



SNMA
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Project Name: University of Southern Maine
Project Location: Matine Court, Portland, Maine
Project No: 3048.10
Date: 03/20/2005

Applicable Building Codes
ADA Accessibility Guidelines
NFPA 101 The Life Safety Code 2003 Edition
IBC 2003 Edition with 2004 Addenda
Maine State Building Code (MSBC) 2003 Edition

A. USE GROUP CLASSIFICATION
1. BUILDING USE: Business
2. USE GROUP: B
3. OCCUPANCY SEPARATION: 2 hrs
(IBC Table 503.2)
Between Use Groups: 1 hr w/ Sprinkler (IBC Table 503.3.2)

B. CONSTRUCTION CLASSIFICATION (PROPOSED)
1. TYPE OF CONSTRUCTION:
(a) New Construction: 2B
(b) Existing to remain: 2B

2. FIRE SEPARATION
(a) New Construction: Interior Finish 503
Occupancy 1: Business
Occupancy 2: Business

Fire Resistance Ratings as follows: (Hour Separation)
(IBC Table 601) with fire separation:
a) Non-sprinkling (Table 602)
see Paragraph C, below
b) Sprinkling (Table 603)

Table 601.1 (Existing and Sprinkled)	Table 601.2 (Non-sprinkled)	Table 601.3 (Sprinkled)
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
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92	92	92
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98	98	98
99	99	99
100	100	100

3. BUILDING LIMITATIONS - (TABLE 600)
(a) Maximum height: 80 ft
(b) Maximum area: 100,000 sq ft
(c) Maximum volume: 1,000,000 cu ft
(d) Maximum lot area: 50,000 sq ft
(e) Maximum floor area: 10,000 sq ft
(f) Maximum floor area per floor: 1,000 sq ft
(g) Maximum floor area per floor per zone: 1,000 sq ft
(h) Maximum floor area per floor per zone: 1,000 sq ft
(i) Maximum floor area per floor per zone: 1,000 sq ft
(j) Maximum floor area per floor per zone: 1,000 sq ft
(k) Maximum floor area per floor per zone: 1,000 sq ft
(l) Maximum floor area per floor per zone: 1,000 sq ft
(m) Maximum floor area per floor per zone: 1,000 sq ft
(n) Maximum floor area per floor per zone: 1,000 sq ft
(o) Maximum floor area per floor per zone: 1,000 sq ft
(p) Maximum floor area per floor per zone: 1,000 sq ft
(q) Maximum floor area per floor per zone: 1,000 sq ft
(r) Maximum floor area per floor per zone: 1,000 sq ft
(s) Maximum floor area per floor per zone: 1,000 sq ft
(t) Maximum floor area per floor per zone: 1,000 sq ft
(u) Maximum floor area per floor per zone: 1,000 sq ft
(v) Maximum floor area per floor per zone: 1,000 sq ft
(w) Maximum floor area per floor per zone: 1,000 sq ft
(x) Maximum floor area per floor per zone: 1,000 sq ft
(y) Maximum floor area per floor per zone: 1,000 sq ft
(z) Maximum floor area per floor per zone: 1,000 sq ft

4. OCCUPANCY RATING
(a) Business: 1
(b) Business: 1
(c) Business: 1
(d) Business: 1
(e) Business: 1
(f) Business: 1
(g) Business: 1
(h) Business: 1
(i) Business: 1
(j) Business: 1
(k) Business: 1
(l) Business: 1
(m) Business: 1
(n) Business: 1
(o) Business: 1
(p) Business: 1
(q) Business: 1
(r) Business: 1
(s) Business: 1
(t) Business: 1
(u) Business: 1
(v) Business: 1
(w) Business: 1
(x) Business: 1
(y) Business: 1
(z) Business: 1

5. EXTERIOR WALL FIRE RESISTANCE REQUIREMENTS (TABLE 602)
(a) Business: 1
(b) Business: 1
(c) Business: 1
(d) Business: 1
(e) Business: 1
(f) Business: 1
(g) Business: 1
(h) Business: 1
(i) Business: 1
(j) Business: 1
(k) Business: 1
(l) Business: 1
(m) Business: 1
(n) Business: 1
(o) Business: 1
(p) Business: 1
(q) Business: 1
(r) Business: 1
(s) Business: 1
(t) Business: 1
(u) Business: 1
(v) Business: 1
(w) Business: 1
(x) Business: 1
(y) Business: 1
(z) Business: 1

6. FIRE RESISTANCE RATING OF STRUCTURAL MEMBERS (IBC TABLE 715.1)
715.1. Requirements. The fire-resistance rating of structural members and assemblies shall not be less than the rating required for the assemblies supported.
715.2. Protection of Structural Members. Columns, beams, or other structural members which are required to have a fire-resistance rating and support more than two floors shall be radially protected on all sides for the full length and height with materials having the required fire-resistance rating. All other structural members shall be protected by individual encasement, or by membrane or ceiling protection.

7. EGRESS REQUIREMENTS
1. OCCUPANCY CALCULATIONS:
a. Maximum sq. ft. per occupant: 68
b. Maximum number of occupant:
Basement: 86
Ground floor: 86
3rd floor: 86
4th floor: 86
5th floor: 86
Total: 436
c. Egress width:
0.2 inches at stairways
0.12 inches at doors, ramps and corridors

8. EGRESS WIDTH (FOR STAIRS)
Basement: 86
1st floor: 86
2nd floor: 86
3rd floor: 86
4th floor: 86
5th floor: 86
Total: 436
Egress width (for doors): 0.2 inches at stairways, 0.12 inches at doors, ramps and corridors

9. NUMBER OF EXITS REQUIRED (IBC TABLE 1016.1)
Basement: 1
1st floor: 2
2nd floor: 2
3rd floor: 2
4th floor: 2
5th floor: 2
Total: 13
Occupancy/ Business: 2 exits required, 2 exits required, 2 exits required, 2 exits required, 2 exits required, 2 exits required

10. DEAD END CORRIDOR
Maximum Dead-end Corridor Length (IBC 1016.3) = 20 ft (Exception: sprinklers for group B)
No corridor greater than 50 ft
Egress Passageway: 50 ft or more
Minimum Egress Passageway Width (IBC 1016.3): 44 inches

11. EXIT DOORS
a. Door leaf: Minimum Width: 36" (34" clear), Maximum Width: 48"
All doors to be min. 36" wide
Doors to swing towards egress
Doors to swing towards egress

12. STAIRWAYS (1009.0)
a. Minimum landing width: Not less than required clear width, need not exceed 4'-0" when stair height is greater than 6'-0"
b. Headroom: 6'-8" minimum
c. Vertical rise per run: 7 1/2" - 8" maximum
d. Tread depth: 11" minimum
e. Dimensional variation: 3/16" maximum between adjacent treads
f. Handrails and guardrails: 32" maximum in height of stairs
g. Egress doors: 48" minimum door leaf width, 32" min. opening per ADA, IBC requires 32"

13. HANDICAPPED (1008.11)
a. Handicapped: 3% inches
b. Handicap Height: 34" (maximum height of top rise)
c. Handicap Length at Landing: 60" (minimum length of run beyond bottom riser)
d. Stairway Handrail Grip: Z" diameter minimum, Z" diameter maximum

14. GUARDRAILS (1012)
a. Height: 42" minimum to top of rail
b. Opening Limits: 4" square not to pass thru, temporary opening at stair nosing, head and bottom rail (IBC 1012.3)
c. Required in buildings greater than 3 stories in height

15. PLUMBING FIXTURES
Table 4-1: Maine State Internal Plumbing Code
1. Minimum Fixtures
Vase Closets: 1 per
Washrooms: 1 per
Luncheon (Main): 1 per
Dinning Parlors: 1 per
Occupant load shall be 50 percent of each sex

16. PLUMBING FIXTURES
Table 4-1: Maine State Internal Plumbing Code
1. Minimum Fixtures
Vase Closets: 1 per
Washrooms: 1 per
Luncheon (Main): 1 per
Dinning Parlors: 1 per
Occupant load shall be 50 percent of each sex

17. PLUMBING FIXTURES
Table 4-1: Maine State Internal Plumbing Code
1. Minimum Fixtures
Vase Closets: 1 per
Washrooms: 1 per
Luncheon (Main): 1 per
Dinning Parlors: 1 per
Occupant load shall be 50 percent of each sex

18. PLUMBING FIXTURES
Table 4-1: Maine State Internal Plumbing Code
1. Minimum Fixtures
Vase Closets: 1 per
Washrooms: 1 per
Luncheon (Main): 1 per
Dinning Parlors: 1 per
Occupant load shall be 50 percent of each sex

19. PLUMBING FIXTURES
Table 4-1: Maine State Internal Plumbing Code
1. Minimum Fixtures
Vase Closets: 1 per
Washrooms: 1 per
Luncheon (Main): 1 per
Dinning Parlors: 1 per
Occupant load shall be 50 percent of each sex

20. PLUMBING FIXTURES
Table 4-1: Maine State Internal Plumbing Code
1. Minimum Fixtures
Vase Closets: 1 per
Washrooms: 1 per
Luncheon (Main): 1 per
Dinning Parlors: 1 per
Occupant load shall be 50 percent of each sex

21. PLUMBING FIXTURES
Table 4-1: Maine State Internal Plumbing Code
1. Minimum Fixtures
Vase Closets: 1 per
Washrooms: 1 per
Luncheon (Main): 1 per
Dinning Parlors: 1 per
Occupant load shall be 50 percent of each sex

22. PLUMBING FIXTURES
Table 4-1: Maine State Internal Plumbing Code
1. Minimum Fixtures
Vase Closets: 1 per
Washrooms: 1 per
Luncheon (Main): 1 per
Dinning Parlors: 1 per
Occupant load shall be 50 percent of each sex

23. PLUMBING FIXTURES
Table 4-1: Maine State Internal Plumbing Code
1. Minimum Fixtures
Vase Closets: 1 per
Washrooms: 1 per
Luncheon (Main): 1 per
Dinning Parlors: 1 per
Occupant load shall be 50 percent of each sex

24. PLUMBING FIXTURES
Table 4-1: Maine State Internal Plumbing Code
1. Minimum Fixtures
Vase Closets: 1 per
Washrooms: 1 per
Luncheon (Main): 1 per
Dinning Parlors: 1 per
Occupant load shall be 50 percent of each sex

25. PLUMBING FIXTURES
Table 4-1: Maine State Internal Plumbing Code
1. Minimum Fixtures
Vase Closets: 1 per
Washrooms: 1 per
Luncheon (Main): 1 per
Dinning Parlors: 1 per
Occupant load shall be 50 percent of each sex

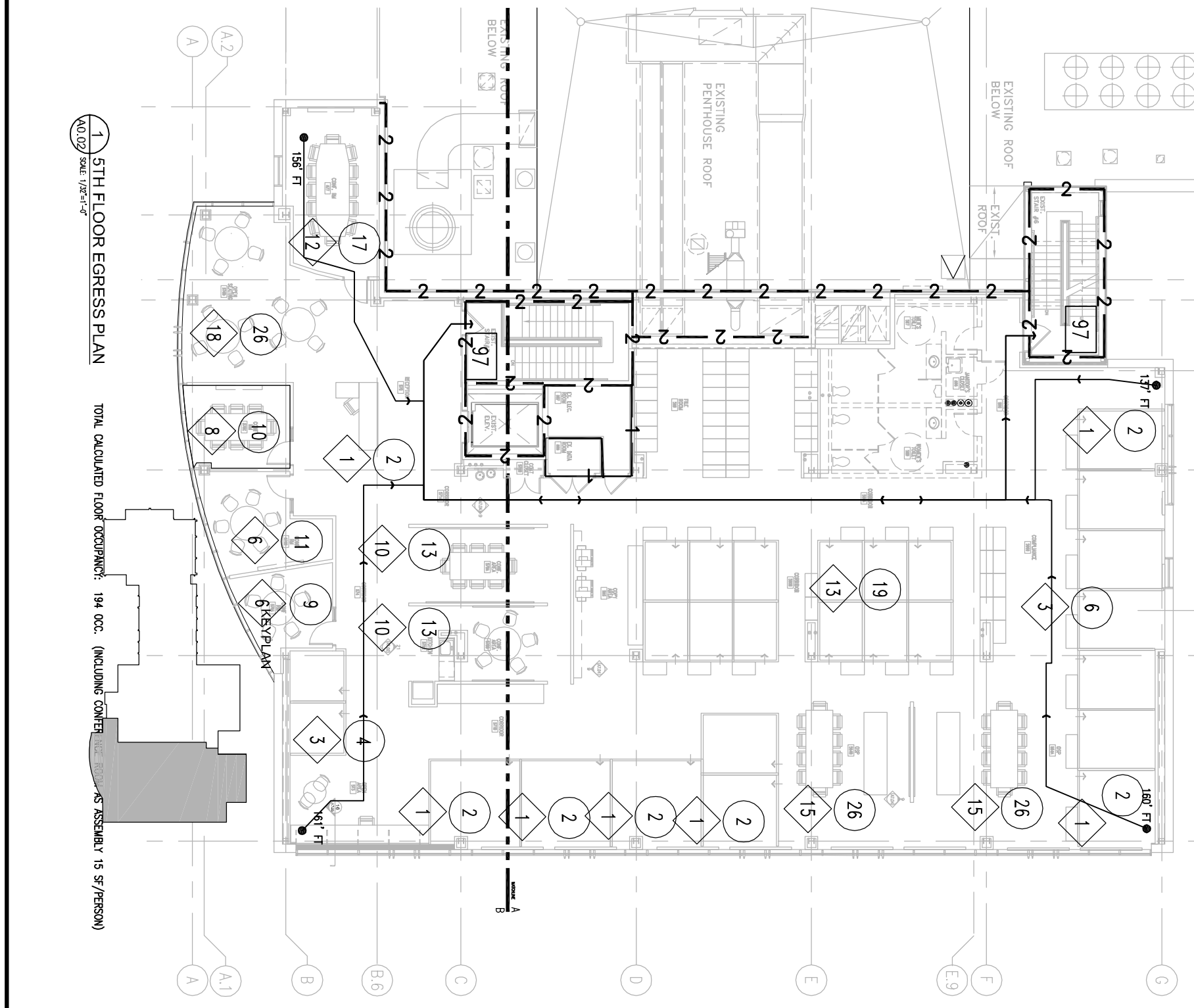
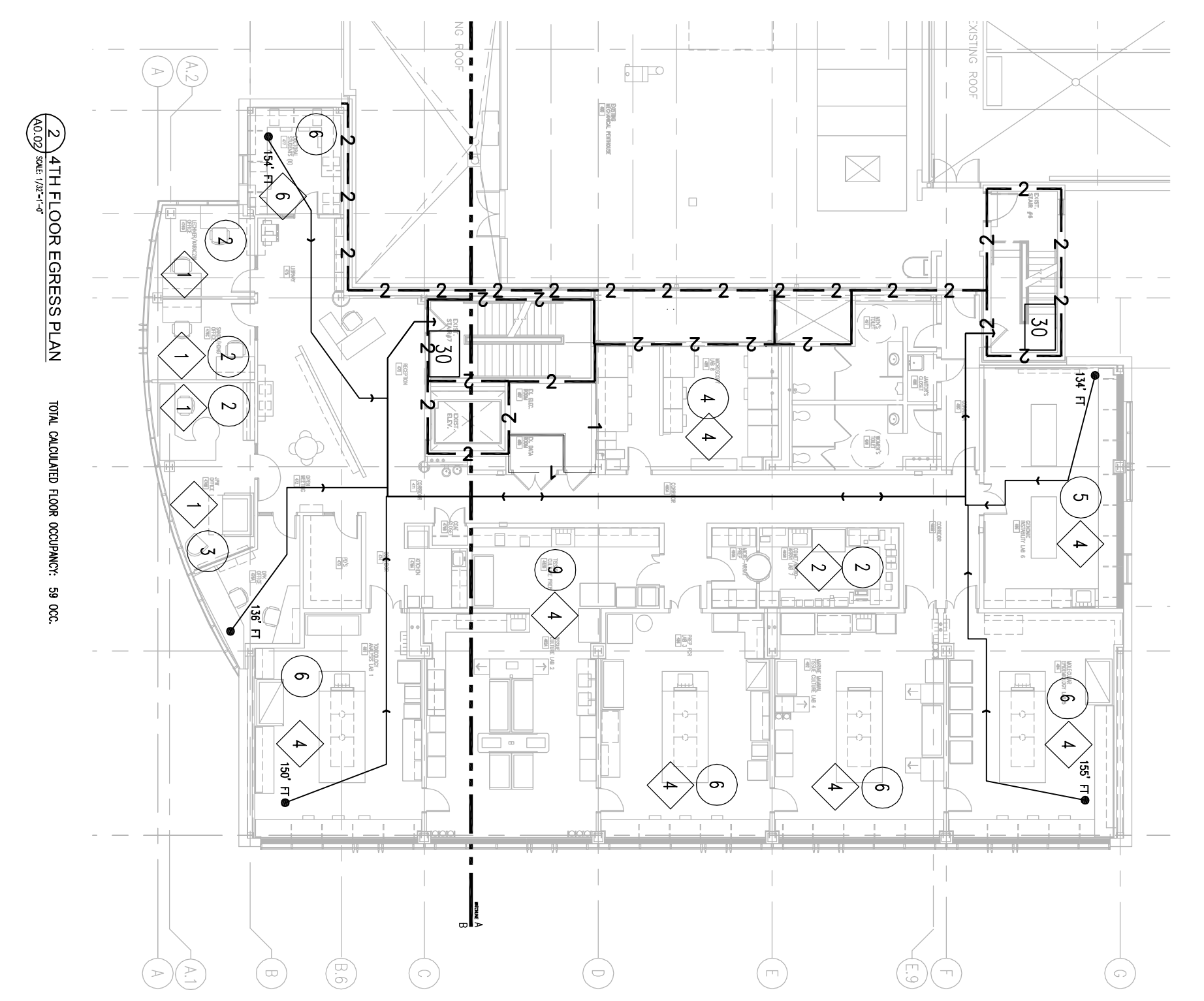
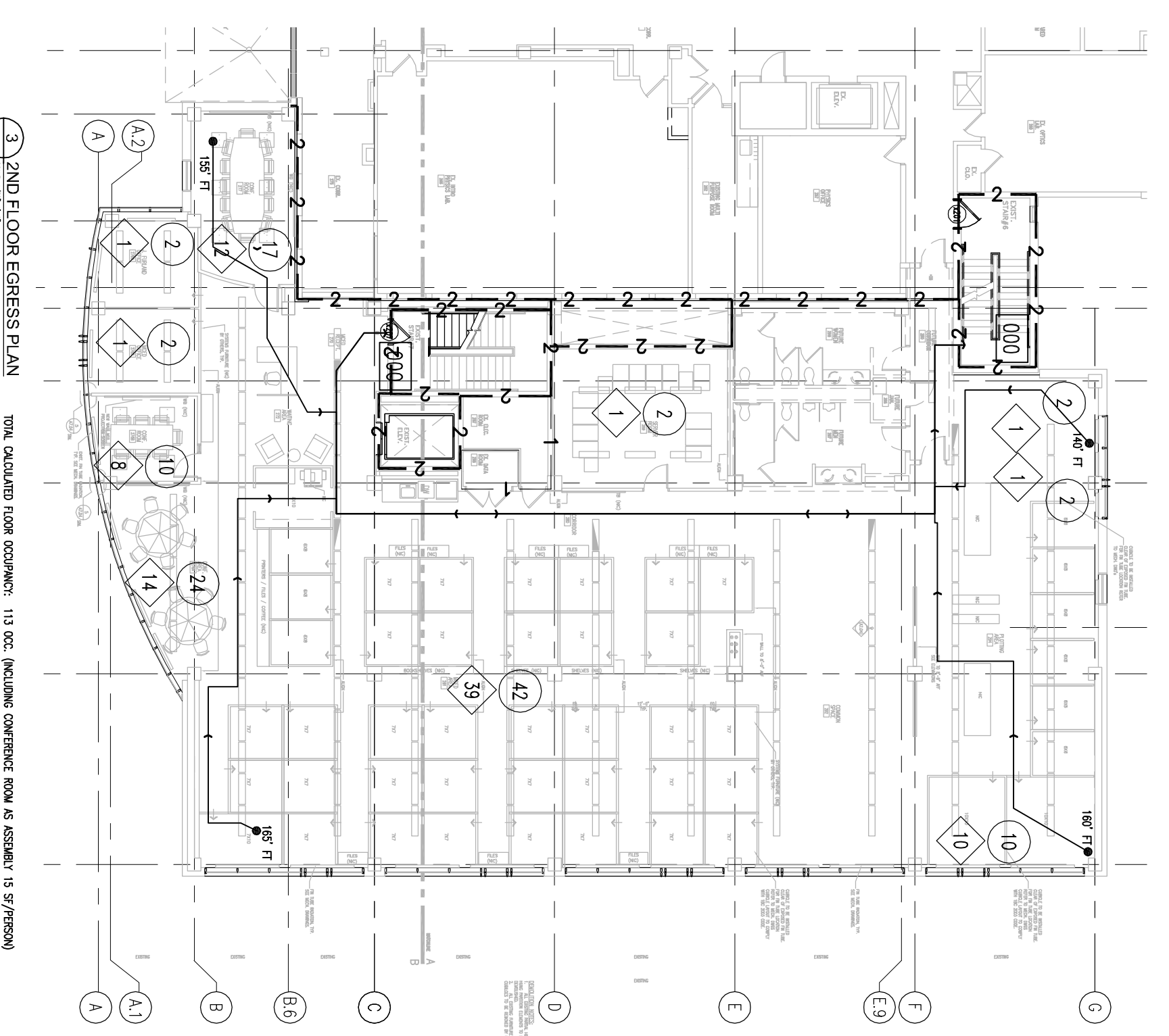
26. PLUMBING FIXTURES
Table 4-1: Maine State Internal Plumbing Code
1. Minimum Fixtures
Vase Closets: 1 per
Washrooms: 1 per
Luncheon (Main): 1 per
Dinning Parlors: 1 per
Occupant load shall be 50 percent of each sex

27. PLUMBING FIXTURES
Table 4-1: Maine State Internal Plumbing Code
1. Minimum Fixtures
Vase Closets: 1 per
Washrooms: 1 per
Luncheon (Main): 1 per
Dinning Parlors: 1 per
Occupant load shall be 50 percent of each sex

28. PLUMBING FIXTURES
Table 4-1: Maine State Internal Plumbing Code
1. Minimum Fixtures
Vase Closets: 1 per
Washrooms: 1 per
Luncheon (Main): 1 per
Dinning Parlors: 1 per
Occupant load shall be 50 percent of each sex

29. PLUMBING FIXTURES
Table 4-1: Maine State Internal Plumbing Code
1. Minimum Fixtures
Vase Closets: 1 per
Washrooms: 1 per
Luncheon (Main): 1 per
Dinning Parlors: 1 per
Occupant load shall be 50 percent of each sex

30. PLUMBING FIXTURES
Table 4-1: Maine State Internal Plumbing Code
1. Minimum Fixtures
Vase Closets: 1 per
Washrooms: 1 per
Luncheon (Main): 1 per
Dinning Parlors: 1 per
Occupant load shall be 50 percent of each sex



OWNER REVIEW: DATE _____

SNMA 1000 Massachusetts Avenue, Cambridge, MA 02138
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RESEARCH WING PHASE III FIT-OUT

CODE DESIGN SUMMARY

SCALE: 1/32"=1'-0"

DRAWN BY: AMD
CHECKED BY: PROJ. MGR. / ENGR. LTD.
PROJ. MGR.: ROSE
JOB NO.: 03048.10
OWNER: SWINNEY MANN & MCKEE ASSOCIATES, INC. 2004

A0.02