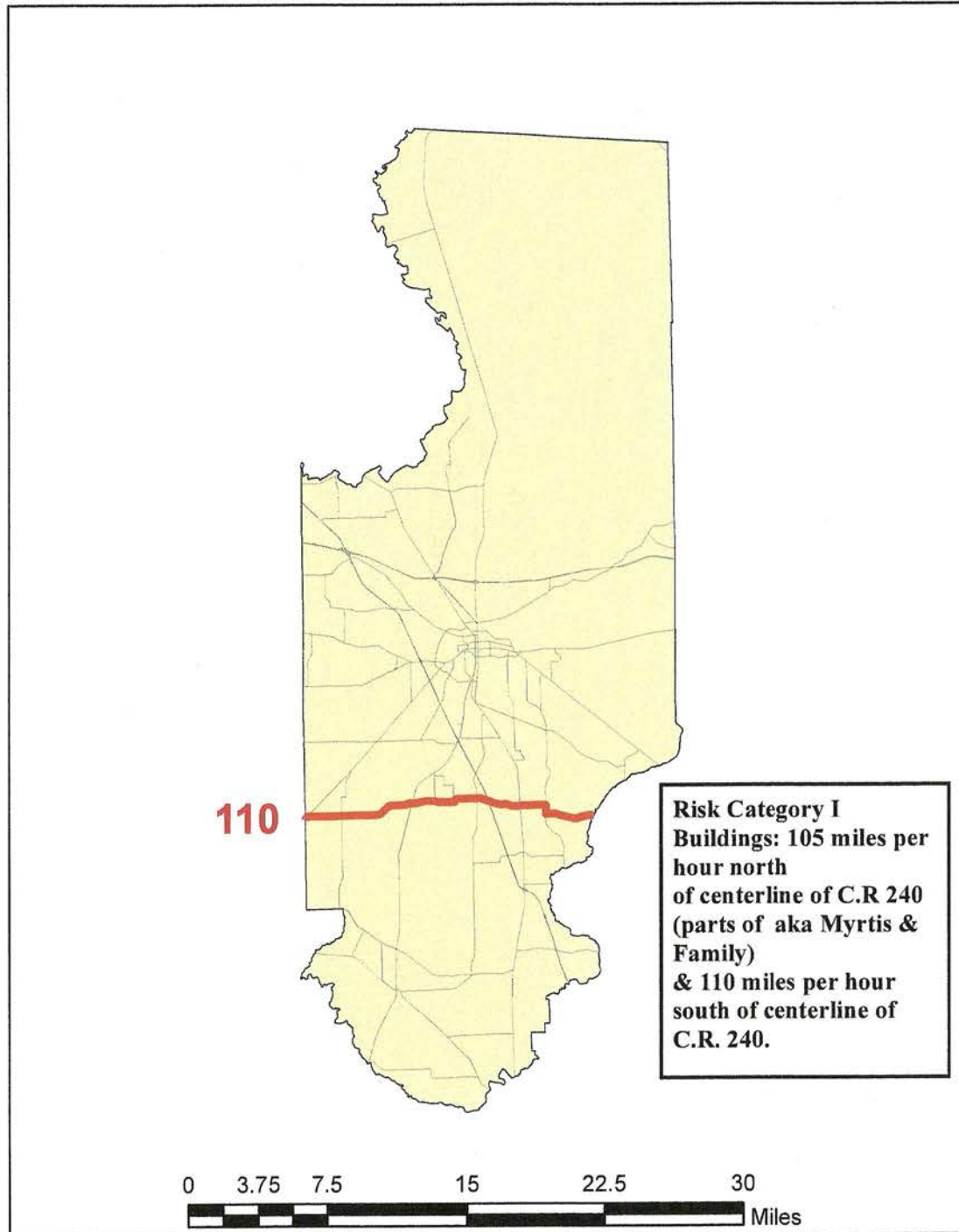


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Figure 1609C

Ultimate Design Wind Speeds

Risk Category I Buildings

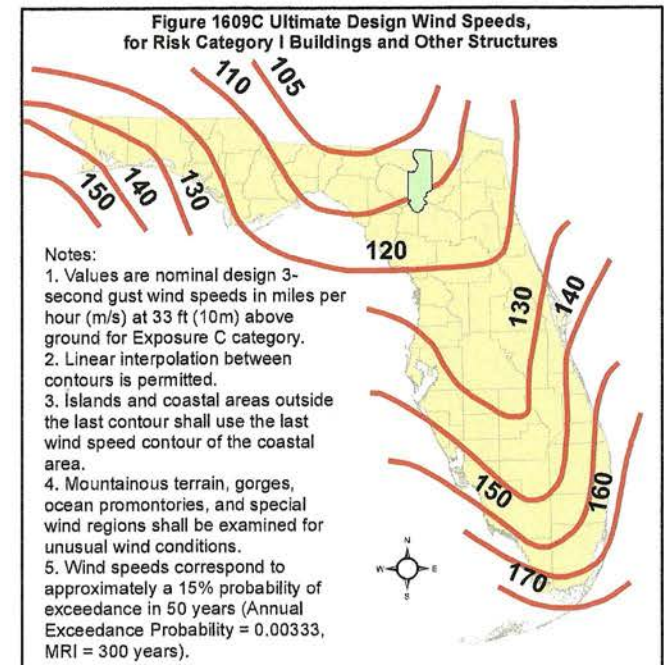


BASIC WIND SPEED. The basic wind speed in miles per hour, for the development of wind loads, shall be determined from Figure 1609. The exact location of wind speed lines shall be established by local ordinance using recognized physical landmarks such as major roads, canals, rivers and lake shores whenever possible.

WIND-BORNE DEBRIS REGION. Areas within hurricane-prone regions located:

1. Within 1 mile (1.61 km) of the coastal mean high water line where the ultimate design wind speed V_{ult} is 130 mph (48 m/s) or greater; or
2. In areas where the ultimate design wind speed V_{ult} is 140 mph (53 m/s) or greater

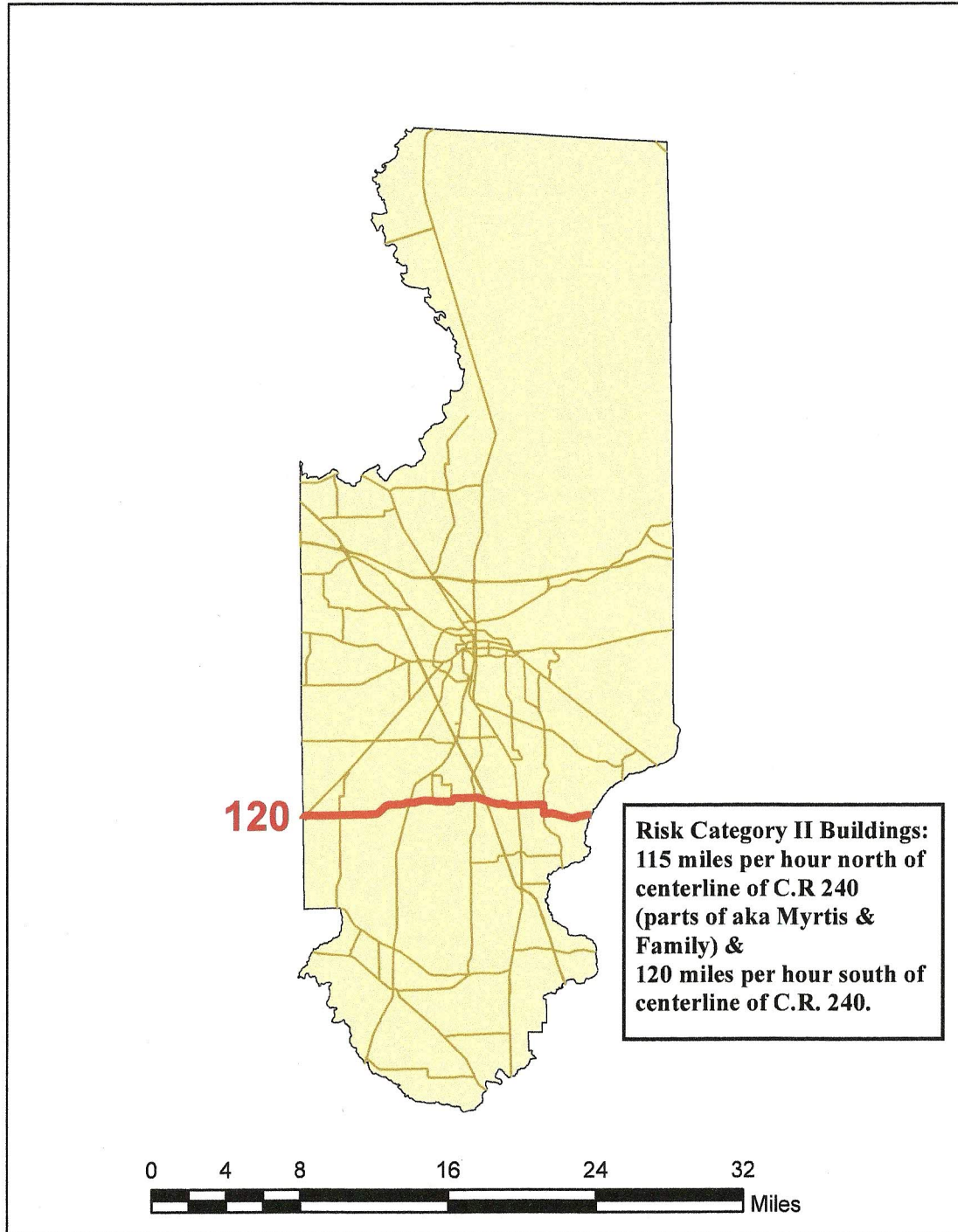
For Risk Category II buildings and structures and occupancy category III buildings and structures, except health care facilities, the windborne debris region shall be based on Figure 1609A. For occupancy category IV buildings and structures and occupancy category III health care facilities, the windborne debris region shall be based on Figure 1609B.



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Figure 1609A

Ultimate Design Wind Speeds Risk Category II Buildings



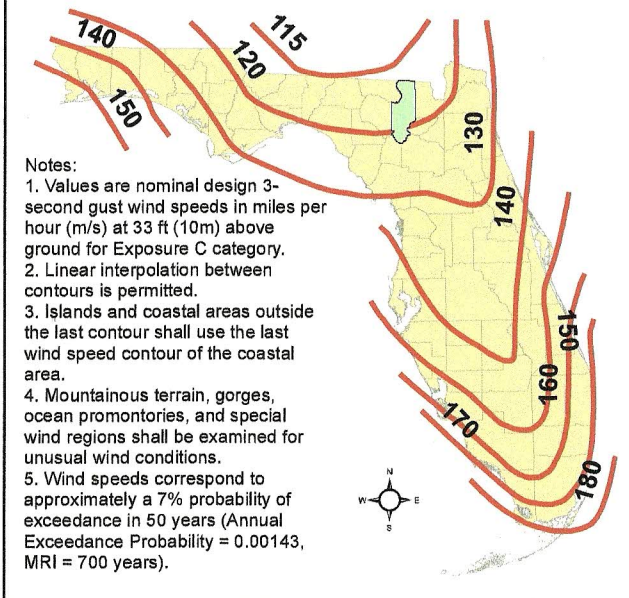
BASIC WIND SPEED. The basic wind speed in miles per hour, for the development of wind loads, shall be determined from Figure 1609. The exact location of wind speed lines shall be established by local ordinance using recognized physical landmarks such as major roads, canals, rivers and lake shores whenever possible.

WIND-BORNE DEBRIS REGION. Areas within hurricane-prone regions located:

1. Within 1 mile (1.61 km) of the coastal mean high water line where the ultimate design wind speed V_{ult} is 130 mph (48 m/s) or greater; or
2. In areas where the ultimate design wind speed V_{ult} is 140 mph (53 m/s) or greater

For Risk Category II buildings and structures and occupancy category III buildings and structures, except health care facilities, the windborne debris region shall be based on Figure 1609A. For occupancy category IV buildings and structures and occupancy category III health care facilities, the windborne debris region shall be based on Figure 1609B.

**Figure 1609A Ultimate Design Wind Speeds,
for Risk Category II Buildings and Other Structures**

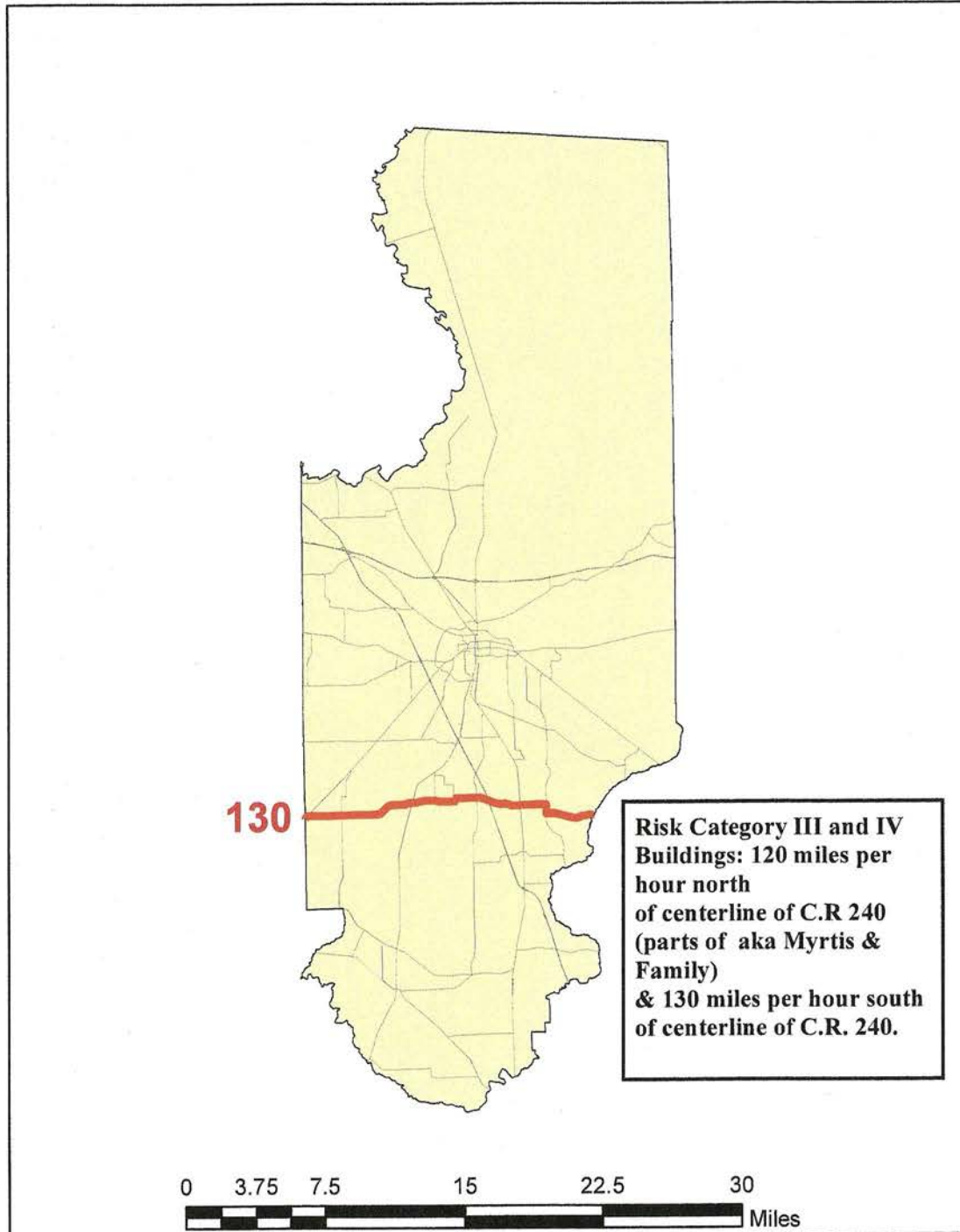


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Figure 1609B

Ultimate Design Wind Speeds

Risk Category III and IV Buildings

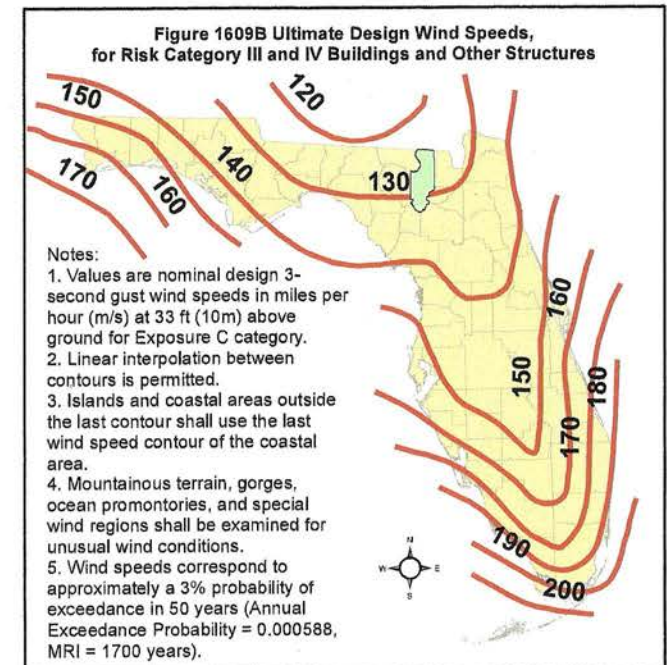


BASIC WIND SPEED. The basic wind speed in miles per hour, for the development of wind loads, shall be determined from Figure 1609. The exact location of wind speed lines shall be established by local ordinance using recognized physical landmarks such as major roads, canals, rivers and lake shores whenever possible.

WIND-BORNE DEBRIS REGION. Areas within hurricane-prone regions located:

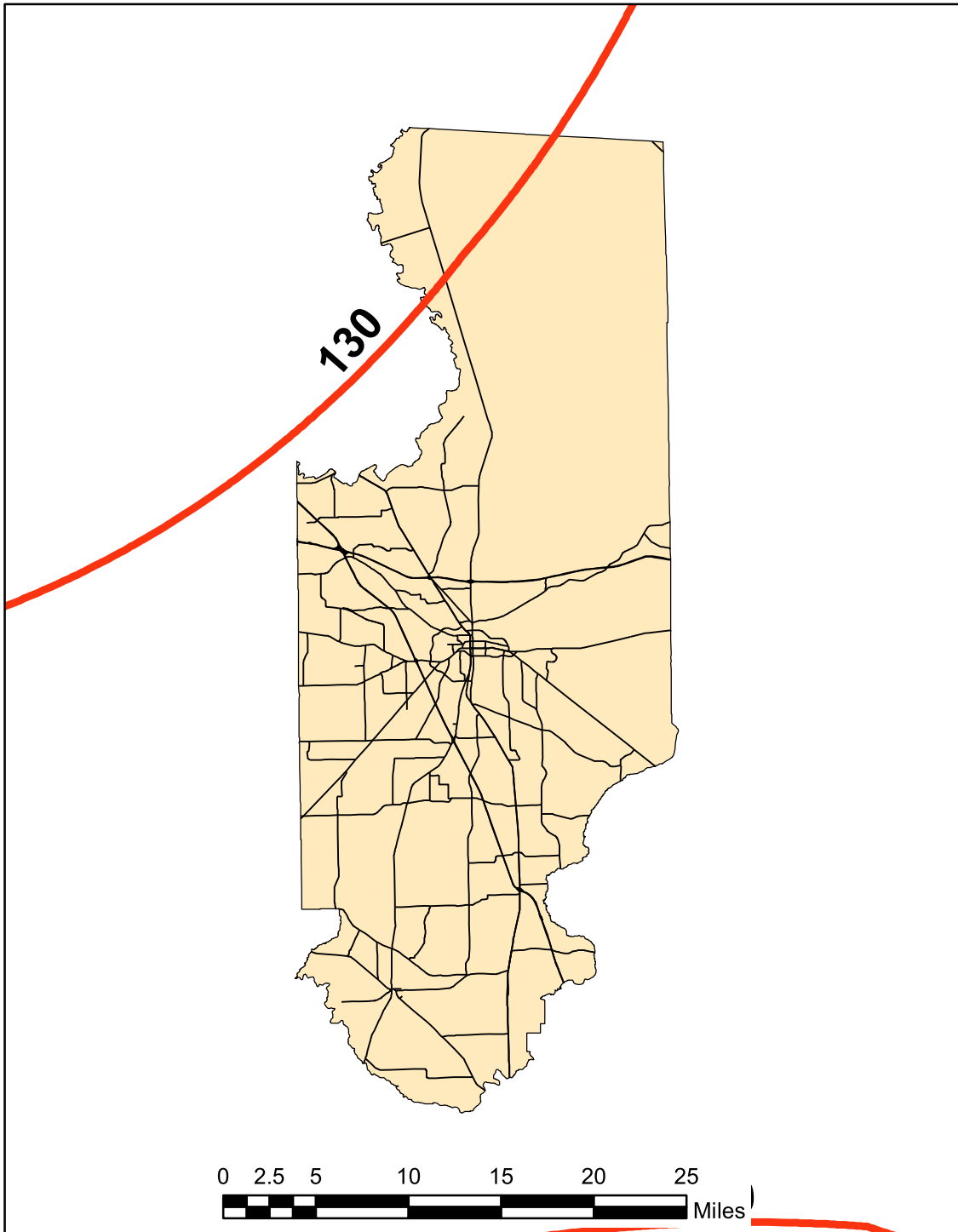
1. Within 1 mile (1.61 km) of the coastal mean high water line where the ultimate design wind speed V_{ult} is 130 mph (48 m/s) or greater; or
2. In areas where the ultimate design wind speed V_{ult} is 140 mph (53 m/s) or greater

For Risk Category II buildings and structures and occupancy category III buildings and structures, except health care facilities, the windborne debris region shall be based on Figure 1609A. For occupancy category IV buildings and structures and occupancy category III health care facilities, the windborne debris region shall be based on Figure 1609B.



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Figure 1609.3(3) Ultimate Design Wind Speeds Risk Category IV Buildings



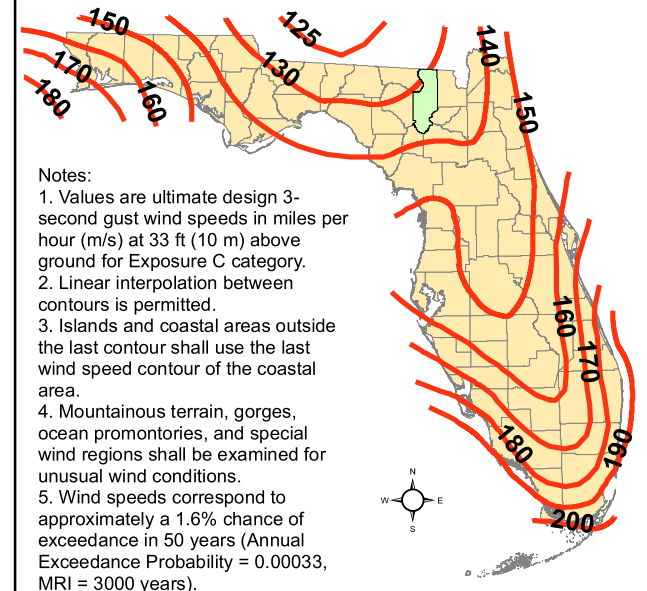
BASIC WIND SPEED. The basic wind speed in miles per hour, for the development of wind loads, shall be determined from Figure 1609.3. The exact location of wind speed lines shall be established by local ordinance using recognized physical landmarks such as major roads, canals, rivers and lake shores whenever possible.

WIND-BORNE DEBRIS REGION. Areas within hurricane-prone regions located:

1. Within 1 mile (1.61 km) of the coastal mean high water line where the ultimate design wind speed V_{ult} is 130 mph (58 m/s) or greater; or
2. In areas where the ultimate design wind speed V_{ult} is 140 mph (63.6 m/s) or greater

For Risk Category II buildings and other structures and Risk Category III buildings and other structures, except health care facilities, the windborne debris region shall be based on Figure 1609.3(1). For Risk Category III health care facilities, the windborne debris region shall be based on Figure 1609.3(2). For Risk Category IV buildings and other structures, the windborne debris region shall be based on Figure 1609.3(3).

Figure 1609.3(3) Ultimate Design Wind Speeds, for Risk Category IV Buildings and Other Structures



- Notes:
1. Values are ultimate design 3-second gust wind speeds in miles per hour (m/s) at 33 ft (10 m) above ground for Exposure C category.
 2. Linear interpolation between contours is permitted.
 3. Islands and coastal areas outside the last contour shall use the last wind speed contour of the coastal area.
 4. Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.
 5. Wind speeds correspond to approximately a 1.6% chance of exceedance in 50 years (Annual Exceedance Probability = 0.00033, MRI = 3000 years).

Sources: Florida Department of Business and Professional Regulations, Building Codes and Standards Office; Florida Building Commission; Applied Research Associates, Inc.; University of Florida GeoPlan Center; Florida Geographic Data Library; Florida Building Code 2020; County Building Official, 06/02/2020

TABLE 1604.5 RISK CATEGORY OF BUILDINGS AND OTHER STRUCTURES

RISK CATEGORY	NATURE OF OCCUPANCY
I	<p>Buildings and other structures that represent a low hazard to human life in the event of failure, including but not limited to:</p> <ul style="list-style-type: none"> • Agricultural facilities. • Certain temporary facilities. • Minor storage facilities. • Screen enclosures.
II	Buildings and other structures except those listed in Risk Categories I, III and IV
III	<p>Buildings and other structures that represent a substantial hazard to human life in the event of failure, including but not limited to:</p> <ul style="list-style-type: none"> • Buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300. • Buildings and other structures containing elementary school, secondary school or day care facilities with an occupant load greater than 250. • Buildings and other structures containing adult education facilities, such as colleges and universities, with an occupant load greater than 500. • Group I-2 occupancies with an occupant load of 50 or more resident patients but not having surgery or emergency treatment facilities. • Group I-3 occupancies. • Any other occupancy with an occupant load greater than 5,000^a. • Power-generating stations, water treatment facilities for potable water, waste water treatment facilities and other public utility facilities not included in Risk Category IV. • Buildings and other structures not included in Risk Category IV containing sufficient quantities of toxic or explosive substances to be dangerous to the public if released.
IV	<p>Buildings and other structures designated as essential facilities, including but not limited to:</p> <ul style="list-style-type: none"> • Group I-2 occupancies having surgery or emergency treatment facilities. • Fire, rescue, ambulance and police stations and emergency vehicle garages. • Designated earthquake, hurricane or other emergency shelters. • Designated emergency preparedness, communications and operations centers and other facilities required for emergency response. • Power-generating stations and other public utility facilities required as emergency backup facilities for Risk Category IV structures. • Structures containing highly toxic materials as defined by Section 307 where the quantity of the material exceeds the maximum allowable quantities of Table 307.1(2). • Aviation control towers, air traffic control centers and emergency aircraft hangars. • Buildings and other structures having critical national defense functions. • Water storage facilities and pump structures required to maintain water pressure for fire suppression.