

1. APPLICABLE CODES:		
<ul style="list-style-type: none"> 2010 BUILDING CODE OF NEW YORK STATE (2010 INTERNATIONAL BUILDING CODE (IBC)) 2010 EXISTING BUILDING CODE OF NEW YORK STATE (2010 INTERNATIONAL EXISTING BUILDING CODE) 2010 PLUMBING CODE OF NEW YORK STATE (2010 INTERNATIONAL PLUMBING CODE (IPC)) 2010 MECHANICAL CODE OF NEW YORK STATE (2010 INTERNATIONAL MECHANICAL CODE (IMC)) 2010 FUEL GAS CODE OF NEW YORK STATE (2010 INTERNATIONAL FUEL GAS CODE (IFGC)) 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN (2009 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES (ICC A111-2009)) 2010 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE (2010 INTERNATIONAL ENERGY CONSERVATION CODE) 2011 NATIONAL ELECTRICAL CODE 		
2. OCCUPANCY GROUP		
OCCUPANCY	TYPE OF CONSTRUCTION <u>VERNI BUILDING RENOVATION</u>	TYPE OF CONSTRUCTION <u>NEW ADDITION</u>
GROUP E: EDUCATIONAL (GRADES 9-12)	II-B (LEVEL 3 ALTERATIONS)	II-B
GROUP A-1: ASSEMBLY (THEATER 116)		
GROUP A-3: ASSEMBLY (ENSEMBLE SP. 150)		
GROUP B: BUSINESS (ACCESSORY)		
3. TYPES OF CONSTRUCTION (TABLE 601 FIRE-RESISTANCE REQUIREMENTS FOR BUILDING ELEMENTS):		
ELEMENT OR SPACE	REQUIRED	PROVIDED
PRIMARY STRUCTURAL FRAME BEARING WALLS		
EXTERIOR	0 HR	0 HR
INTERIOR	0 HR	0 HR
NON-BEARING WALLS AND PARTITIONS		
EXTERIOR	0 HR (PER TABLE 602 W/ FIRE SEPARATION DISTANCE 10')	0 HR
INTERIOR	0 HR	0 HR
FLOOR CONSTRUCTION	0 HR	0 HR
ROOF CONSTRUCTION	0 HR	0 HR
COLUMNS	0 HR	NA
4. GENERAL BUILDING HEIGHTS AND AREAS		
SECTION 503.1.2: THE EXISTING VERNI BUILDING AND THE PROPOSED NEW BUILDING SHALL BE CONSIDERED PORTIONS OF ONE SINGLE BUILDING AS THE HEIGHT AND NUMBER OF STORIES OF EACH PORTION AND THE AGGREGATE BUILDING AREA OF THE PORTIONS ARE WITHIN THE LIMITATIONS SPECIFIED IN SECTIONS 504 AND 506.		
TABLE 506.2 ALLOWABLE AREA FACTOR FOR MIXED-USE, NON-SEPARATED OCCUPANCIES (A-1, E AND B (USING A-1 FOR ASSEMBLY OCCUPANCY AS THE MOST RESTRICTIVE OCCUPANCY) & TYPE II-B CONSTRUCTION. 5M (MULTI-STORY BUILDING) NFPA 13 FIRE SPRINKLER PROTECTION PROVIDED THROUGHOUT BOTH BUILDINGS		
FLOOR	AREA PROVIDED	ALLOWABLE AREA PER FLOOR TABLE 506.2: A-1 OCC. (5M)
1ST FLOOR NEW BLDG.	13,145 SF	
1ST FLOOR EXIST. VERNI BLDG.	4,260 SF	
TOTAL 1ST FLOOR	18,005 SF	25,500 SF / STORY
2ND FLOOR NEW BLDG	11,140 SF	
TOTAL 2ND FLOOR	11,140 SF	25,500 SF / STORY
TOTAL BUILDING BLDG. AREA	29,145 SF	51,000 SF
5. TABLE 504.4 ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE (A-1 OR E OCCUPANCY, WHICHEVER IS MORE STRINGENT. BOTH BUILDINGS EQUIPPED W/ AUTOMATIC SPRINKLER SYSTEM THROUGHOUT)		
	# OF STORIES PROVIDED	# OF STORIES ALLOWED
NEW BUILDING	2	3
EXIST. VERNI BLDG.	1	3
TABLE 504.3 ALLOWABLE BUILDING HEIGHT (USING A-1 OR E OCCUPANCY WHICHEVER IS MORE STRINGENT)		
	PROVIDED	ALLOWED
NEW BUILDING	30'	75'
EXIST. VERNI BLDG.	15'-6"	75'

6. SECTION 502.2.3 ALLOWABLE BUILDING AREA+ AGGREGATE ACCESSORY OCCUPANCIES SHALL NOT OCCUPY MORE THAN 10 PERCENT OF FLOOR AREA OF THE STORY IN WHICH THEY ARE LOCATED.		
ROOM	AREA SQ. FT.	
TV / RADIO STUDIO 168	294	
PRODUCTION BOOTH 169	186	
OFFICE 170	111	
OFFICE 172	110	
TOTAL	701	
TOTAL 1ST FLOOR	18,005	
ACTUAL PERCENTAGE	4%	
MAX 10% AREA PERMITTED	1,800	
7. MEANS OF EGRESS ANALYSIS AND REQUIREMENTS (CHAPTER 10) (TABLE 1004.5 MAX. FLOOR AREA ALLOWANCE PER OCCUPANT:)		
STORY OR SPACE	OCCUPANT LOAD FACTOR (SF/PERSON)	OCCUPANT LOAD (PERSON)
EDUCATIONAL CLASSROOMS	20 NET	219
SHOPS & OTHER VOCATIONAL ROOM AREAS	50 NET	41
ADMINISTRATION OFFICES & MEETING ROOMS	100 GROSS 15 NET	12 12
ASSEMBLY & FIXED SEATING (SECTION 1004.6)	40% SEATS	409
ASSEMBLY STANDING SPACE	5 NET	40
ASSEMBLY WITHOUT FIXED SEATS (CHAIRS ONLY - NOT FIXED)	1 NET	68
BACKSTAGE & PLATFORM	50 NET 15 NET	25 45
ACCESSORY/ STORAGE AREAS	300 GROSS	10
TOTAL OCCUPANT LOAD		881
8. MEANS OF EGRESS SIZING		
1005.3.1 STAIRWAYS: EGRESS WIDTH PER OCCUPANT		0.3X
1005.3.2 OTHER COMPONENTS: EGRESS WIDTH PER OCCUPANT		0.2X
THEATER EXIT CALC. (SECTION 1005.3.2) 480 OCCUPANTS X 0.2'/OCCUPANT + 96' EXIT WIDTH FOR DOORS		
9. DOOR EXIT UNIT CALCULATIONS BC 1005.3.2 OTHER EGRESS COMPONENTS		
DOOR SIZE	CLEAR DIMENSION	EGRESS CAPACITY
SINGLE 3'-0" DOOR	33 IN	33 IN/ 0.2 = 165 PEOPLE
SINGLE 3'-4" DOOR	31 IN	31 IN/ 0.2 = 155 PEOPLE
SINGLE 3'-8" DOOR	41 IN	41 IN/ 0.2 = 205 PEOPLE
PAIR 3'-0" DOORS	68 IN	68 IN/ 0.2 = 340 PEOPLE
PAIR 6'-1" DOORS	75 IN	75 IN/ 0.2 = 375 PEOPLE
10. REQUIRED TRAVEL DISTANCES & EGRESS WIDTH REQUIREMENTS (SPRINKLERED BLDG.)		
CODE SECTION	OCCUPANCY GROUPS	
1010.11	MIN. DOOR CLEAR WIDTH OPENING	32'
1010.11	MAX. DOOR WIDTH	48'
TABLE 1011.2	EXIT ACCESS TRAVEL DISTANCE FOR GROUP 'A' AND 'E' OCCUPANCY WITH SPRINKLER SYSTEM	250 FEET
TABLE 1011.2	EXIT ACCESS TRAVEL DISTANCE FOR GROUP 'B' OCCUPANCY WITH SPRINKLER SYSTEM	300 FEET
TABLE 1006.2.1	MAX. COMMON PATH TRAVEL DISTANCE FOR GROUP 'A' AND 'E' OCCUPANCY WITH SPRINKLER SYSTEM	75 FEET
TABLE 1006.2.1	MAX. COMMON PATH TRAVEL DISTANCE FOR GROUP 'B' OCCUPANCY WITH SPRINKLER SYSTEM	100 FEET
1020.1	CORRIDOR FIRE RESISTANCE RATING FOR GROUP 'E' OCCUPANCY W/ SPRINKLER SYSTEM	0 HR
1020.2	MINIMUM CORRIDOR WIDTH IN GROUP 'E' HAVING AN OCCUPANT LOAD OF MORE THAN 100	72 INCHES
11. CHAPTER 9 FIRE PROTECTION AND LIFE SAFETY SYSTEMS:		
SECTION 902.2.11: AN AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED THROUGHOUT STORIES CONTAINING GROUP A-1 OCCUPANCIES. FIRE AREA HAS AN OCCUPANT LOAD OF 409 SEATS AND FIRE AREA EXCEEDS 12000 SF.		
SEE ITEM 19 (CHAPTER 11) FOR DEVICE MOUNTING HEIGHTS.		

12. CHAPTER 31 SPECIAL CONSTRUCTION

SECTION 31042: THE EXISTING VERNI BUILDING AND THE NEW BUILDING SHALL BE CONSIDERED PORTIONS OF A SINGLE BUILDING.

SECTION 310452: THE PEDESTRIAN WALKWAY SHALL BE EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 9033.11.

13. STAIRS (NEW BUILDING): BC 1012 STAIRWAYS WIDTH AND CAPACITY

STAIR 'B' STAIR 'B' WIDTH: 44 IN.

SECTIONS 1012 AND 100932 EXCEPTION 1: THE CLEAR WIDTH OF 48" BETWEEN HANDRAILS IS NOT REQUIRED IN BUILDINGS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 9033.11 OR 9033.12.

LOBBY STAIR 'A' STAIR 'A' WIDTH: 46 IN.

SECTION 10193: LOBBY STAIR IS ALLOWED TO BE OPEN EXIT ACCESS STAIR LIMITED TO CONNECTING TWO STORIES AS PART OF A MEANS OF EGRESS.

NFPA 13 2016 SECTION 8.15.4 VERTICAL OPENINGS: THE FLOOR OPENINGS INVOLVED SHALL BE PROTECTED BY CLOSELY SPACED SPRINKLERS IN COMBINATION WITH DRAFT STOPS IN ACCORDANCE WITH 8.15.42 AND 8.15.43.

SECTION 8.15.42 DRAFT STOPS:

1. DRAFT STOPS SHALL BE LOCATED IMMEDIATELY ADJACENT TO THE OPENING
 2. THE DRAFT STOPS SHALL BE AT LEAST 18" DEEP
 3. THE DRAFT STOPS SHALL BE OF NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIAL THAT WILL STAY IN PLACE BEFORE AND DURING SPRINKLER OPERATION

8.15.43 SPRINKLERS:

8.15.43.1 SPRINKLERS SHALL BE SPACED NOT MORE THAN 6' APART AND PLACED 6' TO 12' FROM THE DRAFT STOP ON THE SIDE AWAY FROM THE OPENING.
 8.15.43.2 WHERE SPRINKLERS ARE CLOSER THAN 6', CROSS Baffles SHALL BE PROVIDED IN ACCORDANCE WITH 8.6.3.42.

SECTION 10192: MARKINGS WITHIN EXIT COMPONENTS, LUMINOUS EGRESS MARKINGS SHALL BE PROVIDED ON LEADING EDGE OF STEPS AND LANDINGS.

EGRESS WIDTH FOR INTERIOR EGRESS STAIRS

STAIR DESIGNATION	A	B
UNIT WIDTH PER OCCUPANT SERVED	03'	03'
SIZE ALLOWED (MINIMUM WIDTH)	44'	44'
ACTUAL SIZE PROVIDED	46'	44'
ALLOWABLE NUMBER OF PERSONS	153	146
ACTUAL NUMBER OF PERSONS	109	109

14. CHAPTER 1: FIRE AND SMOKE PROTECTION FEATURES:

SECTION 1134 THE ELEVATOR SHAFT SHALL BE 1 HOUR FIRE RATED CONSTRUCTION.

15. CHAPTER 8: INTERIOR FINISHES:

TABLE 803.3 SPRINKLERED	INTERIOR EXIT STAIRWAYS AND RAMPS AND EXIT PASSAGEWAYS	A-1 OCCUPANCY	E OCCUPANCY	B OCCUPANCY
		B	B	B
	CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND RAMPS	B	C	C
	ROOMS & ENCLOSED SPACES	C	C	C

16. CHAPTER 10 : OCCUPANT LOADS

	EXISTING VERNI BUILDING	NEW ADDITION	TOTAL BUILDING
1st FLOOR	161	499	660
2nd FLOOR	0	221	221
TOTAL	161	720	881

17. PLUMBING FIXTURE ANALYSIS (PLUMBING CODE TABLE 403.1)
IBC TABLE 7302.1 & 2018 INTERNATIONAL PLUMBING CODE TABLE 403.1
(TOTAL OCCUPANT LOAD 881 PERSONS)

	ASSEMBLY (THEATERS) (530 OCCUPANTS) 530 x 1/2 = 295		EDUCATIONAL (291 OCCUPANTS) BOYS: 291 x 3/4=218 GIRLS: 291 x 1/4=73		TOTAL	
	CODE REQUIRED RATIO	NUMBER REQUIRED	CODE REQUIRED RATIO	NUMBER REQUIRED	REQUIRED	PROVIDED
MEN'S WATER CLOSETS (MWC)	295 / 125	2.4 (3)	218 / 50	4.4 (5)	8	9 (5 URINALS)
WOMEN'S WATER CLOSETS (WUC)	295 / 65	4.6 (5)	73 / 50	1.5 (2)	7	6
TOTAL WATER CLOSETS					15	15
MEN'S LAVATORIES (MLAV)	295 / 200	1.5 (2)	218 / 50	4.4 (5)	7	5
WOMEN'S LAVATORIES (FLAV)	295 / 200	1.5 (2)	73 / 50	1.5 (2)	4	4
TOTAL LAVATORIES					11	9
DRINKING FOUNTAINS (DF)	530 / 500	1.2 (2)	291 / 100	2.9 (3)	5	5
JANITOR CLOSET SLOP SINK (SS)	1	1	1	1	1	2
FAMILY / ASSISTED-USE TOILET ROOM	1	1	1	1	1	1

18. CHAPTER 10:	
BC 1001.10:	ALL EXIT DOORS SHALL HAVE PANIC HARDWARE AS OCCUPANT LOAD IS GREATER THAN 50 PERSONS.
BC 1008 & 1013:	EXIT SIGNAGE AND EMERGENCY LIGHTING IS REQUIRED TO BE PROVIDED. LOW LEVEL EXIT SIGNAGE IS NOT REQUIRED TO BE PROVIDED.
19. CHAPTER 11: ACCESSIBILITY	
THE SCOPE OF WORK SHALL COMPLY WITH THE PROVISIONS OF THIS SECTION FOR ACCESSIBILITY, THE 2010 ADA, AND ICC/ANSI A117.1 / 2009	
SECTION BC 1102.2 AND TABLE 1102.2.1 ACCESSIBLE WHEELCHAIR SPACES: CAPACITY 301 TO 500 REQUIRES MINIMUM 6 SPACES; 6 SPACES PROVIDED.	
SECTION BC 1102.3 DESIGNATED AISLE SEATS: 5% OF 54 AISLE SEATS REQUIRES MINIMUM OF 3 DESIGNATED AISLE SEATS; 6 PROVIDED.	
SECTION BC 1102.7 AND TABLE 1102.7.1 ASSISTIVE LISTENING DEVICES: CAPACITY 201 TO 500 REQUIRES MINIMUM OF 11 RECEIVERS; 11 RECEIVERS PROVIDED WITH 5 RECEIVERS TO BE HEAR AID COMPATIBLE.	
BC APPENDIX E101 SIGNAGE: SIGNS AND DIRECTIONAL SIGNS SHALL BE PROVIDED ALL RESTROOMS, ELEVATOR AND STAIRS PER PLANS - IN ACCORDANCE WITH ANSI 117.1 SECTION 703	
HEIGHTS OF OUTLETS FROM FINISHED FLOOR TO CENTERLINE OF OUTLET: RECEPTACLES AND TELEPHONES 1'-6" (3'-6" OVER WORK BENCHES) WALL SWITCHES 4'-0" FIRE ALARM STATIONS 4'-0" STROBE LIGHTS 7'-0"	

<p>Key Plan (not to scale)</p>			
7. 6/01/2021 ISSUED FOR BID			
6. 5/07/2021 RE-ISSUED FOR BUILDING PERMIT REVIEW			
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