

Naval Construction Battalion Center Gulfport and Special Areas Joint Land Use Study Implementation

Waveland Stennis International Airport Overlay District



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Introduction

The Naval Construction Battalion Center Gulfport and Special Areas Joint Land Use Study (JLUS), adopted in August 2017, was created in order to respond to the growth surrounding the Naval Construction Battalion Center and associated areas that the installation uses within the neighboring counties. The JLUS provides strategies and tools to reduce conflict between a military installation and the surrounding communities to ensure the continued mission of the military installation. The following report summarizes the recommendations regarding the creation of an overlay district for the area immediately surrounding Stennis International Airport to protect it from land use and compatibility issues.

Stennis International Airport

The Stennis International Airport (SIA) is a 585-acre general aviation airport owned and operated by the Hancock County Port and Harbor Commission (HCPHC). It is located on the eastern edge of the Stennis Space Center Buffer Zone, approximately 10 miles from the Space Center. The airport includes an 8,497-foot long, 150-foot wide, main runway with sufficient pavement strength to support passenger and cargo aircraft.

Training from all branches of the military takes place at SIA, including naval Special Warfare training and operations such as aircraft loading and equipment staging, military free fall and static line jumping, helicopter fast rope and rappelling, drop zone and convoy training. The training is conducted under an airport use agreement between the HCPHC, Hancock County Board of Supervisors, and the U.S. Government.

Plans are being designed to expand SIA to include a 125-acre site to be used exclusively as a military joint use heavy lift drop zone. The additional space would be used by Naval Special Warfare, the Air Force, and the Coast Guard. A 3,500 linear foot military joint use assault landing strip is also in the design stages and additional funding sources are being sought.

Land Use Compatibility

While SIA operates as a general-use airport, it also functions somewhat as a military installation due to its heavy use by the military. This use is planned to expand in the future. Development near SIA must be considered not only in terms of compatibility with the functions of the airport, but also with the functions of a military installation. Without guiding land use controls, growth in close proximity to a military installation can harm its mission by encroaching on the facility leading to reduced or restricted training, altered base missions, and ultimately base closure.

Due to the dynamic nature of military operations and training exercises, many different aspects of development qualify as encroachment. For example, the height of structures, whether they are residential or office high-rise buildings, cell towers, wind towers, or manufacturing plants, can interfere with flight training for military bases. Incompatible uses adjacent to military installations, particularly when located within noise contours or safety zones, include the following:

- Uses that concentrate people into small areas;
- Land Uses that house sensitive populations, such as hospitals, schools, or day cares;
- Uses that attract birds;
- Uses that emit electrical emissions;
- Uses that produce excessive lighting; and
- Uses that releases smoke, dust, steam.

Approximately half of the land contained within the overlay area around SIA is contained within the Stennis Space Center Buffer area. There are specific restrictions on the type and location of development within this buffer area. No residential development is allowed, and the predominant use is agriculture.

A small portion of the remaining overlay area covers part of the City of Waveland. Residential development is located within this area. The current use patterns of predominately compatible with the activities that take place at the airport. The majority of off-site impacts generated by the installation are noise from aircraft activities. Although there are no specific land uses, either currently or in the future, that could be identified as detrimental to the installation, there are compatibility concerns with some uses that should be considered when planning for future growth and military activity expansion.

Land Use Compatibility Recommendations

The JLUS developed the following recommendations concerning SIA to help ensure the continued mission of NCBC and Special Areas:

- Establish an Airport Overlay District which encompasses the entirety of the Stennis International Airport Study Area.
- Update impacted jurisdictions' Comprehensive Plans to incorporate the Airport Overlay District.
- Update impacted jurisdictions' zoning regulations to incorporate the Airport Overlay District.
- Create an Airport compatibility Element within the Comprehensive Plans of impacted jurisdictions.
- Develop and distribute property owner information to provide details on applicable regulations that govern development within the Airport Overlay District.
- Limit incompatible uses within the Airport Overlay District
- Control Land Use density and Intensity within the Airport overlay District.

Stennis International Airport Overlay District

The Stennis Airport Overlay District (SAOD) corresponds to the Federal Aviation Administration Part 77 surfaces for SIA. The Part 77 surface, in effect, identifies the maximum height at which a structure would be considered an obstacle at any given point around an airport. The SAOD within the City of Waveland includes two subdistricts within the Part 77 surfaces of varying height restrictions that correspond to different Part 77 surfaces. Please refer to Map 1: Location Map in Appendix A for the location of the proposed SAOD.

Most current occupants of structures within the SAOD have generally experienced the off-site impacts of the airport. However, there is the potential for further development and redevelopment within the SAOD in the future. Creating an opportunity for greater input from the airport and the military and regulating the type and form of development within the SAOD will serve to protect the mission at the installation.

The proposed SAOD within the City is composed of two sub-districts: the Obstruction Height Zone and the Airport Noise Zone. The following requirements are proposed for development within the SAOD:

Obstruction Height Zone Requirements

615.3 Zone Standards

- A. **Obstruction Height Zone.** Zone height limitations and sizes established in this section conform to the standards for determining obstructions to air navigation of 14 Code of Federal Regulations Part 77, ss 77.21. This zone applies to all the land lying beneath the conical surfaces as they apply to the HSAOD (see Map XX, Obstruction Height Zones). For any object or structure with a top elevation in excess of an Obstruction Height Zone surface, as specified in this section, any permit or variance granted shall, as a specific condition, require the owner to mark and light the structure to indicate to aircraft pilots the presence of an obstruction to air navigation. Such marking and lighting shall conform to the specific standards established by Federal Aviation Administration Advisory Circular 70/7460-1, as amended.

Existing structures not in compliance at the effective date of this regulation shall be required to comply whenever the existing marking requires refurbishment, whenever the existing lighting requires replacement, or within three (3) years of the effective date of this code, whichever occurs first.

No manmade or natural object or structure shall exceed the elevations defined by the various surfaces hereby established and defined as follows:

1. **Conical Surface.** An area extending outward from the periphery of the Horizontal Surface for a distance of 4,000 feet.

Conical Surface Height: No object or structure will be permitted in the conical surface that has a height greater than 150 feet above the airport elevation at its inner boundary with the permitted height increasing one (1) foot vertically for every twenty (20) feet of horizontal distance measured outward from the inner boundary to a height 350 feet above airport elevation at the outer boundary.

- B. **Airport Noise Zone.** This zone is located under the Horizontal and Conical Zones. This zone shall serve as the means of providing notification of potential impact from aircraft operations. The area under this zone may be subject to noise levels associated with aircraft operations that may affect the use or enjoyment of the property.

Development Review Requirements

615.4 **Obstruction Evaluation/Airport Airspace Analysis (OE/AAA).** Aeronautical studies are required to be submitted to the Federal Aviation Administration (FAA) for construction or alteration projects within the vicinity of HAS. These studies are required to be submitted at least 45 days prior to start of construction. However, studies are encouraged to be submitted at least 60 days prior to construction. Submission of the study must be through FAA form 7460-1, Notice of Proposed Construction or Alteration, and FAA Form 7640-2, Notice of Actual Construction or Alteration.

- A. The requirements for filing with the FAA for proposed structures varies based upon height, proximity to airport facilities, location, and frequencies emitted from the structure. Pursuant to 14 CFR Part 77.9, the following types of alteration or construction necessitate the filing of FAA Forms 7460-1 and 7460-2:
1. Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:
 - a. 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest HSA runway to the project.
 - b. 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway at HSA to the project.
 2. Any highway, railroad, waterway, or other corridor for mobile objects whose height, if adjusted upward according to 14 CFR 77.9(c), would exceed the standards within 14 CFR 77.9(a) or 14 CFR 77.9(b).
 3. Any structure that emits frequencies and does not meet the conditions of the FAA Co-location Policy.
 4. Any structure that is in proximity to a navigation facility and may impact the assurance of navigation signal reception.
 5. Any construction or alteration exceeding 200 feet above ground level, regardless of location.
 6. Any construction or alteration located on an airport described in 14 CFR 77.9(d).
 7. Any construction or alteration in which filing has been requested by the FAA.

To assist in determining whether a project needs to file a study with the FAA, a Notice Criteria Tool is available on the OE/AAA website. In addition to the tool, the FAA representative for HSA should be consulted.

- B. Form submittal for projects not located on an airport may either be submitted electronically through the FAA's website or through the mail. Form submittal for projects located on an airport should be submitted electronically through the FAA's website (www.faa.gov/).

Appendix A

Overlay District

Zoning Ordinance Amendment

Section 615 Stennis International Airport Overlay District (SAOD)

615.1 Purpose. The Stennis International Airport Overlay District (SAOD) is established to protect the functions of the airport from incompatible development by placing limitations on the height of objects and structures. The HSAOD also prevents the creation of objects or structures that: are hazardous to aeronautical operations; could increase the risk to the public's health, safety or well-being in the event of an aviation accident; would not be compatible with airport activities; or would otherwise impair the full utility and operating capacity of the Stennis International Airport.

615.2 Zones. Two sub-zones are created for the SAOD:

A. Obstruction Height Zone. Height limitations and sizes are established to conform to the standards for determining obstructions to air navigation (Map XX).

B. Airport Noise Zone. This zone is geographically depicted on Map XX.

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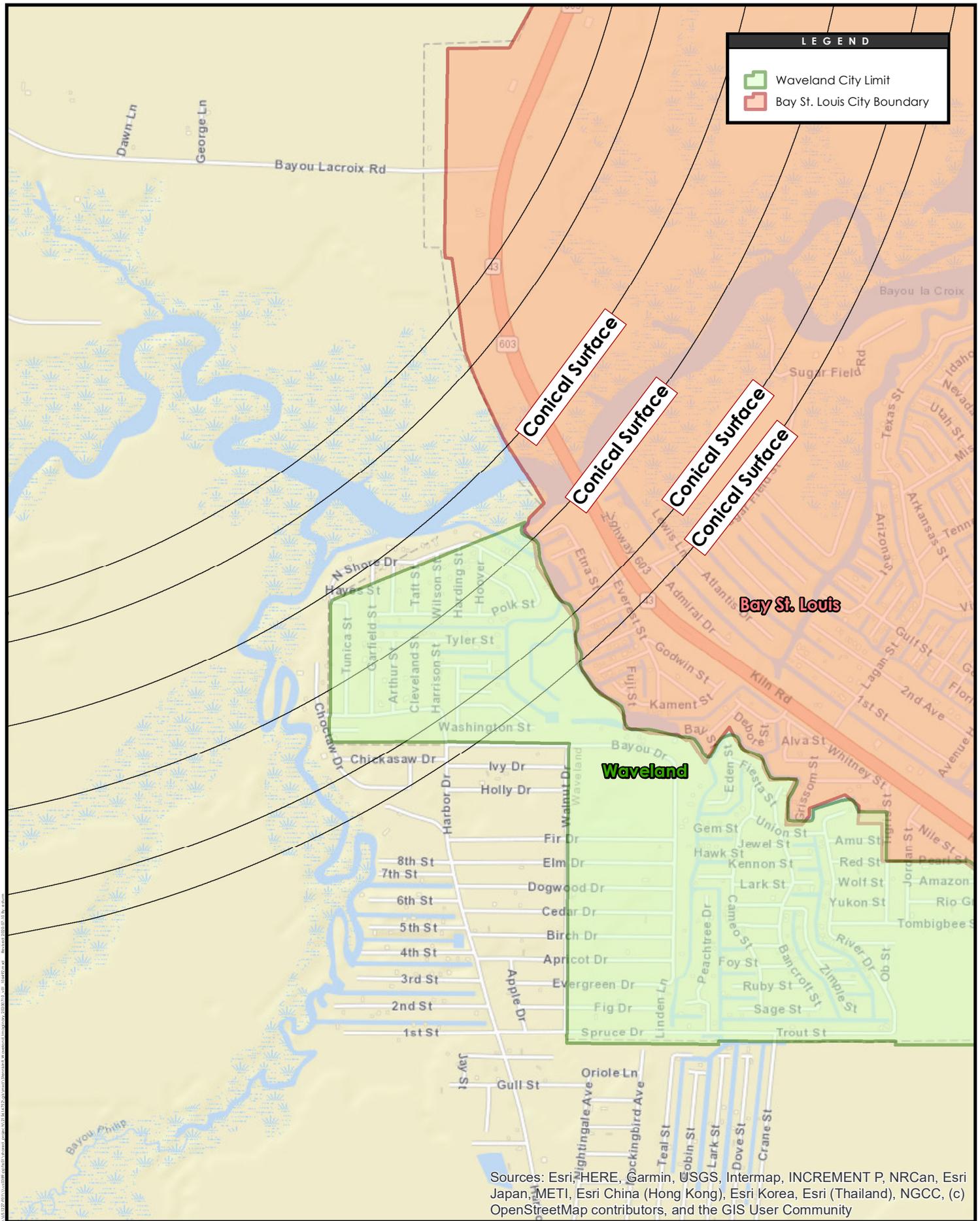
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B. Form submittal for projects not located on an airport may either be submitted electronically through the FAA's website or through the mail. Form submittal for projects located on an airport should be submitted electronically through the FAA's website (www.faa.gov/).

Appendix B

Maps



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

