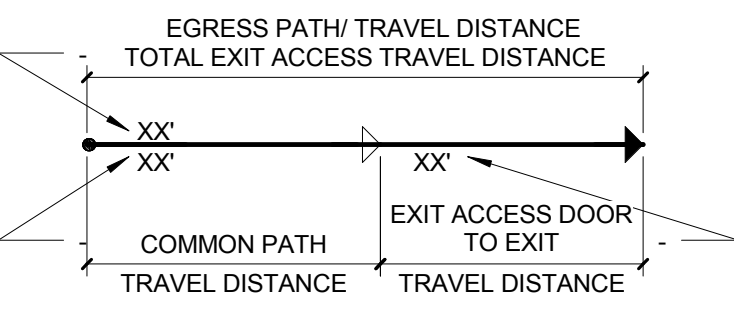
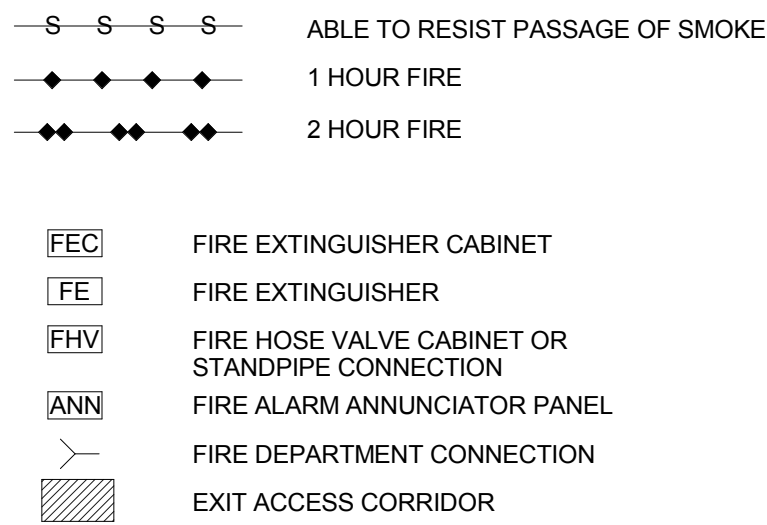


LEGEND



- ▶ (125A) EXIT
- HE ▶ (125A) HORIZONTAL EXIT
- D ▶ (125A) EXIT DISCHARGE

1. THE FLOOR PLAN BACKGROUND FOR NEW AND EXISTING CONSTRUCTION IS SHOWN IN GRAY HALF-TONE. DESIGNATIONS FOR FIRE RATED PARTITIONS, SMOKE PARTITIONS AND OTHER CODE COMPLIANCE RELATED INFORMATION ARE SHOWN FULL TONE. REFER TO CONTRACT DRAWINGS TO DETERMINE WHICH COMPONENTS ARE NEW AND WHICH ARE EXISTING.
2. THE FIRE AND SMOKE DESIGNATIONS FOR EXISTING CONSTRUCTION ARE SHOWN FOR REFERENCE ONLY AND ARE BASED ON INFORMATION PROVIDED BY OWNER. THIS INFORMATION HAS NOT BEEN INDEPENDENTLY VERIFIED BY CANNON DESIGN.
3. REFER TO ELECTRICAL DRAWINGS FOR LOCATIONS OF EXIT LIGHTS, EMERGENCY LIGHTS, AND FIRE ALARM SYSTEM.
4. REFER TO FIRE PROTECTION DRAWINGS FOR LOCATIONS OF SPRINKLERS AND FIRE PUMP.
5. REFER TO PLUMBING DRAWINGS FOR PLUMBING FIXTURE COUNTS.
6. REFER TO STRUCTURAL DRAWINGS FOR STRUCTURAL LOADS.
7. REFER TO FLOOR PLANS FOR FIRE EXTINGUISHERS AND FIRE EXTINGUISHER CABINETS.

AUTHORITIES HAVING JURISDICTION:

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APPLICABLE CODES, STANDARDS, AND ORDINANCES:

AHJ/CODE, STANDARD, OR ORDINANCE
2009 INTERNATIONAL BUILDING CODE IBC
ANSI A117.1-2003, ACSE-7-2005
2009 INTERNATIONAL MECHANICAL CODE
2009 INTERNATIONAL PLUMBING CODE
2009 INTERNATIONAL FIRE CODE
2009 NATIONAL ELECTRIC CODE
2009 INTERNATIONAL ENERGY CONSERVATION CODE

ACCESSIBILITY:
ICC/ANSI A117.1-2003 ACCESSIBLE USABLE BUILDINGS AND FACILITIES
ADA STANDARDS FOR ACCESSIBLE DESIGN - 2010
FM GLOBAL - VERIFY

GENERAL INFORMATION:

AUTOMATIC SPRINKLER SYSTEM: NFPA 13
FIRE ALARM SYSTEM: NFPA 72
STANDPIPE SYSTEM: NFPA 14

OCCUPANCY:
OCCUPANCY CLASSIFICATION: B BUSINESS
PRIMARY USE: UNIVERSITY OFFICES, CLASSROOMS AND SCIENCE LABORATORIES
ACCESSORY OCCUPANCY: ASSEMBLY A3 (LECTURE HALL)

CONSTRUCTION CLASSIFICATION:

CONSTRUCTION TYPE: TYPE II (IBC 2009)
NOTE: BUILDING IS PROPOSED AS AN EXPANSION TO THE EAST ACADEMIC BUILDING (EAB)

SMOKE/FIRE COMPARTMENT SUMMARY

NA

MAXIMUM TRAVEL DISTANCES:

COMMON PATH OF TRAVEL (CPT)
ALLOWABLE MAXIMUM = 100'
ACTUAL MAXIMUM - REFER TO PLANS

EXIT ACCESS TRAVEL DISTANCE
ALLOWABLE MAXIMUM = 300'
ACTUAL MAXIMUM - REFER TO PLANS

DEAD ENDS
ALLOWABLE MAXIMUM = 60'
("B" USE, FULLY SPRINKLERED, IBC 1017.3, EXCEPTION #2)
ACTUAL MAXIMUM: REFER TO PLANS

HAZARDOUS MATERIALS MANAGEMENT

CONTROL AREAS FOR THE MANAGEMENT OF HAZARDOUS MATERIALS:

MAXIMUM ALLOWABLE QUANTITY OF HAZARDOUS MATERIALS PER CONTROL AREA IS BASED ON IBC TABLES 307.1(1) AND 307.1(2). THE MAXIMUM PERMITTED AMOUNT INCLUDES THE INCREASES ALLOWED BY THE AUTOMATIC SPRINKLER SYSTEM AND BY THE STORAGE IN APPROVED HAZARDOUS MATERIAL STORAGE CABINETS.

FLOOR LEVEL	% of max allowable quantity/ control area	allowable number of control areas per floor	proposed number of control areas per floor	fire resistance rating for fire barriers (incl. floor)
LEVEL 01	100	4	1	1
LEVEL 02	75	3	2	1
LEVEL 03	50	2	1	1
LEVEL 04	12.5	2	2	2

BUILDING AREA:

AREA CALCULATION FOR VALIDATION OF CONSTRUCTION TYPE:

AREA CALCULATION:

PROPOSED CONSTRUCTION TYPE: IIB

Aa = [A1 + [A1 X I1] + [A1 X I2]

Aa = [23,000 + [23,000 X 0.00] + [23,000 X 2]]

WHERE:

Aa = ALLOWABLE AREA PER STORY (SQUARE FEET).

A1= TABULAR AREA PER STORY IN ACCORDANCE WITH

TABLE 503 (SQUARE FEET).

If = AREA INCREASE FACTOR DUE TO FRONTAGE (SEE

CALCULATION ABOVE)

Is = AREA INCREASE FACTOR DUE TO SPRINKLER

PROTECTION (SEE 506.3)

RESULT: THE ALLOWABLE AREA PER FLOOR FOR THE SELECTED

CONSTRUCTION TYPE IS GREATER THAN THE ACTUAL PER FLOOR

AREA.

69,000 > 56,668 (COMBINED LEVEL 01 EAB AND ISB)

ALLOWABLE AREA ACTUAL FLOOR AREA

BUILDING AREA ISB EAB COMBINED

LEVEL 00 - EAB BASEMENT LEVEL 6,040 GSF 6,413 GSF 12,453 GSF

LEVEL 01 - EAB FIRST FLOOR 23,876 GSF 32,792 GSF 56,668 GSF

LEVEL 02 - EAB SECOND FLOOR 20,480 GSF 31,338 GSF 51,818 GSF

LEVEL 03 - EAB THIRD FLOOR 20,500 GSF 21,365 GSF 41,865 GSF

LEVEL 04 - EAB PENTHOUSE 16,960 GSF 2,908 GSF 19,868 GSF

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FIRE RESISTANCE RATINGS

ITEM	FIRE RATING TYPE IIB	FIRE RATING** WHERE SUPPORTING CONTROL AREAS
STRUCTURAL FRAME	0 HR**	2 HR**
SUPPORTING ROOF ONLY	0 HR	0 HR
BEARING WALLS : EXTERIOR	0 HRS	
INTERIOR	0 HRS	
INTERIOR SUPPORTING ROOF ONLY	0 HR	
NON-BEARING WALLS AND PARTITIONS EXTERIOR SEPARATION >10'	0 HRS	
INTERIOR	0 HRS	
FLOOR CONSTRUCTION	0 HRS**	2 HRS**
ROOF CONSTRUCTION	0 HR	0 HR

** RATINGS ADJUSTED TO PROVIDE FIRE BARRIER SEPARATIONS REQUIRED BY HAZARDOUS MATERIALS MANAGEMENT STRATEGY

MISCELLANEOUS RATINGS:

IBC 2009:		
SHAFT ENCLOSURES	2 HRS	
4 OR MORE STORIES	1 HR (2 HR TO MATCH FLR RATING)	
<4 STORIES		
CORRIDORS	0 HRS	
VERTICAL EXIT ENCLOSURES	2 HRS	
4 OR MORE STORIES	1 HR (2 HR TO MATCH FLR RATING)	
<4 STORIES		
SMOKE BARRIERS	1 HR	
WASTE ROOMS > 100SF	1 HR*	
FIRE PUMP ROOMS - LOW RISE	1 HR**	
FURNACE ROOM > 400,000 BTU/HR	1 HR*	
BOILER ROOM > 15PSI AND 10HP	1 HR*	

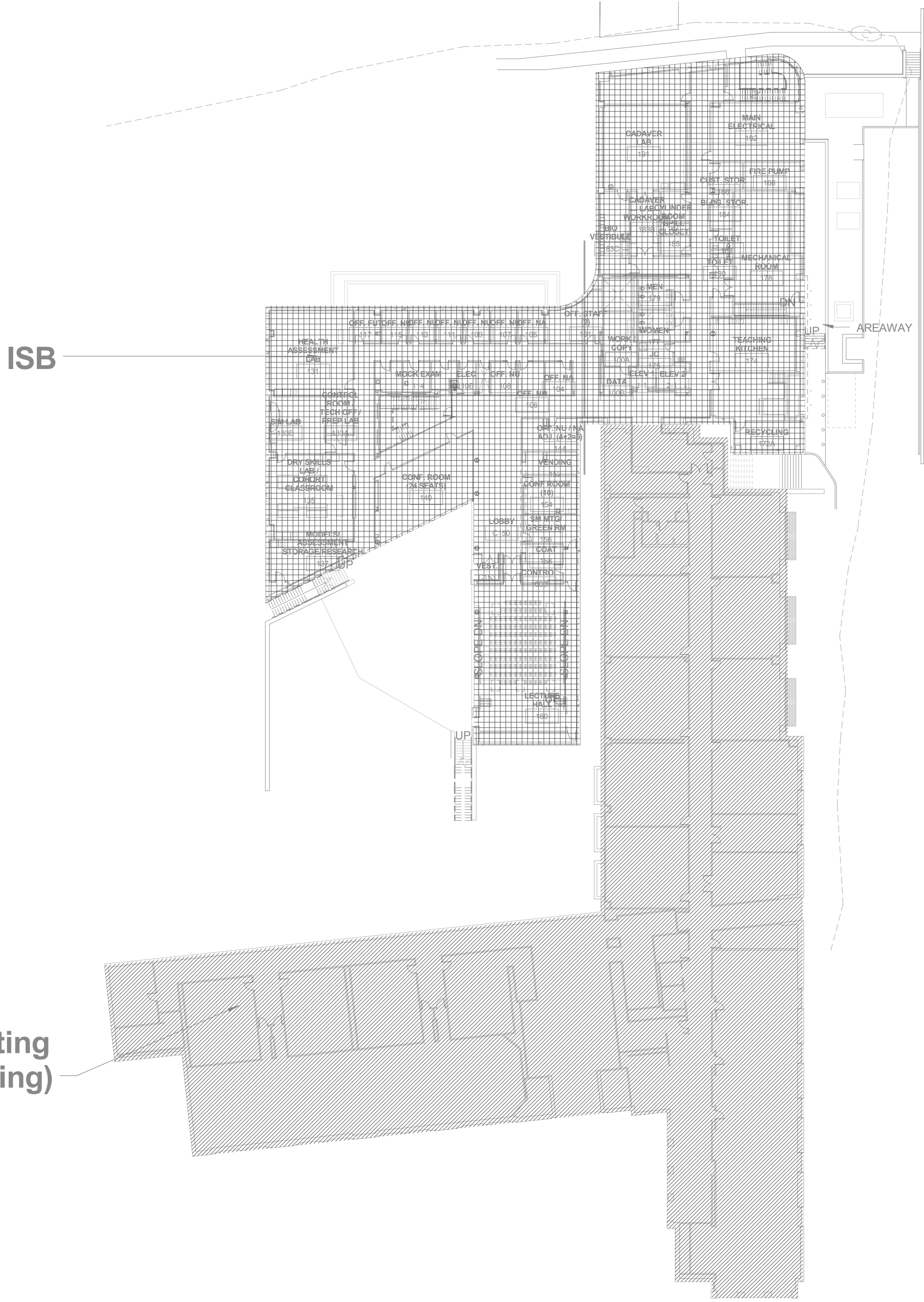
*-or automatic fire extinguishing system with partitions resisting the passage of smoke per 506.2.5.2

** with automaticsprinkler systems throughout

EGRESS CAPACITY

Level	DOOR NO.	WIDTH	WIDTH/DOOR	OCC CAPACITY	OCC LOAD	COMPLIES
LEVEL 01 (542)	C153	6'-0"	0.2"	360	200	Yes
LEVEL 01 (542)	S140	3'-0"	0.2"	180	50	Yes
LEVEL 01 (542)	S194	3'-0"	0.2"	180	40	Yes
LEVEL 01 (542)	X160.3	3'-0"	0.2"	180	50	Yes
LEVEL 01 (542)	X172.2	6'-0"	0.2"	360	5	Yes
LEVEL 01 (542)	X130	3'-0"	0.2"	180	60	Yes
LEVEL 01 (542)	XC153A	6'-0"	0.2"	360	200	Yes
LEVEL 01 (542)	XS176.1	3'-6"	0.2"	210	19	Yes
LEVEL 02 (556)	C230A	3'-2"	0.2"	190	50	Yes
LEVEL 02 (556)	C230A.1	6'-0"	0.2"	360	50	Yes
LEVEL 02 (556)	S240	3'-0"	0.2"	180	150	Yes
LEVEL 02 (556)	S294	3'-0"	0.2"	180	110	Yes
LEVEL 02 (556)	X270A.1	6'-0"	0.2"	360	10	Yes
LEVEL 02 (556)	XC230A	3'-2"	0.2"	190	50	Yes
LEVEL 02 (556)	XC230A.2	6'-0"	0.2"	360	150	Yes
LEVEL 02 (556)	XC270A.2	6'-0"	0.2"	360	75	Yes
LEVEL 02 (556)	XS294	3'-0"	0.2"	180	140	Yes
LEVEL 03	S340.1	3'-0"	0.2"	180	50	Yes
LEVEL 03	S340.2	3'-0"	0.2"	180	30	Yes
LEVEL 03	S394	3'-0"	0.2"	180	120	Yes
LEVEL 04	S440	3'-0"	0.2"	180	40	Yes
LEVEL 04	S494	3'-0"	0.2"	180	120	Yes

STAIR NO.	WIDTH	WIDTH/DOOR	OCC CAPACITY	OCC LOAD	COMPLIES
STAIR 1	4'-8"	0.3"	186	120	Yes
STAIR 2	4'-8"	0.3"	186	100	Yes
STAIR 3	4'-2"	0.3"	166	19	Yes



EAB (existing building)

1 LEVEL 01 CODE COMPLIANCE PLAN SITE
1/32" = 1'-0"



Webster University
Interdisciplinary Science Building

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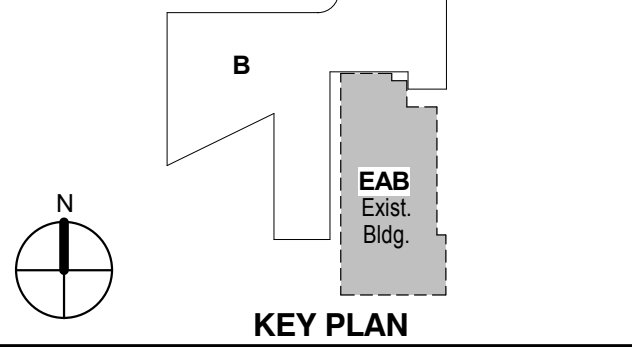
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Planning & Fire Protection
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CONFORMED SET 01 JUL 2016

1 ADDENDUM 1-6 01 MAR 2016
ISSUED FOR CONSTRUCTION (BP1) 15 JAN 2016

No.	Description	Date



KEY PLAN

CODE COMPLIANCE SUMMARY

Project No.: 04561.01 Checked by:

