

BUILDING CODE SUMMARY

NAME OF PROJECT: AIKEN PUBLIC LIBRARY RENOVATION - PHASE II & III
ADDRESS: 314 CHESTERFIELD STREET SOUTH, AIKEN, SC
PROPOSED USE: ASSEMBLY A-3 (LIBRARY)
OWNER/AGENT: MR. BRIAN SANDERS PHONE: (803) 642-2013 EMAIL: bsanders@aikencountysc.gov
OWNED BY: AIKEN COUNTY
CODE ENFORCEMENT JURISDICTION:
CITY - AIKEN
COUNTY - N/A
STATE - SOUTH CAROLINA

PROJECT SUMMARY

BUILDING DESCRIPTION:
EXISTING THREE STORY LIBRARY / FUTURE TENANT BUILDING (NORTH WING). WORK ON EACH FLOOR INCLUDES:
GROUND FLOOR: NEW ACCESSIBLE ENTRANCE AND ELEVATOR, NO CHANGE TO OCCUPANT LOAD OR EGRESS.
FIRST FLOOR:
LIBRARY: ALTERATION
FUTURE TENANT: MINOR ALTERATION, ADD FLOOR TO PROVIDE ACCESS TO EXTERIOR EXIT, NEW ELEVATOR AND NEW FAMILY TOILET.
SECOND FLOOR:
LIBRARY: ALTERATION
FUTURE TENANT: REPAIR FLOOR AND NEW ELEVATOR.

BUILDING CODE - 2018 SOUTH CAROLINA EXISTING BUILDING CODE
2018 SOUTH CAROLINA PLUMBING CODE
2018 SOUTH CAROLINA MECHANICAL CODE
2018 SOUTH CAROLINA FUEL GAS CODE
2009 SOUTH CAROLINA ENERGY CONSERVATION CODE
2018 SOUTH CAROLINA FIRE CODE
2018 SOUTH CAROLINA PLUMBING CODE
2017 NATIONAL ELECTRIC CODE (NFPA 70) WITH SC MODIFICATIONS
ICC/ANSI A117.1 - 2017

CONSTRUCTED: RECONSTRUCTION NEW CONSTRUCTION ADDITION UPFIT
RENOVATED: LIBRARY BUILDING AND NORTH WING

BASIC BUILDING DATA

CONSTRUCTION TYPE: I-A I-B II-A II-B III-A III-B IV V-A V-B
SPRINKLERS: NO PARTIAL YES
STANDPIPES: YES CLASS II III WET DRY
FIRE DISTRICT: NO YES (PRIMARY) FLOOD HAZARD AREA: NO YES
BUILDING HEIGHT: 53'-3"
GROSS BUILDING AREA: EXISTING (SQ. FT.) NEW (SQ. FT.) SUB-TOTAL

ALLOWABLE AREA

PRIMARY OCCUPANCY: ASSEMBLY BUSINESS EDUCATIONAL FACTORY HAZARDOUS INSTITUTIONAL
SECONDARY OCCUPANCY: ASSEMBLY BUSINESS EDUCATIONAL FACTORY HAZARDOUS INSTITUTIONAL
MIXED OCCUPANCY: INCIDENTAL USE SEPARATION NON-SEPARATED USE SEPARATED USE

MAXIMUM BUILDING AREA

Table with 6 columns: STORY NO, DESCRIPTION & USE, (A) BLDG. AREA PER STORY (ACTUAL), TABLE AREA, (C) AREA FOR FRONTAGE INCREASE, (D) ALLOWABLE AREA OR UNLIMITED, (E) MAXIMUM BUILDING AREA (506.2.3)

1 FRONTAGE AREA INCREASES FROM SECTION 506.3 ARE COMPUTED THUS:
A PERIMETER WHICH FRONTS A PUBLIC WAY OR OPEN SPACE HAVING 20 FEET MINIMUM WIDTH = 776'-2" (F)
B TOTAL BUILDING PERIMETER = 776'-2" (F)
C RATIO (F) x H = 11 (F)
D W = MINIMUM WIDTH OF PUBLIC WAY = 32' (W)
E PERCENT OF FRONTAGE INCREASE = 1.103 (F) - 0.25 x W3 = 75% (N)
2 ALLOWABLE AREA ACCORDING TO SECTION 506.2.3 (EQUATION 5.2)
3 UNLIMITED AREA APPLICABLE UNDER CONDITIONS OF SECTION 507
4 MAXIMUM BUILDING AREA = NUMBER OF STORES IN THE BUILDING X (506.2.3)

ALLOWABLE HEIGHT

Table with 4 columns: TYPE OF CONSTRUCTION, ALLOWABLE TABLE (504.3 AND 504.4), SHOWN ON PLANS, and height values.

FIRE PROTECTION REQUIREMENTS - III-B BUILDING PER TABLE 601 AND TABLE 602

Table with 6 columns: BUILDING ELEMENT, FIRE SEPT. DIST. (FEET), RATING (HR) REQD, RATING (HR) PROVIDED, DESIGN # FOR RATED ASSEMBLY, DESIGN # FOR RATED PENETRATION, DESIGN # FOR RATED JOINTS.

PERCENTAGE OF WALL OPENING CALCULATIONS

Table with 4 columns: FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES, DEGREE OF OPENINGS PROTECTION (TABLE 708.8), ALLOWABLE (%) SHOWN ON PLANS, and percentage values.

WALL LEGENDS

(REFER TO LIFE SAFETY PLANS FOR MORE INFORMATION)
FIRE WALLS 708
SMOKE BARRIERS
SMOKE PARTITIONS 711
SHAFT ENCLOSURE 713
HORIZONTAL ASSEMBLY 711

LIFE SAFETY SYSTEM REQUIREMENTS

EMERGENCY LIGHTING: NO YES
EGRESS PATHWAY: NO YES
SMOKE DETECTION SYSTEMS: NO YES
FIRE ALARMS: NO YES
LIFE SAFETY SYSTEM GENERATOR: NO YES

NUMBER, WIDTH AND ARRANGEMENT OF EXITS

(REFER TO LIFE SAFETY PLANS)
FUTURE TENANT UNOCCUPIED AREA FINAL EGRESS SHALL BE DETERMINED AT TENANT UPFIT.

OCCUPANT LOAD

Table with 4 columns: USE GROUP OR SPACE DESIGNATION, AREA, AREA PER OCCUPANT, CALCULATED OCCUPANT LOAD.

PLUMBING FIXTURE REQUIREMENTS

Table with 13 columns: OCCUPANCY, LOAD, MALE RATIO, FEMALE RATIO, URINALS, LAVATORIES, BATHUBS SHOWERS, DRINKING FOUNTAINS, OTHER.

2018 SOUTH CAROLINA EXISTING BUILDING CODE:

307.7 ALTERATIONS AFFECTING AN AREA CONTAINING A PRIMARY FUNCTION

WHERE AN ALTERATION AFFECTS THE ACCESSIBILITY TO, OR CONTAINS AN AREA OF PRIMARY FUNCTION, THE ROUTE TO THE PRIMARY FUNCTION AREA SHALL BE ACCESSIBLE. THE ACCESSIBLE ROUTE TO THE PRIMARY FUNCTION AREA SHALL INCLUDE TOILET FACILITIES AND DRINKING FOUNTAINS SERVING THE AREA OF PRIMARY FUNCTION.
EXCEPTIONS:
1. THE COSTS OF PROVIDING THE ACCESSIBLE ROUTE ARE NOT REQUIRED TO EXCEED 20 PERCENT OF THE COSTS OF THE ALTERATIONS AFFECTING THE AREA OF PRIMARY FUNCTION.

3005.4 MACHINE ROOMS, CONTROL ROOMS, MACHINERY SPACES, AND CONTROL SPACES

ELEVATOR MACHINE ROOMS, CONTROL ROOMS, CONTROL SPACES AND MACHINERY SPACES OUTSIDE OF BUT ATTACHED TO A HOISTWAY THAT HAVE OPENINGS INTO THE HOISTWAY SHALL BE ENCLOSED WITH FIRE BARRIERS CONSTRUCTED IN ACCORDANCE WITH SECTION 707 OR HORIZONTAL ASSEMBLIES CONSTRUCTED IN ACCORDANCE WITH SECTION 711 WITH THE FIRE RESISTANCE RATING SHALL NOT BE LESS THAN THE REQUIRED RATING OF THE HOISTWAY ENCLOSURE. OPENINGS IN THE FIRE BARRIERS SHALL BE PROTECTED WITH ASSEMBLIES HAVING A FIRE RESISTANCE RATING NOT LESS THAN THAT REQUIRED FOR THE HOISTWAY ENCLOSURE DOORS.
EXCEPTIONS:
1. FOR OTHER THAN FIRE SERVICE ACCESS ELEVATORS AND OCCUPANT EVACUATION ELEVATORS, WHERE THE MACHINE ROOMS, MACHINERY SPACES, CONTROL ROOMS AND CONTROL SPACES DO NOT ABUT AND DO NOT HAVE OPENINGS TO THE HOISTWAY ENCLOSURE THEY SERVE, THE FIRE BARRIERS CONSTRUCTED WITH SECTION 707 OR HORIZONTAL ASSEMBLIES CONSTRUCTED IN ACCORDANCE WITH SECTION 711, OR BOTH, SHALL BE PERMITTED TO BE REDUCED TO A 1-HR FIRE RESISTANCE RATING.
2. FOR OTHER THAN FIRE SERVICE ACCESS ELEVATORS AND OCCUPANT EVACUATION ELEVATORS, IN BUILDINGS FOR STORIES OR LESS ABOVE GRADE PLAN WHERE MACHINE ROOM, MACHINERY SPACES, CONTROL ROOMS AND CONTROL SPACES DO NOT ABUT AND DO NOT HAVE OPENINGS TO THE HOISTWAY ENCLOSURE THEY SERVE, THE MACHINE ROOM, MACHINERY SPACES, CONTROL ROOMS AND CONTROL SPACES ARE NOT REQUIRED TO BE FIRE-RESISTANCE RATED.



CORRIGENDUM LOGS

MAIL



AIKEN COUNTY
AIKEN PUBLIC LIBRARY & NORTH WING RENOVATION
314 CHESTERFIELD ST, AIKEN SC

Table with 4 columns: SHEET ISSUE NO, DATE, DESCRIPTION, BY

ISSUED FOR BIDS 07/02/2020
PRINCIPAL IN CHARGE DRM
PROJECT ARCHITECT TA
DRAWN BY JTP

SHEET TITLE: CODE SUMMARY

SHEET NO. PROJ. NO. 019477.01

G010