Appendix E

General Aviation Planning Assumptions

PLANNING FACTORS - SUMMARY

TIE-DOWN SPACE REQUIREMENTS:

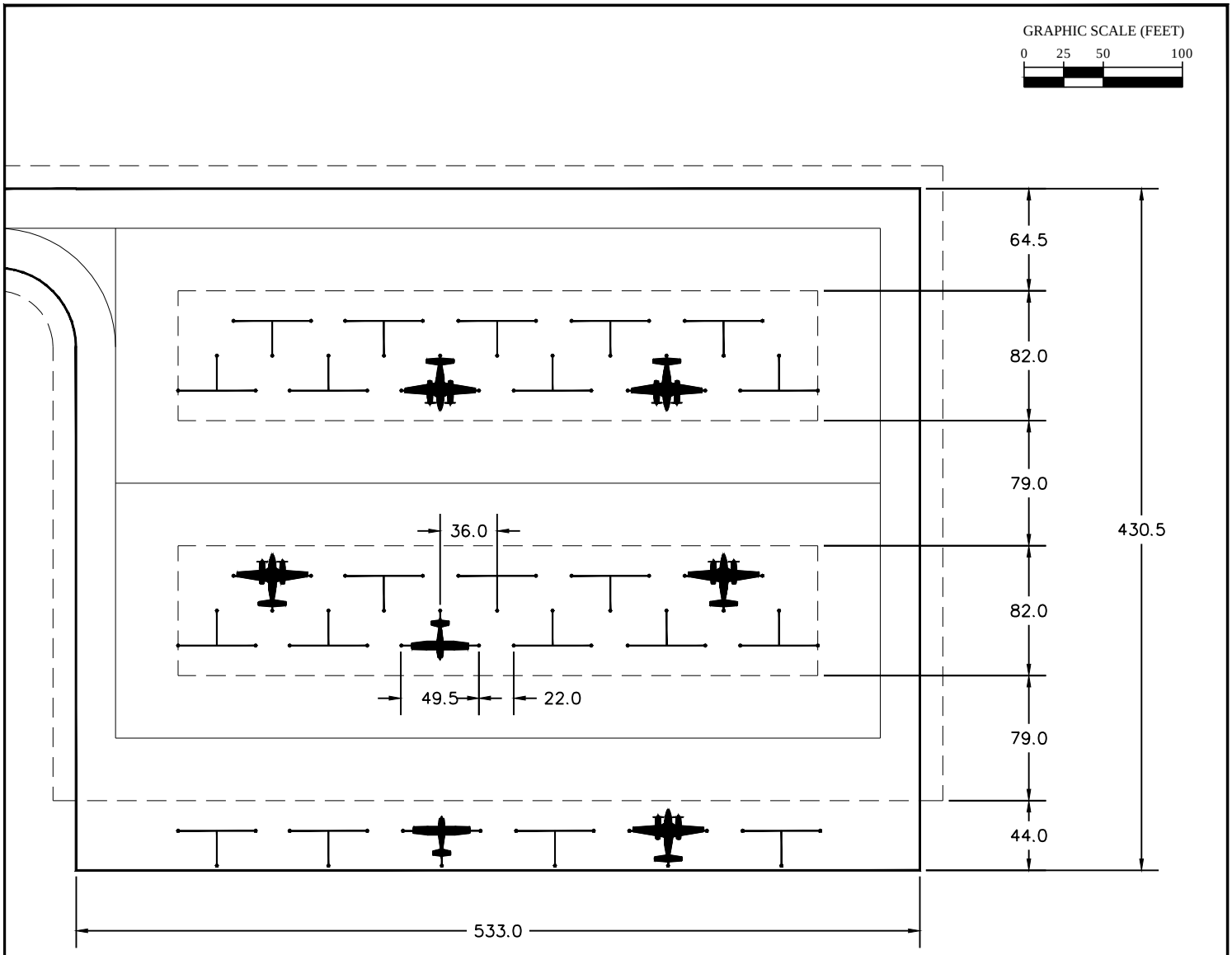
FAA GROUP-I STANDARD LAYOUT (AC 150/5300-13)
8,200 S.F.
MODIFIED GROUP-I LAYOUT PER AC 20-35C WITH 10' WINGTIP CLEARANCE
6,600 S.F.

TRANSIENT SPACE REQUIREMENTS: (POWER-IN/[POWER-OUT)

SE/ME = 11,700 S.F.
TP = 21,950 S.F.
JETS = 26,450 S.F.
HELICOPTER = 4,300 S.F.

HANGAR SPACE REQUIREMENTS:

SE/ME = 1,340 S.F.
TP = 2,500 S.F.
BUSINESS JETS:
SMALL/MEDIUM MIX = 3,215 S.F.
MEDIUM/LARGE MIX = 5,210 S.F.
SMALL/MED/LARGE MIX = 3,906 S.F.
AVERAGE = 4,080 S.F.
HELICOPTER = 750 S.F.



GROUP-I AIRCRAFT UP TO 49' WINGSPAN
28 NESTED TIE-DOWNS (FAA STANDARD DIMENSIONS PER AC 150/5300-13)

TOTAL RAMP SPACE = 533' x 430.5' ≈ 229,600

SPACE PER TIE-DOWN ≈ 8,200 S.F.

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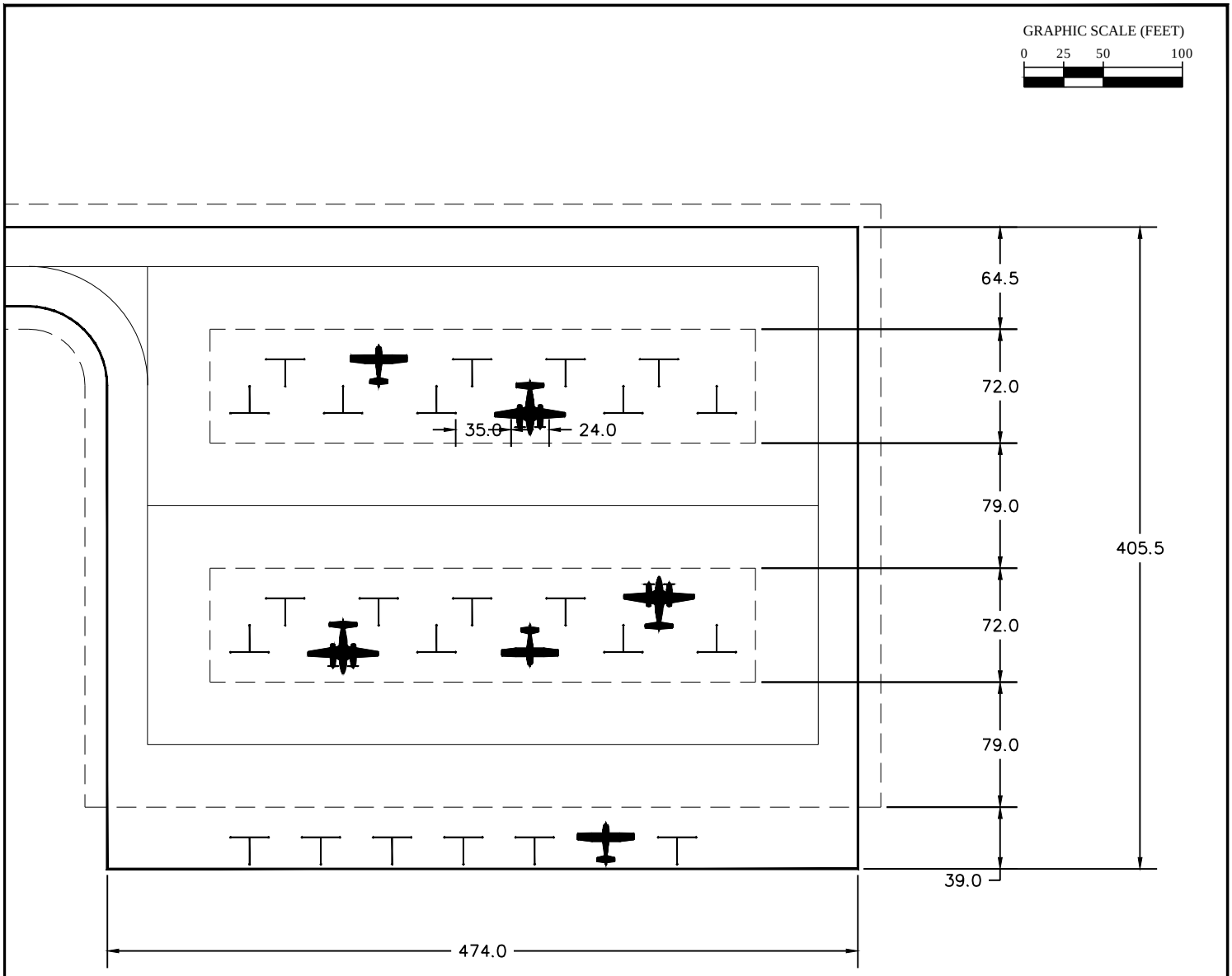
DEMAND / CAPACITY ANALYSIS

PLANNING ASSUMPTIONS

NESTED GROUP-I TIE-DOWNS

JUNE 2011



GROUP-I AIRCRAFT UP TO 49' WINGSPAN WITH 10' WINGTIP CLEARANCE
29 NESTED TIE-DOWNS (MODIFIED DIMENSIONS PER AC 20-35C)

TOTAL RAMP SPACE = 474' x 405.5' ≈ 191,400

SPACE PER TIE-DOWN ≈ 6,600 S.F.

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PLANNING ASSUMPTIONS

GROUP-I TIE-DOWNS (MODIFIED)

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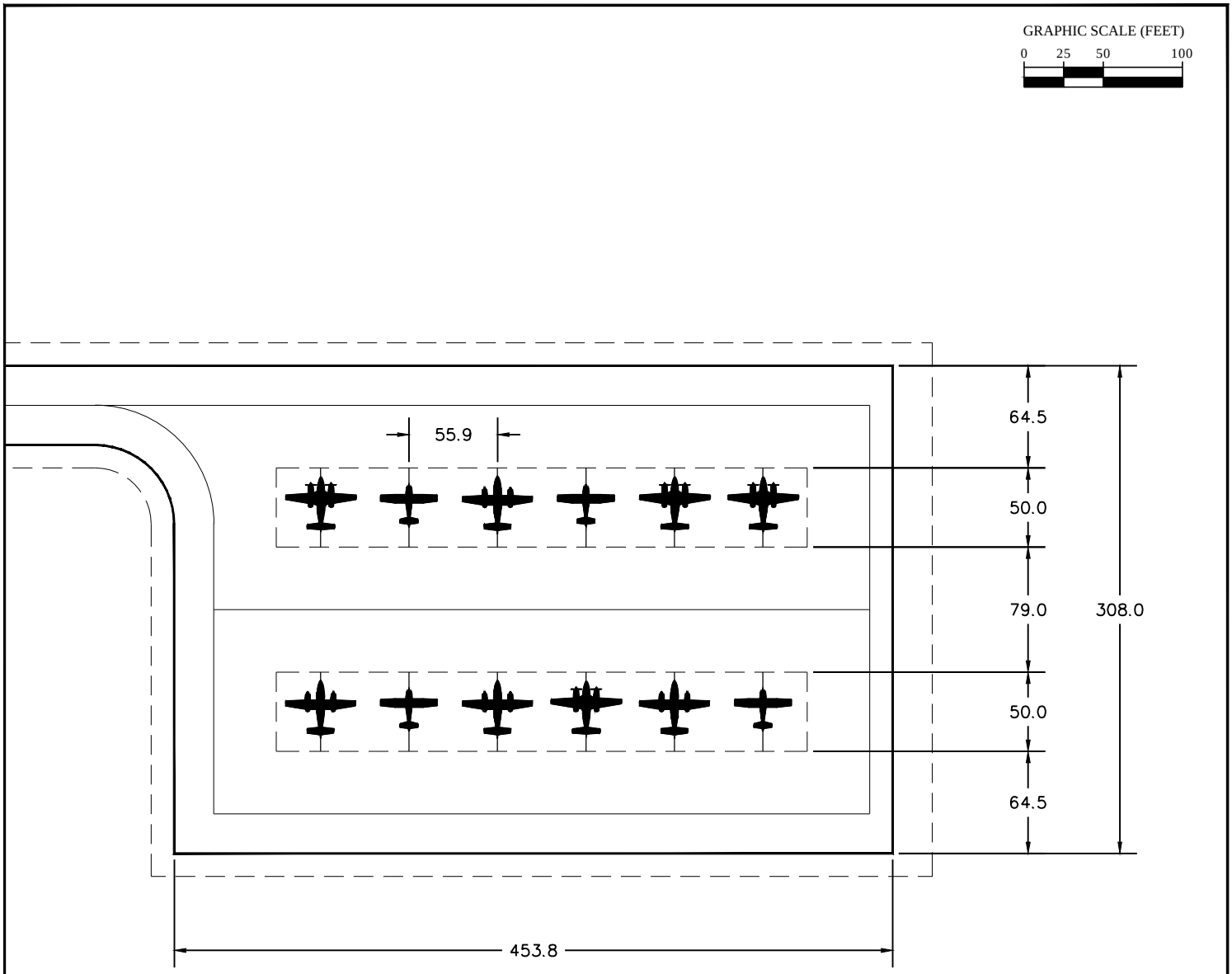

GROUP-I AIRCRAFT UP TO 46' WINDSPAN WITH 10' WINGTIP CLEARANCE
12 TRANSIENT PARKING POSITIONS

TOTAL RAMP SPACE 308' x 454' ≈ 140,000 S.F.

SPACE PER POSITION ≈ 11,700 S.F.

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PLANNING ASSUMPTIONS

GROUP-I PARKING - POWER-IN/OUT

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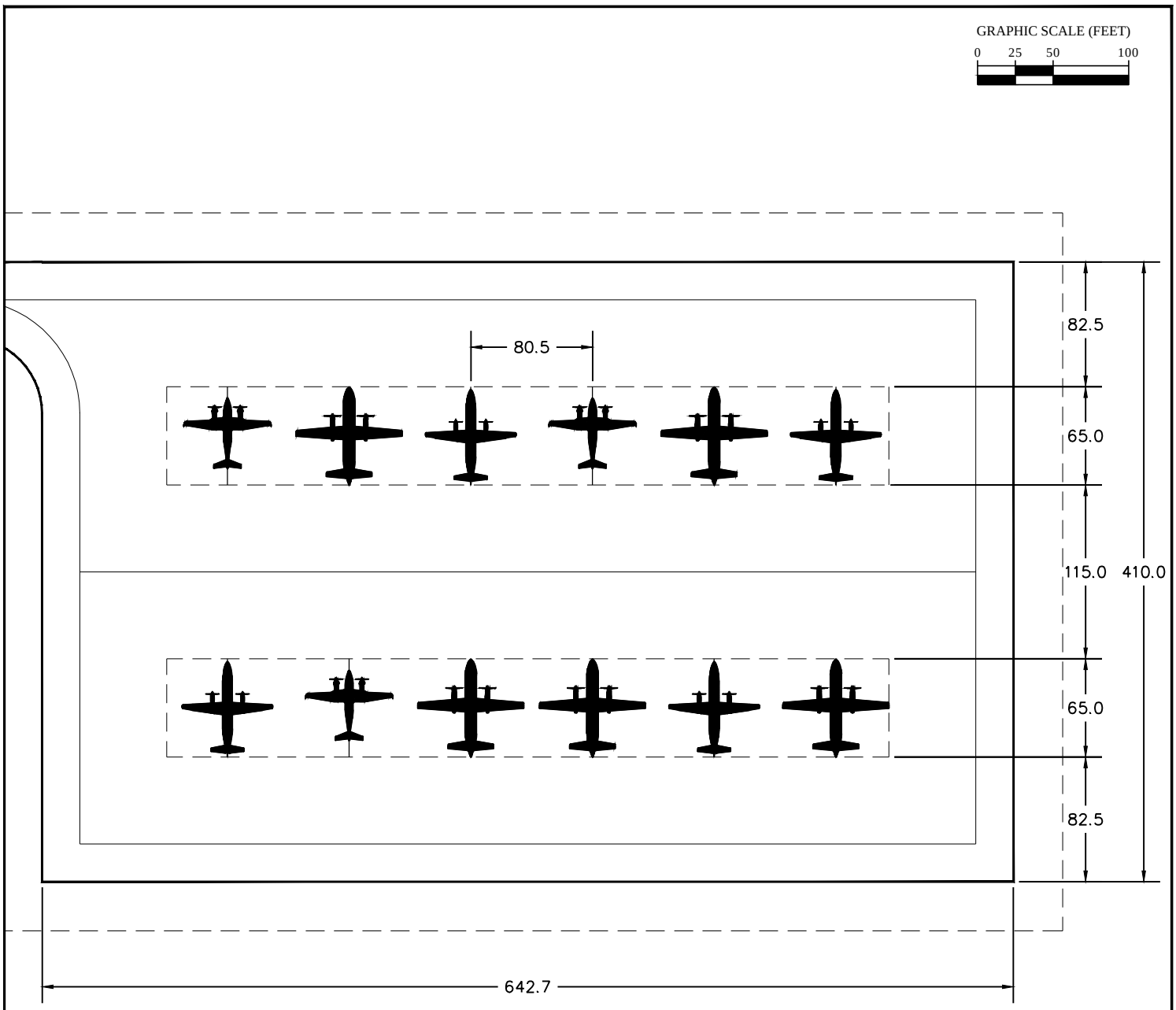

GROUP-II TURBO PROP AIRCRAFT UP TO 70' WINGSPAN
12 TRANSIENT PARKING POSITIONS

TOTAL RAMP SPACE ≈ 410' x 642.5' ≈ 263,400 S.F.

SPACE PER POSITION ≈ 21,950 S.F.

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PLANNING ASSUMPTIONS

GROUP-II PARKING - TURBO-PROP

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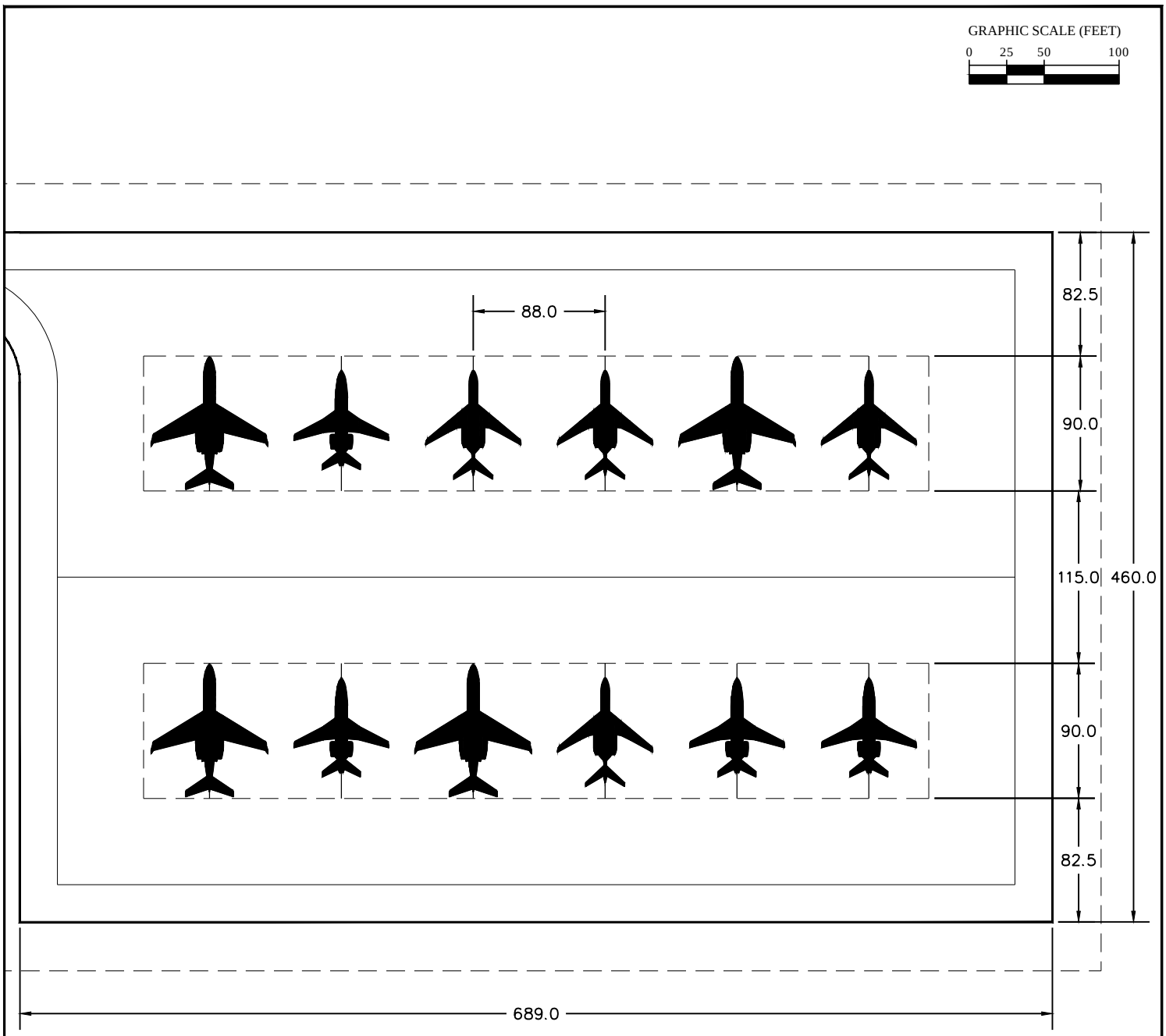

GROUP-II CORPORATE JET AIRCRAFT UP TO 79' WINGSPAN
12 TRANSIENT PARKING POSITIONS

TOTAL RAMP SPACE ≈ 460' x 690' å 317,400 S.F.

SPACE PER POSITION å 26,450 S.F.

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PLANNING ASSUMPTIONS

GROUP-Ii PARKING - BUSINESS JET

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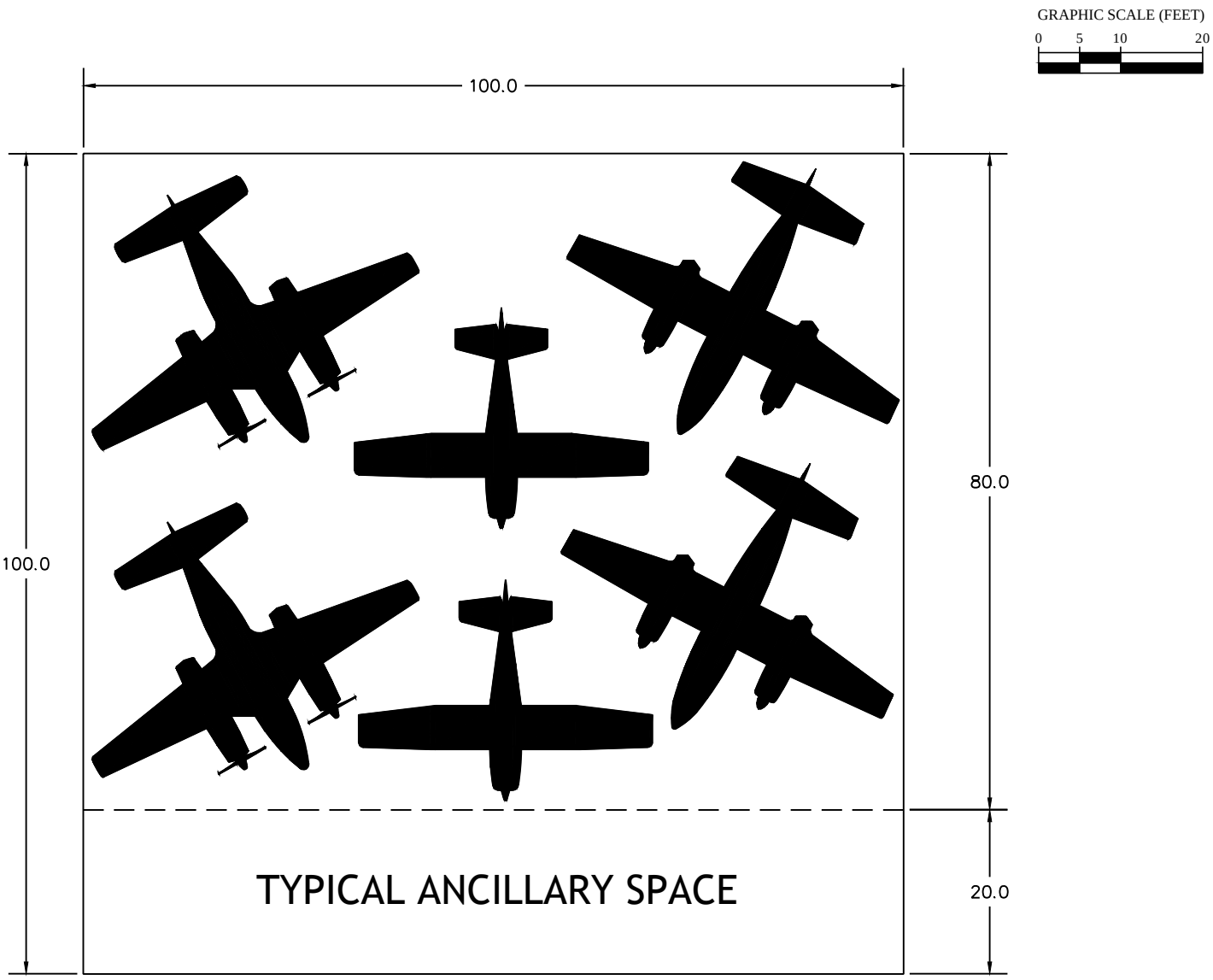

TYPICAL GROUP-I AIRCRAFT 35' - 45' WINGSPAN

6 SE/ME ≈ 80' x 100' ≈ 8,000 S.F.

EACH SE/ME 1,340 S.F.

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PLANNING ASSUMPTIONS

GROUP-I HANGAR

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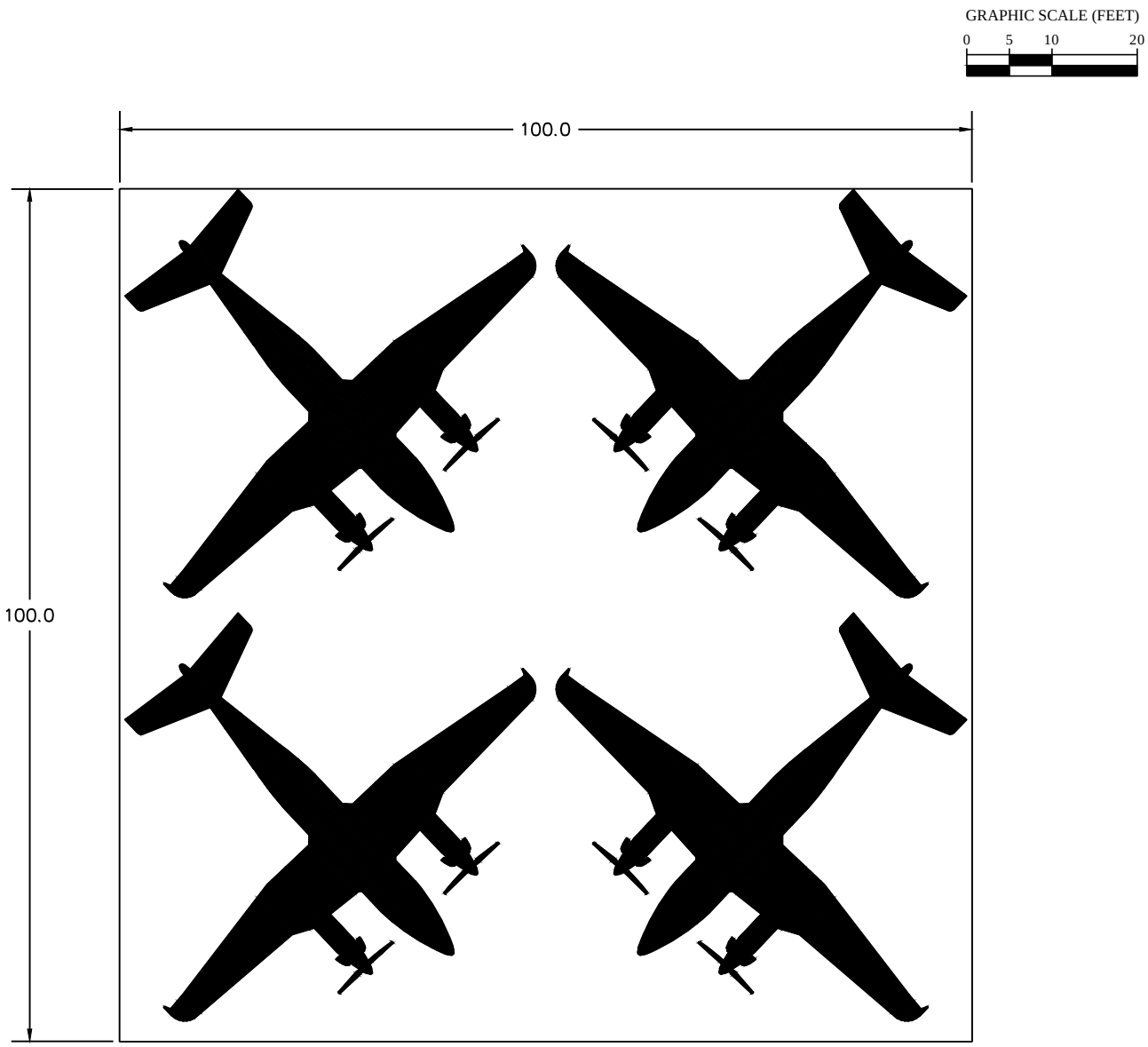

TYPICAL GROUP-II TURBO PROP: 52' WINGSPAN

4 TURBO PROPS ≈ 100' x 100' ≈ 10,000 S.F.

EACH TURBO PROP 2,500 S.F.

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GROUP-II TURBO PROP HANGAR

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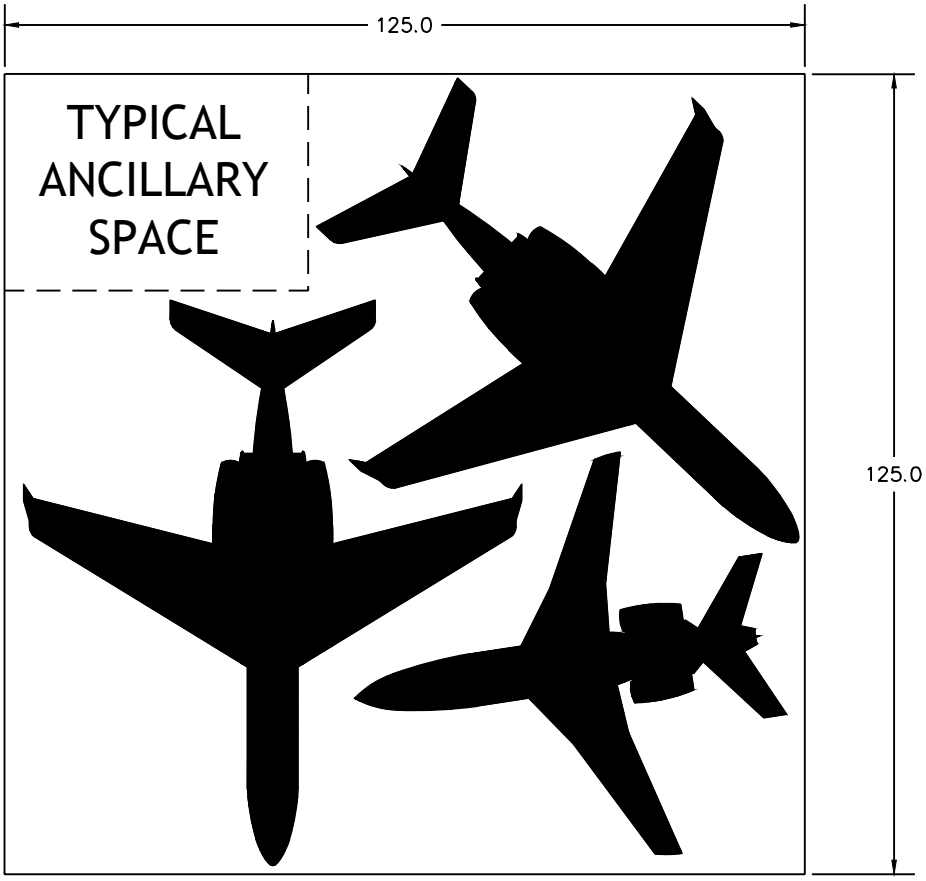
GRAPHIC SCALE (FEET)

0 7.5 15 30



TYPICAL GROUP-II CORPORATE JETS

- FACLON 900B (MED - 64' WINGSPAN)
- G-IV (LARGE - 78' WINGSPAN)

3 JETS = 125' x 125' =15,625 S.F.

EACH JET ≈ 5,210 S.F.

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MED/LARGE CORPORATE JET HANGAR

JUNE 2011

GRAPHIC SCALE (FEET)

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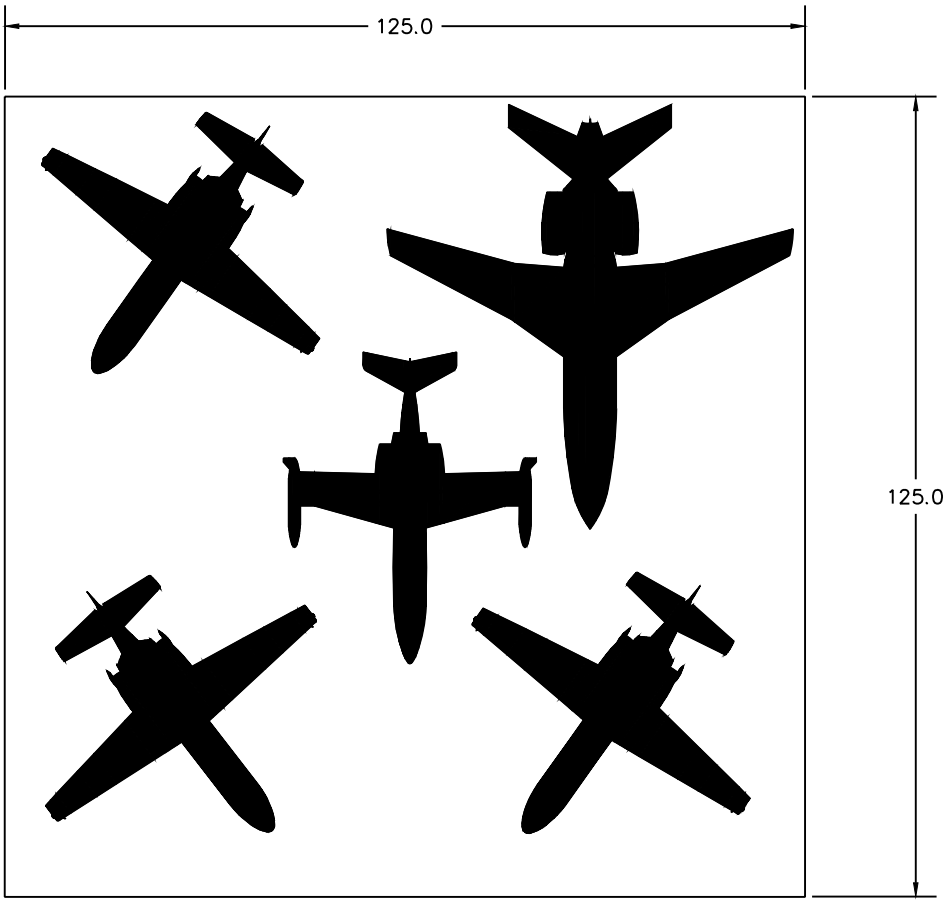

TYPICAL GROUP-I/II CORPORATE JETS

- LEARJET (SMALL - 40' WINGSPAN)
- CITATION BRAVO (SMALL - 52' WINGSPAN)
- FALCON 900B (MED - 64' WINGSPAN)

5 JETS = 125' x 125' =15,625 S.F.

EACH JET = 3,125 S.F.

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SMALL/MED CORPORATE JET HANGAR

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GRAPHIC SCALE (FEET)

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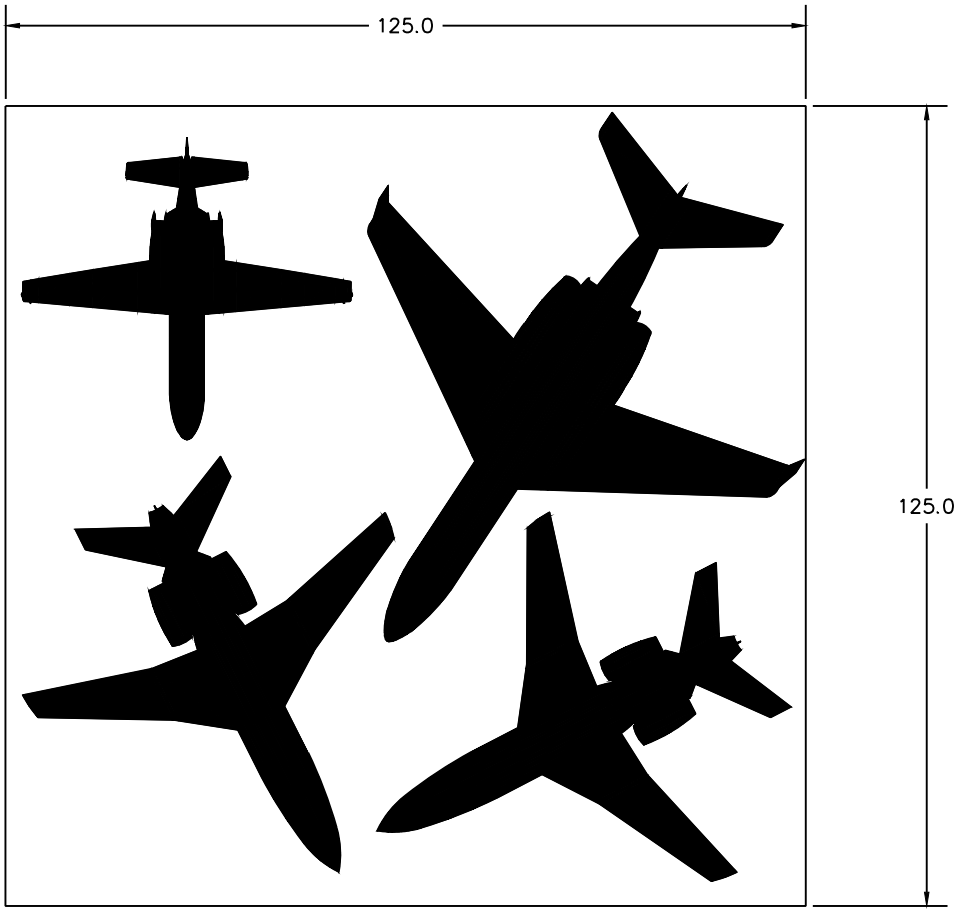

TYPICAL GROUP-I/II CORPORATE JETS

- CITATION BRAVO (SMALL -52' WINGSPAN)
- FACLON 900B (MED - 64' WINGSPAN)
- G-IV (LARGE - 78' WINGSPAN)

4 JETS = 125' x 125' =15,625 S.F.

EACH JET ≈ 3,906 S.F.

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SMALL/MED/LARGE JET HANGAR

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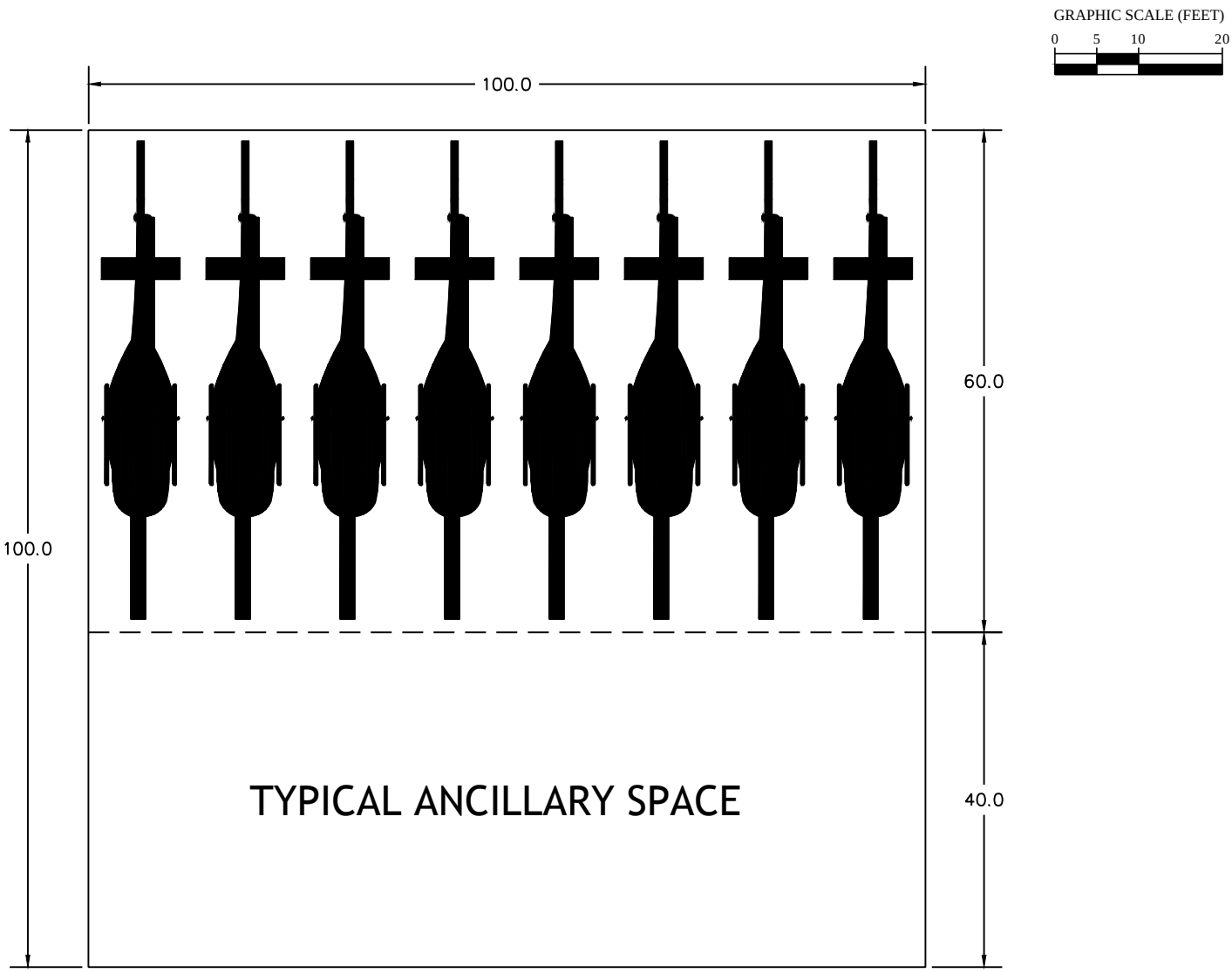

TYPICAL HELICOPTER

BELL IROQUOIS (ROTOR DIAMETER - 48')

8 HELICOPTERS = 100' x 60' =6,000 S.F.

EACH JET = 750 S.F.

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SMALL/MED/LARGE JET HANGAR

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