CROSS GATES ATHLETIC CLUB
SLIDELL LOUISIANA

LIFE-SAFETY INFORMATION

APPLICABLE CODES
NFPA 101 LIFE-SAFETY CODE 2015 AND IBC 2021
OCCUPANCY TYPE(S) AND CHAPTER(S)
ASSEMBLY A-3 (CHAPTER 3)

OCCUPANT LOAD FACTOR		(REFERENCE TABLE 7.3.1.2)	
BLDG 'A' - ASSEMBLY A-3	50 GROSS - Exercise rooms	1st Flr = 15,526 s.f. / 50 gross = 310	2nd Flr = 14,150 s.f. / 50 gross = 283
BLDG 'B' - ASSEMBLY A-3	50 GROSS - Exercise rooms	1st Flr = 4,894 s.f. / 50 gross = 98	2nd Flr = 2,651 s.f. / 50 gross = 53
BLDG 'C' - ASSEMBLY A-3	50 GROSS - Exercise rooms	1st Flr = 21,605 s.f. / 50 gross = 432	2nd Flr = 12,784 s.f. / 50 gross = 256

CLASSIFICATION OF HAZARD OF CONTENTS
(REFERENCE: OCCUPANCY CHAPTER AND 6.2.2: SPECIFY LOW, ORDINARY, OR HIGH)
CONSTRUCTION TYPE= VB (REFERENCE: CHAPTER 9, TABLE A.9.2.1.2 AND COMMENTARY TABLE 8.1 IN HANDBOOK)

MINIMUM EXIT SEPARATION DISTANCE FOR REMOTELY LOCATED EXITS
(REFERENCE: SECTION 7.5; SPECIFY 1/2 OR 1/3 DIAGONAL DISTANCE OF AREA SERVED)
1/2 DIAGONAL = 47'-8"

MAXIMUM DEAD-END CORRIDORS (REFERENCE: OCCUPANCY CHAPTER AND TABLE A.7.6)
20 FEET

MAXIMUM COMMON PATH OF TRAVEL DISTANCE (REFERENCE: OCCUPANCY CHAPTER AND TABLE A.7.6)
20 FEET/75 FEET

MAXIMUM TRAVEL DISTANCE TO EXITS (REFERENCE: OCCUPANCY CHAPTER AND TABLE A.7.6)
200 FEET

*MAIN ENTRANCES MUST BE SIGNED TO ACCOMODATE 1/2 OCCUPANT LOAD OF BUILDING

EXTINGUISHMENT REQUIREMENTS	SPRINKLERED
DETECTION, ALARM, AND COMMUNICATION SYSTEMS	YES
ALLOWABLE HEIGHT AND BUILDING AREA	PER IBC EQUIVALENT CONSTRUCTION TYPE

BUILDING CODE INFORMATION

APPLICABLE CODES
IBC 2021

ASSEMBLY GROUP A3		(IBC 2015 CHAPTER 3)	
OCCUPANT LOAD CALCULATIONS		(REFERENCE TABLE 1004.1.2)	
BLDG 'A' - ASSEMBLY A-3	50 GROSS - Exercise rooms	1st Flr = 15,526 s.f. / 50 gross = 310	2nd Flr = 14,150 s.f. / 50 gross = 283
BLDG 'B' - ASSEMBLY A-3	50 GROSS - Exercise rooms	1st Flr = 4,842 s.f. / 50 gross = 99	2nd Flr = 2,651 s.f. / 50 gross = 53
BLDG 'C' - ASSEMBLY A-3	50 GROSS - Exercise rooms	1st Flr = 21,605 s.f. / 50 gross = 432	2nd Flr = 12,784 s.f. / 50 gross = 256
TOTAL OCCUPANTS		Bldg A = 593 ; Bldg B = 152 ; Bldg C = 688	
CONSTRUCTION TYPE(S)		(TABLE 503)	

IIB & VB

ALLOWABLE HEIGHT AND BUILDING AREA LIMITED BY TYPE OF CONSTRUCTION

MAXIMUM HEIGHT (IBC TABLE 504.3)	MAXIMUM STORIES (IBC TABLE 504.4)	ALLOWABLE AREA FACTOR MULTI STORY SPRINKLED	ALLOWABLE AREA FACTOR MULTI STORY NON-SPRINKLED
BLDG A, SPRINKLED, TYP 2B = 75 FT	BLDG A, SPRINKLED, TYP 2B = 3	SM = 28,500 s.f.	NS = 9,500 s.f.
BLDG B, SPRINKLED, TYP 5B = 60 FT	BLDG B, SPRINKLED, TYP 5B = 2	SM = 18,000 s.f.	NS = 6,000 s.f.
BLDG C, SPRINKLED, TYP 2B = 75 FT	BLDG C, SPRINKLED, TYP 2B = 3	SM = 28,500 s.f.	NS = 9,500 s.f.

WIND SPEED DESIGN REQUIREMENTS

THIS BUILDING SHALL BE DESIGNED WITH IBC SEC 1609 AS A FULLY ENCLOSED BLDG USING THE FOLLOWING INFORMATION:
WIND DESIGN DATA: DETERMINATION OF WIND LOADS SHALL BE IN ACCORDANCE WITH IBC SEC 1609.3 (A), (B), OR (C) DEPENDING ON THE RISK CATEGORY

ULTIMATE WIND SPEED =	141 MPH (IBC FIG 1609C)	NOMINAL WIND SPEED =	Vasd = 109 MPH
RISK FACTOR:	CATEGORY II	SURFACE ROUGHNESS =	B
TOPOGRAPHIC FACTOR =	1	EXPOSURE =	B
INTERNAL PRESSURE COEFFICIENT (ASCE 7-10 TABLE 26.11-1):		± 0.18	

LIVE LOADS (IBC SEC 1607)	
ASSEMBLY FIXED SEATING (IBC TABLE 1607.1):	60 PSF
PLATFORMS (ASSEMBLY) (IBC TABLE 1607.1):	100 PSF
LOBBIES (IBC TABLE 1607.1):	100 PSF
CLASSROOMS (IBC TABLE 1607.1):	40 PSF UNIFORM, 1,000 LB CONCENTRATED
ROOF LIVE LOADS (IBC TABLE 1607.1):	20 PSF UNIFORM, 300 LB CONCENTRATED
SNOW LOADS (IBC TABLE 1608):	
GROUND SNOW LOAD (IBC FIG 1608.2):	5 IPSF

FLOOD ZONE INFORMATION

BASED ON THE SURVEY OF THIS PROPERTY BY J.V. BURKES AND ASSOCIATES, INC. THIS PROPERTY IS IN A SPECIAL FLOOD HAZARD AREA. F.I.R.M. COMMUNITY MAP NO 220205 0420 E; REVISED 4/21/99

FLOOD ZONE:	A	BASE FLOOD ELEVATION	17.0 NGVD

ELEVATIONS REFER TO NGVD 1929 DATUM

PROJECT STATISTICS

EXISTING BUILDINGS	YEAR BUILT	CONSTRUCTION TYPE	1st FLOOR GROSS S.F.	2nd FLOOR GROSS S.F.
BLDG A	1997	II B	21,605	10,203
BLDG B		VB	4,894	2,536
BLDG C	2006	IIB	15,526	14,161

Project Synopsis:

Cross Gates Athletic Club has three (3) existing main buildings A, B, & C. Building B is the original building; the newer buildings, A & C, were constructed at a higher elevations due to FEMA flood maps at the time of their construction. Currently the buildings are connected on the first floor via enclosed connectors with stairs that serve the staff & customers to move from building to building without requiring them to exit one building to enter the next. The second floor of Building B is connected to the second floor of building C with stairs; however there is no path from the 2nd floor of building A to the second floor of building B.

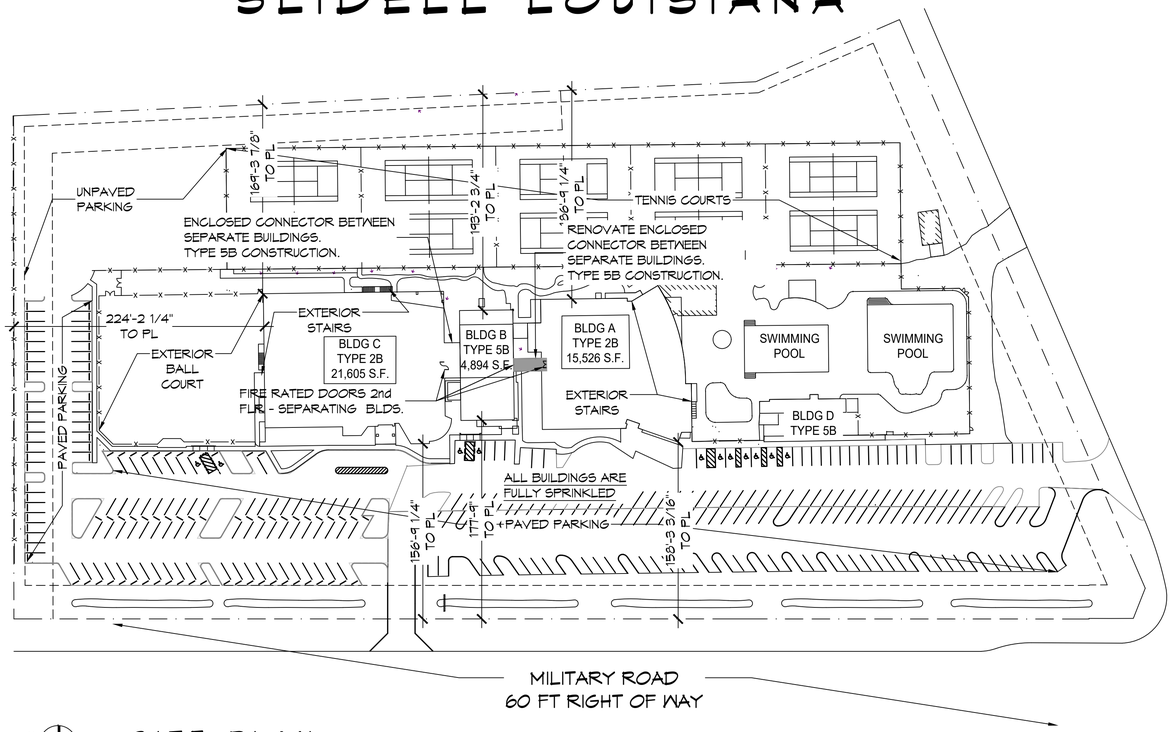
The owner wants to create an open floor such that a person could walk from the 2nd floor of building A thru the 2nd floor of B to the second floor of building C.

Building B is metal building with wood frame construction for interior walls and 2nd floor support. The connector between buildings A & B is constructed of wood frame construction. This project extends building B to the face of buildings A & C.

Each of the buildings at the connection between buildings, will be separated with 1 1/2 hour fire rated doors that area magnetically held open and connected to the fire alarm system. All 3 buildings, as well as connectors, are sprinkled and none of the existing Egress routes will be altered during this construction.

PROJECT LOCATION:
200 NORTH MILITARY ROAD
SLIDELL, LA 70460

OWNER:
CROSS GATES ATHLETIC CLUB
LARRY WELCH



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SITE PLAN
SCALE: 1-64" = 1'-0"

ALLOWABLE BLDG AREA INCREASE BLDG A

BLDG FULLY SPRINKLED, BLD'G CONSTRUCTION 2B
ASSEMBLY GROUP A-3, SM = 28,500 s.f.; NS = 9,500 s.f.
W = 30 (SHALL NOT EXCEED 30, IBC SEC, 506.3.2)
If = (F/P - 0.25) X W/30 (IBC SEC, 506.3.3)
F= 249.66ft; P= 549.58ft;
If = ((249.66/549.58) - 0.25) X (30/30)
If = 0.20

Aa = [At + (Ns x If)] x Sa
Aa = [28,500 + (9,500 X 0.2)] X 2
Aa = 60,800 s.f. / 2 STORIES = 30,400 s.f. Each Floor

ALLOWABLE BLDG AREA INCREASE BLDG B

BLDG FULLY SPRINKLED, BLD'G CONSTRUCTION 5B
ASSEMBLY GROUP A-3, SM = 18,000 s.f.; NS = 6,000 s.f.
W = 30 (SHALL NOT EXCEED 30, IBC SEC, 506.3.2)
If = (F/P - 0.25) X W/30
F= 95.33 ft; P= 292.0 ft
If = ((95.33/292.0) - 0.25) X (30/30)
If = 0.076

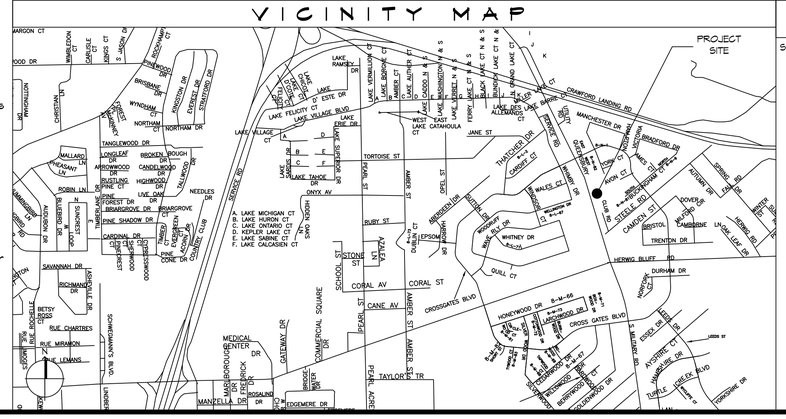
Aa = [At + (At X If) + (At X Is)] x Sa
Aa = [18,000 + (6,000 X 0.076)] x 2
Aa = 36,912 s.f. / 2 STORIES = 18,456 s.f. Each Floor

ALLOWABLE BLDG AREA INCREASE BLDG C

BLDG FULLY SPRINKLED, BLD'G CONSTRUCTION 2B
ASSEMBLY GROUP A-3, SM = 28,500 s.f.; NS = 9,500 s.f.
W = 30 (SHALL NOT EXCEED 30, IBC SEC, 506.3.2)
If = (F/P - 0.25) X W/30 (IBC SEC, 506.3.3)
F= 494.66 ft; P= 599.75 ft;
If = ((494.66/599.75) - 0.25) X (30/30)
If = 0.575

Aa = [At + (Ns x If)] x Sa
Aa = [28,500 + (9,500 X 0.575)] X 2
Aa = 67,925 s.f. / 2 STORIES = 33,962 s.f. Each Floor

VICINITY MAP


PROJECT SITE
A. LAKE MICHIGAN CT
B. LAKE HURON CT
C. LAKE ONTARIO CT
D. KEPLER LAKE CT
E. LAKE SABINE CT
F. LAKE CALCASIEN CT
MEDICAL CENTER DR
MUNICIPAL SQUARE
CROSSGATES BLVD
CROSS GATES BLVD
HONEYWOOD DR 8-14-66
MANZELLA DR
EDGEMERE DR
TAYLOR S TR
CORAL ST
CORAL AV
CANE AV
STONE ST
RUBY ST
ONYX AV
TORTOISE ST
LAKE VILLAGE BLVD
LAKE FELICITY CT
LAKE ERIE DR
WEST LAKE CATAHOULA CT
EAST LAKE CATAHOULA CT
JANE ST
TANTCHED DR
CARSET CT
MANCHESTER DR
CRANFORD LANDING RD
HERWIG BLUFF RD
DURHAM DR
TRENTON DR
CAMDEN CT
BRISTOL
CLUB DR
STEELE RD
WHITNEY DR
GULL CT
EPSOM
SCHOOL ST
GATEWAY DR
ROSALIND
BRIDGE DR
MARGARET PL
MARGARET ST
PEARL ST
SCHOOL ST
SAVANNAH DR
RIGMAND DR
BETSY ROSS CT
RUE CHARTRES
RUE MIRAMON
RUE LEMAIRE
CORDELL ST
RUE ROCHELLE
SOUTHGATE BLVD
MARGARET PL
MARGARET ST
MARGARET DR
MARGARET CT
MARGARET TR
MARGARET LN
MARGARET CIR