

Building Code Summary

Name of Project: MOUNTAIN ISLAND APARTMENTS
 Address: MT. HOLLY/HUNTERSVILLE RD AND HWY 16 CHARLOTTE, NC 28216
 Proposed Use: RESIDENTIAL
 Owner/Contact Person: BROWN INVESTMENT PROPERTIES Phone # : (336) 379-8721
 Code Enforcement Jurisdiction: CHARLOTTE / MECKLENBURG CO.
 DESIGNER OF RECORD: Designer Name License # Telephone #
 Architectural CHARLES M. HILL, AIA / 4877 (NC) 828-659-1540
 Electrical
 Plumbing
 Mechanical
 Structural
 Sprinkler-Standpipe VENDOR SELECTED BY OWNER / CONTRACTOR
 Fire Alarm
 Other
 BUILDING DATA
 Occupancy: RESIDENTIAL
 Mixed Occupancy? NO
 Construction Type: YES VB
 Sprinklered? NO
 Fire District? NO
 Building Height: NO
 High Rise? NO
 FLOOR SOL. FT. BLDG. TYPE: X
 1st Floor 11,563 SQ. FT. GROSS BRICK VENER
 2nd Floor 11,330 SQ. FT. GROSS FRAME
 3rd Floor 11,350 SQ. FT. GROSS FRAME
 Area Increase: TABLE 503 / VB / 504.2 AUTOMATIC SPRINKLER INCREASE TO 3 STORY
 506.3 AREA INCREASE TABLE 503

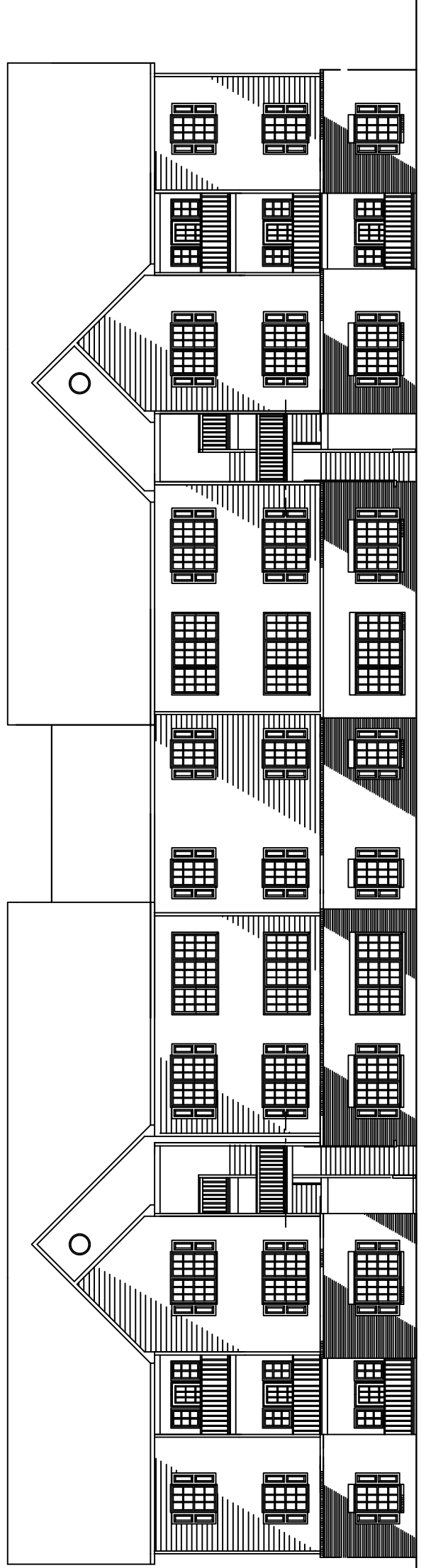
SOIL BEARING CAPACITIES:
 Field Test (provided copy of test report) 2000 PSF
 Presumptive Bearing Capacity:
 File size, type, and capacity
 DESIGN LOADS:
 Roof live load: 20 LB. Importance Factor: 1 psf.
 Wind: Zone: 90 mph Exposure: 1
 VOLUME / Section 1606 ASCE-7 X
 Floor: SLAB ON GRADE / TRUSSES 40LL / 10DL psf.
 Snow: 20 #
 Seismic: Zone: "C" Av 0.75 Importance Factor:
 SEISMIC PERFORMANCE CATEGORY "B"
 Method of Resistance: BRACED FRAME / SHEAR WALL
 (i.e. Braced Frame/Moment Frame/Shear Walls)
 LIFE SAFETY SYSTEM:
 Emergency Lighting and Exit Signs: Yes No X
 Fire Alarm and Smoke Detectors System: Yes No X
 Panic Hardware: Yes No X
 EXIT REQUIREMENTS:
 Dead end limit—maximum condition:
 Travel distance to exit—maximum condition:
 Number exits:
 (1) EXIT DOOR TO BREZEWAY PER DWELLING UNIT REQ'D / (1) DOOR PROVIDED
 (2) BLDG. EQUIPPED W/ SPRINKLER SYSTEM / INCLUDES BREZEWAY

Required Hourly	Detail # & Sheet #	% WALL Openings	Design No. for Rated Assemblies
1 HR. #4, 5, 6, 7			UL - U356
Party/Firewalls:			
North	1 HR. #4, 5, 6, 7		UL - U356
East	1 HR. #4, 5, 6, 7		UL - U341
West	1 HR. #4, 5, 6, 7		UL - U328
South	1 HR. #4, 5, 6, 7		UL - U322
Exterior Non-Bearing Walls:			
North	1 HR. #4, 5, 6, 7		UL - U356
East	1 HR. #4, 5, 6, 7		UL - U341
West	1 HR. #4, 5, 6, 7		UL - U328
South	1 HR. #4, 5, 6, 7		UL - U322
Interior Walls:			
Bearing	1 HR. #4, 5, 6, 7		UL - U305
Non-Bearing	1 HR. #4, 5, 6, 7		UL - U341
Tenant Separation	1 HR. #4, 5, 6, 7		UL - U328
Ceiling-Floors Assembly:	1 HR. #4, 5, 6, 7		UL - U328
Beams:			
Columns:			
Ceiling-Roof Assembly:	1 HR. #4, 5, 6, 7		UL - U322
Mixed Occupancy Separation:			
Tenant Separation:			
Vertical Shafts:			
EXIT CORRIDOR (BREZEWAY)	(1) HR. #6, #7		UL - U305

PARKING SPACES: SEE SITE PLAN

THERMAL ENVELOPE
 METHOD OF COMPLIANCE: RESIDENTIAL / PRESCRIPTIVE
 Roof/Ceiling Assembly (each assembly) DETAIL SHEETS #4, #5
 Description of assembly
 U-Value of assembly
 R-Value of insulation
 Skylights in each assembly
 U-Value of skylight
 total square footage of skylights in each assembly
 Exterior Walls (each assembly) DETAIL SHEETS #4, #5
 Description of assembly
 U-Value of total assembly = SIDING U = 0.54 B.V. = .052
 R-Value of insulation
 R-Value of batts
 Openings (windows or doors with glazing)
 U-Value of assembly U = 0.65 MAX. GLASS ALL EXTERIOR WINDOWS
 shading coefficient
 low e required, if applicable
 Door R-Values
 Walls adjacent to unconditioned space (each assembly)
 Description of assembly
 U-Value of assembly
 R-Value of insulation
 Openings (windows or doors with glazing)
 U-Value of assembly
 low e required, if applicable
 Door R-Values
 Walls below grade (each assembly)
 Description of assembly
 U-Value of total assembly
 R-Value of insulation
 Floors over unconditioned space (each assembly)
 Description of assembly
 U-Value of total assembly
 R-Value of insulation
 Floors slab on grade
 Description of assembly
 U-Value of total assembly
 R-Value of insulation
 Horizontal/vertical requirement
 24" HOR. / 4" VERT. SEE SHEET #1
 slab heated
 DESIGNER STATEMENT:
 To the best of my knowledge and belief, the design of this building complies with the mechanical systems, service systems and equipment requirements of the North Carolina State Building Code, Volume X-Energy.

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT cont.
 Building heating load SEE LOAD SUMMARY SHEET M-1
 Building cooling load SEE LOAD SUMMARY SHEET M-1
 Mechanical Space Conditioning System
 EQUIPMENT SCHEDULE:
 2 BEDROOM UNIT APARTMENT
 GOODMAN EQUIPMENT 1-1/2 TON HEAT PUMP SPLIT SYSTEM
 HEAT PUMP / CONDENSER: 14.5 SEER HEAT PUMP
 WALL MOUNT AIR HANDLER W/ 8 KW STRIP
 T-STAT: ROBERT SHAW OR EQUAL HEAT PUMP T-STAT.
 3 BEDROOM UNIT APARTMENT
 GOODMAN EQUIPMENT 2 TON HEAT PUMP SPLIT SYSTEM
 HEAT PUMP / CONDENSER: 14.5 SEER HEAT PUMP
 WALL MOUNT AIR HANDLER W/ 8 KW STRIP
 T-STAT: ROBERT SHAW OR EQUAL HEAT PUMP T-STAT.
 DESIGNER STATEMENT:
 To the best of my knowledge and belief, the design of this building complies with the mechanical systems, service systems and equipment requirements of the North Carolina State Building Code, Volume X-Energy.
 SIGNED: CHARLES M. HILL, AIA
 NAME: ARCHITECT OF RECORD / #4877 (NC)
 TITLE:
 ELECTRICAL SYSTEM AND EQUIPMENT RESIDENTIAL / PRESCRIPTIVE
 METHOD OF COMPLIANCE: SEE PANEL SIZES, LAYOUTS, LOAD SUMMARY SHEETS
 ME-1, E-1, E-2



MOUNTAIN ISLAND LAKE APARTMENTS / BLDG. TYPE 'C'

3 STORY SPRINKLERED BLDG.
 2 AND 3 BEDROOM UNIT PLAN / 24 UNIT BLDG. TYPE 'C'.

CHARLES M. HILL, A.I.A.
 ARCHITECT
 NEBO, NC
 TELEPHONE (828) 659-1540

OWNER / DEVELOPER:
 MOUNTAIN ISLAND APARTMENTS, LLC
 1329 EAST MOREHEAD STREET, SUITE 200
 CHARLOTTE, NC 28204

MOUNTAIN ISLAND LAKE APARTMENTS
 MT. HOLLY/HUNTERSVILLE RD AND HWY 16
 CHARLOTTE, NC 28216

CHARLES M. HILL ARCHITECT AIA 4877 (NC) NEBO, NC

JOB NO.	DRAWN BY	CMH
CHECKED BY	CMH	
DATE	4-22-2010	
REVISIONS		
6-30-2010		
8-2-10		

SHEET NO. CODE SUMMARY BUILDING