# BUILDING CODE SUMMARY

NAME OF PROJECT: UNIVERSITY OF NORTH CAROLINA WILMINGTON, DOBO HALL RENOVATION (COMPUTER 118 & 118A)
ADDRESS: 601 SOUTH COLLEGE ROAD, WILMINGTON NC.
PROPOSED USE: BUSINESS
OWNER OR AUTHORIZED AGENT: TOM McCARLEY PHONE #: 910-962-7229
OWNED BY: ☐ CITY/COUNTY ☐ PRIVATE ■ STATE
CODE ENFORCEMENT JURISDICTION: ☐ CITY _____ ☐ COUNTY _____ ■ STATE

LEAD DESIGN PROFESSIONAL: _____

| DESIGNER | FIRM | NAME | LICENSE # | TELEPHONE # | EMAIL ADDRESS |
|---|---|---|---|---|---|
| ARCHITECTURAL | BECKER MORGAN GROUP | Ernest W. Olds | 10595 | 910.341.7600 | eolds@beckermorgan.com |
| CIVIL | | | | | |
| ELECTRICAL | CBHF ENGINEERS, PLLC | W. Allen Cribb | 23311 | 910.791.4000 | acribb@mcbheng.com |
| FIRE ALARM | | | | | |
| PLUMBING | CBHF ENGINEERS, PLLC | David M. Hahn | 23551 | 910.791.4000 | dhahn@mcbheng.com |
| MECHANICAL | CBHF ENGINEERS, PLLC | David M. Hahn | 23551 | 910.791.4000 | dhahn@mcbheng.com |
| SPRINKLER-STANDPIPE | | | | | |
| STRUCTURAL | | | | | |
| RETAINING WALLS >5' HIGH | | | | | |
| OTHER | | | | | |

2012 EDITION OF NC CODE FOR: ☐ NEW CONSTRUCTION ☐ ADDITION ☐ UPFIT
EXISTING: ☐ RECONSTRUCTION ■ ALTERATION ☐ REPAIR ☐ RENOVATION
CONSTRUCTED 1994 ORIGINAL USE(S) (Ch. 3) BUSINESS
RENOVATED 2005, 2008 CURRENT USE(S) (Ch. 3) BUSINESS
PROPOSED USE(S) (Ch. 3) BUSINESS

## BASIC BUILDING DATA:

CONSTRUCTION TYPE: ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A
(Check all that apply) ■ I-B ☐ II-B ☐ III-B ☐ V-B
SPRINKLERS: ☐ NO ☐ PARTIAL ■ YES ■ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
STANDPIPES: ■ NO ☐ YES CLASS ☐ I ☐ II ☐ III ☐ WET ☐ DRY
FIRE DISTRICT: ■ NO ☐ YES (Primary) FLOOD HAZARD AREA: ■ NO ☐ YES
BUILDING HEIGHT: FEET 160

GROSS BUILDING AREA:

| FLOOR | EXISTING (SQ. FT.) | EXIST. AREA OF ALTERATION (SQ. FT.) | SUB-TOTAL |
|---|---|---|---|
| 6TH FLOOR | . | . | . |
| 5TH FLOOR | . | . | . |
| 4TH FLOOR | . | . | . |
| 3RD FLOOR | . | . | . |
| 2ND FLOOR | 51,144 | . | . |
| MEZZANINE | . | . | . |
| 1ST FLOOR | 51,144 | 2162 | . |
| BASEMENT | . | . | . |
| TOTAL | 102,288 | 2162 | . |

## ALLOWABLE AREA:

OCCUPANCY:
ASSEMBLY ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
BUSINESS ■
EDUCATIONAL ☐
FACTORY ☐ F-1 MODERATE ☐ F-2 LOW
HAZARDOUS ☐ H-1 DETONATE ☐ H-2 DEFLAGRATE ☐ H-3 COMBUST ☐ H-4 HEALTH ☐ H-5 HPM
INSTITUTIONAL ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
I-3 USE CONDITION ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
MERCANTILE ☐
RESIDENTIAL ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
STORAGE ☐ S-1 MODERATE ☐ S-2 LOW ☐ HIGH-PILED
☐ PARKING GARAGE ☐ OPEN ☐ ENCLOSED ☐ REPAIR GARAGE
UTILITY AND MISCELLANEOUS ☐

ACCESSORY OCCUPANCIES:
ASSEMBLY ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
BUSINESS ☐
EDUCATIONAL ☐
FACTORY ☐ F-1 MODERATE ☐ F-2 LOW
HAZARDOUS ☐ H-1 DETONATE ☐ H-2 DEFLAGRATE ☐ H-3 COMBUST ☐ H-4 HEALTH ☐ H-5 HPM
INSTITUTIONAL ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
I-3 USE CONDITION ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
MERCANTILE ☐
RESIDENTIAL ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
STORAGE ☐ S-1 MODERATE ☐ S-2 LOW ☐ HIGH-PILED
☐ PARKING GARAGE ☐ OPEN ☐ ENCLOSED ☐ REPAIR GARAGE
UTILITY AND MISCELLANEOUS ☐

INCIDENTAL USES (Table 508.2.5):
☐ FURNACE ROOM WHERE ANY PIECE OF EQUIPMENT IS OVER 400,000 BTU PER HOUR INPUT
☐ ROOMS WITH BOILERS WHERE THE LARGEST PIECE OF EQUIPMENT IS OVER 15 PSI AND 10 HORSEPOWER
☐ REFRIGERANT MACHINE ROOM
☐ HYDROGEN CUTOFF ROOMS, NOT CLASSIFIED AS GROUP H
☐ INCINERATOR ROOMS
☐ PAINT SHOPS, NOT CLASSIFIED AS GROUP H, LOCATED IN OCCUPANCIES OTHER THAN GROUP F
☐ LABORATORIES AND VOCATIONAL SHOPS, NOT CLASSIFIED AS GROUP H, LOCATED IN A GROUP E OR I-2 OCCUPANCIES
☐ LAUNDRY ROOMS OVER 100 SQUARE FEET
☐ GROUP I-3 CELLS EQUIPPED WITH PADDED SURFACES
☐ GROUP I-2 WASTE AND LINEN COLLECTION ROOMS
☐ WASTE AND LINEN COLLECTION ROOMS OVER 100 SQUARE FEET
☐ STATIONARY STORAGE BATTERY SYSTEMS HAVING A LIQUID ELECTROLYTE CAPACITY OF MORE THAN 50 GALLONS, OR A LITHIUM-ION CAPACITY OF 1,000 POUNDS USED FOR FACILITY STANDBY POWER, EMERGENCY POWER OR UNINTERRUPTED POWER SUPPLIES
☐ ROOMS CONTAINING FIRE PUMPS
☐ GROUP I-2 STORAGE ROOMS OVER 100 SQUARE FEET
☐ GROUP I-2 COMMERCIAL KITCHENS
☐ GROUP I-2 LAUNDRIES EQUAL TO OR LESS THAN 100 SQUARE FEET
☐ GROUP I-2 ROOMS OR SPACES THAN CONTAIN FUEL-FIRED HEATING EQUIPMENT

SPECIAL USES: ☐ 402 ☐ 403 ☐ 404 ☐ 405 ☐ 406 ☐ 407 ☐ 408 ☐ 409 ☐ 410 ☐ 411 ☐ 412 ☐ 413 ☐ 414 ☐ 415 ☐ 416 ☐ 417 ☐ 418 ☐ 419 ☐ 420 ☐ 421 ☐ 422 ☐ 423 ☐ 424 ☐ 425 ☐ 426 ☐ 427

SPECIAL PROVISIONS: ☐ 509.2 ☐ 509.3 ☐ 509.4 ☐ 509.5 ☐ 509.6 ☐ 509.7 ☐ 509.8 ☐ 509.9

MIXED OCCUPANCY: ■ NO ☐ YES SEPARATION: _____ HR. EXCEPTION: _____

☐ INCIDENTAL USE SEPARATION (508.2.5)
THIS SEPARATION IS NOT EXEMPT AS A NON-SEPARATED USE (SEE EXCEPTIONS)

☐ NON-SEPARATED USE (508.3)
THE REQUIRED TYPE OF CONSTRUCTION FOR THE BUILDING SHALL BE DETERMINED BY APPLYING THE HEIGHT AND AREA LIMITATIONS FOR EACH OF THE APPLICABLE OCCUPANCIES TO THE ENTIRE BUILDING. THE MOST RESTRICTIVE TYPE OF CONSTRUCTION, SO DETERMINED, SHALL APPLY TO THE ENTIRE BUILDING

☐ SEPARATED USE (508.4) - SEE BELOW FOR AREA CALCULATIONS
FOR EACH STORY, THE AREA OF THE OCCUPANCY SHALL BE SUCH THAT THE SUM OF THE RATIOS OF THE ACTUAL FLOOR AREA OF EACH USE DIVIDED BY THE ALLOWABLE FLOOR AREA FOR EACH USE SHALL NOT EXCEED 1

$$\frac{\text{ACTUAL AREA OF OCCUPANCY A}}{\text{ALLOWABLE AREA OF OCCUPANCY A}} + \frac{\text{ACTUAL AREA OF OCCUPANCY B}}{\text{ALLOWABLE AREA OF OCCUPANCY B}} \leq 1$$

$$\frac{\quad.\quad}{\quad.\quad} + \frac{\quad.\quad}{\quad.\quad} + \frac{\quad.\quad}{\quad.\quad} = \frac{\quad.\quad}{\quad.\quad} \leq 1$$

| STORY NO. | DESCRIPTION AND USE | (A) BLDG AREA PER STORY (ACTUAL) | (B) TABLE 503[5] AREA | (C) AREA FOR OPEN SPACE INCREASE[1] | (D) AREA FOR SPRINKLER INCREASE[2] | (E) ALLOWABLE AREA OR UNLIMITED[3] | (F) MAXIMUM BUILDING AREA[4] |
|---|---|---|---|---|---|---|---|
| 1 | BUSINESS | 51,144 | UNLIMITED | . | . | . | UNLIMITED |
| 2 | BUSINESS | 51,144 | . | . | . | . | . |
| . | . | . | . | . | . | . | . |
| . | . | . | . | . | . | . | . |

1. FRONTAGE AREA INCREASES FROM SECTION 506.2 ARE COMPUTED THUS:
   A. PERIMETER WHICH FRONTS A PUBLIC WAY OR OPEN SPACE HAVING 20 FEET MINIMUM WIDTH = _____(F)
   B. TOTAL BUILDING PERIMETER = _____(P)
   C. RATIO (F/P) = _____(F/P)
   D. W = MINIMUM WIDTH OF PUBLIC WAY = _____(W)
   E. PERCENT OF FRONTAGE INCREASE $I_f$ = 100 [F/P - 0.25] x W/30 = _____(%)
2. THE SPRINKLER INCREASE PER SECTION 506.3 IS AS FOLLOWS:
   A. MULTI-STORY BUILDING $I_s$ = 200 PERCENT
   B. SINGLE-STORY BUILDING $I_s$ = 300 PERCENT
3. UNLIMITED AREA APPLICABLE UNDER CONDITIONS OF SECTION 507
4. MAXIMUM BUILDING AREA = TOTAL NUMBER OF STORIES IN THE BUILDING x E (506.4)
5. THE MAXIMUM AREA OF OPEN PARKING GARAGES MUST COMPLY WITH 406.3.5. THE MAXIMUM AREA OF AIR TRAFFIC CONTROL TOWERS MUST COMPLY WITH 412.1.2.

## ALLOWABLE HEIGHT:

| | ALLOWABLE (TABLE 503) | INCREASE FOR SPRINKLERS | SHOWN ON PLANS | CODE REFERENCE |
|---|---|---|---|---|
| TYPE OF CONSTRUCTION | TYPE I-B | | TYPE I-B | . |
| BUILDING HEIGHT IN FEET | FEET 160 | FEET = H + 20' = . | FEET 36 | . |
| BUILDING HEIGHT IN STORIES | STORIES 5 | STORIES + 1 = . | STORIES 2 | . |

## FIRE PROTECTION REQUIREMENTS:

| BUILDING ELEMENT | FIRE SEPARATION DISTANCE (FEET) | RATING REQ'D | RATING PROVIDED (W/ * REDUCTION) | DETAIL # AND SHEET # | DESIGN # FOR RATED ASSEMBLY | DESIGN # FOR RATED PENETRATION | DESIGN # FOR RATED JOINTS |
|---|---|---|---|---|---|---|---|
| STRUCTURAL FRAME, INCLUDING COLUMNS, GIRDERS, TRUSSES | SUPPORTING FLOOR / SUPPORTING ROOF | 2 / 1 | 2 / 1 | . | UL X-510 / UL X-513, UL X-517 | UNKNOWN / UNKNOWN | UNKNOWN / UNKNOWN |
| BEARING WALLS | N/A | . | . | . | . | . | . |
| EXTERIOR | . | . | . | . | . | . | . |
| NORTH | . | . | . | . | . | . | . |
| EAST | . | . | . | . | . | . | . |
| WEST | . | . | . | . | . | . | . |
| SOUTH | . | . | . | . | . | . | . |
| INTERIOR | . | . | . | . | . | . | . |
| NON-BEARING WALLS AND PARTITIONS | | | | | | | |
| EXTERIOR | >30' | 0 | . | . | . | . | . |
| NORTH | . | 0 | . | . | . | . | . |
| EAST | . | 0 | . | . | . | . | . |
| WEST | . | 0 | . | . | . | . | . |
| SOUTH | . | 0 | . | . | . | . | . |
| INTERIOR | . | 0 | . | . | . | . | . |
| FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS | . | 2 | . | . | UL D-502 / UL N-708 | . | . |
| ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS | . | 1 | . | . | UL D-502 / UL N-708 | . | . |
| SHAFTS - EXIT | . | 1 | . | . | UNKNOWN | UNKNOWN | UNKNOWN |
| SHAFTS - OTHER | . | 1 | . | . | UNKNOWN | UNKNOWN | UNKNOWN |
| CORRIDOR SEPARATION | . | 0 | . | . | . | . | . |
| OCCUPANCY SEPARATION | . | 1,2 | EXISTING | . | UNKNOWN | UNKNOWN | UNKNOWN |
| PARTY/FIRE WALL SEPARATION | . | N/A | . | . | . | . | . |
| SMOKE BARRIER SEPARATION | . | N/A | . | . | . | . | . |
| TENANT SEPARATION | . | N/A | . | . | . | . | . |
| INCIDENTAL USE SEPARATION | . | N/A | . | . | . | . | . |

* INDICATE SECTION NUMBER PERMITTING REDUCTION

## LIFE SAFETY SYSTEM REQUIREMENTS:

| | | | | |
|---|---|---|---|---|
| EMERGENCY LIGHTING: | ☐ NO | ■ YES | | EXISTING |
| EXIT SIGNS: | ☐ NO | ■ YES | | EXISTING |
| FIRE ALARM: | ☐ NO | ■ YES | | EXISTING |
| SMOKE DETECTION SYSTEMS: | ☐ NO | ■ YES | ☐ PARTIAL | EXISTING |
| PANIC HARDWARE: | ☐ NO | ■ YES | | EXISTING |

## LIFE SAFETY PLAN REQUIREMENTS:

LIFE SAFETY PLAN SHEET # G002

NA ☐ FIRE AND/OR SMOKE RATED WALL LOCATIONS (CHAPTER 7)
NA ☐ ASSUMED AND REAL PROPERTY LINE LOCATIONS
NA ☐ EXTERIOR WALL OPENING AREA WITH RESPECT TO DISTANCE TO ASSUMED PROPERTY LINES (705.8)
NA ☐ EXISTING STRUCTURES WITHIN 30 FEET OF THE PROPOSED BUILDING
■ OCCUPANCY TYPES FOR EACH AREA AS IT RELATES TO OCCUPANT LOAD CALCULATION (TABLE 1004.1.1)
■ OCCUPANT LOADS FOR EACH AREA
■ EXIT ACCESS TRAVEL DISTANCES (1016)
■ COMMON PATH OF TRAVEL DISTANCES (1014.3 & 1028.8)
NA ☐ DEAD END LENGTHS (1018.4)
■ CLEAR EXIT WIDTHS FOR EACH EXIT DOOR
■ MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.1)
■ ACTUAL OCCUPANT LOAD FOR EACH EXIT DOOR
NA ☐ A SEPARATE SCHEMATIC PLAN INDICATING WHERE FIRE RATED FLOOR/CEILING AND/OR ROOF STRUCTURE IS PROVIDED FOR PURPOSES OF OCCUPANCY SEPARATION
NA ☐ LOCATION OF DOORS WITH PANIC HARDWARE (1008.1.10)
NA ☐ LOCATION OF DOORS WITH DELAYED EGRESS LOCKS AND THE AMOUNT OF DELAY (1008.1.9.7)
NA ☐ LOCATION OF DOORS WITH ELECTROMAGNETIC EGRESS LOCKS (1008.1.9.8)
NA ☐ LOCATION OF DOORS EQUIPPED WITH HOLD-OPEN DEVICES
NA ☐ LOCATION OF EMERGENCY ESCAPE WINDOWS (1029)
NA ☐ THE SQUARE FOOTAGE OF EACH FIRE AREA (902)
NA ☐ THE SQUARE FOOTAGE OF EACH SMOKE COMPARTMENT (407.4)
NA ☐ NOTE ANY CODE EXCEPTIONS OR TABLE NOTES THAT MAY HAVE BEEN UTILIZED REGARDING THE ITEMS ABOVE

## ACCESSIBLE DWELLING UNITS (SECTION 1107) N/A

| TOTAL UNITS | ACCESSIBLE UNITS REQUIRED | ACCESSIBLE UNITS PROVIDED | TYPE A UNITS REQUIRED | TYPE A UNITS PROVIDED | TYPE B UNITS REQUIRED | TYPE B UNITS PROVIDED | TOTAL ACCESSIBLE UNITS PROVIDED |
|---|---|---|---|---|---|---|---|
| . | . | . | . | . | . | . | . |

## ACCESSIBLE PARKING (SECTION 1106) NA -EXISTING

| LOT OR PARKING AREA | TOTAL # OF PARKING SPACES | | # OF ACCESSIBLE SPACES PROVIDED | | | TOTAL # ACCESSIBLE PROVIDED |
|---|---|---|---|---|---|---|
| | REQUIRED | PROVIDED | REGULAR WITH 5' ACCESS AISLE | VAN SPACES WITH 132" ACCESS AISLE | VAN SPACES WITH 8' ACCESS AISLE | |
| . | . | . | . | . | . | . |
| . | . | . | . | . | . | . |
| TOTAL | . | . | . | . | . | . |

## STRUCTURAL DESIGN NA -EXISTING

DESIGN LOADS:
IMPORTANCE FACTORS: WIND (Iw) _____ SNOW (Is) _____ SEISMIC (Ie) _____
LIVE LOADS: ROOF _____ PSF MEZZANINE _____ PSF FLOOR _____ PSF
GROUND SNOW LOAD: _____ PSF
WIND LOAD: BASIC WIND SPEED _____ MPH (ASCE-7-98) EXPOSURE CATEGORY _____ WIND BASE SHEARS (FOR MWFRS) Vx= _____ Vy= _____

SEISMIC DESIGN CATEGORY ☐ A ☐ B ☐ C ☐ D ■ E
PROVIDE THE FOLLOWING SEISMIC DESIGN PARAMETERS:
OCCUPANCY CATEGORY (TABLE 1604.5) ☐ I ■ II ☐ III ☐ IV
SPECTRAL RESPONSE ACCELERATION $S_s$ _____ %g $S_1$ _____ %g
SITE CLASSIFICATION (TABLE 1613.2) ☐ A ☐ B ☐ C ■ D ☐ E ☐ F
DATA SOURCE: ☐ FIELD TEST ■ PRESUMPTIVE ☐ HISTORICAL DATA
BASIC STRUCTURAL SYSTEM (CHECK ONE)
☐ BEARING WALL ☐ DUAL W/ SPECIAL MOMENT FRAME
☐ BUILDING FRAME ☐ DUAL W/ INTERMEDIATE R/C OR SPECIAL STEEL
☐ MOMENT FRAME ☐ INVERTED PENDULUM
SEISMIC BASE SHEAR: Vx=_____ Vy=_____
ANALYSIS PROCEDURE: ☐ SIMPLIFIED ☐ EQUIVALENT LATERAL FORCE ☐ DYNAMIC
ARCHITECTURAL, MECHANICAL, COMPONENTS ANCHORED? ☐ YES ☐ NO

LATERAL DESIGN CONTROL: EARTHQUAKE ☐ WIND ☐

SOIL BEARING CAPACITIES:
FIELD TEST (PROVIDE COPY OF TEST REPORT) _____ PSF
PRESUMPTIVE BEARING CAPACITY _____ PSF
PILE SIZE, TYPE AND CAPACITY _____

SPECIAL INSPECTIONS REQUIRED: ☐ YES ☐ NO




1 LIFE SAFETY PLAN
G002 SCALE: 3/32" = 1'-0"

## PLUMBING FIXTURE REQUIREMENTS (SECTION 1106) NA -EXISTING

| USE | | WATERCLOSETS MALE | WATERCLOSETS FEMALE | URINALS | LAVATORIES MALE | LAVATORIES FEMALE | SHOWERS/ TUBS | DRINKING FOUNTAINS REGULAR | DRINKING FOUNTAINS ACCESSIBL |
|---|---|---|---|---|---|---|---|---|---|
| SPACE | EXISTING | . | . | . | . | . | . | . | . |
| | NEW | . | . | . | . | . | . | . | . |
| | REQUIRED | . | . | . | . | . | . | . | . |

## SPECIAL APPROVALS

SPECIAL APPROVAL: (LOCAL JURISDICTION, DEPARTMENT OF INSURANCE, SBCCI, ICC, ETC., DESCRIBE BELOW)
. . . .

## ENERGY SUMMARY NA -EXISTING

MECHANICAL SUMMARY -SEE MECHANICAL DRAWINGS
ELECTRICAL SUMMARY -SEE ELECTRICAL DRAWINGS


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RECORD DRAWINGS

THIS DOCUMENT REFLECTS CHANGES TO THE DESIGN DOCUMENTS MADE DURING CONSTRUCTION BY THE CONTRACTOR AND SUBMITTED TO THE ARCHITECT AFTER CONSTRUCTION. FIELD VERIFICATION BY THE ARCHITECT WAS NOT PROVIDED.

PROJECT TITLE

UNCW
UNIVERSITY OF NORTH CAROLINA WILMINGTON

Dobo Hall Labs
117 & 119
Renovations

601 S College Rd.
Wilmington, NC 28403

STATE ID #: 17-16975-01A

SHEET TITLE

LAB 117 & LAB 119
BUILDING CODE SUMMARY
LIFE SAFETY PLAN

ISSUE BLOCK

| MARK | DATE | DESCRIPTION |
|---|---|---|
| | 10/13/2017 | RECORD DRAWINGS |

PROJECT NO: 2012168.01
DATE: 04/07/2017
SCALE:
DRAWN BY: NMY PROJ MGR: EWO

G002

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