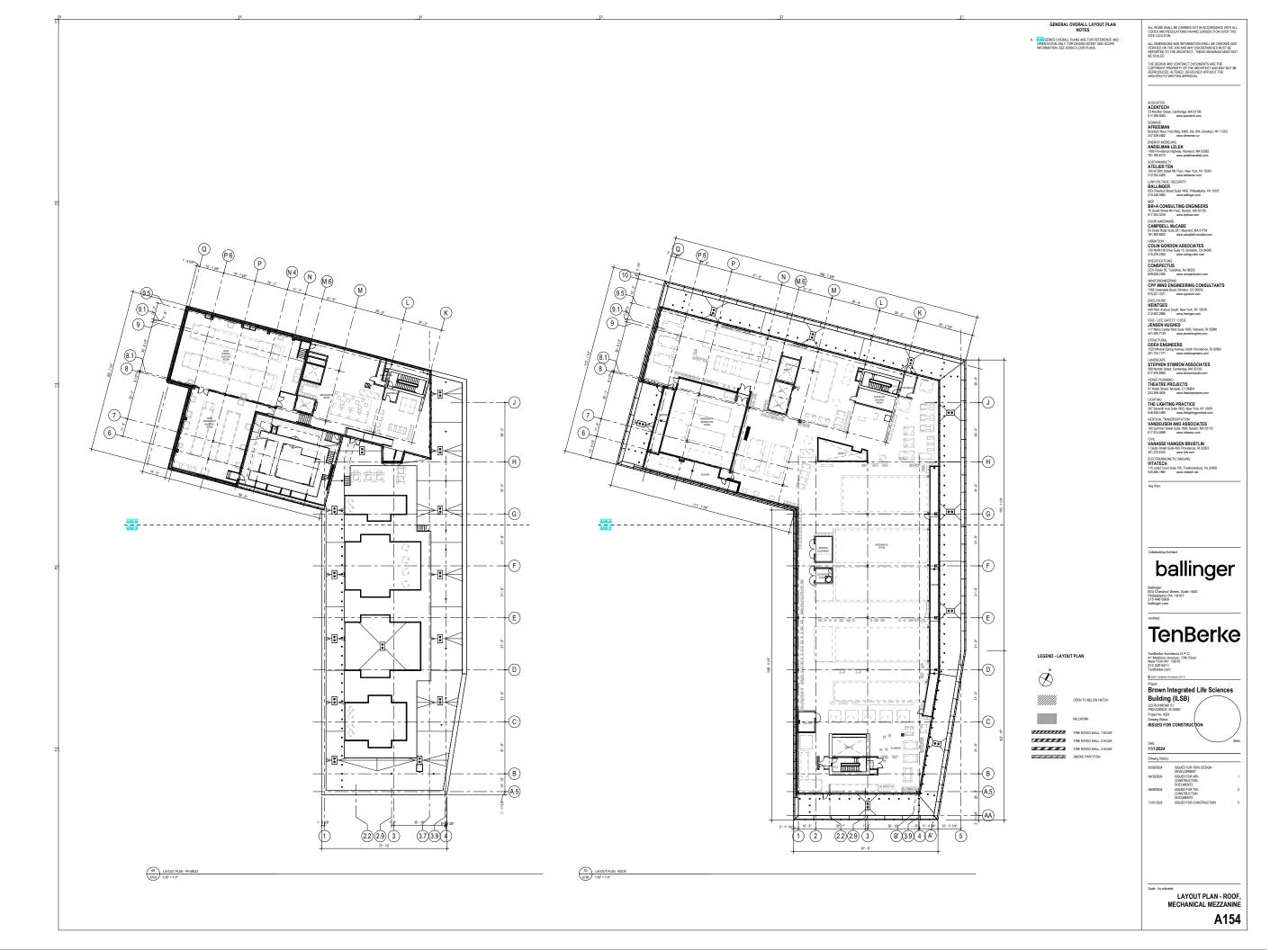
THERMAL / AIR VAPOR BARRIER











APPLICATION DATE NOTICE OF REFUSAL CITY OF PROVIDENCE APPLICATION NO. DEPT OF INSPECTIONS AND 11/27/2024 BLDG-24-511 **STANDARDS** OF PERMIT APPLICATION 444 Westminster Street -Providence, RI. 02903 DATE OF REFUSAL APPEAL FEE Joseph A. Doorley - Municipal Building 11/27/2024 \$440 LOCATION PAGE NUMBER 233 Richmond St. Providence, RI 02903 1 of 1 APPLICANT TITLE ADDRESS 65 Allerton St., Boston, MA 02119 Suffolk Construction Company, Inc. Applicant PROPERTY OWNER'S NAME PROPERTY OWNER'S FULL ADDRESS Brown University One Davol Sq Providence, RI 09203 THE APPLICATION FOR A CERTIFICATE OF OCCUPANCY FOR THE ABOVE LOCATION HAS BEEN REFUSED BECAUSE THE PROVISIONS OF THE

SCOPE OF PERMIT:

Part of the ILSB Project construction of a 7-story, approximately 300,000 square foot new building, and the associated fit-out of the 5th and 6th stories.

BUILDING DESCRIPTION: Seven (7) story, proposed structure.

RHODE ISLAND STATE CODE HAVE NOT BEEN COMPLIED WITH IN THE FOLLOWING PARTICULARS.

USE GROUP(S): B, A-3, S-1, S-2, F-2, H-3, H-4.

TYPE OF CONSTRUCTION: <u>I-B</u>

LOCATION OF SPRINKLERS (IF ANY): NFPA 13 throughout

C.O. REQUIRED: YES

FLOOR AREAS / USES

1st floor: 36,552 + Mezzanine 3,860 SF/ A-3, B, F-2, S-2, H

2nd-7th floors =~40,693SF/B

Has the proposed scope of work been completed? \circ Yes \otimes No $\:$ Has a violation been noted for this property? \circ Yes \otimes No

RISBC-1 Rhode Island Building Code (510-RICR-00-00-1)	CODE SECTIONS AND REASONS FOR REFUSAL
Section 1011.8	Vertical rise. A flight of stairs shall not have a vertical rise greater than 12 feet (3658 mm) between floor levels or landings.
**	Whereas, the proposed spiral stairs have a vertical rise of 15 ft.

Discipline: --Building Code-

Signed

Yaniv Gal Senior Plan Examiner James C. Moore, III
Director DIS