

Jim Minnick DIRECTOR

TO:

# **Imperial County Planning & Development Services Planning / Building**

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Chairman Mike Goodsell Vice-Chairman Janell Guerrero Commissioner Dennis Loque Commissioner Jerry Arguelles Commissioner Sylvia Chavez Jim Minnick, Secretary FROM: Planning & Development Services Director SUBJECT: Public hearing to consider compatibility of YK America Group's proposed El Centro - YK American Town Center Village Phase II consisting of both Industrial and Residential development. The Residential Development project of 104 single-family dwellings are within the Imperial County Airport Compatibility Plan B2 zone (extended approach/ departure zone) and a portion within D zone. The Industrial Development project of 12 industrial buildings are within the Imperial County Airport Compatibility Plan B2 zone. proposed project site is located at the northwest corner of Cruickshank Drive and Clark Road, in El Centro, CA 92243. Assessor's Parcel Numbers 044-620-037, 038, 039, 040, 041, 053, 064 and 065 (Supervisorial District #3) (ALUC 05-22) [Evelia Jimenez Planner II, 442-265-1736, extension 1747 or by email at ejimenez@co.imperial.ca.us]. DATE OF REPORT: December 21, 2022 1

AGENDA ITEM NO:

HEARING DATE:

HEARING TIME:

HEARING LOCATION:

January 18, 2023

6:00 P.M.

**County Administration Center Board of Supervisors Chambers** 940 Main Street El Centro, CA 92243

# STAFF RECOMMENDATION

It is staff's recommendation that the Airport Land Use Commission review YK America Group's request and determine that the proposed development is incompatible with the 1996 Airport Land Use Compatibility Plan.

# SECRETARY'S REPORT

#### **Project Location:**

The proposed project site is 37+\- acres located at the northwest corner of Cruickshank Drive and Clark Road, in El Centro, CA 92243; Assessor's Parcel Numbers 044-620-037, 038, 039, 040, 041, 053, 064 and 065 (See attached Vicinity Map).

## **Project Description:**

The applicant, YK America Group, is requesting an evaluation of the attached Technical Letter Reports regarding the above parcels (044-620-037, 038, 039, 040, 041, 053, 064 and 065) that fall within the Imperial Airport Land Use Compatibility Plan (ALUCP). The parcels are primarily located within the Imperial County Airport Compatibility Zone B2 (extended approach/ departure zone) and a portion of Zone D.

The proposed development of 104 identically designed single-family residential dwellings will be known as the El Centro – YK America Town Center Village Phase II Single Family Residential Project. Each of the residential dwellings would be constructed on a disturbed, cleared, and graded site having a uniform Below Mean Sea Level elevation of -46.77 feet North American Vertical Datum of 1988. The highest Above Ground Level height of each residential dwelling roof would be 35.83 feet, or - 10.94 feet Below Mean Sea Level elevation.

The proposed development of 12 identically designed industrial buildings will be known as the El Centro – YK America Town Center Village Phase II Industrial Development Project. Each of the industrial buildings would be constructed on a disturbed, cleared, and graded site having a uniform Below Mean Sea Level elevation of -49.45 feet North American Vertical Datum of 1988. The highest Above Ground Level height of each industrial building's roof parapet would be 45.83 feet. or -3.62 feet Below Mean Sea Level elevation.

# General Plan/ALUCP Analysis:

This project is being brought to ALUC due to the applicant proposing to construct 104 new single-family residential dwelling and 12 industrial. The project site is within the B2 Compatibility Zone and a portion on Zone D, where the ALUCP indicates that there should be a maximum density of one resident per acre, with a 30 percent open land requirements and that residential subdivisions are not normally acceptable. The parcels in the current B2 zone, would not allow for high density residential.

The ALUCP, Chapter 2, Policies, Section 2.1.3, provides "Types of Actions Reviewed" by the Commission, which shall include:

"Any other proposed land use action, as determined by the local planning agency, involving a question of compatibility with airport activities" (Section 2.1.3.3h, pg. 2-4) and Table 2A, Compatibility Critieria, Zone B2, Extended Approach\Departure Zone pg. 2-16\17.

The applicant offers the attached Technical Letter Reports, an Evaluation of Imperial County Airport for Runway 32 Civil Airport Imaginary Surfaces Overlying Proposed El Centro – YK America Town Center Village Phase II Single family Residential Development Project and Industrial Development Project at El Centro, California, for the ALUC's review and determination of compatibility with the 1996 ALUCP due to the nature of the project (104 single-family residential dwellings and 12 industrial buildings within the ALUCP zones).

Attachments

- A Vicinity Map B – Site Plan C – Assessor Plat Map
- D ALUCP Zone Map
- E ALUC Section F – Technical Letter Report

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ATTACHMENT A VICINITY MAP



ATTACHMENT B SITE MAP



ATTACHMENT C ASSESOR PLAT MAP



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https://pdfviewer.geoviewer.io/web/viewer.html?file=https://gvhotlinks.storage.googleapis.com/ImageFiles\_IMPERIALCOUNTY/44-62.pdf

# ATTACHMENT D ALUCP ZONE MAP



ATTACHMENT E ALUC SECTION

# Policies

#### **1.SCOPE OF REVIEW**

# 1. Geographic Area of Concern

The Imperial County Airport Land Use Commission's planning area encompasses:

1. Airport Vicinity - All lands on which the uses could be negatively affected by present or future aircraft operations at the following airports in the County and lands on which the uses could negatively affect said airports. The specific limits of the planning area for each airport are depicted on the respective Compatibility Map for that airport as presented in Chapter 3.

- (a) Brawley Municipal Airport.
- (b) Calexico International Airport.
- (c) Calipatria Municipal Airport.
- (d) Holtville Airport.
- (e) Imperial County Airport.
- (f) Salton Sea Airport.
- (g) Naval Air Facility El Centro.

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Countywide Impacts on Flight Safety - Those lands, regardless of their location in the County, on which the uses could adversely affect the safety of flight in the County. The specific uses of concern are identified in Paragraph 2.

3.

2.

New Airports and Heliports - The site and environs of any proposed new airport or heliport anywhere in the County. The Brawley Pioneers Memorial Hospital has a heliport area on-site.

#### Types of Airport Impacts

The Commission is concerned only with the potential impacts related to aircraft noise, land use safety (with respect both to people on the ground and the occupants of aircraft), airspace protection, and aircraft overflights. Other impacts sometimes created by airports (e.g., air pollution, automobile traffic, etc.) are beyond the scope of this plan. These impacts are within the authority of other local, state, and federal agencies and are addressed within the environmental review procedures for airport development.

3.

1.

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Types of Actions Reviewed

- General Plan Consistency Review Within 180 days of adoption of the Airport Land Use Compatibility Plan, the Commission shall review the general plans and specific plans of affected local jurisdictions to determine their consistency with the Commission's policies. such time as (1) the Commission finds that the local general plan or
- specific plan is consistent with the Airport Land Use Compatibility Plan, or (2) the local agency has overruled the Commission's determination of inconsistency, the local jurisdiction shall refer all actions, regulations, and permits (as specified in Paragraph 3) involving the airport area of influence to the Commission for review (Section 21676.5 (a)).

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Statutory Requirements -As required by state law, the following types 2. of actions shall be referred to the Airport Land Use Commission for determination of consistency with the Commission's plan prior to their approval by the local jurisdiction:

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- (a) The adoption or approval of any amendment to a general or specific plan affecting the Commission's geographic area of concern as indicated in Paragraph 1 (Section 21676 (b)).
- (b) The adoption or approval of a zoning ordinance or building regulation which (1) affects the Commission's geographic area of concern as indicated in Paragraph 1 and (2) involves the types of airport impact concerns listed in Paragraph 2 (Section 21676 (b)).
- (c) Adoption or modification of the master plan for an existing publicuse airport (Section 21676 (c)).
- (d) Any proposal for a new airport or heliport whether for public use or private use (Section 21661.5).

3. Other Project Review - State law empowers the Commission to review additional types of land use "actions, regulations, and permits" involving a question of airport/land use compatibility if either: (1) the Commission and the local agency agree that these types of individual projects shall be reviewed by the Commission (Section 21676.5 (b)); or (2) the Commission finds that a local agency has not revised its general plan or specific plan or overruled the Commission and the Commission requires that the individual projects be submitted for review (Section 21676.5 (a)). For the purposes of this plan, the specific types of "actions, regulations, and permits" which the Commission shall review include:

a) airport's planning area.

b) Any proposed residential planned unit development consisting of five or more dwelling units within an airport's planning area.

c) Any request for variance from a local agency's height limitation ordinance.

d) Any proposal for construction or alteration of a structure (including antennas) taller than 150 feet above the ground anywhere within the County.

e) Any major capital improvements (e.g., water, sewer, or roads) that would promote urban development.

f) Proposed land acquisition by a government entity (especially, acquisition of a school site).

g) Building permit applications for projects having a valuation greater than \$500,000.

h) Any other proposed land use action, as determined by the local planning agency, involving a question of compatibility with airport activities.

#### Review Process

1.

4.

Timing of Project Submittal - Proposed actions listed in Paragraph 3.1 must be submitted to the Commission for review prior to approval by the local government entity. All projects shall be referred to the Commission at the earliest reasonable point in time so that the Commission's review can be duly considered by the local jurisdiction prior to formalizing its actions. At the local government's discretion, submittal of a project for Airport Land Use Commission review can be done before, after, or concurrently with review by the local planning commission or other local advisory bodies.

2.

Commission Action Choices - When reviewing a land use project proposal, the Airport Land Use Commission has a choice of either of two actions: (1) find the project consistent with the Airport Land Use Compatibility Plan; or, (2) find the project inconsistent with the Plan. In making a finding of inconsistency, the Commission may note the conditions under which the project would be consistent with the Plan. The Commission cannot, however, find a project consistent with the Plan subject to the inclusion of certain conditions in the project.

## Table 2A

# Compatibility Criteria

# Imperial County Airport Land Use Compatibility Plan

| Zone | Location  | Impact Elements   | Maximum Densities                  |  | Required<br>Open<br>Land <sup>2</sup> |
|------|---|---|------------------------------------|--|---------------------------------------|
|      |   |   | Residential<br>(dwac) <sup>1</sup> | Other Uses<br>(people/ac) <sup>2</sup> |                                       |
| A    | Runway Protection Zone or<br>within Building Restriction<br>Une | <ul> <li>High risk</li> <li>High noise levels</li> </ul>  | 0                                  | 10                                     | All<br>Remaining                      |
| B1   | Approach/Departure Zone and<br>Adjacent to Runway               | <ul> <li>Substantial risk - alrcraft com-<br/>monly below 400 ft AGL or<br/>within 1,000 ft of runway</li> <li>Substantial noise</li> </ul> | 0.1                                | 100                                    | 30%                                   |
| B2   | Extended Approach/Daparture<br>Zone                             | <ul> <li>Significant risk – alreraft com-<br/>monly below 800 ft. AGL</li> <li>Significant noise</li> </ul>                                 | 1                                  | 100                                    | 30%                                   |
| C    | Common Traffic Pattern  | <ul> <li>Limited risk – aircraft at or<br/>below 1,000 ft_AGL</li> <li>Frequent noise intrusion</li> </ul>                                  | 6                                  | 200                                    | 15%                                   |
| D.   | Other Airport Environs  | <ul> <li>Negligible risk</li> <li>Potential for annoyance from overflights</li> </ul>   | No<br>Limit                        | No<br>Limit                            | No<br>Requirement                     |

| Zone             | Additiona   | l Criterià  | Examples  |   |  |
|------------------|---|---|---|---|--|
|                  | Prohibited Uses   | Other Development<br>Conditions   | Normally Acceptable<br>Uses*  | Uses Not Normaliy<br>Acceptable <sup>6</sup>  |  |
| A                | <ul> <li>All structures except<br/>ones with location set by<br/>aeronautical function</li> <li>Assemblages of people</li> <li>Objects exceeding FAR<br/>Part 77 height limits</li> <li>Hazards to flight<sup>6</sup></li> </ul>                    | Dedication of avigation     easement  | <ul> <li>Aircraft tiedown apron</li> <li>Pastures, field crops,<br/>vineyards</li> <li>Automobile parking</li> </ul>  | <ul> <li>Heavy poles, signs, large<br/>trees, etc.</li> </ul>   |  |
| .81<br>and<br>B2 | <ul> <li>Schools, day care centers, libraries</li> <li>Hospitals, nursing homes</li> <li>Highly noise-sensitive uses</li> <li>Above ground storage</li> <li>Storage of highly flammable materials</li> <li>Hazards to flight<sup>6</sup></li> </ul> | <ul> <li>Locate structures maximum distance from<br/>extended runway cen-<br/>terline</li> <li>Minimum NLR<sup>7</sup> of 25<br/>dBA in residential and<br/>office buildings</li> <li>Dedication of avigation<br/>easement</li> </ul> | <ul> <li>Uses in Zone A</li> <li>Any agricultural use<br/>except ones attracting<br/>bird flocks</li> <li>Warehousing, truck<br/>terminals</li> <li>Single-story offices</li> </ul>         | <ul> <li>Residential subdivisions</li> <li>Intensive retail uses</li> <li>Intensive manufacturing<br/>or food processing uses</li> <li>Multiple story offices</li> <li>Hotels and motels</li> </ul> |  |
| C                | <ul> <li>Schoola</li> <li>Hospitals, nursing homes</li> <li>Hazards to flight<sup>6</sup></li> </ul>  | <ul> <li>Dedication of overflight.</li> <li>easement for residential uses</li> </ul>  | <ul> <li>Uses in Zone B</li> <li>Parks, playgrounds</li> <li>Low-intensity retail, offices, etc.</li> <li>Low-intensity manufacturing, food processing</li> <li>Two-story motels</li> </ul> | <ul> <li>Large shopping mails</li> <li>Theaters, auditoriums</li> <li>Large sports stadiums</li> <li>Hi-rise office buildings</li> </ul>  |  |
| D                | <ul> <li>Hazards to flight<sup>6</sup></li> </ul>   | <ul> <li>Deed notice required for<br/>residential development</li> </ul>  | <ul> <li>All except ones hazard-<br/>ous to flight</li> </ul>   |   |  |

#### Policies / Chapter 2

### Table 2A Continued Compatibility Criteria

#### Imperial County Airport Land Use Compatibility Plan

#### NOTES

- Residential development should not contain more than the indicated number of dwelling units per gross acre. Clustering of units is encouraged as a means of meeting the Required Open Land requirements.
- 2 The land use should not attract more than the indicated number of people per acre at any time. This figure should include all individuals who may be on the property (e.g., employees, customers/visitors, etc.). These densities are intended as general planning guidelines to aid in determining the acceptability of proposed land uses.

3 See Policy 2.5.

#### BASIS FOR COMPATIBILITY ZONE BOUNDARIES

- These uses typically can be designed to meet the density requirements and other development conditions listed.
- 5 These uses typically do not meet the density and other development conditions listed. They should be allowed only if a major community objective is served by their location in this zone and no feasible alternative location exists.
- 6 See Policy 3.4
- 7 NLR ≈ Noise Level Reduction; i.e., the attenuation of sound level from outside to inside provided by the structure.

The following general guidelines are used in establishing the Compatibility Zone boundaries for each civilian airport depicted in Chapter 3. Modifications to the boundaries may be made to reflect specific local conditions such as existing roads, property lines, and land uses. Boundaries for NAF El Centro are modified in recognition of the differences between civilian and military e/craft characteristics and flight tracks.

A The boundary of this zone for each airport is defined by the runway protection zones (formariy called runway clear zones) and the airfield building restriction lines.

Runway protection zone dimensions and locations are set in accordance with Federal Aviation Administration standards for the proposed future runway location, length, width, and approach type as indicated on an approved Airport Layout Pfan. If no such plan exists, the existing runway location, length, width, and approach type are used.

The building restriction line location indicated on an approved Airport Layout Plan is used where such plans exist. For airports not having an approved Airport Layout Plan, the zone boundary is set at the following distance laterally from the runway centerline;

| Visual runway for small simplanes  | 370 feet |
|------------------------------------|----------|
| Visual runway for large simplenes  | 500 feet |
| Nonprecision instrument runway for |          |
| large airplanes                    | 500 feet |
| Precision instrument runway        | 750 feet |

These distances allow structures up to approximately 35 feet height to remain below the airepace surfaces defined by Federal Aviation Regulations Part 77.

B1 The outer boundary of the Approach/Departure Zone is defined as the area where aircraft are commonly below 400 feet above ground level (AGL). For visual runways, this location encompasses the base leg of the traffic pattern as commonly flown. For instrument runways, the attitudes established by approach procedures are used. Zone B1 also includes areas within 1,000 feet laterally from the runway centerline.

- 82 The Extended Approach/Departure Zone includes areas where aircraft are commonly below 800 feet AGL on straight-in approach or straight-out departure. It applies to runways with more than 500 operations per year by large aircraft (over 12,500 pounds maximum gross takeoff weight) and/or runway ends with more than 10,000 total annual takeoffs.
- C The outer boundary of the Common Traffic Pattern Zone is defined as the area where aircraft are commonly below 1,000 feet AGL (i.e., the traffic pattern and pattern entry points). This area is considered to extend 5,000 feet laterally from the runway centerline and from 5,000 to 10,000 feet longitudinally from the end of the runway primary surface. The length depends upon the runway classification (visual versus instrument) and the type and volume of aircraft accommodated. For runways having an established traffic solely on one side, the shape of the zone is modified accordingly.
- D The outer boundary of the Other Airport Environs Zone conforms with the adopted Planning Area for each airport.

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ATTACHMENT F TECHNICAL LETTER REPORT



# **Technical Letter Report**

DATE: September 7, 2022

SUBJECT: Evaluation of Imperial County Airport for Runway 32 Civil Airport Imaginary Surfaces Overlying Proposed El Centro – YK America Town Center Village Phase II Single Family Residential Development Project at El Centro, California

# INTRODUCTION, PURPOSE AND FINDINGS

As requested by the City of El Centro, Michael Baker International evaluated Civil Airport Imaginary Surfaces for the Imperial County Airport. These surfaces would overlay what is called the proposed El Centro – YK America Town Center Village Phase II Single Family Residential Development Project at El Centro, California (the Proponent's Project). Our evaluation was developed to identify and assess potential adverse penetrations of overlying Federal Aviation Administration- (FAA) prescribed planes of civil airport navigable airspace that may be imposed by the proposed Project.

As presented, this information is offered to the City for informational purposes only, and fully reflects data and information that will be included within the electronic filing of FAA Form 7460-1, *Notice of Proposed Construction or Alteration*. That filing submittal to the FAA's Western-Pacific Regional Office Obstruction Evaluation Group via the FAA's Obstruction Evaluation / Airport Airspace Analysis (OE/AAA) Web Portal will occur at a date and time directed by the City of El Centro.

The Proponent's filing of FAA Form 7460-1 will be limited to the closest of 104 residential dwellings of the proposed Project.

It is important to note that the evaluation and findings presented by Michael Baker International do not reflect FAA's Airspace Analysis and related FAA Aeronautical Study actions, nor does it guarantee the FAA's formal issuance of a "Determination of No Hazard".

The findings of the Technical Letter Report indicate that none of the proposed single family residential dwellings would adversely affect (i.e. penetrate) overlying prescribed CFR Part 77 Civil Airport Imaginary Surfaces applicable to Visual Approach Procedure to Runway 32 and a single Obstacle Clearance Surface applicable to a published Circling Approach to the Imperial County Airport.

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# **PROPOSED PROJECT**

The proposed development of 104 identically designed single family residential dwellings will be known as the El Centro – YK America Town Center Village Phase II Single Family Residential Project. Each of the residential dwellings would be constructed on a disturbed, cleared, and graded site having a uniform Below Mean Sea Level (BMSL) elevation of -46.77 feet (North American Vertical Datum of 1988 (NAVD 88). The highest Above Ground Level (AGL) height of each residential dwelling roof would be 35.83 feet, or -10.94 feet BMSL.

# THE IMPERIAL COUNTY AIRPORT AND PROTECTED NAVIGABLE AIRSPACE

The Imperial County Airport (FAA Location Identifier: IPL) is a classified as being Public Use General Aviation Airport having an Airport Reference Point location of 32° 50' 3.20" N / 115° 34' 43.50" W (North American Horizontal Datum of 1983, NAD83). The airport has two paved runways, Runway 08-26 having Basic Visual and Runway 14-32 having Non-Precision Runway Markings.

The FAA classifies each of the two runways as being limited to visual straight-in approach operations to each runway end. These types of approach operations are protected by Visual Approach Civil Airport Imaginary Surfaces prescribed by Title 14 of the Code of Federal Regulations (14 CFR) Part 77, Safe, Efficient Use, and Preservation of the Navigable Airspace, §77.19, Civil airport imaginary surfaces.

This Technical Letter Report is limited to the identification and assessment of CFR Part 77 Civil Airport Imaginary Surfaces applicable to Visual Approach Procedure to Runway 32 and a single Obstacle Clearance Surface applicable to a published Circling Approach to the airport as described below:

Runway 14-32 Primary Surface

Runway14-32's Primary Surface is longitudinally centered about each runway centerline and extends 200 feet beyond each end of each runway. The elevation of any point on the Primary Surface is the same as the elevation of the nearest point on the runway centerline. The width of the Primary Surface for each runway is 500 feet.

**Finding**: None of the planned 104 residential dwellings would be located within the limits of the Runway 14-32 Primary Surface

## Runway 32 Visual Approach Surface

The Visual Approach Surface for Runway 32 is trapezoidal in shape, is longitudinally centered about the extended runway centerline, has an inner width of 500 feet, expands uniformly to a width of 3,500 feet from the end of the Primary Surface, and rises upward and outward for a distance of 5,000 feet at a rate of 20:1.

**Finding**: Of the total of 104 residential dwellings, a total of 77 having a roof height of -10.94 feet BMSL would underly the upwardly-sloping Runway 32 Visual Approach Surface. The Above Mean Sea level (AMSL) height of the surface would range from 147.0 feet to 186.5 feet to 196.1 feet. The absolute vertical clearance between the overlying surface and the peak roof heights of the residential dwellings would range from 185.0 feet to 234.0 feet.

#### Horizontal Surface

The Horizontal Surface is a flat horizontal plane established 150 feet above the airport's established elevation of -53.6 feet BMSL, or 96.4 feet AMSL The perimeter of the Horizontal Surface is constructed by swinging arcs having a radius of 5,000 feet from the center of each end of the Primary Surface of each of the two runways and connecting the adjacent arcs by lines tangent to those arcs.

**Finding**: A total of 70 of the planned 104 residential dwellings would be located directly below the overlying flat Horizontal Surface. The absolute vertical clearance height between the highest roof element of each residential dwelling and the overlying flat Horizontal Surface would be 107.3 feet.

#### **Conical Surface**

The Conical Surface begins at that periphery of the Horizontal Surface extending outward and upward for a distance of 4,000 feet at a rate of 20:1 beginning at a height of 96.4 feet AMSL and ending at a height of 296.4 AMSL.

**Finding**: A total of 35 of the planned 104 residential dwellings would be located directly below the overlying upwardly-sloping Conical Surface. The AMSL height of the 20:1 upwardly-sloping Conical Surface directly above each residential dwelling would range

from 96.4 feet to 116.6 feet and have absolute vertical clearances over the highest roof element of each residential dwelling that would range from 107.3 feet to 127.5 feet.

Although the FAA classifies each runway as being limited to visual approach capabilities, the airport is served by a Non-published Instrument Approach Procedure (VOR or GPS-A) having a 1 statute mile Visibility Minimum that provides a non-runway specific Circling Approach to the airport. The availability of Circling Approach Procedures requires the establishment and protection of Obstacle Clearance Surfaces for each runway end. The surfaces are defined by FAA Advisory Circular 150/5300-13B, §3.6, §3.6.1.1, Standards, Approach and Departure Surfaces, Table 3-3, Non-Precision and IFR Circling Approach Surfaces, Type 4 Obstacle Clearance Surface as depicted in Figure 3-6 for visibilities equal to, or greater than <sup>3</sup>/<sub>4</sub> statute mile.

Runway 32 Type 4 Circling Approach Obstacle Clearance Surface

This surface is trapezoidal in shape, begins 200 feet from the approach end of Runway 32, has an inner width of 400 feet, an outer width of 3,400 feet and a length of 10,000 feet that rises upward and outward at a rate of 20:1.

**Finding:** A total of 77 of the planned 104 residential dwellings having BMSL peak roof heights of -10.94 feet would be located directly below the overlying upwardly-sloping Type 4 Circling Approach Obstacle Clearance Surface. The AMSL height of the overlying surface would range from 149.6 feet to 216.3 feet and have absolute vertical clearances over the highest roof element of each residential dwelling ranging from 160.5 to 227.2 feet.

# CLOSEST RESIDENTIAL DWELLING (FILED VIA FAA FORM 7460-1)

Of the 104 residential dwellings, the corner of the closest residential dwelling would be situated within the northwestern-most portion of the planned residential development project at a relative bearing of 164 degrees (True) 4,315 feet from the closest end of the closest runway (i.e., the approach end of Runway 32, or the departure end of Runway 14).

The absolute vertical clearances between the highest root-top of the closest residential dwelling and applicable overlying planes of protected navigable airspace for visual approaches to Runway 32 and the Circling Instrument Approach procedure are described below:

Runway 32 Visual Approach Surface

The AMSL height of the upwardly-sloping Runway 32 Visual Approach Surface would range from 148.1 feet to 148.6 feet. The vertical clearance between the closest residential dwelling having a MSL peak roof height of -10.94 feet and the overlying surface would range from 186.0 feet to 185.5 feet.

#### Horizontal Surface

The absolute vertical clearance between the highest roof elevation and the overlying flat Horizontal Surface would be 96.4 feet. The absolute vertical clearance would be 107.3 feet.

#### **Conical Surface**

The closest residential dwelling would not be located within the limits of the 20:1 upwardly-sloping Conical Surface.

#### Runway 32 Type 4 Circling Approach Obstacle Clearance Surface

The closest residential dwelling would not be located within the limits of the Type 4 Circling Approach Obstacle Clearance Surface.

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## FILING OF FAA FORM 7460-1

# EL CENTRO YK AMERICA TOWN CENTER VILLAGE PHASE II SINGLE FAMILY RESIDENTIAL DEVELOPMENT PROJECT





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# **Technical Letter Report**

#### DATE: September 7, 2022

SUBJECT: Evaluation of Imperial County Airport for Runway 32 Civil Airport Imaginary Surfaces Overlying Proposed El Centro – YK America Town Center Village Phase II Industrial Development Project at El Centro, California

# INTRODUCTION, PURPOSE AND FINDINGS

As requested by the City of El Centro, Michael Baker International evaluated Civil Airport Imaginary Surfaces for the Imperial County Airport. These surfaces would overlay what is called the proposed El Centro – YK America Town Center Village Phase II Industrial Development Project at El Centro, California (the Proponent's Project). Our evaluation was developed to identify and assess potential adverse penetrations of overlying Federal Aviation Administration-(FAA) prescribed planes of civil airport navigable airspace that may be imposed by the proposed Project.

As presented, this information is offered to the City for informational purposes only, and fully reflects data and information that will be included within the electronic filing of FAA Form 7460-1, *Notice of Proposed Construction or Alteration*. That filing submittal to the FAA's Western-Pacific Regional Office Obstruction Evaluation Group via the FAA's Obstruction Evaluation / Airport Airspace Analysis (OE/AAA) Web Portal will occur at a date and time directed by the City of El Centro.

The Proponent's filing of FAA Form 7460-1 will be limited to the closest of the 12 industrial buildings of the proposed Project.

It is important to note that the evaluation and findings presented by Michael Baker International do not reflect FAA's Airspace Analysis and related FAA Aeronautical Study, nor does it guarantee the FAA's formal issuance of a "Determination of No Hazard."

The findings of the Technical Letter Report indicate that none of the proposed industrial buildings would adversely affect (i.e., penetrate) overlying prescribed CFR Part 77 Civil Airport Imaginary Surfaces applicable to Visual Approach Procedure to Runway 32 and a single Obstacle Clearance Surface applicable to a published Circling Approach to the Imperial County Airport.

# PROPOSED PROJECT

The proposed development of 12 identically designed industrial buildings will be known as the El Centro – YK America Town Center Village Phase II Industrial Project. Each of the industrial buildings would be constructed on a disturbed, cleared, and graded site having a uniform Below Mean Sea Level (BMSL) elevation of -49.45' (North American Vertical Datum of 1988 (NAVD 88). The highest Above Ground Level (AGL) height of each industrial building's roof parapet would be 45.83 feet, or -3.62 feet BMSL.

# THE IMPERIAL COUNTY AIRPORT AND PROTECTED NAVIGABLE AIRSPACE

The Imperial County Airport (FAA Location Identifier: IPL) is a classified as being Public Use General Aviation Airport having an Airport Reference Point location of 32° 50′ 3.20″ N / 115° 34′ 43.50″ W (North American Horizontal Datum of 1983, NAD83). The airport has two paved runways: Runway 08-26 and Runway 14-32.

The FAA classifies each of the two runways as being limited to visual straight-in approach operations to each runway end. These types of approach operations are protected by Visual Approach Civil Airport Imaginary Surfaces prescribed by Title 14 of the Code of Federal Regulations (14 CFR) Part 77, Safe, Efficient Use, and Preservation of the Navigable Airspace, §77.19, Civil airport imaginary surfaces.

This Technical Letter Report is limited to the identification and assessment of CFR Part 77 Civil Airport Imaginary Surfaces applicable to Visual Approach Procedure to Runway 32 and a single Obstacle Clearance Surface applicable to a published Circling Approach to the airport as described below:

#### Runway 14-32 Primary Surface

Runway 14-32's Primary Surface is longitudinally centered about each runway centerline and extends 200 feet beyond each end of each runway. The elevation of any point on the Primary Surface is the same as the elevation of the nearest point on the runway centerline. The width of the Primary Surface for each runway is 500 feet.

**Finding**: None of the planned 12 industrial buildings would be located within the limits of the Runway 14-32 Primary Surface.

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#### Runway 32 Visual Approach Surface

The Visual Approach Surface for Runway 32 is trapezoidal in shape, is longitudinally centered about the extended runway centerline, has an inner width of 500 feet, expands uniformly to a width of 3,500 feet from the end of the Primary Surface, and rises upward and outward for a distance of 5,000 feet at a rate of 20:1.

**Finding**: Of the total of 12 industrial buildings, only one having an BMSL roof parapet height of -3.62 feet would underly the upwardly-sloping Runway 32 Visual Approach Surface. The Above Mean Sea Level (AMSL) height of the surface would range from 186.5 feet to 193.0 feet. The absolute vertical clearance between the overlying surface and the industrial building roof parapet would range from 190.1 feet to 196.6 feet.

#### Horizontal Surface

The Horizontal Surface is a flat horizontal plane established 150 feet above the airport's established BMSL elevation of -53.6 feet, or 96.4 feet AMSL The perimeter of the Horizontal Surface is constructed by swinging arcs having a radius of 5,000 feet from the center of each end of the Primary Surface of each of the two runways and connecting the adjacent arcs by lines tangent to those arcs.

**Finding**: Of the total of 12 industrial buildings, only two having the closest proximity to the approach end of Runway 32 would underly the flat Horizontal Surface.

The absolute vertical clearance between the roof parapet of each industrial building and the overlying flat Horizontal Surface would be 100.0 feet.

#### Conical Surface

The Conical Surface begins at that periphery of the Horizontal Surface extending outward and upward for a distance of 4,000 feet at a rate of 20:1 beginning at a height of 96.4 feet AMSL and ending at a height of 296.4 AMSL.

**Finding**: Of the total of 12 industrial buildings, 11 would be located directly below the overlying upwardly-sloping Conical Surface. The AMSL height of the 20:1 upwardly-sloping Conical Surface directly above each industrial building would range from 96.4 feet to 138.4 feet and have absolute vertical clearances over the roof parapet of each industrial buildings that would range from 100.0 feet to 142.2 feet.

Although the FAA classifies each runway as being limited to visual approach capabilities, the airport is served by a Non-published Instrument Approach Procedure (VOR or GPS-A) having a 1 statute mile Visibility Minimum that provides a non-runway specific Circling Approach to the airport. The availability of Circling Approach Procedures requires the establishment and protection of Obstacle Clearance Surfaces for each runway end. The surfaces are defined by FAA Advisory Circular 150/5300-13B, §3.6, §3.6.1.1, Standards, Approach and Departure Surfaces, Table 3-3, Non-Precision and IFR Circling Approach Surfaces, Type 4 Obstacle Clearance Surface as depicted in Figure 3-6 for visibilities equal to, or greater than ¾ statute mile.

Runway 32 Type 4 Circling Approach Obstacle Clearance Surface

This surface is trapezoidal in shape, begins 200 feet from the approach end of Runway 32, has an inner width of 400 feet, an outer width of 3,400 feet and a length of 10,000 feet that rises upward and outward at a rate of 20:1.

**Finding:** All of the planned 12 industrial buildings having a roof parapet BMSL height of - 3.62 would be located directly below the overlying upwardly-sloping Type 4 Circling Approach Obstacle Clearance Surface. The AMSL height of the overlying surface would range from 186.5 feet to 238.5 feet and have absolute vertical clearances over the roof parapet of each industrial buildings ranging from 190.1 to 242.1 feet.

# CLOSEST INDUSTRIAL BUILDING (FILED VIA FAA FORM 7460-1)

Of the 12 industrial buildings, the closest corner of the closest building would be situated within the northwestern-most portion of the planned industrial building development project at a relative bearing of 155 degrees (True) 5,012.3 feet from the closest end of the closest runway (i.e., the approach end of Runway 32, or the departure end of Runway 14).

The absolute vertical clearances between the highest roof-parapet of the closest industrial building and applicable overlying planes of protected navigable airspace for visual approaches to Runway 32 and the Circling Instrument Approach procedure are described below:

# Runway 32 Visual Approach Surface

The AMSL height of the upwardly-sloping Runway 32 Visual Approach Surface would range from 186.5 feet to 195.9 feet. The vertical clearance between the roof parapet of the closest industrial building and the overlying surface would range from 190.1 feet to 199.5 feet.

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#### Horizontal Surface

The AMSL height of the overlying flat Horizontal Surface would be 96.4 feet. The absolute vertical clearance between the industrial building roof parapet and the overlying flat Horizontal Surface would be 100.0 feet.

**Conical Surface** 

The closest industrial building would not be located within the limits of the 20:1 upwardlysloping Conical Surface.

Runway 32 Type 4 Circling Approach Obstacle Clearance Surface

The closest industrial building would be located directly below the overlying upwardlysloping Type 4 Circling Approach Obstacle Clearance Surface that would have AMSL heights ranging from 186.5 feet to 195.9 feet. The absolute vertical clearance over the roof parapet of the industrial building would range from 190.1 to 199.5 feet.



## FILING OF FAA FORM 7460-1

# EL CENTRO YK AMERICA TOWN CENTER VILLAGE PHASE II SINGLE FAMILY RESIDENTIAL DEVELOPMENT PROJECT

