



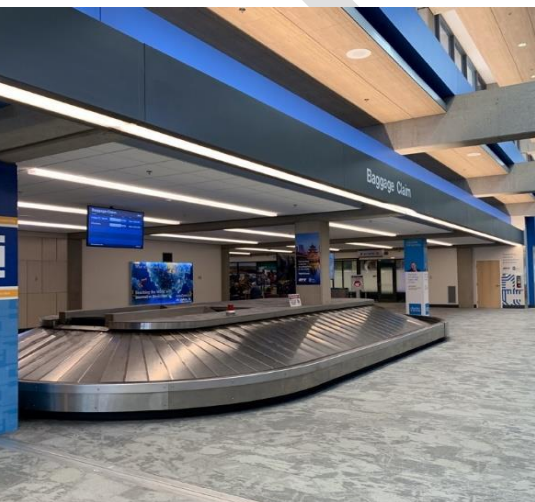
Evansville Regional Airport

# Draft Working Paper #5

Airport Master Plan Update

Alternatives Development Concepts

June 2025



## TABLE OF CONTENTS

5	Alternatives Development Concepts.....	5-1
5.1	Review of Planning Factors.....	5-1
5.2	Concept Evaluation .....	5-1
5.3	Review of Airfield Design Standards.....	5-2
5.3.1	Runway 4-22 .....	5-2
5.3.2	Runway 18-36 .....	5-3
5.3.3	Runway 9-27 .....	5-3
5.3.4	Taxiway System.....	5-4
5.4	Airfield Development Concepts.....	5-4
5.4.1	Runway Alternatives .....	5-5
5.4.2	Taxiway System.....	5-24
5.5	Passenger Terminal Facility Development Concepts.....	5-27
5.5.1	Gate and Holdroom Expansion .....	5-27
5.5.2	Outbound /Inbound Baggage Make-Up .....	5-32
5.5.3	Security Screening Check Point.....	5-34
5.6	Landside Development Concepts .....	5-38
5.6.1	Public Parking.....	5-38
5.6.2	Rental Car Facilities.....	5-43
5.7	Support Facilities Development Concepts.....	5-46
5.7.1	Westside Aeronautical Development Concepts .....	5-46
5.7.2	Northeast Non-Aeronautical Development Area .....	5-53
5.7.3	Aviation Fueling Facilities.....	5-59
5.8	Recommended Development Plan Summary.....	5-61

## FIGURES

Figure 5-1 – Alternative 1: (Runway 22) – Property/Easement Acquisition.....	5-7
Figure 5-2 – Alternative 2: (Runway 22) – Decommission Oak Hill Road.....	5-9
Figure 5-3 – Alternative 1: (Runway 18) – Tunnel for State Road 57.....	5-11
Figure 5-4 – Alternative 2: (Runway 36) – Property Acquisition/Easements.....	5-13
Figure 5-5 – Alternative 3: (Runway 36) – Relocate St. George Road, Roundabout, and Removal of Displaced Threshold.....	5-15
Figure 5-6 – Alternative 1: (Runway 9) – Property Acquisition/Easements.....	5-17
Figure 5-7 – Alternative 2: (Runway 9) – US Highway 41 and CSX Railway Tunnel.....	5-19
Figure 5-8 – Alternative 3: (Runway 9-27) – Closure.....	5-21
Figure 5-9 – Alternative 4: (Runway 9-27) Taxiway Conversion.....	5-23
Figure 5-10 – Taxiway System.....	5-25
Figure 5-11 – Taxiway System (Beyond 20-Years).....	5-26
Figure 5-12 – Alternative 1: Central Terminal Expansion.....	5-29
Figure 5-13 – Alternative 2: West Terminal Expansion.....	5-31
Figure 5-14 – Alternative 3: East Terminal Expansion.....	5-33
Figure 5-15 – Alternative 1: North/South SSCP Queue Orientation.....	5-36
Figure 5-16 – Alternative 2: East/West SSCP Queue Orientation.....	5-37
Figure 5-17 – Enabling Parking Projects.....	5-40
Figure 5-18 – Alternative 1: Additional Surface Lots and Proposed Parking Structure.....	5-41
Figure 5-19 – Alternative 2: Additional Surface Lot and Proposed Park & Ride.....	5-42
Figure 5-20 – Ready and Return Lot Expansion.....	5-44
Figure 5-21 – Quick Turn Around/Maintenance Area Expansion.....	5-45
Figure 5-22 – Alternative 1: Northwest Corporate Development.....	5-47
Figure 5-23 – Alternative 2: Northwest Maintenance, Repair, and Overhaul (MRO) Development.....	5-48
Figure 5-24 – Alternative 3: Southwest Development Max Aeronautical.....	5-50
Figure 5-25 – Alternative 4: Southwest Development Max Non-Aeronautical.....	5-51
Figure 5-26 – Alternative 5: Southwest MRO Development.....	5-52
Figure 5-27 – Alternative 1: Northeast Non-Aeronautical Development.....	5-54

Figure 5-28 – Alternative 2: Northeast Non-Aeronautical Development..... 5-56

Figure 5-29 – Alternative 3: Northeast Non-Aeronautical Development..... 5-58

Figure 5-30 – Aviation Fueling Facilities ..... 5-60

Figure 5-31 – Recommended Development Plan ..... 5-63

## TABLES

Table 5-1 – Alternative 1: (Runway 22) – Property/Easement Acquisition..... 5-6

Table 5-2 – Alternative 2: (Runway 22) – Decommission Oak Hill Road ..... 5-8

Table 5-3 – Alternative 1: (Runway 18) – Tunnel for State Road 57 ..... 5-10

Table 5-4 – Alternative 2: (Runway 36) – Property Acquisition/Easements ..... 5-12

Table 5-5 – Alternative 3: (Runway 36) – Relocate St. George Road, Roundabout, and Removal of Displaced Threshold..... 5-14

Table 5-6 – Alternative 1: (Runway 9) – Property Acquisition/Easements ..... 5-16

Table 5-7 – Alternative 2: (Runway 9) – US Highway 41 and CSX Railway Tunnel ..... 5-18

Table 5-8 – Alternative 3: (Runway 9-27) – Closure ..... 5-20

Table 5-9 – Alternative 4: (Runway 9-27) – Taxiway Conversation..... 5-22

Table 5-10 – Alternative 1: Central Terminal Expansion ..... 5-27

Table 5-11 – Alternative 2: West Terminal Expansion..... 5-30

Table 5-12 – Alternative 3: East Terminal Expansion ..... 5-32

Table 5-13 – Future Parking Demand ..... 5-38

Table 5-14 – Alternative 1: Public Parking..... 5-39

Table 5-15 – Alternative 2: Public Parking ..... 5-39

Table 5-16 – Alternative 1: Northeast Non-Aeronautical Development..... 5-53

Table 5-17 – Alternative 2: Northeast Non-Aeronautical Development..... 5-55

Table 5-18 – Alternative 3: Northeast Non-Aeronautical Development..... 5-57

## 5 ALTERNATIVES DEVELOPMENT CONCEPTS

---

To satisfy the facility requirements identified in Chapter 4, numerous concepts, site configurations, and development options were created and reviewed for the various components of the Airport. In many circumstances, multiple alternatives were identified but eliminated early in the planning process from further consideration. The concepts deemed most reasonable to support the long-term operational sustainability of the Airport were identified and carried forward in the evaluation.

This chapter includes separate concepts and configurations for runways, taxiways, passenger terminal facilities, landside infrastructure, air cargo, general aviation, and support facilities. The number of potential recommendations is substantial; however, it is emphasized that although projects may be desired, they may not necessarily be financially or environmentally feasible. As such, recommendations presented within this chapter were further modified or narrowed during the financial planning components of the Master Plan Update (MPU). The overall effort refined the final strategy into actionable recommended projects for implementation in phases.

### 5.1 REVIEW OF PLANNING FACTORS

As presented in **Chapter 4**, Planning Activity Levels (PALs) are used, rather than calendar years, to identify significant demand thresholds for facility improvement projects based on annual passenger enplanement totals (as presented in the Forecast) while providing EVAAD with the flexibility to advance or slow the rate of development in response to actualized demand. Each of the four PALs corresponds with the preferred aviation activity forecast for the base year of 2022 and the planning horizon years if actual airport activity mirrors the forecast (2028, 2033, 2038, and 2043).

### 5.2 CONCEPT EVALUATION

Regardless of timeframe or activity level, the overarching principles guiding facility recommendations are to provide an elevated level of customer service and promote regional economic wellbeing while accommodating the evolving business model of the airlines and airport tenants. For some functional areas, such as the airfield, the logical recommendations were distinctly apparent as they are driven largely by Federal Aviation Administration (FAA) design standards as well as by existing infrastructure and available property. In contrast, improvements related to the passenger terminal buildings and vehicle parking have variability in their configuration. This is due to potential financing and implementation challenges, and their influence on surrounding Airport facilities.

During the identification of facility requirements, it became evident that the MPU would not consist of all-encompassing or competing alternatives for development of the Airport. Rather, the concepts and alternatives presented consist of a series of separate improvements that are assembled into the overall strategy. As such, individual components were reviewed and recommended separately to develop the preferred improvements program.

## 5.3 REVIEW OF AIRFIELD DESIGN STANDARDS

Evansville Regional Airport (EVV) currently operates three runways (Runway 4-22, Runway 18-36, and Runway 9-27), each having unique capabilities and constraints. Each runway was evaluated based on its operational requirements, with the identified improvements provided below. To identify the best methods for improving airfield operations regarding the runway infrastructure, it was advantageous to evaluate the benefits and constraints of a potential closure to Runway 9-27. To satisfy operational efficiency, access to and from the runways, improvements and expansions to the associated taxiway systems, and FAA design standards were also identified.

Concepts relating to runway standards and deficiencies are presented in **Sections 5.3.1** through **Section 5.3.3**, while taxiway standards and deficiencies are discussed in **Section 5.3.4**.

**Chapter 4** provides additional details regarding FAA design standards.

### 5.3.1 Runway 4-22

#### ***Design Standards Satisfied***

Based on the demands outlined in **Chapter 4**, the current length, width, Runway Safety Area (RSA), Runway Object Free Area (ROFA), and Runway Visibility Zone (RVZ) for the primary runway (Runway 4-22) are adequate and are anticipated to remain adequate throughout the forecast period; therefore, it is recommended that these fundamentals of Runway 4-22 be maintained throughout the planning period for a D-III runway. No development alternatives are needed for these elements.

#### ***Non-Standard Conditions***

Although many attributes of Runway 4-22 meet FAA design criteria, some features do not, including: the runway shoulders, blast pads, and RPZs.

- ✈ Runway Shoulders – When evaluating runway designs standards in **Chapter 4**, it was determined that Runway 4-22 does not have paved shoulders. The FAA recommends paved shoulders 25-feet wide for runways serving ADG-III aircraft with a certified takeoff weight greater than 150,000 lbs. It is recommended that the Airport include plans in their Airport Capital Improvement Program (ACIP) for providing paved shoulders for Runway 4-22.
- ✈ Runway Blast Pads – Runway 4-22 currently has blast pads measuring 150 feet wide and 200 feet long. To conform to FAA design criteria, it is recommended that the blast pads be widened to 200 feet.
- ✈ Runway Protection Zone (RPZ) – The required dimensions for Runway 4-22 RPZs are adequate, with Runway 4 RPZs having no penetrations and/or public ways contained within it; however, EVV does not own or control the entirety of Runway 22 approach and departure RPZs. In accordance with FAA AC 150/5300-13B and AC 150/5190-4B, it is recommended that EVV gain control of the land within the RPZs through zoning, easements, or property acquisition. Additionally, relocation of public ways outside the Runway 22 RPZs is highly recommended.

- ✈ Inner Approach Object Free Zone – Due to having an approach lighting system at the approach end of Runway 22, the Inner Approach Object Free Zone area is extended to 200’ past the last light (2,400’ past the runway end) which includes a railway and a small portion of Oak Hill Road as a penetration.

### 5.3.2 Runway 18-36

#### ***Design Standards Satisfied***

Based on the demands outlined in **Chapter 4**, the current length, width, RSA, ROFA, ROFZ, and RVZ for the legacy crosswind runway (Runway 18-36) are adequate and are anticipated to remain adequate throughout the forecast period; therefore, it is recommended that these fundamentals of Runway 18-36 be maintained throughout the planning period for a C-II runway. No development alternatives are needed for these elements. It is important to note that any future reconstruction to Runway 18-36 will require adequate justification, FAA approval, and redesignation as a secondary runway. Per FAA Program Guidance Letter 25-01, legacy runways are only eligible for funding for reconstruction up to A/B-I.

#### ***Non-Standard Conditions***

Although many attributes of Runway 18-36 meet FAA design criteria, some features do not, including the RPZs.

- ✈ Runway Protection Zone (RPZ) – Similar to Runway 4-22, Runway 18-36 RPZs meet the required FAA dimensional standards. However, both Runway 18-36 RPZs have portions not located within EVV airport property with public ways contained within. A portion of the Runway 18’s RPZs is found outside the EVV airport property boundary and contains State Route 57. Despite the displaced threshold, Runway 36’s RPZs mostly fall outside EVV’s airport property boundary and contains St. George Road and various buildings. In accordance with FAA guidance, it is recommended that the Airport acquire property or easements for portions of the RPZs outside airport property and work to relocate and/or remove public ways outside RPZs.

### 5.3.3 Runway 9-27

#### ***Design Standards Satisfied***

Based on the demands outlined in **Chapter 4**, the current length, width, RSA, ROFA, ROFZ, and RVZ for the crosswind runway (Runway 9-27) are adequate and are anticipated to remain adequate throughout the forecast period for a A-I visual runway; therefore, these fundamentals of Runway 9-27 would be maintained as long as the Runway remains in operation. No development alternatives are needed for these elements outlined.

#### ***Non-Standard Conditions***

Although many attributes of Runway 9-27 meet FAA design criteria, some features do not, which include the RPZs:

- ✈ Runway Protection Zone (RPZ) – Portions of the Runway 9 RPZ fall outside the EVV airport boundary with U.S Highway 41 found within. In addition, the western portion of the Runway 9’s RPZ fall over a section of the airport-owned golf course which could impact the protection of people. In accordance with FAA guidance, it is recommended that the

Airport acquire property or easements for portions of the RPZs and remove/relocate incompatible land uses within the RPZs.

***Efforts Necessary to Meet FAA Design Standards (if retained)***

According to the most recent Pavement Condition Index (PCI) Study from 2023, Runway 9-27 was determined to have an average PCI of 30 (very poor) which will require reconstruction. In addition, Runway 9-27 does not meet FAA slope and grading standards. Furthermore, discussions with the FAA have determined that Runway 9-27 will no longer be grant eligible given that Runway 9-27 is not required to meet capacity or wind coverage requirements. A wind analysis using the past 10 years of wind data was performed in **Chapter 4** and verified that the Airport could meet the required wind coverage of 95 percent with only Runway 4-22 and Runway 18-36 which further verified this assumption. Taxiway alternatives will evaluate the viability of converting Runway 9-27 to a taxiway to see if FAA standards could be met. Runway alternatives will focus on eliminating RPZ deficiencies as noted below, as well as the potential for decommissioning Runway 9-27 or converting the pavement to a taxiway.

**5.3.4 Taxiway System**

***Design Standards Satisfied***

The taxiway system at EVV was evaluated based on FAA design standards for airfield infrastructure. Based on FAA standards, the following items are satisfactory:

- ✈ Width: All taxiways
- ✈ Distance of taxiway centerlines from objects: All taxiways
- ✈ Taxiway Safety Area (TSA): All taxiways
- ✈ Taxiway Object Free Area (TOFA): All taxiways

***Non-Standard Conditions***

Although many attributes of EVV’s taxiway system meet or exceed FAA design criteria, some features do not, including the following:

- ✈ Shoulders: Only Taxiways D, D1, and E are not required to have shoulders since they serve aircraft smaller than ADG III. All other taxiways (Taxiways A, B, C, F, G, H, T1, and T2) which serve the design aircraft (ADG III) are recommended to have stabilized shoulders (e.g., turf shoulder or stabilized soil treatment).
- ✈ Taxiway Fillets: All taxiways do not meet FAA taxiway geometry standards.
  - Revised pavement geometry is necessary to meet standards.

Taxiway geometry deficiencies were previously depicted in **Chapter 4, Figure 4-26**.

**5.4 AIRFIELD DEVELOPMENT CONCEPTS**

This section identifies and evaluates potential runway and taxiway improvements that will enhance the overall safety, efficiency, and reliability of the airfield at EVV. Aircraft flows between the runway system and various functional areas (e.g., terminal area, air cargo, and general aviation) have been considered. Runway and taxiway concepts were developed through qualitative review of the following considerations:

- ✈ Construction and operating costs
- ✈ Operational changes and considerations
- ✈ Construction impacts, including ease of phasing and construction
- ✈ Other operational factors
- ✈ Safety, and dependability considerations
- ✈ Airspace considerations
- ✈ Environmental considerations
- ✈ Community acceptance

As discussed within previous sections of the MPU, the goal is to plan for a safe and operationally efficient airfield. This can be accomplished by meeting the following objectives:

- ✈ Adhere to FAA design standards, reducing/eliminating need for Modifications of Standards
- ✈ Accommodate all existing and projected users
- ✈ Provide sufficient airfield capacity to meet demand, while minimizing airfield delays
- ✈ Reduce runway crossings (particularly in the middle third of runway) to improve safety
- ✈ Reduce risk of pilot confusion
  - Reducing the number of taxiways intersecting at a single location
  - Eliminating acute angle intersections
  - Increasing the pilot’s situational awareness (proper signage and marking)
  - Avoiding wide expanses of pavement
  - Increasing visibility
- ✈ Determine the ultimate Airport Layout

#### 5.4.1 Runway Alternatives

EVV currently operates a three-runway system, each with unique capabilities and constraints. **Chapter 4** determined that there were no penetrations to all runway’s critical safety areas such as the RSA, ROFA, and RVZ. Runway 4-22 and Runway 18-36, for the most part, meet FAA standards for a D-III and C-II (future RDC) runway except for RPZs containing incompatible land uses and/or are not fully under the Airport’s control. ROFZ penetrations to Runway 4-22 do exist at the approach end of Runway 22 given the requirements for a runway with an ALS. A-I Small represents the FAA standards that need to be met for Runway 9-27 which RPZ penetrations and non-standard gradient conditions exist. Any non-standard RSA slope and gradient conditions for both Runway 18-36 and Runway 9-27 were assumed for all alternatives to be corrected during future runway rehabilitation or reconstruction projects. In addition, runway delineation changes anticipated to occur for both Runway 18-36 and Runway 9-27 during the planning horizon are assumed and anticipated to take place during future runway rehabilitation/reconstruction projects.

#### ***Runway Protection Zones (RPZ) Requirements Overview***

The FAA recommends that Airport’s control areas within the RPZ to limit land uses and protect the protection of people and property. The FAA expects the airport sponsor to take proactive steps in accordance with Grant Assurance 21 to prevent or mitigate any new incompatible land

use within the RPZ. Airport control of RPZs can be achieved through the following per FAA AC 150/5190-4B, Airport Land Use Compatibility:

- ✈ Ownership of the RPZ property in fee simple
- ✈ Possessing sufficient interest in the RPZ property through easements, deed restrictions, etc.
- ✈ Possessing sufficient land use control authority to regulate land use in the jurisdiction containing the RPZ.
- ✈ Possessing and exercising the power of eminent domain over the property; or
- ✈ Possessing and exercising permitting authority over proponents of development within the RPZ (e.g., where the sponsor is a State).

Assurance 21 requires sponsors to take “appropriate action, to the extent reasonable,” to protect RPZs and the FAA expects sponsors to proactively identify a full range of alternatives and prepare a sufficient evaluation to be able to draw a conclusion about what is “appropriate and reasonable” which will be the key focus of the runway alternatives in this chapter.

**Runway 4-22**

Alternative 1: (Runway 22) – Property/Easement Acquisition

The first alternative for Runway 22 is to eliminate incompatible land uses for the approach RPZ of Runway 22 with the acquisition of property/easements for all areas within the RPZ not owned by the Airport. Due to the low visibility minimum of Runway 22 (1/2 mile) the approach RPZ represents the largest FAA RPZ dimensional requirement. Property/easements will need to be acquired for portions within the RPZs which are not under the airports control which include the CSX Railway and Oak Hill Road. If property acquisition is not feasible for these key transportation infrastructure corridors, easements could be acquired to limit land uses within the RPZs. The ROFZ penetrations will remain in this alternative if only aviation easements are required.

See **Table 5-1** and **Figure 5-1**.

**Table 5-1 – Alternative 1: (Runway 22) – Property/Easement Acquisition**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Corrects RPZ deficiencies related to incompatible land uses within RPZ and/or RPZ on non-airport owned property.</li> <li>• Provides more airport owned property.</li> <li>• Does not require modification of Runway 4-22.</li> </ul>	<ul style="list-style-type: none"> <li>• Financial commitment to acquire property/easements.</li> <li>• Acquisition of property/easement is not guaranteed. Particularly for key transportation infrastructure areas such as the CSX Railway and State Road 57.</li> <li>• ROFZ penetrations will remain if only aviation easements are acquired.</li> <li>• The Airport previously contributed financially to relocate the railway and would be required to provide more funding for an additional relocation.</li> </ul>

Source: CHA, 2025.



**Alternative 2: (Runway 22) – Decommission Oak Hill Road**

Given that Oak Hill Road is not a major roadway artery, a closure of the road (approximately 3,400 feet) can be considered to eliminate the likelihood of people or property within the approach RPZ and Inner Approach Object Free Zone for Runway 22. The closure would take place at the roundabout intersection of Oak Hill Road, Millersburg Road, and Hedden Road. Access from the north to would be rerouted via Hedden Road which is located outside the RPZ. Although Hedden Road is near the existing Oak Hill Road closure area, it may pose some noise concerns as vehicular activity may increase passing through residential communities. Future coordination with the city, county, state, and Amcor may be required and a potential traffic study will need to be pursued to confirm the need for Oak Hill Road, capacity, and additional points of access for this area. No modifications to the CSX Railway are made in this alternative, with the railway remaining within the RPZ/ROFZ.

See **Table 5-2** and **Figure 5-2**.

**Table 5-2 – Alternative 2: (Runway 22) – Decommission Oak Hill Road**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Corrects RPZ deficiencies related to incompatible land uses within RPZ and/or RPZ on non-airport owned property.</li> <li>• Could provide a quick implementation timeline with no property/easement acquisition or construction requirement.</li> <li>• Does not require modification of Runway 4-22.</li> </ul>	<ul style="list-style-type: none"> <li>• Closure of the road may not be feasible given existing need and potential capacity and noise concerns for Hedden Road.</li> <li>• Does not remove CSX Railway from within Runway 22 approach RPZ/ROFZ.</li> </ul>

Source: CHA, 2025.

[Intentional Page Break]



**Runway 18-36**

Alternative 1: (Runway 18) – Tunnel for State Road 57

The first alternative to alleviate incompatible land uses for the Runway 18 approach RPZ is to tunnel portions of State Road 57 (within the RPZ) and acquire approximately 2.75 acres of property. Tunnelling a portion of the roadway will require close coordination and approval from the Indiana Department of Transportation (INDOT). This roadway analysis will likely have to be initiated and conducted by INDOT prior to approval to proceed. However, given that this is a State Road, there is a potential for state funding.

See **Table 5-3** and **Figure 5-3**.

**Table 5-3 – Alternative 1: (Runway 18) – Tunnel for State Road 57**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Corrects RPZ deficiencies related to incompatible land uses within RPZ and/or RPZ on non-airport owned property.</li> <li>• Does not require modification of Runway 18-36.</li> <li>• Can be potentially eligible for state funding given that it’s a state road.</li> </ul>	<ul style="list-style-type: none"> <li>• Financial commitment and costs associated with demolition and tunneling of State Road 57.</li> <li>• Complicated construction phasing plan to ensure vehicular access is maintained through construction.</li> <li>• Longer implementation timeline given INDOT coordination/approval requirement, property acquisition and construction timeline.</li> </ul>

Source: CHA, 2025.

[Intentional Page Break]



**Alternative 2: (Runway 36) – Property Acquisition/Easements**

Approximately half of the approach RPZ for Runway 36 is outside airport property with incompatible land uses such as St. George Road, CSX Railway, buildings, parking, and storage areas. This alternative is to eliminate incompatible land uses within the Runway 36 approach RPZ and Runway 18 departure RPZ by acquiring non-airport owned property or easements totaling approximately 26 acres. If EVAAD were to acquire these properties, incompatible land uses could be removed or relocated. Property acquisition for St. George Road may be difficult to accomplish and a relocation of the road may not be financially feasible, so easement acquisition is recommended.

See **Table 5-4** and **Figure 5-4**.

**Table 5-4 – Alternative 2: (Runway 36) – Property Acquisition/Easements**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Corrects a majority RPZ deficiencies related to incompatible land uses within RPZ and/or RPZ on non-airport owned property for Runway 18-36.</li> <li>• Provides more airport owned property.</li> <li>• Does not require modification of Runway 18-36.</li> </ul>	<ul style="list-style-type: none"> <li>• Financial commitment to acquire property or easements. In addition, costs associated with demolition or relocation of incompatible land uses and maintenance of areas.</li> <li>• Acquisition of property or easements is not guaranteed.</li> <li>• St. George Road and CSX Railway will remain within RPZs.</li> </ul>

Source: CHA, 2025.

[Intentional Page Break]



**Alternative 3: (Runway 36) – Relocate St. George Road, Roundabout, and Removal of Displaced Threshold**

Similar to Alternative 2, this alternative would alleviate incompatible land uses within the RPZs for Runway 18-36 which include St. George Road, CSX Railway, buildings, parking, and storage areas. However, this alternative would relocate St. George Road outside the RPZs, with new connections to US Highway 41, as well as a roundabout at St. George Road and Ossenberg Lane. Furthermore, this alternative would remove the existing displaced threshold to acquire an additional 789 feet of usable pavement for landings and departures off Runway 18/36, thus eliminating declared distances.

This alternative would require the acquisition and demolition of a warehouse to provide for the right-of-way for the road and to keep clear the new RPZ location with the removal of the displaced threshold. This alternative may demonstrate to be the most costly due to the cost to acquire property, demolish incompatible land uses, and construct a roadway, utility corridor, railroad crossings, and runway modifications.

See **Table 5-5** and **Figure 5-5**.

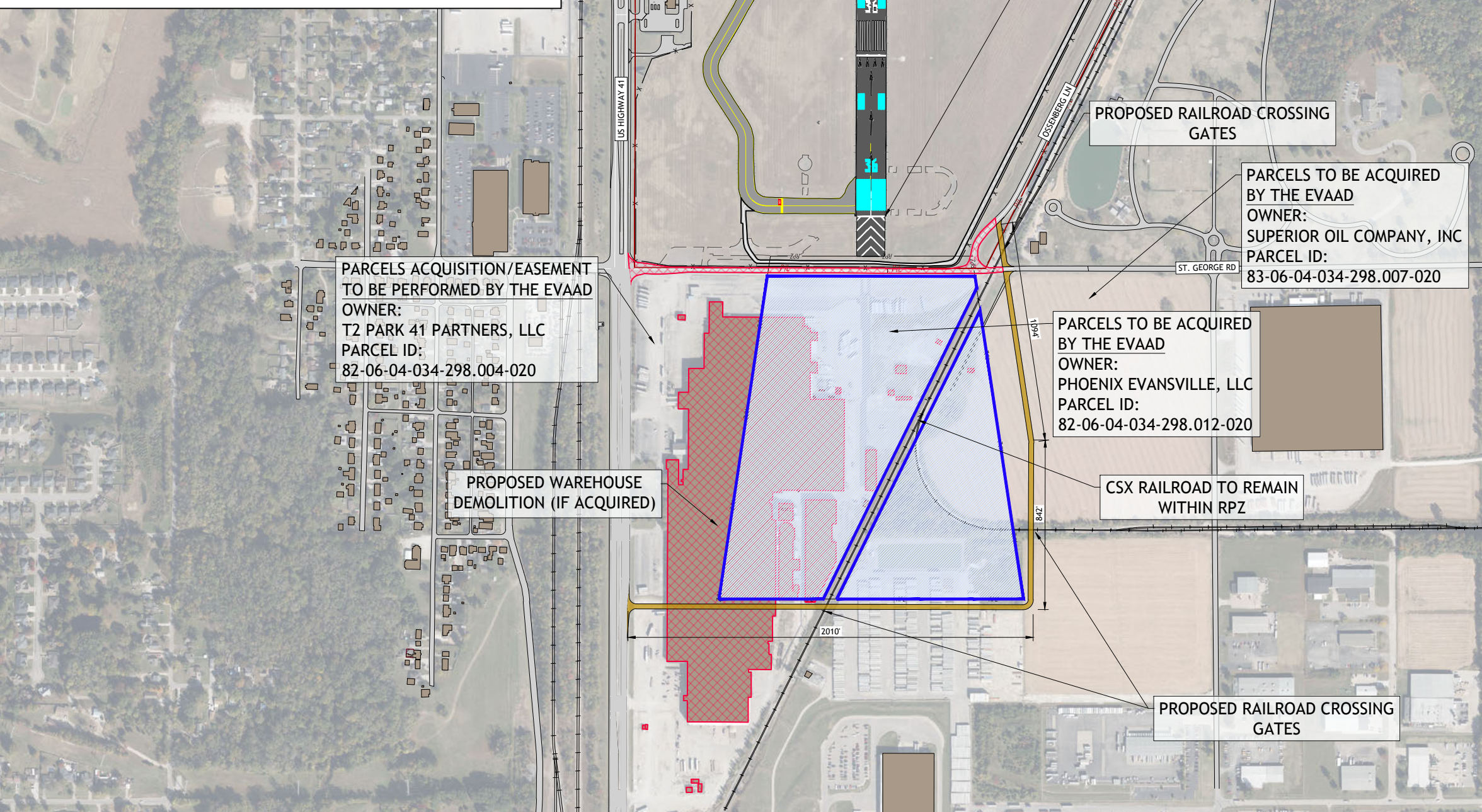
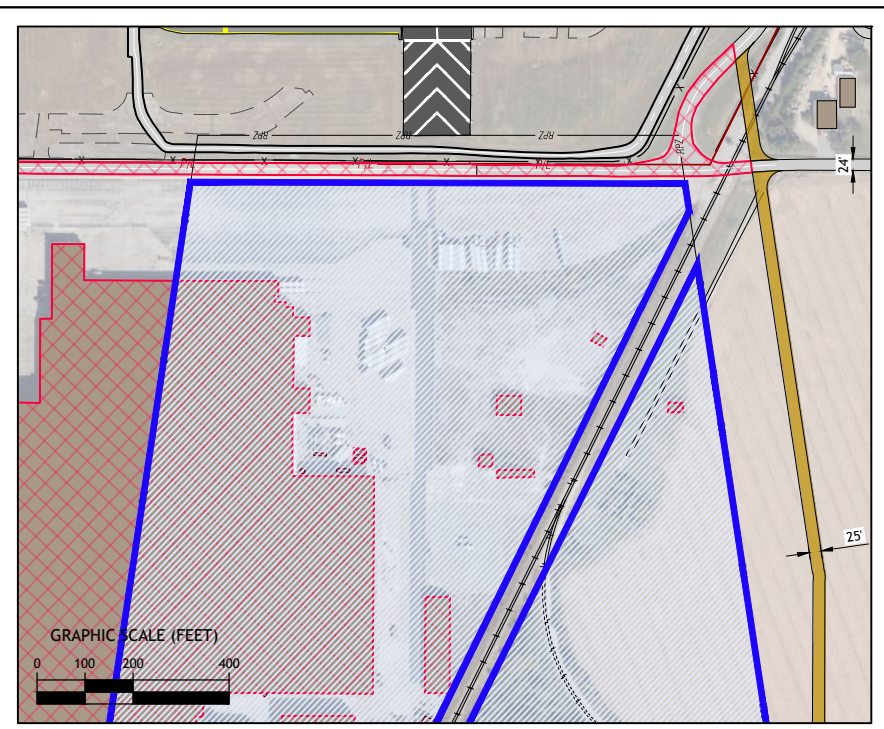
**Table 5-5 – Alternative 3: (Runway 36) – Relocate St. George Road, Roundabout, and Removal of Displaced Threshold**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Corrects a majority RPZ deficiencies related to incompatible land uses within RPZ and/or RPZ on non-airport owned property for Runway 18-36.</li> <li>• Provides more airport owned property.</li> <li>• Eliminates declared distances from Runway 18-36 providing more landing and departure distance for aircraft.</li> </ul>	<ul style="list-style-type: none"> <li>• Financial commitment to relocate St. George Road, construct a roundabout, modify Runway 18-36, and acquire property or easements. In addition, costs associated with demolition or relocation of incompatible land uses and maintenance of areas.</li> <li>• Acquisition of property or easements is not guaranteed.</li> <li>• CSX Railway will remain within RPZs.</li> <li>• Longer implementation timeline due to construction and city/county coordination requirement.</li> </ul>








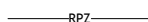
Source: CHA, 2025.


[Intentional Page Break]

File Name: \\cha-ftp.com\proj\Projects\ANY\6\076738\_000\09\_Design\Exhibits\Alternatives Concept Options\EW\_RWY Alternatives\_v1.dwg - RWY-36 RB | Modified / By: May 8, 2025 9:36:16 PM / Hand: Jonathan




**LEGEND:**

-  FUTURE ROADWAY
-  RUNWAY PAVEMENT
-  TAXIWAY PAVEMENT
-  EXISTING BUILDING
-  BUILDING DEMOLITION
-  FUTURE PARCEL ACQUISITION/ EASEMENT
-  P/L PROPERTY LINE
-  RPZ RUNWAY PROTECTION ZONE



---

PRIMARY:



201 N. Illinois Street, Suite 800  
Indianapolis, IN 46204  
317.786.0461 · www.chacompanies.com

---

SUB:

Designed By:	Drawn By:	Checked By:
Issue Date: 5/8/2025	Project No: 076738	Scale: AS SHOWN

---

REV	BY	DESCRIPTION	DATE

---

<p><b>EVANSVILLE REGIONAL AIRPORT AIRPORT MASTER PLAN</b></p>	<p><b>ALTERNATIVE #3 (RUNWAY 36) ST. GEORGE ROAD RELOCATION AND PROPERTY/EASEMENT ACQUISITION</b></p>
---	---

---

CERTIFICATION:

---

DRAWING NO.  
**FIGURE 5-5**

**Runway 9-27**

Alternative 1: (Runway 9) – Property Acquisition/Easements

Similar to the property/easement acquisition alternatives created for Runway 4-22 and Runway 18-36, this alternative would proceed with acquisition of all areas not owned by the Airport for Runway 9-27 encompassing US Highway 41 and the CSX Railway. Proceeding with property acquisition of the areas which contain US Highway 41 and the CSX Railway is unlikely given the critical need of these transportation resources for the movement of people/goods within the region. In addition, US Highway 41 is a key route for passengers to EVV.

See **Table 5-6** and **Figure 5-6**.

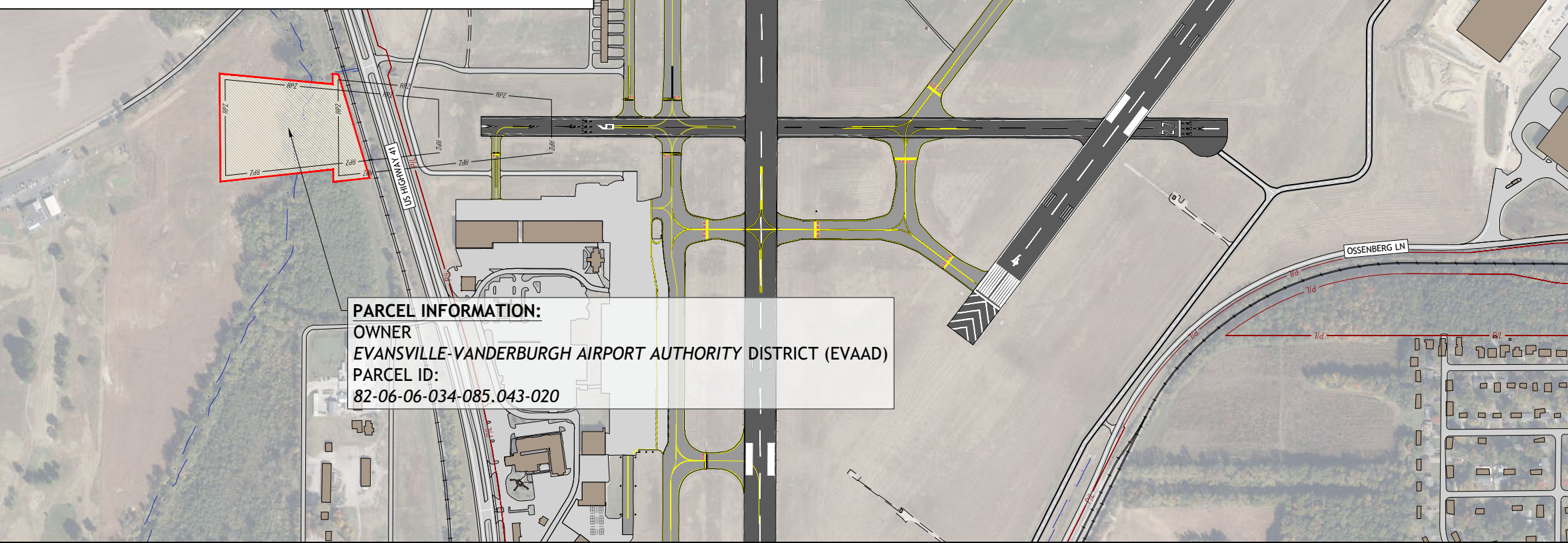
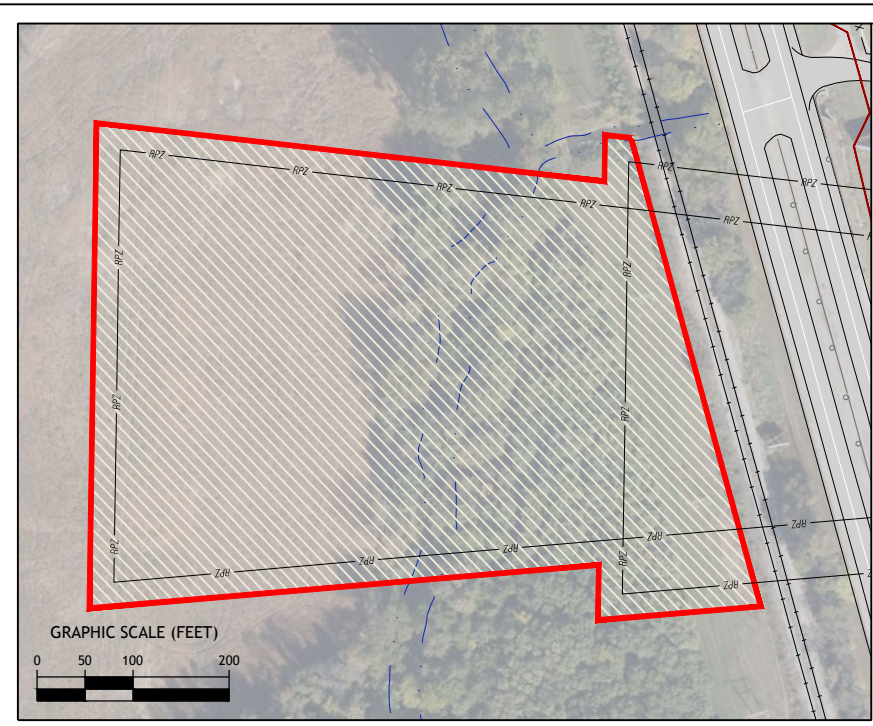
**Table 5-6 – Alternative 1: (Runway 9) – Property Acquisition/Easements**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Corrects a majority RPZ deficiencies related to incompatible land uses within RPZ and/or RPZ on non-airport owned property for Runway 9-27.</li> <li>• Provides more airport owned property.</li> <li>• Does not require modification of Runway 9-27.</li> </ul>	<ul style="list-style-type: none"> <li>• Financial commitment to acquire property or easements. In addition, costs associated with demolition or relocation of incompatible land uses and maintenance of areas.</li> <li>• Acquisition of property or easements is not guaranteed.</li> <li>• US Highway 41 and CSX Railway will remain within RPZs.</li> </ul>

Source: CHA, 2025.

[Intentional Page Break]

File Name: \\cha-lp.com\proj\Projects\ANY\6\076738.000\01\_Design\Exhibits\Alternatives Concept Options\EW RWY Alternatives.dwg - RWY-9 AE - Modified / By: November 19, 2024 8:32:42 AM / Coutain, Ken



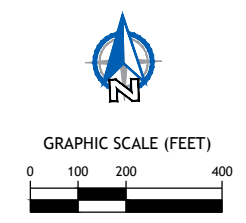
**PARCEL INFORMATION:**  
 OWNER  
 EVANSVILLE-VANDEBURGH AIRPORT AUTHORITY DISTRICT (EVAAD)  
 PARCEL ID:  
 82-06-06-034-085.043-020

**LEGEND:**

	RUNWAY PAVEMENT
	TAXIWAY PAVEMENT
	EXISTING BUILDING
	EVAAD PARCELS
	FUTURE PARCEL ACQUISITION/ EASEMENT
	P/L PROPERTY LINE
	RPZ RUNWAY PROTECTION ZONE

 Evansville Regional Airport		
PRIMARY:  201 N. Illinois Street, Suite 800 Indianapolis, IN 46204 317.786.0461 · www.chacompanies.com		
SUB:		
Designed By:	Drawn By:	Checked By:
Issue Date: 11/19/2024	Project No: 076738	Scale: AS SHOWN
REV	BY	DESCRIPTION

- NOTE(S):**
1. A runway alternative concept for Runway 9-27 depicting the relocation of approach RPZ for runway 9 and the departure RPZ for runway 27 will not included as part of the Runway Alternative Exhibits.
    - 1.1. Provided the aircraft fleet mix identified in the Forecast and Facility Requirement Chapters of the Evansville Regional Airport Master Plan and the FAA "Runway Length Requirements" Advisory Circular, relocating the approach RPZ for Runway 9 and the departure RPZ for Runway 27 would adversely impact the runways Takeoff Distance Available (TORA) and Landing Distance Available (LDA).
    - 1.2. Shortening the runway TORA and LDA for Runway 9-27 would compromise the safety of the small General Aviation aircraft currently operating on the runway.



PROJECT:	TITLE:
EVANSVILLE REGIONAL AIRPORT AIRPORT MASTER PLAN	ALTERNATIVE #1 (RUNWAY 9/27) PROPERTY/EASEMENT ACQUISITION
CERTIFICATION:	
DRAWING NO. FIGURE 5-6	

**Alternative 2: (Runway 9) – US Highway 41 and CSX Railway Tunnel**

A tunnel structure can be pursued in coordination with regional transportation entities such as INDOT over US Highway 41 and CSX Railway. A tunnel would remove these non-compatible land uses for Runway 9-27 (given they will be below grade of the runway). This alternative would be a significant lift both financially and in terms of implementation.

The Facility Requirements Chapter within the MPU, recognized that Runway 9-27 is not needed to maintain the Airports wind coverage, therefore selecting this alternative as the best path forward is not recommended. Furthermore, Runway 9-27 is not often used due to its runway length and orientation. If the climate (wind direction) of the region and use of Runway 9-27 were to change, this alternative can be reevaluated. However, the change in use of Runway 9-27 is not anticipated during the planning horizon.

See **Table 5-7** and **Figure 5-7**.

**Table 5-7 – Alternative 2: (Runway 9) – US Highway 41 and CSX Railway Tunnel**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Corrects RPZ deficiencies related to incompatible land uses within RPZ and/or RPZ on non-airport owned property for Runway 9-27.</li> <li>• Provides more airport owned property.</li> <li>• Does not require modification of Runway 9-27.</li> </ul>	<ul style="list-style-type: none"> <li>• Heavy financial commitment to construct tunnel and acquire property or easements. In addition, costs associated with demolition or relocation of incompatible land uses and maintenance of areas.</li> <li>• Acquisition of property or easements is not guaranteed.</li> <li>• Longer implementation timeline due to construction and city/county/state coordination requirement.</li> </ul>

Source: CHA, 2025.

[Intentional Page Break]



**Alternative 3: (Runway 9-27) – Closure**

According to an INDOT pavement study from 2020, Runway 9-27 was identified to have an average PCI of 40 (very poor) which will require major rehabilitation/reconstruction. In addition, the Facility Requirements Chapter identified that longitudinal and traverse grading concerns also exist within the RSA. To ensure that Runway 9-27 remains operational and to maintain safe aircraft operations, these deficiencies will need to be corrected. However, given that Runway 9-27 is not needed to provide adequate wind coverage or for airfield capacity, the FAA has determined that this runway is not eligible for federal funding assistance to maintain as an active runway. Thus, future improvements to Runway 9-27 will have to be fully funded with airport funds.

Closing, or decommissioning, Runway 9-27 would require several steps, with the first step including coordination with FAA and following FAA’s ‘Runway Decommissioning Checklist’ which outlines required action items and best practices. Prior to decommissioning Runway 9-27, EVV should look at potential environmental concerns that may arise, feasibility of decommissioning versus maintaining, and other potential advantages or disadvantages (i.e., potential for new hot spots, etc.). Decommissioning would potentially require EVAAD to pay the FAA back the federal funds that have been expended on Runway 9-27 within the last 20-years.

The closure of Runway 9-27 would provide an additional aeronautical development area (approximately 6 acres) with landside access via US Highway 41. A disadvantage with proceeding with the closure of Runway 9-27 would be the elimination of a key entrance point to the United Companies Air Center maintenance area, training operations for Runway 9-27, and route to Taxiway A to the terminal area.

See **Table 5-8** and **Figure 5-8**.

**Table 5-8 – Alternative 3: (Runway 9-27) – Closure**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Corrects RPZ deficiencies related to incompatible land uses within RPZ and/or RPZ on non-airport owned property for Runway 9-27.</li> <li>• Provides more aeronautical development area for the Airport which can lead to additional airport development and revenue generation opportunities.</li> <li>• No future financial commitment to maintain the runway.</li> </ul>	<ul style="list-style-type: none"> <li>• Runway 9-27 will not be available for smaller aircraft training activity.</li> <li>• Runway 9-27 would no longer be able to be used as a taxiway to navigate to the United Companies Air Center Maintenance area and Taxiway A. Additional access points to United Companies Air Center will need to be considered when developing this area.</li> </ul>

Source: CHA, 2025.

[Intentional Page Break]



**Alternative 4: (Runway 9-27) Taxiway Conversation**

Based on the costs of maintaining Runway 9-27, alleviating its deficiencies, and its limited use, Runway 9-27 could be converted to a taxiway. Rather than completely closing the runway and eliminating the pavement, the Airport can improve the pavement in order to convert it to a taxiway. Per FAA Order 5100.38D – Change 1, *Airport Improvement Program Handbook*, converting the ineligible runway to a taxiway may be eligible for federal funding if the FAA has determined that the taxiway is justified based on an operational need and the costs are considered reasonable. In this alternative, the runway would be converted to TDG 2 taxiway at 35 feet in width from the approach end of Runway 9 to Taxiway C. The portion between Taxiway C and Taxiway A would be eliminated since it would represent a high energy runway crossing in the middle third of Runway 18-36 which the FAA does not recommend. A new taxiway connector would be provided perpendicular to Runway 4-22 to meet FAA standards and to provide an exit taxiway for Runway 22 arrivals. The Runway 9-27 pavement past Runway 4-22 would be eliminated since it would no longer be needed.

Although this alternative maintains airfield access for United Companies Air Center, it does not preserve the ability for aircraft to utilize Runway 9-27 exiting Runway 18-36 to navigate to Taxiway A, since a taxiway would represent a high energy runway crossing. A taxiway providing airfield access to the new aeronautical development area created from the decommissioning of Runway 9-27 could be advantageous to attract a new airport entrant. See **Table 5-9** and **Figure 5-9**.

**Table 5-9 – Alternative 4: (Runway 9-27) – Taxiway Conversation**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Corrects RPZ deficiencies related to incompatible land uses within RPZ and/or RPZ on non-airport owned property for Runway 9-27.</li> <li>• Provides more aeronautical development area for the Airport which can lead to additional airport development opportunities and revenue generation.</li> <li>• Reduced future financial commitment to maintain a runway as opposed to a taxiway.</li> <li>• Maintains airfield access for United Companies Air Center and provides airfield access to new aeronautical development area.</li> </ul>	<ul style="list-style-type: none"> <li>• Runway 9-27 is not available for smaller aircraft training activity.</li> <li>• Pavement improvements would be required to convert Runway 9-27 to a taxiway.</li> </ul>

Source: CHA, 2025.

[Intentional Page Break]



### 5.4.2 Taxiway System

Aircraft ground movement at EVV is supported by a system of taxiways providing access to all portions of the airfield. Nevertheless, portions of the taxiway system are considered non-standard regarding current FAA design standards, or an improved configuration could increase capacity, safety, or operational efficiency. An efficient taxiway system following FAA standards could reduce the risk of pilot confusion and thus a runway incursion. Since the taxiway system was found to be adequate in terms of maintaining capacity given future demand, one alternative was generated to correct non-standard conditions throughout the Airport. The preferred taxiway configuration corrects all non-standard conditions, as shown in **Figure 5-10**, and was found to work in cohesion with all airfield, terminal, and aeronautical development alternatives presented in this chapter.

While a need was not identified, a second alternative was also developed to provide EVAAD with a planning tool beyond the 20-year planning horizon in the instance that demand exceeds the forecast and terminal needs identified in previous chapters. The additional alternative depicts potentially relocating Taxiway A 400 feet from Runway 4-22, thus increasing the apron space for the terminal area. However, relocating the taxiway may prove costly, with limited federal funding options. See **Figure 5-11**.

---

[Intentional Page Break]

DRAFT





## 5.5 PASSENGER TERMINAL FACILITY DEVELOPMENT CONCEPTS

### 5.5.1 Gate and Holdroom Expansion

Projections for commercial aircraft and passenger activity from the FAA approved Forecast found in **Chapter 3** determined that the Airport will need approximately 8,800 square feet of holdroom space and a total of 10 gates during the planning horizon. Alternatives in this section were developed to evaluate varying ways to expand the terminal concourses to provide for these requirements with documentation of potential opportunities and constraints. All terminal alternatives will require the complete restriping of the terminal apron to provide for a concourse expansion and readjustments to aircraft parking positions to provide for the addition of new parking positions. All parking positions shown could be served by a passenger boarding bridge or via ground boarding. The terminal curb was evaluated in **Chapter 4** which determined that EVV will see a drop in the LOS of the curb to a C during the planning horizon. Although additional terminal curb capacity is not required during the planning horizon, planning for a terminal curb expansion was recommended. Therefore, all terminal expansion alternatives illustrate a 140 linear foot extension of the curb plan west with a covered walkway to provide a higher LOS for passengers.

#### **Alternative 1: Central Terminal Expansion**

The first terminal alternative provides approximately 10,600 square feet of holdroom space by expanding the corridor in between Concourse A and B. The exterior glass curtain wall would need to be penetrated and new foundations, super structures, exterior curtain wall, roofing, furniture, and finishings will be required to convert this open-air space to conditioned space to accommodate passengers. In addition, new utilities will need to be tied into the existing utilities and systems.

A central terminal expansion could provide one new parking position and PBB centrally located within the terminal. Although this alternative would provide more holdroom space centrally located between both concourses, the financial requirement and complex phasing should be a key consideration. Two more PBB's can be provided (A2 and B2) alongside the central holdroom expansion to provide the necessary holdroom space to accommodate more parking positions for Concourse A and B. A complete restriping of the terminal apron would be required to provide a total of 10 gates with eight PBB's. Lastly, an optional 300-foot linear extension to the covered canopy to the west of Concourse B can be pursued to provide a covered walkway to the last aircraft parking position. See **Table 5-10** and **Figure 5-12**.

**Table 5-10 – Alternative 1: Central Terminal Expansion**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Provides a path forward to provide an additional gate and hold room area contiguous to the existing concourses.</li> <li>• Provides an opportunity to utilize existing concourses which were recently renovated.</li> <li>• Provides opportunity for additional airport revenue with new concession space.</li> </ul>	<ul style="list-style-type: none"> <li>• Potentially highest cost alternative due to significant requirement to tie into existing terminal structure and utility systems.</li> <li>• Complex phasing and constructability.</li> </ul>

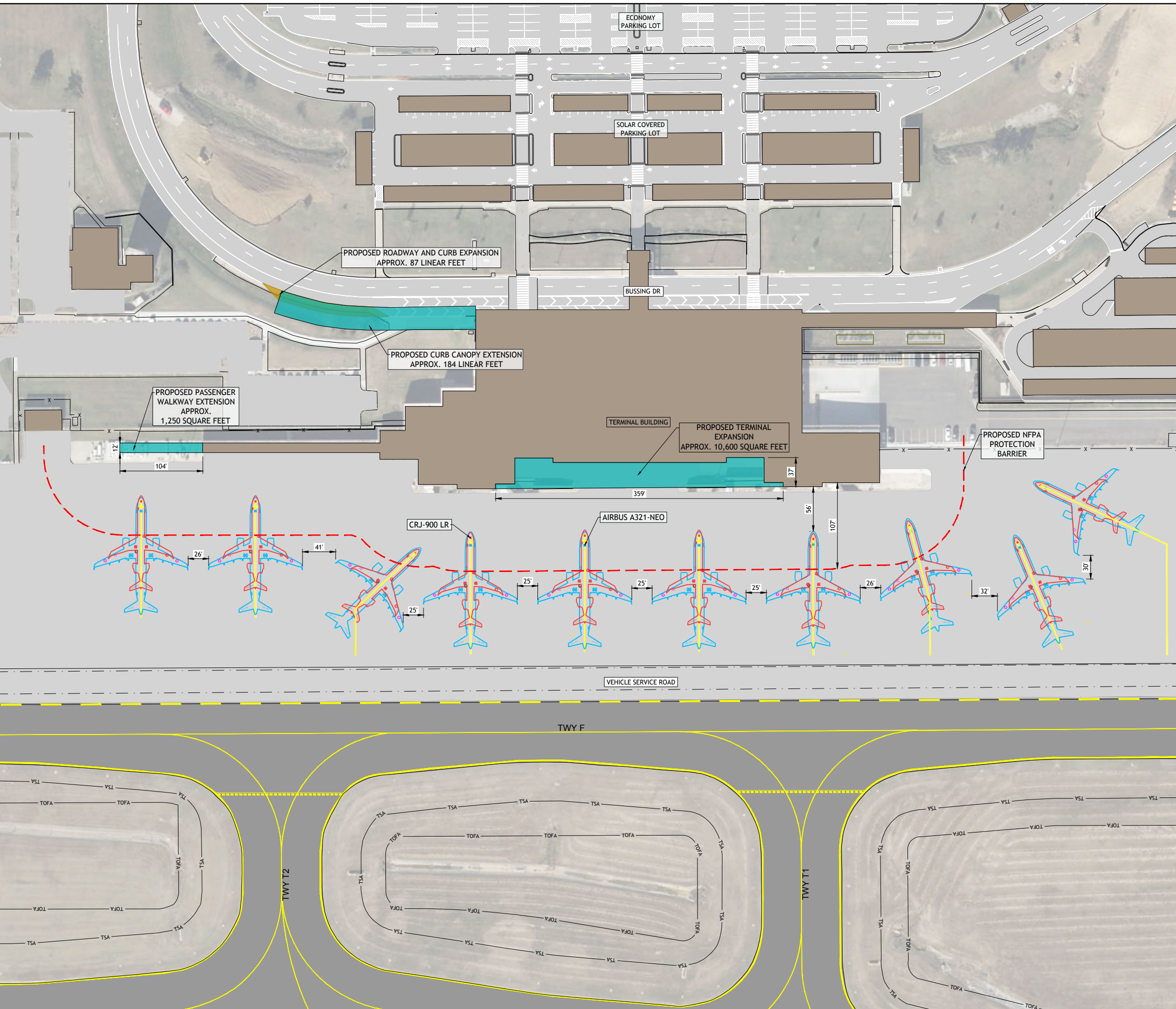
Advantages	Disadvantages
<ul style="list-style-type: none"> <li>Balances the Airport terminal requirements equally between Concourse A and B.</li> <li>Creates a central focal point for the Airport with the ability to accommodate an expansion to the security screening checkpoint beyond three screening lanes.</li> </ul>	<ul style="list-style-type: none"> <li>Reduced ability to proceed with alternative as a phased approach given need to tie-in to existing building façade.</li> <li>Impacts to passenger level of service.</li> </ul>

Source: CHA, 2025.


[Intentional Page Break]

DRAFT

File Name: \\cha-ftp.com\proj\Projects\ANY\6\076738\_000\09\_Design\Exhibits\Alternatives Concept Options\EW\_Terminal Alternative - Central Expansion\_v1.dwg - Exhibit 1 - Modified | By: November 19, 2024 3:20:01 PM / Contain, Ken




- LEGEND:**
- PROPOSED TERMINAL EXPANSION
  - PROPOSED REGIONAL JET POSITION
  - PROPOSED NARROW-BODY JET POSITION
  - PROPOSED LEAD-IN LINE
  - TAXIWAY PAVEMENT
  - EXISTING BUILDING
  - PROPOSED TAXIWAY CENTERLINE
  - PROPOSED NATIONAL FIRE PROTECTION AGENCY (NFPA) 100' BARRIER
  - VEHICLE SERVICE ROAD (VSR) BOUNDARY
  - TOFA TAXIWAY OBJECT FREE AREA (TOFA)
  - TSA TAXIWAY SAFETY AREA (TSA)
  - X EXISTING FENCE



Evansville Regional Airport

---

PRIMARY:



201 N. Illinois Street, Suite 800  
Indianapolis, IN 46204  
317.786.0461 | www.chacompanies.com

---

SUB:

Designed By:	Drawn By:	Checked By:
Issue Date:	Project No:	Scale:
11/19/2024	076738	AS SHOWN

---

REV	BY	DESCRIPTION	DATE

---

PROJECT:

EVANSVILLE REGIONAL AIRPORT  
AIRPORT MASTER PLAN

TITLE:

ALTERNATIVE #1  
CENTRAL TERMINAL EXPANSION

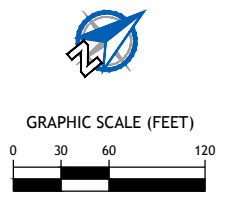
---

CERTIFICATION:

---

DRAWING NO.

**FIGURE 5-12**



**Alternative 2: West Terminal Expansion**

Currently, Concourse B serves Allegiant Air (the Airport’s dominant carrier) and American Airlines. Passengers on Allegiant Air flights are ground boarded via a covered passenger walkway to the plane west of Concourse B, sharing the holdroom with American Airlines passengers. During peaks when Allegiant Air and American Airlines are operating simultaneously, the Concourse B holdroom is overloaded. In this alternative, an approximately 8,800 square foot west expansion of the Concourse B holdroom is pursued at the concourse level. The expansion will remove the covered passenger walkway and replace it with a building at the same grade with the existing terminal providing a seamless experience for passengers. The west expansion allows the airport to transfer from ground boarding to utilizing PBB’s for Allegiant Air, leading to an increase in passenger level of service. In addition, a new PBB can be installed at unused Gate B2 to provide a total of 3 new PBB’s for a total of 8 PBB’s and 2 ground boarding positions (Concourse A). Two ground boarding positions (B2 and B4) will remain within Concourse B. Like Alternative 1 but not as impactful, the new terminal expansion to the west would need to tie into the existing building structure and building systems. However, phasing would not likely impact passenger level of service. However, the FAA does not require ATCT maintain line-of-sight for non-movement areas such as the apron area which are not under the control of ATCT.

See **Table 5-11** and **Figure 5-13**.

**Table 5-11 – Alternative 2: West Terminal Expansion**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Provides a path forward to provide an additional gate and hold room area contiguous to the existing concourses.</li> <li>• Provides an opportunity to utilize existing concourses which were recently renovated.</li> <li>• Provides opportunity for additional airport revenue with new concession space.</li> <li>• Maintains passenger level of service during construction.</li> <li>• Straight forward phasing and constructability.</li> <li>• Can be accomplished as part of a two phased approach in lockstep with future requirements.</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in cost associated with requirement to tie into existing terminal structure and utility systems.</li> <li>• Rebalancing of concourses may be required given anticipated use of Concourse B given the expansion.</li> </ul>

Source: CHA, 2025.

[Intentional Page Break]



**Alternative 3: East Terminal Expansion**

Similar to the West Terminal Expansion, the East Expansion Alternative proceeds with an approximate 8,800 square foot expansion. Tie into the existing terminal will be required, however phasing will be more complex as the existing Gate A4 will have to be relocated prior to initiating construction. Another key difference from the West Expansion is that only two new PBB’s can be provided as opposed to three due to the available apron space. A total of seven PBB’s and 3 ground boarding positions would result with the East Expansion Alternative. Potential ATCT line-of-sight issues may be more prominent as the existing area presently suffers from line-of-sight issues to the ATCT. An optional passenger covered walkway expansion of approximately 600 linear feet can also be pursued to increase the passenger level of service to the western most parking position at Concourse B. Lastly, a key consideration would be balancing the terminal once constructed, as the existing Concourse B witnesses higher passenger levels with Allegiant Air and American Airlines.

See **Table 5-12** and **Figure 5-14**.

**Table 5-12 – Alternative 3: East Terminal Expansion**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Provides a path forward to provide an additional gate and hold room area contiguous to the existing concourses.</li> <li>• Provides an opportunity to utilize existing concourses which were recently renovated.</li> <li>• Provides opportunity for additional airport revenue with new concession space.</li> <li>• Maintains passenger level of service during construction.</li> <li>• Straight forward constructability.</li> <li>• Can be accomplished as part of a two phased approach in lockstep with future requirements.</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in cost associated with requirement to tie into existing terminal structure and utility systems.</li> <li>• Rebalancing of concourses required given use of Concourse B compared to Concourse A.</li> <li>• Complex phasing due to need to relocate Gate A4 prior to construction.</li> <li>• Provides the least amount of PBB’s compared to other terminal alternatives.</li> <li>• Anticipated line-of-sight concerns at the apron.</li> </ul>

Source: CHA, 2025.

**5.5.2 Outbound /Inbound Baggage Make-Up**

The outbound/inbound baggage make-up area is consolidated with the Checked Baggage Inspection System (CBIS) area located on the lower level. The Facility Requirements analyzed projections for checked baggage attributed to increasing levels of passenger activity through the planning horizon. The CBIS was found to be adequate over the next 20-years. However, the outbound/inbound baggage make-up area would need to increase by approximately 1,000 square feet in PAL 4 to accommodate additional space needed for baggage carts to transport baggage. A reconfiguration of the lower-level space can be pursued to provide 1,000 square feet of additional space needed in PAL 4.



### 5.5.3 Security Screening Check Point

Results from **Chapter 3** identified deficiencies within the TSA Security Screening Checkpoint (SSCP) within the terminal. EVV operates one (1) distinct centralized security screening check point with two (2) security screening checkpoint lanes. In addition, checkpoint demand was analyzed against level of service standards that address performance measured by passengers wait time, processing rate, and space allotted for each SSCP function. The existing two (2) security screening lanes were found to be deficient in meeting industry standards for passenger queuing space and circulation which will be further exasperated when the airport will require a third security checkpoint lane in PAL 3.

Industry standards suggest the terminal circulation corridor within the terminal facility be a minimum of 20 feet in width. However, the current layout of the main terminal building at EVV can only accommodate a circulation corridor width of 12 feet. This constraint meant the design of the proposed queuing lines would need to taper towards the east ticket counter area to avoid impacting the circulation corridor between the ticketing area and baggage claim. As demand increases, it is recommended that EVAAD consider undergoing a study to evaluate potential options to expand or reconfigure the circulation corridor.

The planning team's approach in developing alternatives to address the SSCP discrepancies were to introduce two alternatives, each containing a TSA Pre-Check and General Lane that would follow the industry standard TSA SSCP Lane design and meet the required passenger queue time and Level of Service (LOS) C standard by optimizing available space within the terminal without jeopardizing the flow of passenger movement and/or other passenger processing functions.

Six ticket counters were vacant, and this number is anticipated to increase throughout the planning horizon as airlines and the industry continue to gravitate towards self-service kiosks and remote check-in functions. The shift to self-service lessens the square footage consumption of the check-in area inside the terminal building. Taking the future requirements into consideration, two SSCP Queuing Lane alternatives were developed which would accommodate more queuing and circulation space by replacing four (4) ticket counters adjacent to the security screening checkpoint at the plan west of the ticketing area and shifting occupied ticket counters to the plan east.

#### ***Alternative 1: North/South SSCP Queue Orientation***

This alternative incorporates the TSA SSCP Standard and provides a 12-foot circulation clearance between the TSA Document Checker (TDC) Podium and the screening equipment, as well as a 12-foot clearance between the TDC and the passenger hold point at the end of the queuing line as illustrated on **Figure 5-15**. Passengers queue to the east of the SSCP with pre-check passengers queuing in front of SSCP near the terminal entrance.

#### ***Alternative 2: East/West SSCP Queue Orientation***

Like Alternative 1 in terms of the 12-foot clearance from security equipment and TDC. However, Alternative 2, all passengers (general and TSA-precheck) queue to the east and TDC positions are orientated to the east/west in a staggered position as shown on **Figure 5-16**. The stagger for the

TDC positions was required to maintain the terminal circulation corridor from the ticketing area to the baggage claim.

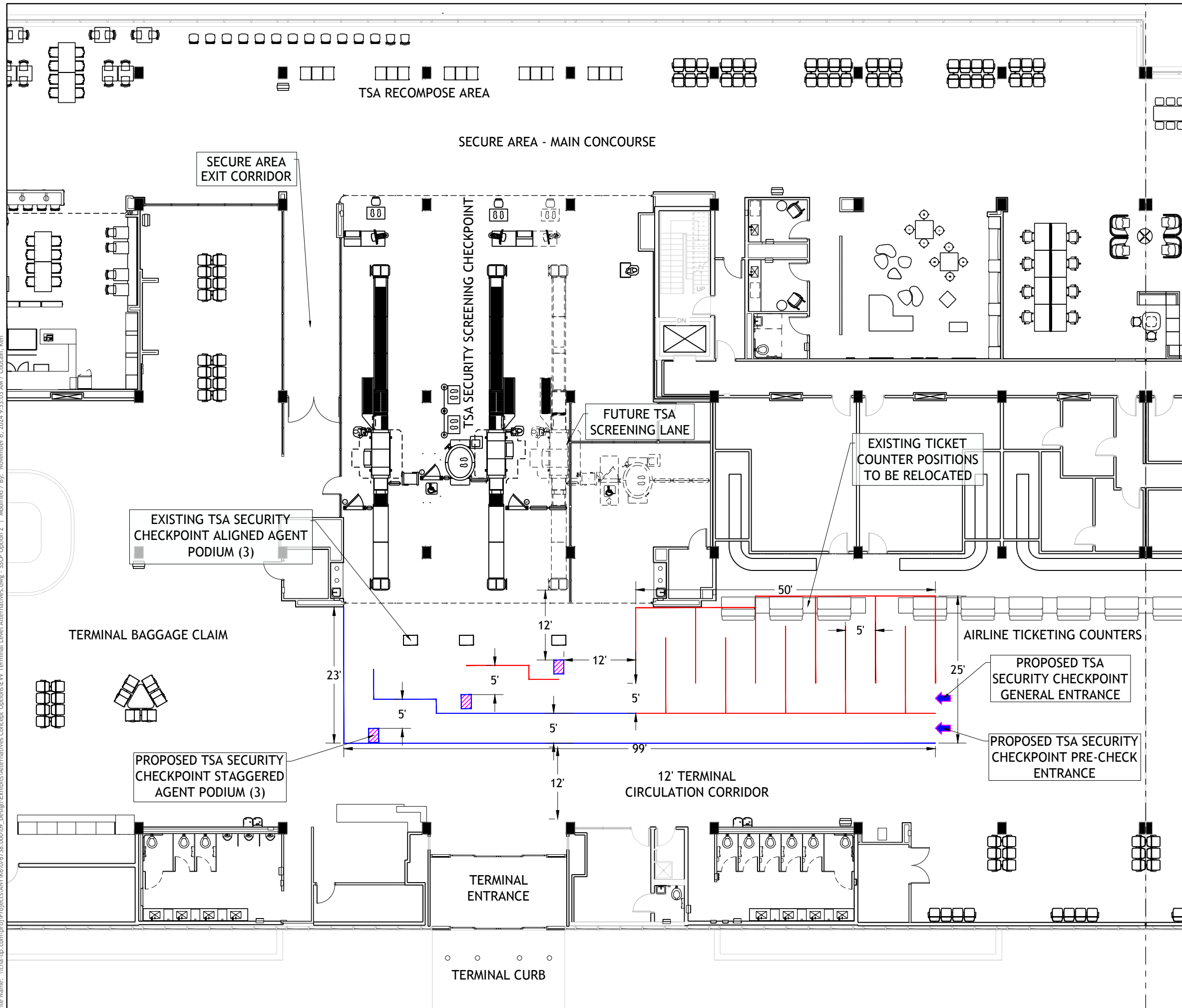
---

[Intentional Page Break]

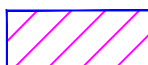


DRAFT




File Name: \\cha-ftp.com\proj\01\Projects\ANY\6\076738\_0000\09\_Design\Exhibits\Alternatives Concept Options\EW\_Terminal Level\Alternatives.dwg - SSCP Option 2 - Modified / By: November 6, 2024 9:33:03 AM / Contain\_Ken




**LEGEND:**

-  PROPOSED AGENT PODIUM
-  PROPOSED TSA GENERAL QUEUE LANE
-  PROPOSED TSA PRE-CHECK QUEUE LANE



Evansville Regional Airport

PRIMARY:



201 N. Illinois Street, Suite 800  
Indianapolis, IN 46204  
317.786.0461 · www.chacompanies.com

SUB:

Designed By:	Drawn By:	Checked By:
Issue Date:	Project No:	Scale:
11/6/2024	076738	AS SHOWN

REV	BY	DESCRIPTION	DATE

EVANSVILLE REGIONAL AIRPORT  
AIRPORT MASTER PLAN

ALTERNATIVE #2  
EAST/WEST SECURITY SCREENING  
CHECKPOINT QUEUE ORIENTATION

CERTIFICATION:

DRAWING NO.  
**FIGURE 5-16**

## 5.6 LANDSIDE DEVELOPMENT CONCEPTS

### 5.6.1 Public Parking

Although the Airport currently has adequate parking capacity to handle existing parking demand, the Airport will exceed maximum parking capacity within the forecasted planning horizon as identified within the **Facility Requirements** chapter of the EVV MPU. To appropriately meet the anticipated increase in passenger demand throughout the forecasted planning period, immediate planning and programming of additional parking capacity is crucial. As identified in **Table 5-13**, the High Growth Forecast suggests an increase in the Airport’s parking capacity by approximately 135<sup>1</sup> to 992<sup>2</sup> parking spaces to accommodate anticipated parking demand throughout the planning horizon.

**Table 5-13 – Future Parking Demand**

Public Parking						
High Growth Forecast						
Year	Enplanements	Actual Supply	Effective Supply (90 Percent)	Parking Demand	Surplus/ (Deficit)	Percent Capacity
Base (2023)	165,933	1,493	1,344	800	544	60%
PAL 1 (2028)	306,839	1,493	1,344	1,479	(135)	110%
PAL 2 (2033)	384,561	1,493	1,344	1,854	(510)	138%
PAL 3 (2038)	434,219	1,493	1,344	2,093	(749)	156%
PAL 4 (2043)	484,596	1,493	1,344	2,336	(992)	174%

Source: Evansville Airport Master Plan Update, Demand Capacity & Facility Requirements (Table 4-65), CHA, 2025.

At the time of this report, the Airport has planned for the expansion of the solar covered lot, economy lot, and satellite lot adjacent to the ATCT which are considered enabling projects for future parking expansion as shown on **Figure 5-17**. These planned expansion areas will provide approximately 500 spaces and will suffice till PAL 3. The Planning team’s approach to anticipating the future public parking deficit for PAL 3 and PAL 4, consists of two alternative concepts with the addition of a parking garage or a park and ride shuttle lot.

#### **Alternative 1: Additional Surface Lots and Proposed Parking Structure**

Alternative 1 presents the introduction of expansion lots to the Existing Economy and Existing Solar-Covered Parking Lots, a proposed Satellite Economy Parking Lot near the Airport’s Air Traffic Control Tower (ATCT), and the introduction of a 3-story Proposed Economy Parking Structure. As shown in **Figure 5-18**, the Proposed Economy East Expansion Lot will provide an additional 243 parking spaces to the Existing Economy Parking Lot. The expansion to the Existing Solar-Covered Parking Lot introduces two proposed surface lots. The Proposed East Expansion which will provide an additional 67 parking spaces and the Proposed West Expansion which will provide an additional 56 parking spaces to the Existing Solar-Covered Parking Lot. The Proposed Satellite Economy Parking Area will consist of two lots surrounding the existing parking lots near the ATCT and will provide 182 parking spaces. The additional parking spaces provided by the

<sup>1</sup> Additional parking capacity needed to meet the anticipated High Growth Forecast for PAL 1 (2028).

<sup>2</sup> Additional parking capacity needed to meet the anticipated High Growth Forecast for PAL 4 (2043).

Proposed Satellite Economy Parking Area will assist in alleviating the parking loss due to the construction of the Proposed Economy Parking Structure. The 3-Story Proposed Economy Parking Structure, located within the Existing Economy Parking lot (see **Figure 5-18**), will provide 525 additional parking spaces. Overall, Alternative 1 will provide an additional 1,064 future parking spaces increasing the total public parking from 2,493 spaces to 3,557 spaces.

An airspace analysis was conducted to determine if the Proposed Economy Parking Structure would penetrate Part 77 Imaginary Surfaces, specifically the Transitional Surface for Runway 18-36. The airspace analysis found there to be no potential Part 77 penetrations to the Transitional Surface by the Proposed Economy Parking Structure.

**Table 5-14 – Alternative 1: Public Parking**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>Provides sufficient parking positions to meet forecasted demand.</li> <li>Potentially provides sufficient parking positions to accommodate stalls lost during Parking Structure construction.</li> </ul>	<ul style="list-style-type: none"> <li>Potential increase in cost associated with designing and constructing Parking Structure compared to Alternative #2.</li> <li>Proposed Lots unable to accommodate future demand (beyond planning horizon).</li> </ul>

Source: CHA, 2025.

**Alternative 2: Additional Surface Lot and Proposed Park & Ride**

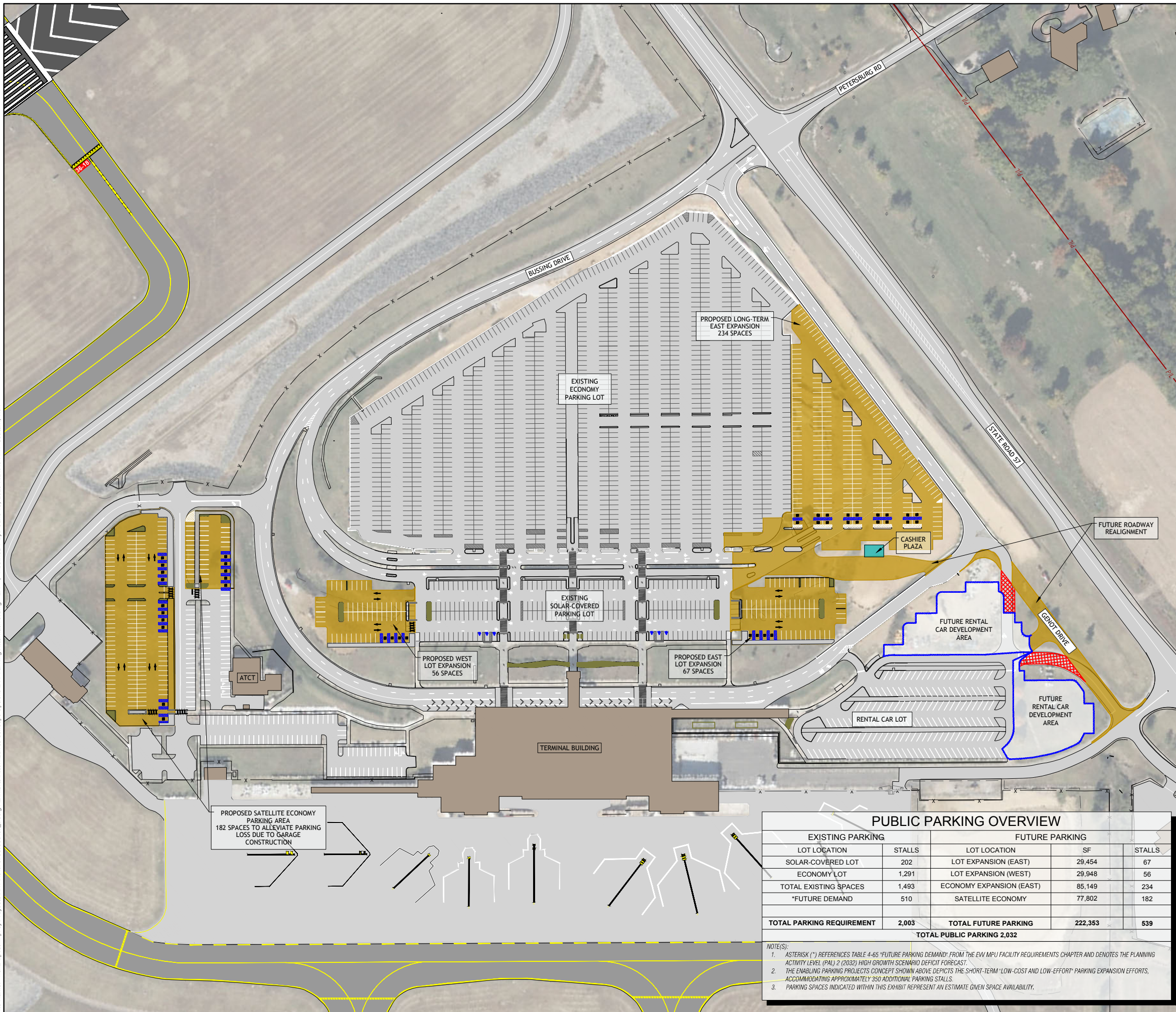
Alternative 2 includes the same expansion lots to the Existing Economy and Existing Solar-Covered Parking Lots, as well as the proposed Satellite Economy Parking Lot near the ATCT. However, instead of a 3-story Proposed Economy Parking Structure, Alternative 2 introduces a Proposed Park & Ride Lot northeast of the Existing Economy Parking Area across State Road 57. The Proposed Park & Ride Lot, located on the other side of State Road 57 (see **Figure 5-19**), will provide 511 additional parking spaces with shuttle service between the Terminal Building and the proposed lot. The Proposed Park & Ride Lot also includes space for shuttle bus maintenance and storage with a cashier plaza to enter the lot. The Proposed Park & Ride Lot entrance would be aligned with the Airport’s exit roadway at the intersection of Bussing Drive and State Road 57. Overall, Alternative 2 will provide an additional 1,050 future parking spaces increasing the total public parking from 2,493 spaces to 3,543 spaces.

**Table 5-15 – Alternative 2: Public Parking**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>Provides sufficient parking positions to meet forecasted demand.</li> <li>Provides the most parking positions as compared to proposed lots identified within Alternative #1.</li> <li>Potentially a cheaper Alternative compared to Alternative #1.</li> <li>Proposed Park &amp; Ride Lot capable of expanding to accommodate future demand (beyond planning horizon).</li> </ul>	<ul style="list-style-type: none"> <li>Proposed Park &amp; Ride may require an additional parking service tenant (additional operating costs).</li> <li>Proposed Park &amp; Ride Lot requires schedule shuttle service to Terminal curb. May translate to additional travel time for passenger to terminal facility.</li> </ul>


Source: CHA, 2025.

File Name: \\cha\lp.com\proj\Projects\ANY\6\076738\_000\01\_Design\Exhibits\Alternatives Concept Options\EW Parking Alternatives.dwg - EPP - I Modified / By: June 13, 2025 7:21:40 PM / Coutain, Ken




**LEGEND:**

- PROPOSED BUILDING
- PROPOSED ROADWAY DEMOLITION
- FUTURE RENTAL CAR DEVELOPMENT
- PROPOSED ROADWAY/PARKING FACILITY
- ROADWAY PAVEMENT
- EXISTING BUILDING
- LANDSCAPING
- X  EXISTING FENCE
- P/L  PROPERTY LINE



Evansville Regional Airport

**PRIMARY:**



201 N. Illinois Street, Suite 800  
Indianapolis, IN 46204  
317.786.0461 | www.chacompanies.com

**SUB:**

Designed By:	Drawn By:	Checked By:
Issue Date:	Project No:	Scale:
6/13/2025	076738	AS SHOWN

REV	BY	DESCRIPTION	DATE

PROJECT:

**EVANSVILLE REGIONAL AIRPORT  
AIRPORT MASTER PLAN**

TITLE:

**ENABLING PARKING PROJECTS**

CERTIFICATION:

---

DRAWING NO.

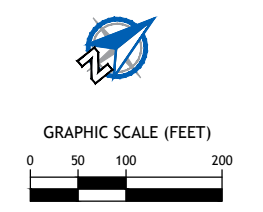
**FIGURE 5-17**

**PUBLIC PARKING OVERVIEW**

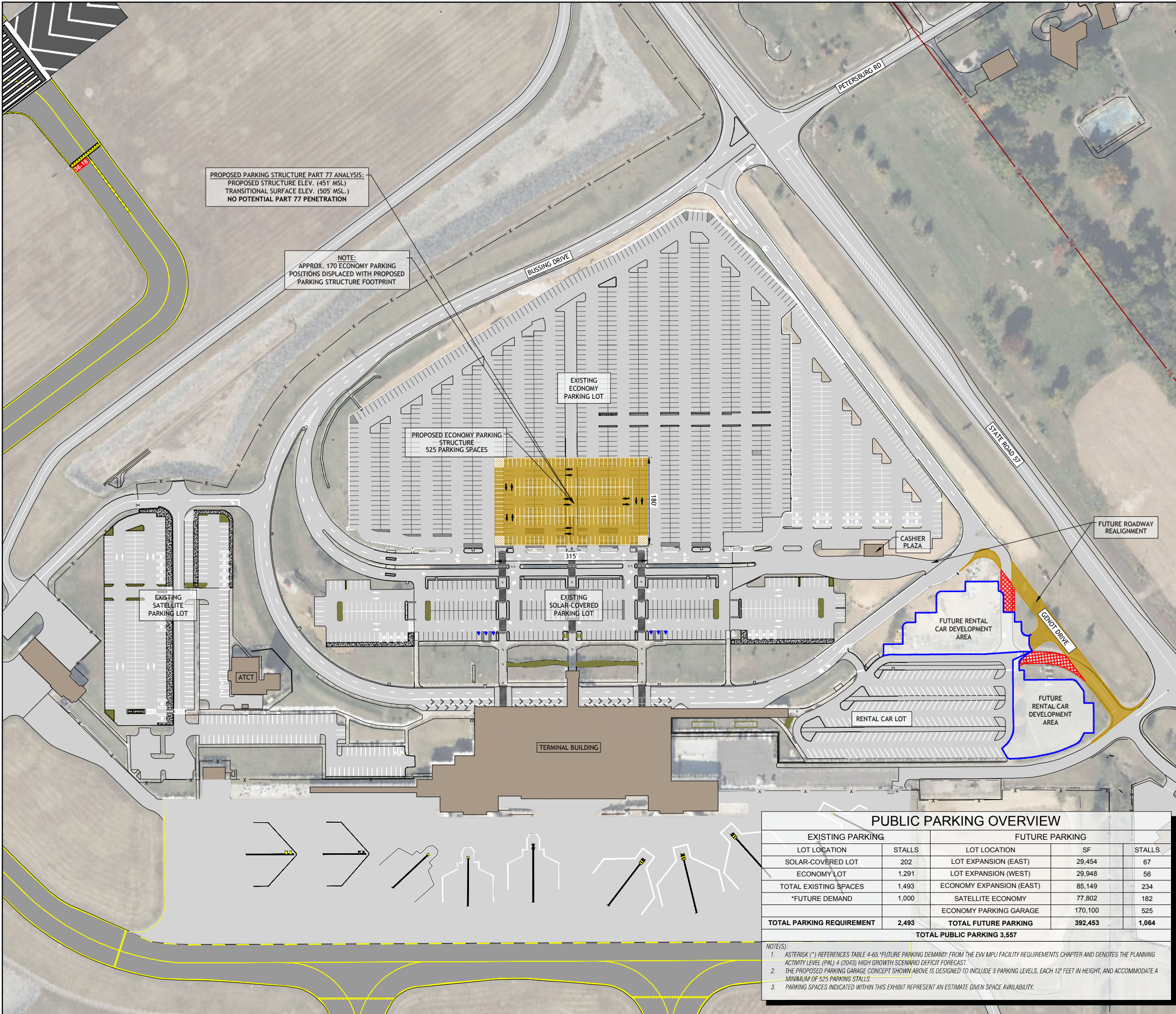
EXISTING PARKING		FUTURE PARKING		
LOT LOCATION	STALLS	LOT LOCATION	SF	STALLS
SOLAR-COVERED LOT	202	LOT EXPANSION (EAST)	29,454	67
ECONOMY LOT	1,291	LOT EXPANSION (WEST)	29,948	56
<b>TOTAL EXISTING SPACES</b>	<b>1,493</b>	ECONOMY EXPANSION (EAST)	85,149	234
*FUTURE DEMAND	510	SATELLITE ECONOMY	77,802	182
<b>TOTAL PARKING REQUIREMENT</b>	<b>2,003</b>	<b>TOTAL FUTURE PARKING</b>	<b>222,353</b>	<b>539</b>
		<b>TOTAL PUBLIC PARKING 2,032</b>		

**NOTE(S):**

1. ASTERISK (\*) REFERENCES TABLE 4-65 "FUTURE PARKING DEMAND" FROM THE EVV MPU FACILITY REQUIREMENTS CHAPTER AND DENOTES THE PLANNING ACTIVITY LEVEL (PAL) 2 (2032) HIGH GROWTH SCENARIO DEFICIT FORECAST.
2. THE ENABLING PARKING PROJECTS CONCEPT SHOWN ABOVE DEPICTS THE SHORT-TERM "LOW-COST AND LOW-EFFORT" PARKING EXPANSION EFFORTS, ACCOMMODATING APPROXIMATELY 350 ADDITIONAL PARKING SPACES.
3. PARKING SPACES INDICATED WITHIN THIS EXHIBIT REPRESENT AN ESTIMATE GIVEN SPACE AVAILABILITY.



File Name: \\cha\lp.com\proj\Projects\ANY\6\076738\_000\09\_Design\Exhibits\Alternatives Concept Options\EW Parking Alternatives.dwg - PGA | Modified / By: June 13, 2025 7:21:40 PM / Contain, Ken



PROPOSED PARKING STRUCTURE PART 77 ANALYSIS:  
 PROPOSED STRUCTURE ELEV. (451' MSL)  
 TRANSITIONAL SURFACE ELEV. (505' MSL.)  
 NO POTENTIAL PART 77 PENETRATION

NOTE:  
 APPROX. 170 ECONOMY PARKING  
 POSITIONS DISPLACED WITH PROPOSED  
 PARKING STRUCTURE FOOTPRINT

PROPOSED ECONOMY PARKING  
 STRUCTURE  
 525 PARKING SPACES

EXISTING  
 ECONOMY  
 PARKING LOT

EXISTING  
 SATELLITE  
 PARKING LOT

ATCT

TERMINAL BUILDING

CASHIER PLAZA

RENTAL CAR LOT

FUTURE RENTAL CAR DEVELOPMENT AREA

FUTURE RENTAL CAR DEVELOPMENT AREA

FUTURE ROADWAY REALIGNMENT

GENO DRIVE

BUSSING DRIVE

STATE ROAD 37

PETERSBURG RD

**LEGEND:**

- PROPOSED BUILDING
- PROPOSED ROADWAY DEMOLITION
- FUTURE RENTAL CAR DEVELOPMENT
- PROPOSED ROADWAY/PARKING FACILITY
- ROADWAY PAVEMENT
- EXISTING BUILDING
- LANDSCAPING
- EXISTING FENCE
- PROPERTY LINE

**EVV**  
 Evansville Regional Airport

PRIMARY:  
  
 201 N. Illinois Street, Suite 800  
 Indianapolis, IN 46204  
 317.786.0461 | www.chacompanies.com

SUB:

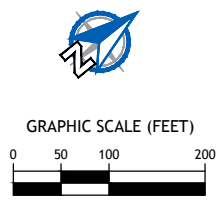
Designed By:	Drawn By:	Checked By:
Issue Date:	Project No:	Scale:
6/13/2025	076738	AS SHOWN

REV	BY	DESCRIPTION	DATE

**PUBLIC PARKING OVERVIEW**

EXISTING PARKING		FUTURE PARKING		
LOT LOCATION	STALLS	LOT LOCATION	SF	STALLS
SOLAR-COVERED LOT	202	LOT EXPANSION (EAST)	29,454	67
ECONOMY LOT	1,291	LOT EXPANSION (WEST)	29,948	56
TOTAL EXISTING SPACES	1,493	ECONOMY EXPANSION (EAST)	85,149	234
*FUTURE DEMAND	1,000	SATELLITE ECONOMY	77,802	182
		ECONOMY PARKING GARAGE	170,100	525
<b>TOTAL PARKING REQUIREMENT</b>	<b>2,493</b>	<b>TOTAL FUTURE PARKING</b>	<b>392,453</b>	<b>1,064</b>
		<b>TOTAL PUBLIC PARKING</b>	<b>3,557</b>	

NOTE(S):  
 1. ASTERISK (\*) REFERENCES TABLE 4-65 "FUTURE PARKING DEMAND" FROM THE EVV MPU FACILITY REQUIREMENTS CHAPTER AND DENOTES THE PLANNING ACTIVITY LEVEL (PAL) 4 (2043) HIGH GROWTH SCENARIO DEFICIT FORECAST.  
 2. THE PROPOSED PARKING GARAGE CONCEPT SHOWN ABOVE IS DESIGNED TO INCLUDE 3 PARKING LEVELS, EACH 12' FEET IN HEIGHT, AND ACCOMMODATE A MINIMUM OF 525 PARKING SPACES.  
 3. PARKING SPACES INDICATED WITHIN THIS EXHIBIT REPRESENT AN ESTIMATE GIVEN SPACE AVAILABILITY.



**EVANSVILLE REGIONAL AIRPORT  
 AIRPORT MASTER PLAN**

**ALTERNATIVE #1  
 ADDITIONAL SURFACE LOTS AND PROPOSED PARKING STRUCTURE**

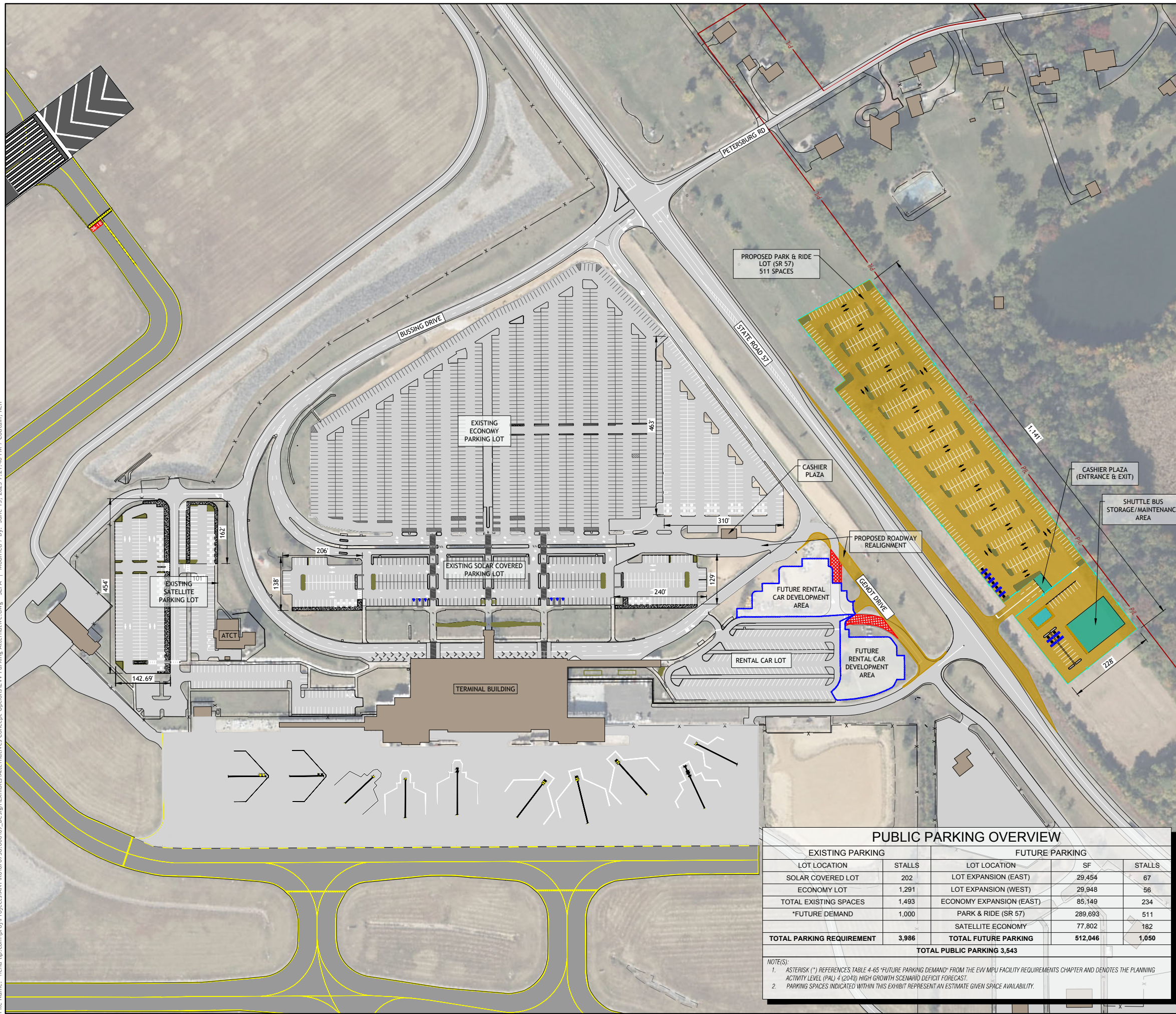
PROJECT:

TITLE:

CERTIFICATION:

DRAWING NO.  
**FIGURE 5-18**

File Name: \\cha-lp.com\proj\Projects\ANY\6\076738\000\09\_Design\Exhibits\Alternatives Concept Options\EW Parking Alternative.dwg - SLPA - Modified / By: June 13, 2025 7:21:40 PM / Coutain, Ken



**LEGEND:**

- PROPOSED BUILDING
- PROPOSED ROADWAY/PARKING FACILITY
- PROPOSED ROADWAY DEMOLITION
- FUTURE RENTAL CAR DEVELOPMENT
- ROADWAY PAVEMENT
- EXISTING BUILDING
- LANDSCAPING
- PROPOSED FENCE
- EXISTING FENCE
- P/L PROPERTY LINE



---

PRIMARY:



201 N. Illinois Street, Suite 800  
Indianapolis, IN 46204  
317.786.0461 · www.chacompanies.com

---

SUB:

Designed By:	Drawn By:	Checked By:
Issue Date:	Project No:	Scale:
6/13/2025	076738	AS SHOWN

---

REV	BY	DESCRIPTION	DATE

---

PROJECT:

EVANSVILLE REGIONAL AIRPORT  
AIRPORT MASTER PLAN

TITLE:

ALTERNATIVE #2  
ADDITIONAL SURFACE LOT AND PROPOSED PARK & RIDE

---

CERTIFICATION:

---

DRAWING NO.

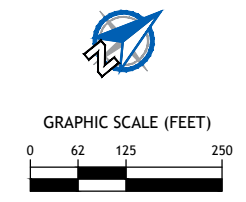
**FIGURE 5-19**

**PUBLIC PARKING OVERVIEW**

EXISTING PARKING		FUTURE PARKING		
LOT LOCATION	STALLS	LOT LOCATION	SF	STALLS
SOLAR COVERED LOT	202	LOT EXPANSION (EAST)	29,454	67
ECONOMY LOT	1,291	LOT EXPANSION (WEST)	29,948	56
TOTAL EXISTING SPACES	1,493	ECONOMY EXPANSION (EAST)	85,149	234
*FUTURE DEMAND	1,000	PARK & RIDE (SR 57)	289,693	511
		SATELLITE ECONOMY	77,802	182
<b>TOTAL PARKING REQUIREMENT</b>	<b>3,986</b>	<b>TOTAL FUTURE PARKING</b>	<b>512,046</b>	<b>1,050</b>
		<b>TOTAL PUBLIC PARKING 3,543</b>		

NOTE(S):

- ASTERISK (\*) REFERENCES TABLE 4-65 'FUTURE PARKING DEMAND' FROM THE EVV MPU FACILITY REQUIREMENTS CHAPTER AND DENOTES THE PLANNING ACTIVITY LEVEL (PAL) 4 (2043) HIGH GROWTH SCENARIO DEFICIT FORECAST.
- PARKING SPACES INDICATED WITHIN THIS EXHIBIT REPRESENT AN ESTIMATE GIVEN SPACE AVAILABILITY.



## 5.6.2 Rental Car Facilities

### ***Ready and Return Lot Expansion***

The existing ready and return covered lot for rental cars is located to the plan east of the terminal. Proximity to the terminal is a key consideration for rental car ready and return lots, allowing passengers to quickly retrieve or return rental cars without the need for additional forms of transportation or long walks. The Facility Requirements, **Chapter 3**, and tenant interviews did not indicate a need for additional rental car parking. However, areas are reserved adjacent to the existing covered lot for future expansion. Illustrated on **Figure 5-20** is a conceptual two phased expansion for the ready and return lot. The first phase to the plan east could provide approximately 50 parking stalls with the second phase to the plan north capable of providing approximately 80 parking stalls. Both expansion areas were assumed to also be solar covered lots and would require the realignment of Genot Drive to provide more developable area.

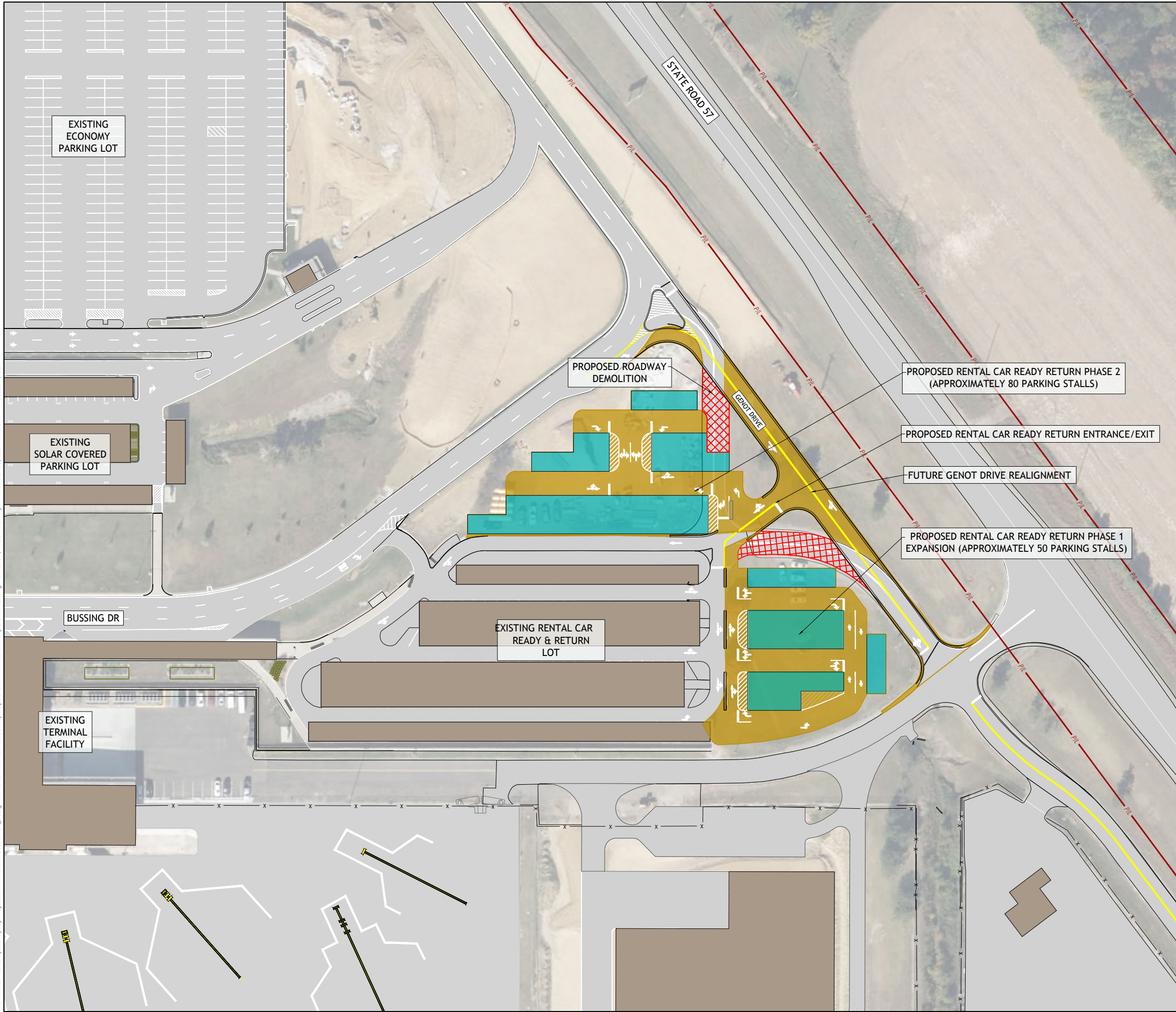
### ***Quick Turn Around/Maintenance Area Expansion***

Four Rental Car Quick Turn Around (QTA) lots exist to the northwest of the terminal along Genot drive for three rental car operators (Avis, Enterprise, and National) for car storage, fueling, washing, and light maintenance and one housing Amazon vehicle storage. One lot is vacant adjacent to the Enterprise leasehold which can potentially accommodate a new rental car QTA. However, a dedicated driveway will need to be provided through Enterprise. One conceptual layout was developed to show another potential 1-acre QTA lot to the west of Amazon if rental car demand were to require the expansion of the area as shown on **Figure 5-21**.








---


[Intentional Page Break]

File Name: \\cha-lp.com\proj\Projects\ANY\6\076738\_000\09\_Design\Exhibits\Alternatives\Concept Options\EV Rental Car Expansion v2.dwg - Exhibit - Modified / By: November 20, 2024 1:55:37 PM / Coutain, Ken




**LEGEND:**

-  PROPOSED BUILDING/SOLAR ARRAY
-  PROPOSED LANDSIDE ROADWAY AND PARKING AREA
-  PROPOSED DEMOLITION
-  EXISTING BUILDING
-  EXISTING PAVEMENT
-  EXISTING FENCE
-  P/L PROPERTY LINE



Evansville Regional Airport

PRIMARY:



201 N. Illinois Street, Suite 800  
Indianapolis, IN 46204  
317.786.0461 | www.chacompanies.com

SUB:

Designed By:	Drawn By:	Checked By:

Issue Date:	Project No:	Scale:
11/20/2024	076738	AS SHOWN

REV	BY	DESCRIPTION	DATE

PROJECT:

**EVANSVILLE REGIONAL AIRPORT  
AIRPORT MASTER PLAN**

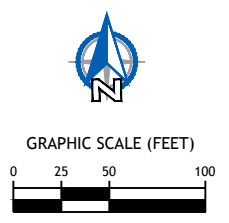
TITLE:

**RENTAL CAR  
READY AND RETURN LOT EXPANSION**

CERTIFICATION:

DRAWING NO.

**FIGURE 5-20**





## 5.7 SUPPORT FACILITIES DEVELOPMENT CONCEPTS

### 5.7.1 Westside Aeronautical Development Concepts

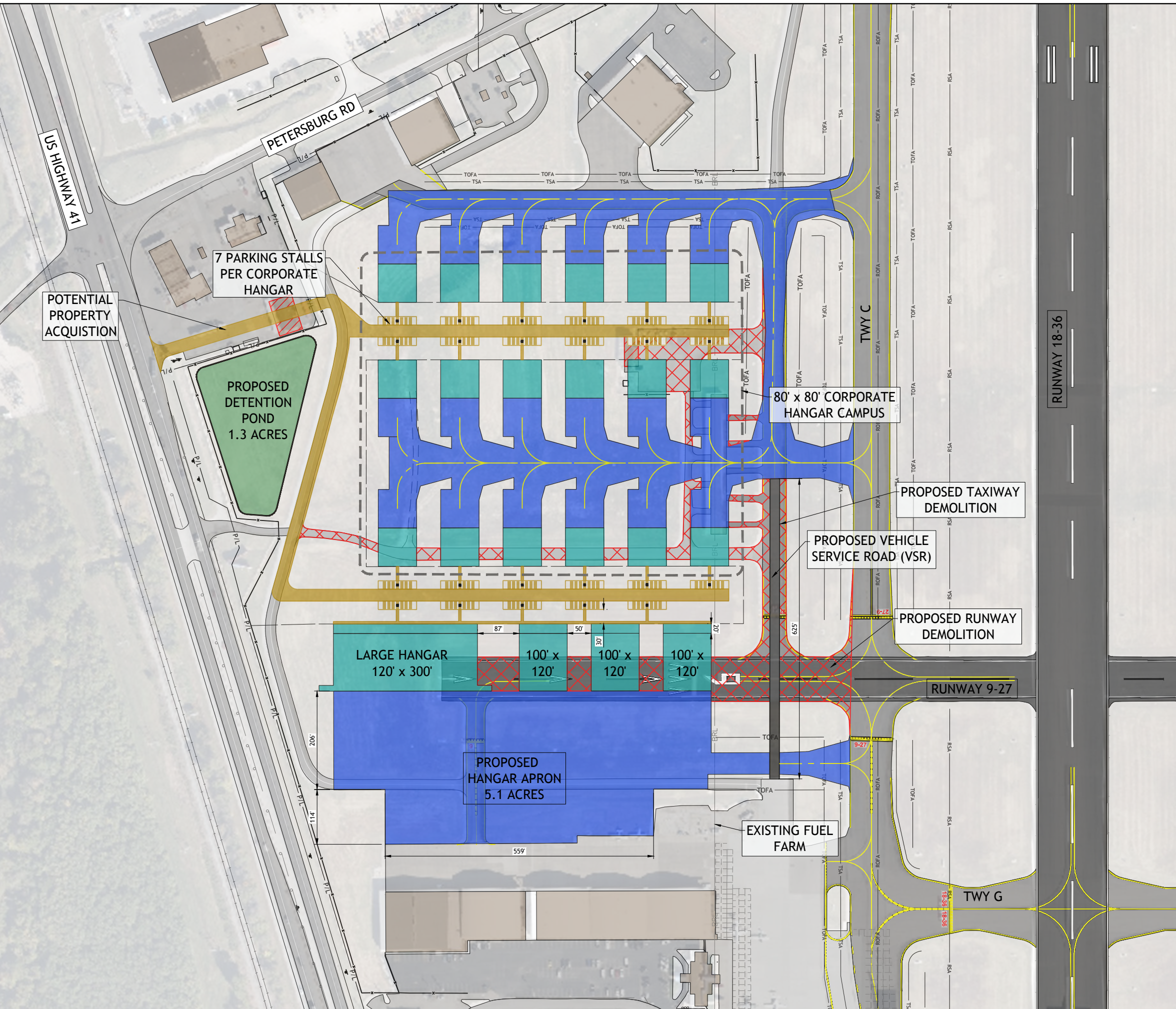
A strategic long-term vision was analyzed for large areas within EVV with airfield and landside access, to determine the preferred build out and potential future utility requirements. **Chapter 4** identified that an additional 41,400 square feet of hangar space and 90,915 square yards of apron space will be needed in PAL 4. As a result, two areas were identified for the westside of the Airport (Northwest and Southwest) with various alternatives developed to show multiple build outs in terms of aeronautical (Fixed Based Operator (FBO), corporate jets, individual aircraft operators, cargo, aircraft maintenance and repair), non-aeronautical (restaurants, retail, lodging, industrial, manufacturing, etc.). Three non-aeronautical alternatives were developed for the Northeast side of the airport north of Amcor. Although actual realized development will ultimately be determined by customer demand and developer funds and operating requirements, it was important to establish a highest and best use scenario to guide future development decisions. A development vision is a planning tool to ensure future growth does not deter or prevent or restrict further airport development. The following sections will describe the alternatives which have been recommended for further consideration after numerous alternatives were evaluated for both the Northwest and Southwest development areas at the westside of the Airport and the undeveloped area north of Amcor.

#### ***Northwest Development Concepts***

Concepts illustrate various ways in which the Northwest can be developed with or without the decommissioning of Runway 9-27. The Northwest development area is centrally located with the airfield which makes aeronautical development advantageous. However, the Northwest does suffer from a smaller non-aeronautical development footprint unless valuable airfield space is occupied and has limited utility availability. All development concepts assume the acquisition of property at the present location of Circle K and Windmill Fireworks to provide for a landside vehicular access point to the area.


- ✈ **Corporate Development (Figure 5-22)** – Maximizes aeronautical development with 80x80 private hangars to the north connecting to Taxilanes D and E. Each row of hangars can be built incrementally in a modular fashion following demand. Also shown, is a potential corporate GA FBO hangar expansion adjacent to Tri-State Aero if Runway 9-27 is decommissioned. This alternative would allow for Tri-State to expand adjacent to their existing facilities. Landside access to this area will be provided with a new landside access road through property acquisition at the location of an existing fireworks building.
- ✈ **Maintenance, Repair, and Overhaul (MRO) Development (Figure 5-23)** – Presents the flexibility of the area to support larger aeronautical demand given its size. Larger 100x100 corporate hangars with attached offices are illustrated with a potential MRO and cargo development area if Runway 9-27 is decommissioned. Development still provides for the opportunity for a FBO expansion on the existing Runway 9-27 site. Adjacency to the terminal makes this area worthwhile for a potential MRO operation due to the short taxi to the terminal and the primary Runway 4-22. A cargo operation benefits from easy access to US 41 via a new access road through property acquisition.


File Name: \\cha-ftp.com\proj\Projects\ANY\6\076738\000\01\_Design\Exhibits\Alternatives Concept Options\EW Westside Aero Dev Concepts.dwg - A1 | Modified / By: November 20, 2024 9:42:08 AM / Contain, Ken



**LEGEND:**


- FUTURE TAXIWAY/APRON
- FUTURE HANGAR
- FUTURE HANGAR CAMPUS (80' X 80')
- FUTURE ROADWAY
- DETENTION BASIN
- BUILDING REMOVAL
- PAVEMENT REMOVAL
- RUNWAY PAVEMENT
- TAXIWAY PAVEMENT
- EXISTING BUILDING
- EXISTING FENCE
- P/L PROPERTY LINE
- TOFA FUTURE TAXIWAY OBJECT FREE AREA
- TSA FUTURE TAXIWAY SAFETY AREA
- ROFA RUNWAY OBJECT FREE AREA
- RSA RUNWAY SAFETY AREA
- RPZ RUNWAY PROTECTION ZONE
- RPZA RUNWAY PROTECTION ZONE - APPROACH
- BRL BUILDING RESTRICTION LINE (35')

  
GRAPHIC SCALE (FEET)  
0 50 100 200



---

PRIMARY:



201 N. Illinois Street, Suite 800  
Indianapolis, IN 46204  
317.786.0461 | www.chacompanies.com

---

SUB:

Designed By:	Drawn By:	Checked By:
Issue Date:	Project No:	Scale:
11/20/2024	076738	AS SHOWN

---

REV	BY	DESCRIPTION	DATE

---

PROJECT: EVANSVILLE REGIONAL AIRPORT AIRPORT MASTER PLAN

TITLE: ALTERNATIVE #1 NORTHWEST CORPORATE DEVELOPMENT

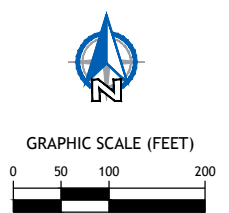
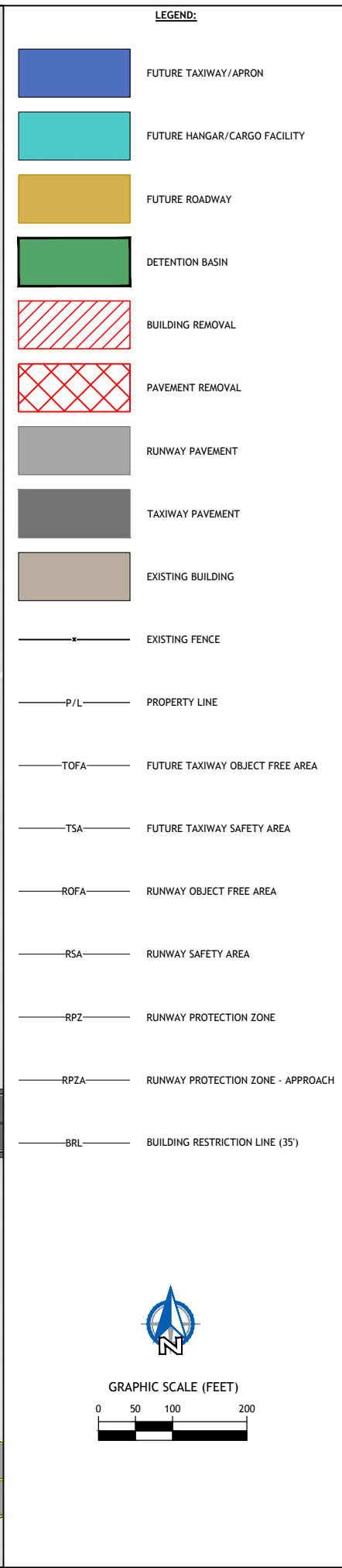
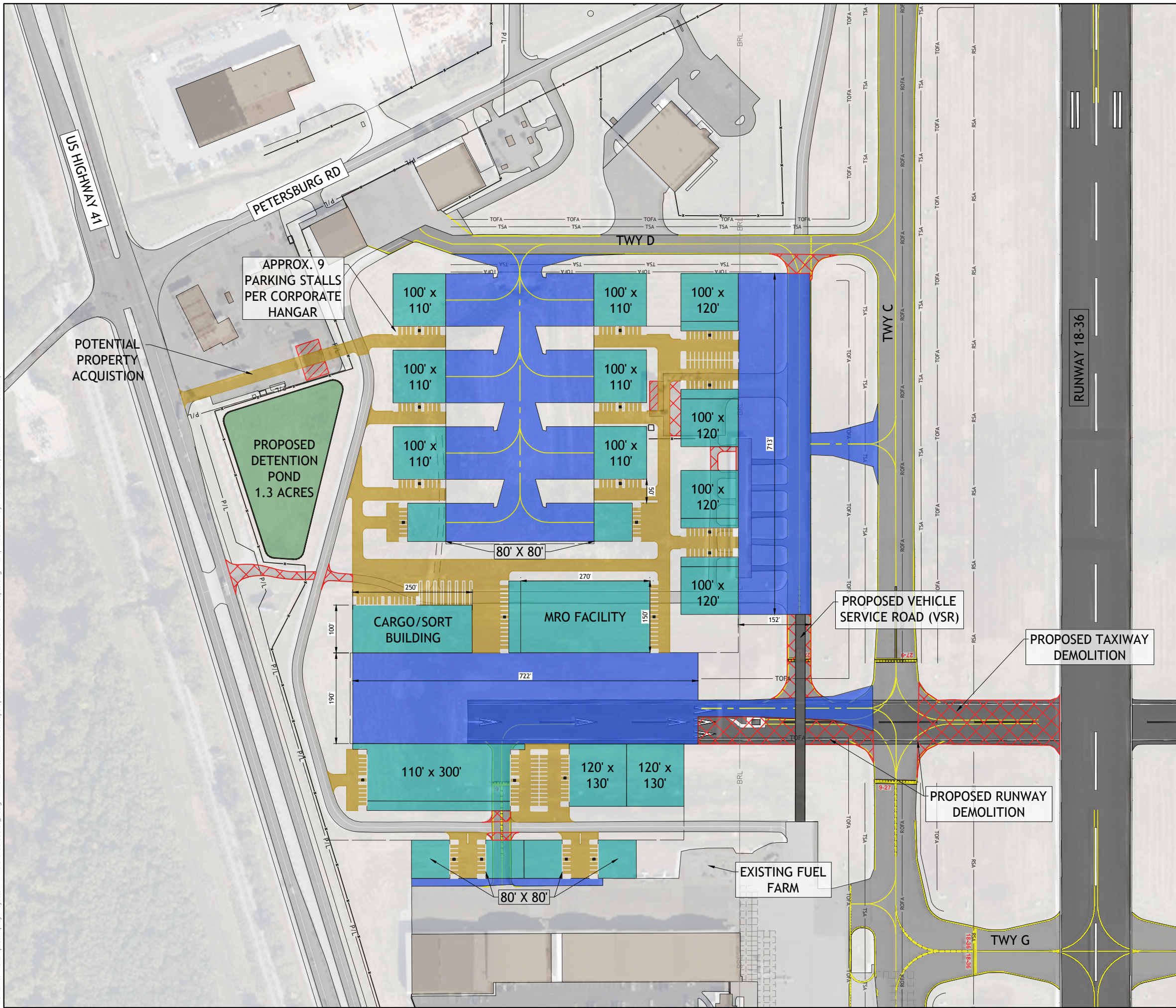
---

CERTIFICATION:

---

DRAWING NO. **FIGURE 5-22**

File Name: \cha-tp.com\proj\Projects\ANY\6\076738\_000\09\_Design\Exhibits\Alternatives Concept Options\EW Westside Aero Dev Concepts.dwg - A2\_1\_Modified / By: November 20, 2024 9:42:08 AM / Content, Ken



**EVV**  
Evansville Regional Airport

PRIMARY:  
**CHA**  
201 N. Illinois Street, Suite 800  
Indianapolis, IN 46204  
317.786.0461 · www.chacompanies.com

SUB:

Designed By:	Drawn By:	Checked By:
Issue Date:	Project No:	Scale:
11/20/2024	076738	AS SHOWN

REV	BY	DESCRIPTION	DATE

**EVANSVILLE REGIONAL AIRPORT  
AIRPORT MASTER PLAN**

PROJECT:

TITLE:  
ALTERNATIVE #2  
NORTHWEST MAINTENANCE, REPAIR, AND OVERHAUL (MRO) DEVELOPMENT

CERTIFICATION:

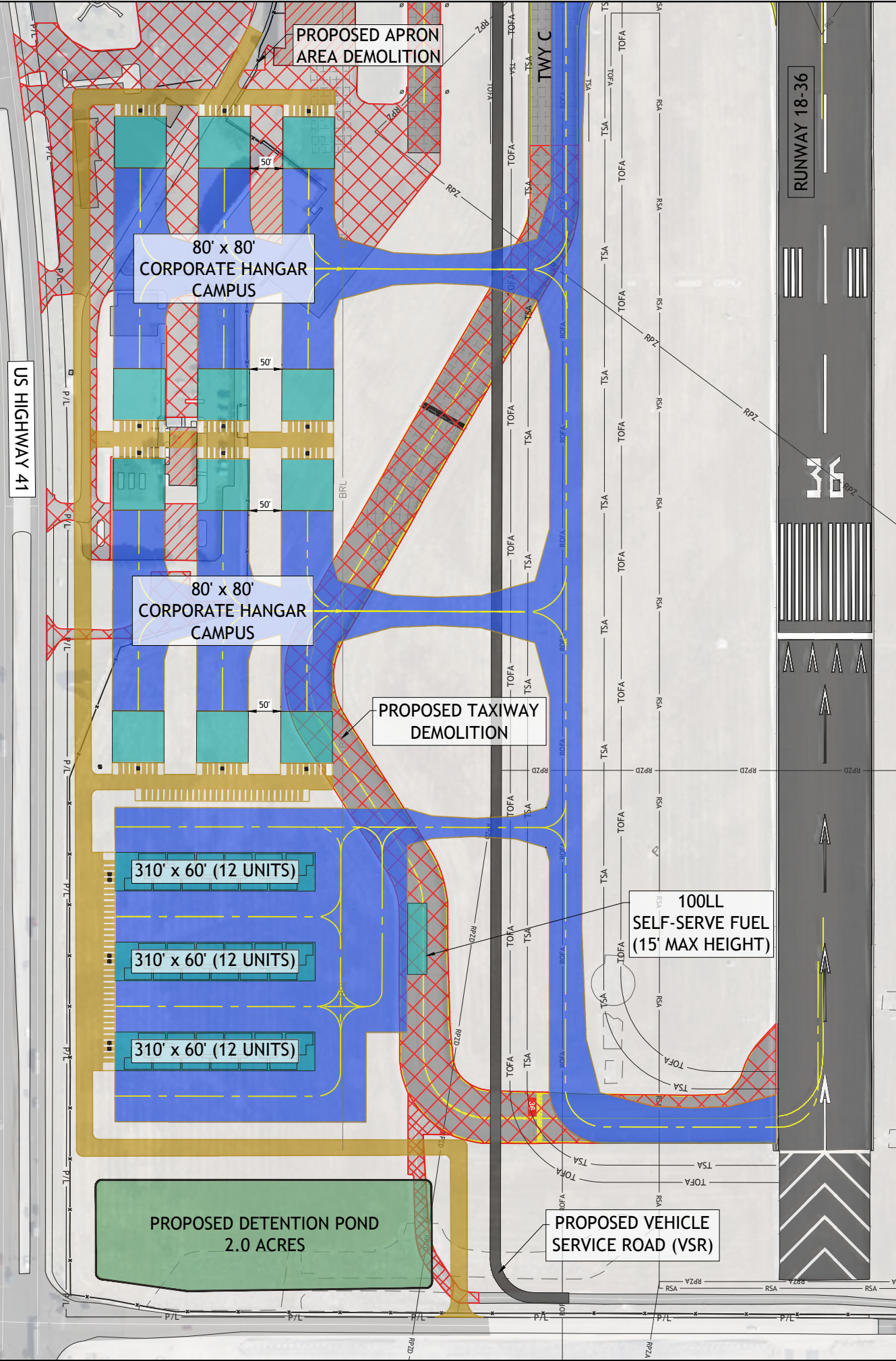
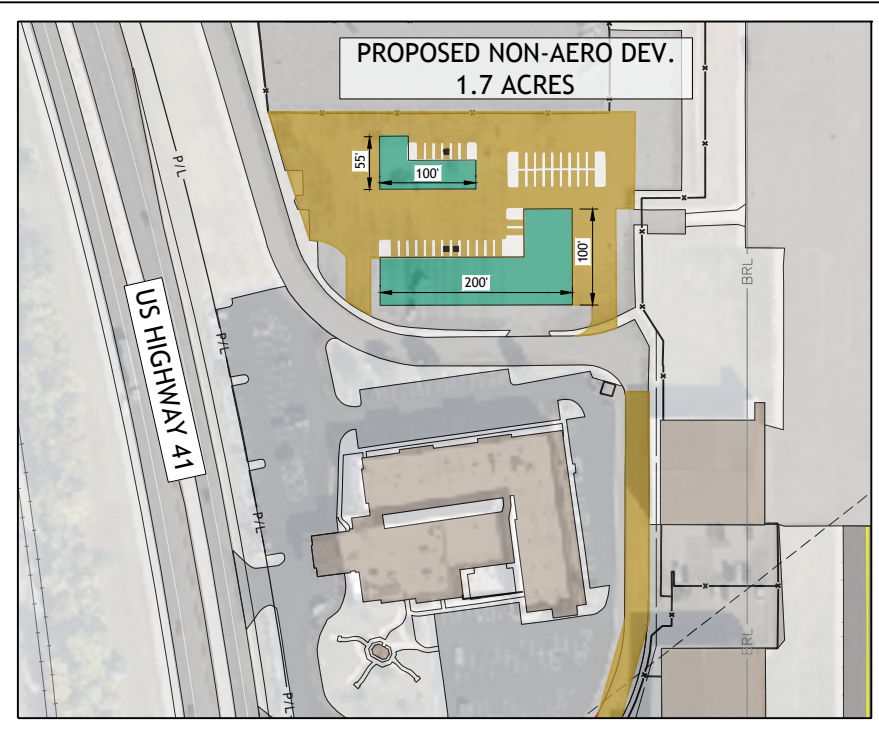
DRAWING NO.  
**FIGURE 5-23**








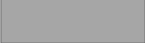


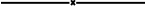








### **Southwest Development Concepts**

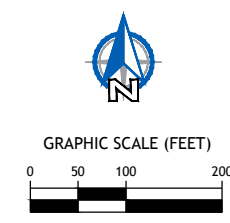
Three concepts were shortlisted to illustrate how the Southwest can be further developed given the existing tenancies and available airport owned parcels. All concepts show the future planned realignment of Taxiway C which opens more developable space. The Southwest is a key development area due to its location between Highway 41 (landside access) and Taxiway C (airfield access). Therefore, both aeronautical (specifically GA development) and non-aeronautical development which benefits from attracting an audience (i.e. restaurant or retail) will serve this area well. A new landside access road parallel to U.S Highway 41 to St. George Road provides access. A new landside road in the Southwest would separate the area from high-speed traffic off of U.S Highway 41 and would eliminate multiple entrance roads.


- ✈ **Max Aeronautical (Figure 5-24)** – Focuses on maximizing aeronautical development with smaller 80x80 private hangars to the north adjacent to Tri-State Aero and T-Hangars to the south. A potential self-service fuel farm is located adjacent to the T-Hangars given the distance to the existing fuel farm. This alternative provides a streamlined approach for aeronautical development as demand dictates but sacrifices non-aeronautical revenue generating opportunities. However, a 1.7 acre parcel north of Hampton Inn is earmarked for restaurant and retail due to the airfield constraints of this area.
- ✈ **Max Non-Aeronautical (Figure 5-25)** – Builds upon the EVV 2022 Stormwater Development Plan with a split development vision between aeronautical (east) alongside Taxiway C and non-aeronautical development (west) along Highway 41. This concept maximizes restaurant and retail development which benefits from attracting customers with easy access off U.S Highway 41. Ample space (2 acres) is still available for further development in the SW corner of the Airport earmarked as flexible development dictated by aeronautical or non-aeronautical demand. This alternative illustrates the flexibility of this area given its size.
- ✈ **MRO Development (Figure 5-26)** – For this alternative, the southern portion of this parcel is assigned for larger aeronautical development such as all-cargo and/or an MRO facility, if a future need were to arise. Although the forecast of cargo activity does not anticipate additional cargo space is needed, a new airport entrant may require dedicated space for their business which includes dedicated parking, office space, and apron. Development footprint also provides plenty of space for non-aeronautical development to the northwest along US 41. Flexible development space which is approximately 3.6 acres is found in between the aeronautical and non-aeronautical development areas to be dictated by demand.

File Name: \\cha-lp.com\proj\Projects\ANY\6\076738\000\01\_Design\Exhibits\Alternatives\Concept Options\EW Westside Aero Dev Concepts.dwg - A3 | Modified / By: November 20, 2024 9:42:08 AM / Coutain, Ken



- LEGEND:**
-  FUTURE TAXIWAY/APRON
  -  FUTURE HANGAR/BUILDING
  -  NON-AERO DEVELOPMENT
  -  FUTURE ROADWAY
  -  DETENTION BASIN
  -  BUILDING REMOVAL
  -  PAVEMENT REMOVAL
  -  RUNWAY PAVEMENT
  -  TAXIWAY PAVEMENT
  -  EXISTING BUILDING
  -  EXISTING FENCE
  -  P/L — PROPERTY LINE
  -  TOFA — FUTURE TAXIWAY OBJECT FREE AREA
  -  TSA — FUTURE TAXIWAY SAFETY AREA
  -  ROFA — RUNWAY OBJECT FREE AREA
  -  RSA — RUNWAY SAFETY AREA
  -  RPZ — RUNWAY PROTECTION ZONE
  -  RPZA — RUNWAY PROTECTION ZONE - APPROACH
  -  BRL — BUILDING RESTRICTION LINE (35')






**Evansville Regional Airport**

---

**PRIMARY:**



201 N. Illinois Street, Suite 800  
Indianapolis, IN 46204  
317.786.0461 | www.chacompanies.com

**SUB:**

---

Designed By:	Drawn By:	Checked By:
Issue Date:	Project No:	Scale:
11/20/2024	076738	AS SHOWN

---

REV	BY	DESCRIPTION	DATE

---

**EVANSVILLE REGIONAL AIRPORT  
AIRPORT MASTER PLAN**

**ALTERNATIVE #3  
SOUTHWEST DEVELOPMENT MAX AERONAUTICAL**

---

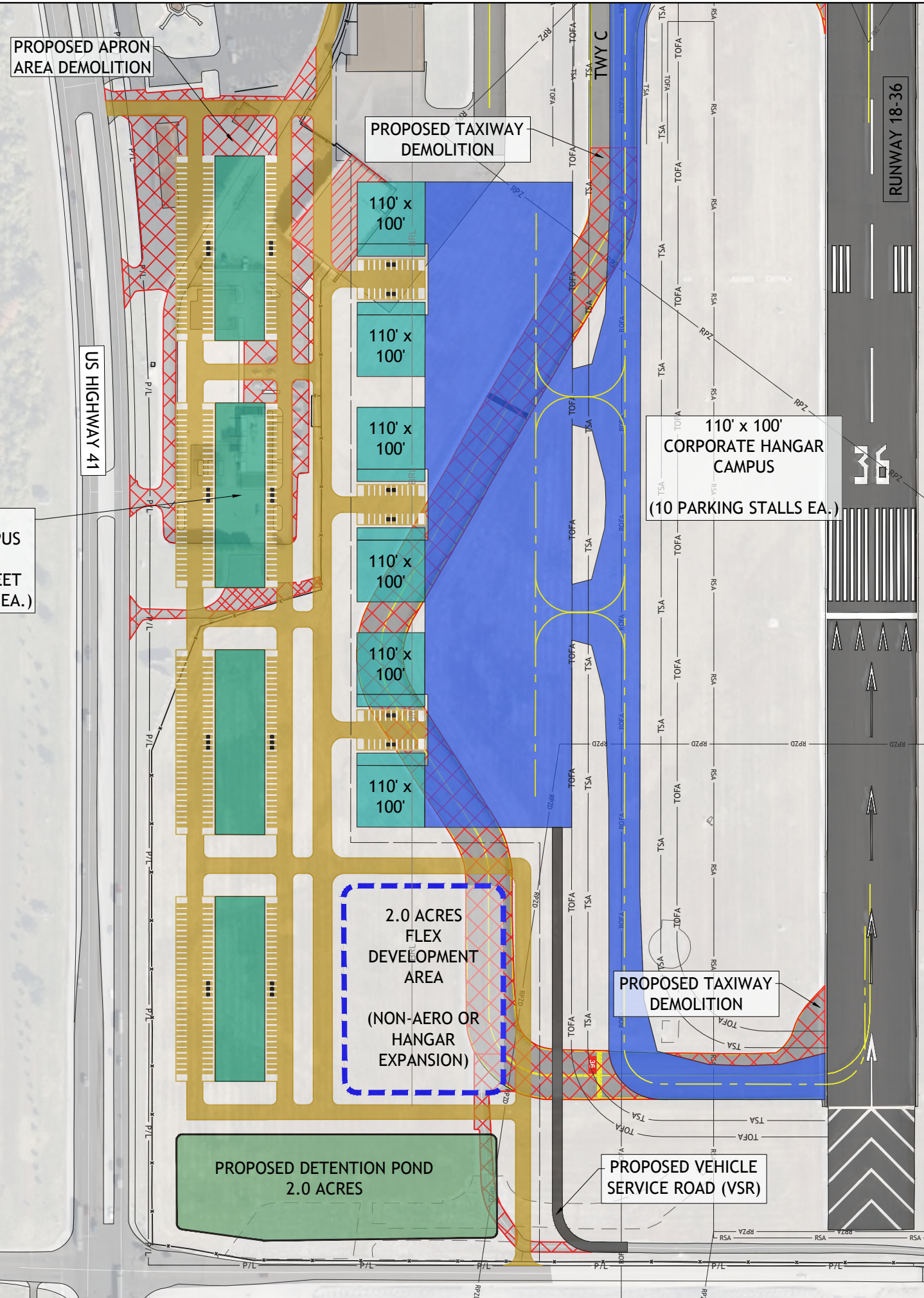
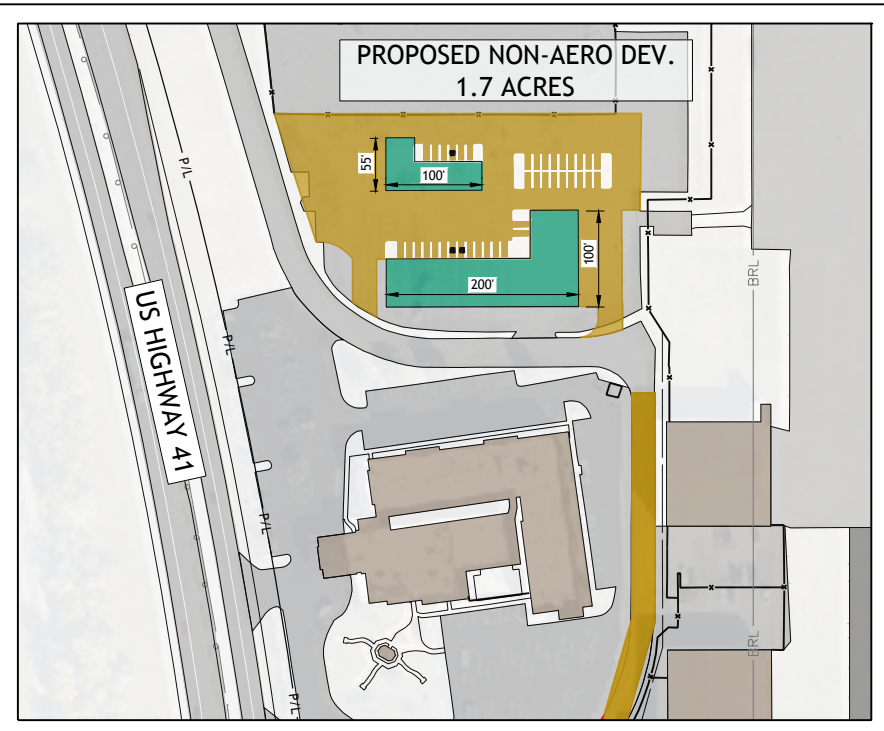
**PROJECT:**

**CERTIFICATION:**

---

**DRAWING NO.**  
**FIGURE 5-24**

File Name: \\cha-ftp.com\proj\Projects\ANY\6\076738\_000\09\_Design\Exhibits\Alternatives Concept Options\EW Westside Aero Dev Concepts.dwg - A4 | Modified / By: November 20, 2024 9:42:08 AM / Coutain, Ken



**LEGEND:**

- FUTURE TAXIWAY/APRON
- FUTURE HANGAR/BUILDING
- NON-AERO DEVELOPMENT
- FUTURE ROADWAY
- DETENTION BASIN
- BUILDING REMOVAL
- PAVEMENT REMOVAL
- RUNWAY PAVEMENT
- TAXIWAY PAVEMENT
- EXISTING BUILDING
- EXISTING FENCE
- P/L PROPERTY LINE
- TOFA FUTURE TAXIWAY OBJECT FREE AREA
- TSA FUTURE TAXIWAY SAFETY AREA
- ROFA RUNWAY OBJECT FREE AREA
- RSA RUNWAY SAFETY AREA
- RPZ RUNWAY PROTECTION ZONE
- RPZA RUNWAY PROTECTION ZONE - APPROACH
- BRL BUILDING RESTRICTION LINE (35')

GRAPHIC SCALE (FEET)

**PRIMARY:**

201 N. Illinois Street, Suite 800  
Indianapolis, IN 46204  
317.786.0461 | www.chacompanies.com

SUB:

Designed By:	Drawn By:	Checked By:	
Issue Date:	Project No:	Scale:	
11/20/2024	076738	AS SHOWN	
REV	BY	DESCRIPTION	DATE

---

**EVANSVILLE REGIONAL AIRPORT  
AIRPORT MASTER PLAN**

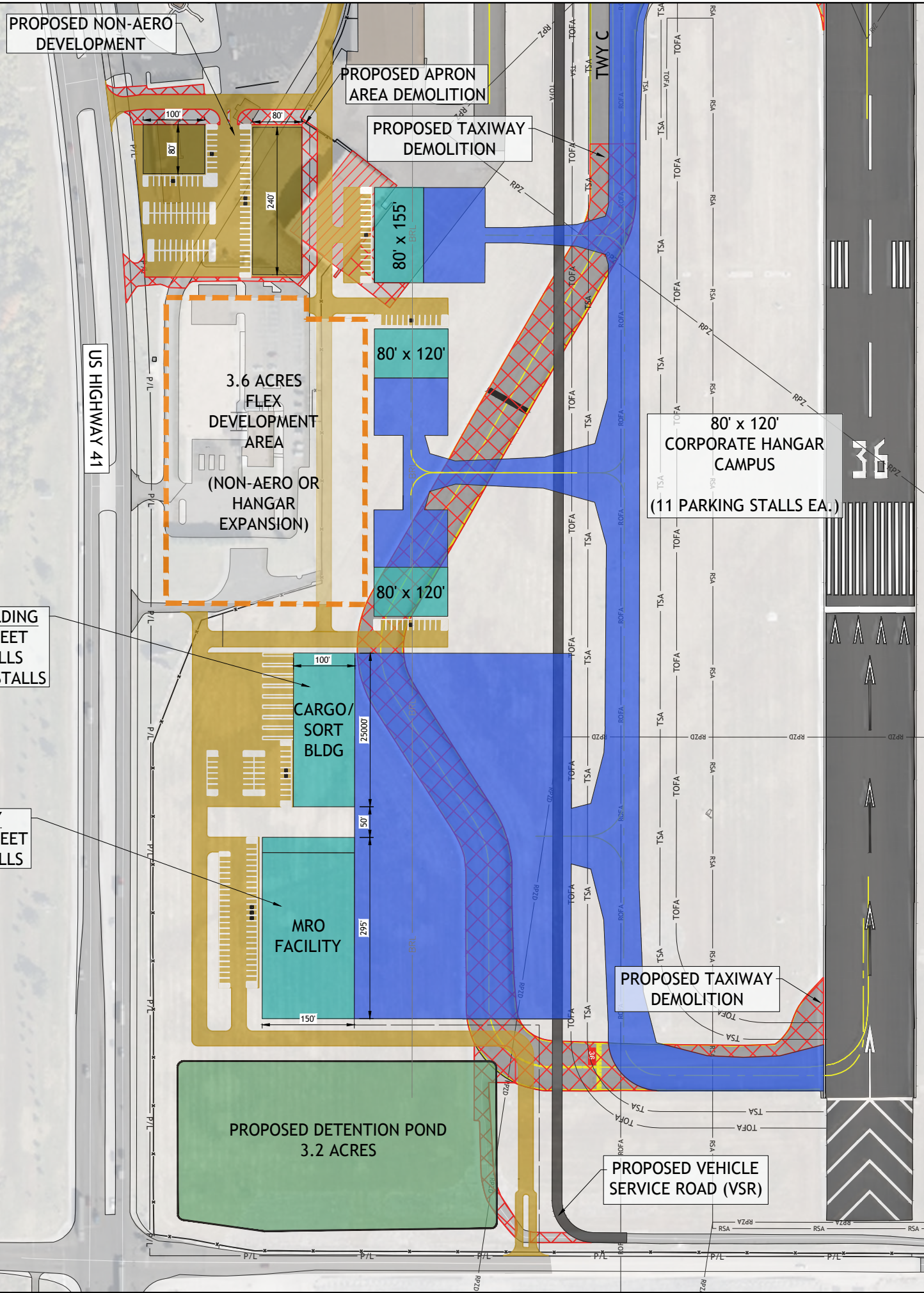
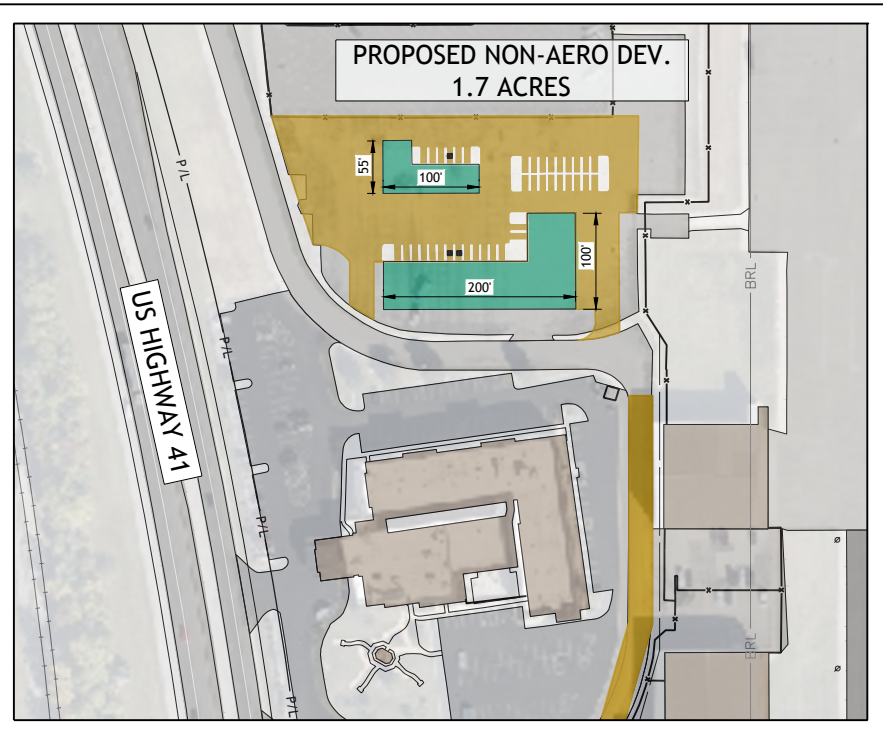
**ALTERNATIVE #4  
SOUTHWEST DEVELOPMENT MAX NON-AERONAUTICAL**

PROJECT: \_\_\_\_\_ TITLE: \_\_\_\_\_

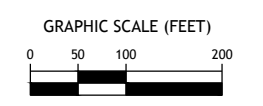
CERTIFICATION: \_\_\_\_\_

DRAWING NO. **FIGURE 5-25**

File Name: \\cha-lp.com\proj\Projects\ANY\6\076738\_000\09\_Design\Exhibits\Alternatives\EW Westside Aero Dev Concepts.dwg - A5 | Modified / By: November 20, 2024 9:42:08 AM / Coutain, Ken



- LEGEND:**
- FUTURE TAXIWAY/APRON
  - FUTURE HANGAR/BUILDING
  - NON-AERO DEVELOPMENT
  - FUTURE ROADWAY
  - DETENTION BASIN
  - BUILDING REMOVAL
  - PAVEMENT REMOVAL
  - RUNWAY PAVEMENT
  - TAXIWAY PAVEMENT
  - EXISTING BUILDING
  - EXISTING FENCE
  - PROPERTY LINE
  - FUTURE TAXIWAY OBJECT FREE AREA
  - FUTURE TAXIWAY SAFETY AREA
  - RUNWAY OBJECT FREE AREA
  - RUNWAY SAFETY AREA
  - RUNWAY PROTECTION ZONE
  - RUNWAY PROTECTION ZONE - APPROACH
  - BUILDING RESTRICTION LINE (35')



**EVV**  
Evansville Regional Airport

PRIMARY:  
**CHA**  
201 N. Illinois Street, Suite 800  
Indianapolis, IN 46204  
317.786.0461 | www.chacompanies.com

SUB:

Designed By:	Drawn By:	Checked By:
Issue Date:	Project No:	Scale:
11/20/2024	076738	AS SHOWN

REV	BY	DESCRIPTION	DATE

PROJECT: EVANSVILLE REGIONAL AIRPORT AIRPORT MASTER PLAN

TITLE: ALTERNATIVE #5 SOUTHWEST MAINTENANCE, REPAIR, AND OVERHAUL (MRO) DEVELOPMENT

CERTIFICATION:

DRAWING NO. FIGURE 5-26

### 5.7.2 Northeast Non-Aeronautical Development Area

The inclusion of Non-Aeronautical Development within airport property allows an airport to diversify the types of tenants doing business on an airfield and can provide a lucrative means of generating revenue for an airport. This methodology of allocating portions of airport property for non-aeronautical has already been adopted by the EVAAD with the existence of tenants like Amcor and ePackage Supply on the eastern side of the airfield along Ossenberg Lane. Three non-aeronautical development concepts were developed to introduce additional non-aeronautical tenants just north of the existing non-aeronautical tenants within William L. Brooks Drive and Ossenberg Lane. The northeast non-aeronautical development was found to best be served for industrial development given its adjacent land uses and roadway connectivity. Like the existing non-aeronautical tenants, the ultimate responsibility of the facility design, operation, and maintenance would be that of the future tenant/developer. Each concept provides a layout for warehouse/industrial facilities that include truck docks, employee/passenger parking, and roadway connectivity to local roads to demonstrate the usability and flexibility of these available parcels.

#### **Alternative 1 - Large Warehouse Development**

Alternative 1 showcases a singular, 193,000 square foot large warehouse with an additional 30,000 square foot warehouse office facility along the eastern edge of William L. Brooks Drive. As shown in **Figure 5-27**, this concept includes a 70,000 square foot truck loading dock with over 50 parking positions, a 68,000 square foot parking lot with 195 parking stalls for warehouse employees and customers, a proposed warehouse access road connecting to Ossenberg Lane and a proposed maintenance access road for access to the maintenance facility, Foreign Trade Zone (FTZ) Warehouse, and Airport Beacon.

The development of Alternative 1 would require the demolition of William L. Brooks Drive leading towards the existing Maintenance Building. Alternative 1 also include the demolition and realignment of existing property fencing to accommodate a new Access Gate along William L. Brooks Drive just north the existing Maintenance Building. See **Table 5-16**.

**Table 5-16 – Alternative 1: Northeast Non-Aeronautical Development**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Most warehouse and office space square feet</li> <li>• Highest potential revenue generation.</li> </ul>	<ul style="list-style-type: none"> <li>• Least quantity of employee/customer and truck docking square feet and positions.</li> <li>• Potentially the most difficult to secure long-term tenant given the size, as well as a financial burden if unoccupied.</li> <li>• Facility footprint requires the largest detention area.</li> <li>• Concept targeted towards larger businesses with potentially less demand.</li> <li>• Requires development of a new roadway to maintenance area.</li> <li>• Does not permit space for future non-aeronautical development.</li> </ul>

Source: CHA, 2025.



**Alternative 2 – Medium/Small Warehouse Development**

Alternative 2 showcases two warehouse facilities for at least two potential tenants. The first warehouse depicted in **Figure 5-28** is a 120,000 square foot medium warehouse facility just north of the Maintenance Building on William L. Brooks Drive. The medium warehouse includes two 52,000 square foot truck loading docks each with 38 parking positions, and a 51,000 square foot parking lot with 160 parking stalls for warehouse employees and customers. The second warehouse depicted in **Figure 5-28** is a smaller 35,000 square foot warehouse facility just south of the intersection of Ossenber Lane and William L. Brooks Drive. The small warehouse includes a 26,000 square foot truck loading dock accommodating 20 parking positions, and a 21,000 square foot parking lot with 57 parking stalls for warehouse employees and customers. Both the medium and Small Warehouse facilities share a proposed east/west roadway access corridor connecting Ossenber Lane and William L. Brooks Drive.

Like Alternative 1, the development of Alternative 2 would also require the demolition of William L. Brooks Drive leading towards the existing Maintenance Building.

See **Table 5-17**.

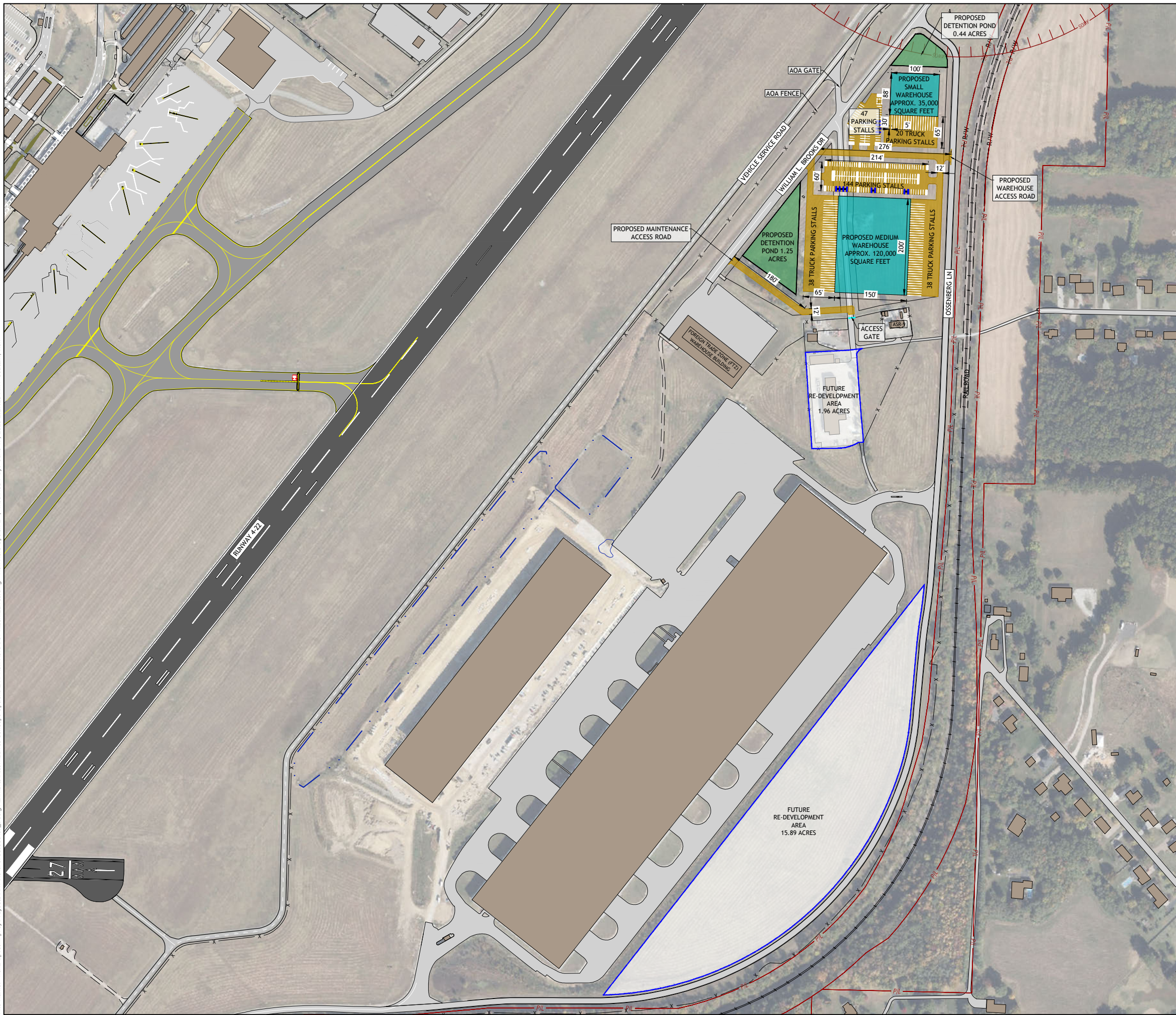
**Table 5-17 – Alternative 2: Northeast Non-Aeronautical Development**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Flexibility with accommodating multiple tenants.</li> <li>• Largest quantity of employee/customer parking square feet and parking positions.</li> <li>• Most warehouse square feet for a multi-tenant concept.</li> </ul>	<ul style="list-style-type: none"> <li>• Potentially difficult to secure long-term tenants given the size, as well as a financial burden if unoccupied.</li> <li>• Requires development of a new roadway.</li> <li>• Does not permit space for future non-aeronautical development.</li> </ul>

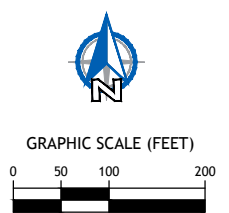
Source: CHA, 2025.

[Intentional Page Break]

File Name: \\cha-ilp.com\proj\Projects\ANY\6\076738\_000\01\_Design\Exhibits\Alternatives Concept Options\EW Non-Aero Dev Alternatives.dwg - Non-Aero Option 2 | Modified / By: June 17, 2025 2:27:25 PM / Coutain, Ken



- LEGEND:**
- PROPOSED NON-AERO BUILDING
  - PROPOSED ROADWAY
  - DETENTION BASIN
  - RUNWAY PAVEMENT
  - TAXIWAY PAVEMENT
  - EXISTING BUILDING
  - EXISTING FENCE
  - P/L PROPERTY LINE
  - NAVAID CRITICAL AREA
  - R/W RAILWAY RIGHT-OF-WAY
  - RAILWAY BOUNDARY LINE



PRIMARY:

Designed By:	Drawn By:	Checked By:

Issue Date:	Project No:	Scale:
6/17/2025	076738	AS SHOWN

REV	BY	DESCRIPTION	DATE

PROJECT:

**EVANSVILLE REGIONAL AIRPORT  
AIRPORT MASTER PLAN**

TITLE:

**ALTERNATIVE #2  
NORTHEAST NON-AERONAUTICAL DEVELOPMENT**

CERTIFICATION:

DRAWING NO.:

**FIGURE 5-28**

**Alternative 3 – Small Multiple Tenant Warehouse Development**

Alternative 3 showcases three small warehouse facilities (36,000 square feet each) for three potential tenants north of the FTZ Warehouse Building along William L. Brooks Drive as shown on **Figure 5-29**. The small warehouses include truck loading docks, trailer storage area, as well as a 10,300 square foot parking lot with 34 parking stalls for warehouse employees and customers. The second and third warehouses depicted in **Figure 5-29** are located in-between the William L. Brook Drive extension towards the Maintenance Building and Ossenberg Lane. Both warehouses share a footprint containing a 104,000 square foot truck loading dock and trailer storage area with 40 parking positions and 22 trailer storage stalls, as well as a 21,000 square foot parking lot with 74 parking stalls for warehouse employees and customers. All three warehouse facilities share roadway access to the William L. Brooks Drive extension corridor. In addition, the second and third warehouses also share roadway access to Ossenberg Lane.

Unlike Alternative 1 and 2, the development of Alternative 3 would not require the demolition of the William L. Brooks Drive extension leading towards the existing Maintenance Building. In addition, Alternative 3 includes a access gate on the William L. Brooks extension along the existing fence line. See **Table 5-18**.

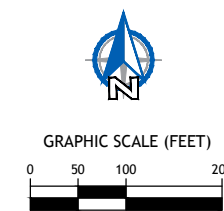
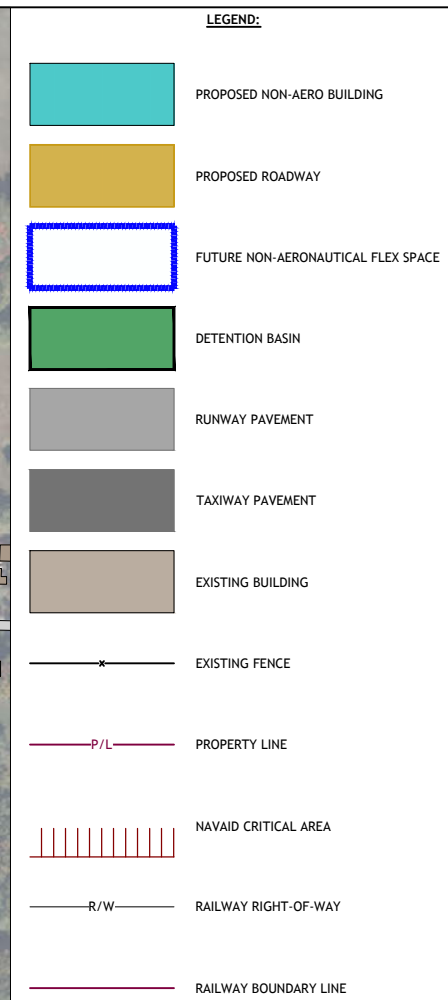
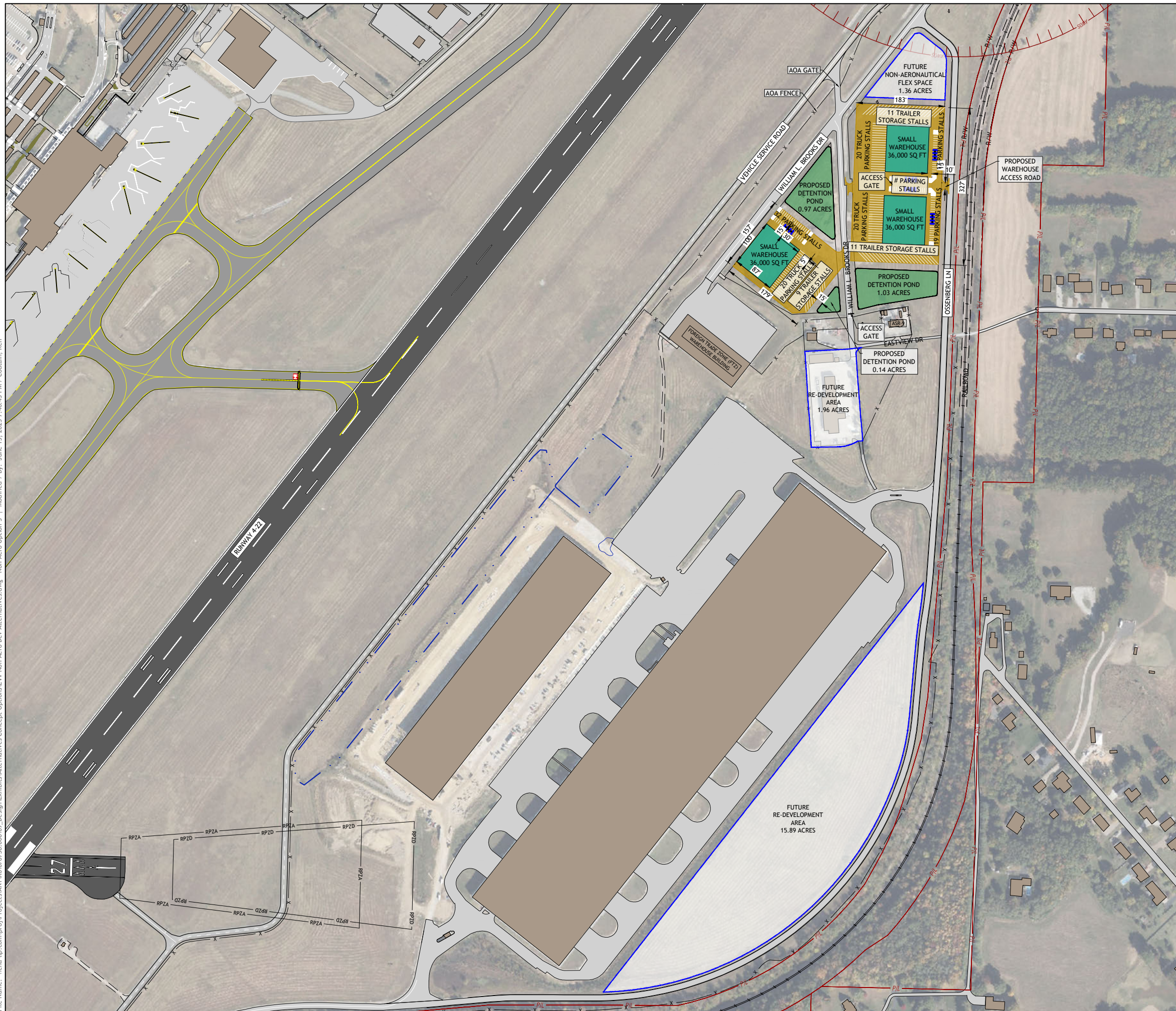
**Table 5-18 – Alternative 3: Northeast Non-Aeronautical Development**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Utilizes the existing roadway infrastructure including the roadway to the airport maintenance area.</li> <li>• Provides facilities with smaller footprints compared to other alternatives, thus increasing the likelihood of acquiring and maintaining long-term tenants.</li> <li>• Provides trailer storage area.</li> <li>• The small footprint presents the lowest potential financial burden if unoccupied.</li> <li>• Less risky due to multiple facilities and tenants.</li> <li>• Provides flex space for additional aeronautical or non-aeronautical development.</li> </ul>	<ul style="list-style-type: none"> <li>• Least quantity of warehouse and vehicular parking square feet and parking positions.</li> <li>• Potential for less revenue generation given smaller footprint.</li> <li>• Requires oversight and coordination of multiple tenants which could have competing priorities.</li> </ul>

Source: CHA, 2025.

[Intentional Page Break]

File Name: \\cha-ilp.com\proj\Projects\ANY\61076738\_0001\09\_Design\Exhibits\Alternatives Concept Options\EW Non-Aero Dev Alternatives.dwg - Non-Aero Option 3 | Modified / By: June 13, 2025 7:46:43 PM / Coutain, Ken



**PRIMARY:**

201 N. Illinois Street, Suite 800  
Indianapolis, IN 46204  
317.786.0461 | www.chacompanies.com

**SUB:**

Designed By:	Drawn By:	Checked By:
Issue Date:	Project No:	Scale:
6/13/2025	076738	AS SHOWN

REV	BY	DESCRIPTION	DATE

**EVANSVILLE REGIONAL AIRPORT  
AIRPORT MASTER PLAN**

**ALTERNATIVE #3  
NORTHEAST NON-AERONAUTICAL DEVELOPMENT**

**CERTIFICATION:**

**DRAWING NO.:**  
**FIGURE 5-29**

### 5.7.3 Aviation Fueling Facilities

The existing underground fuel farm which provides fuel for both commercial and GA operations is located on Tri-State Aero’s leasehold who provides fueling services. The existing fuel farm consists of four aviation fuel tanks which include two 20,000 Jet-A tanks and two 10,000 AvGas tanks. The fuel demand and capacity analysis performed in **Chapter 4** concluded that the existing fuel supply is adequate to maintain a three-day reserve (Jet-A) and a seven-day reserve (AvGas) through the planning horizon. However, industry standard is to at least maintain a five-day reserve which would require an additional 20,000-gallon Jet-A tank through the planning horizon. To take a conservative approach to account for unforeseen demand which exceeds the forecast or as a contingency for supply disruptions, the Airport could consider installing another 20,000-gallon Jet-A tank (two additional 20,000-gallon Jet-A tanks total) to maintain a 7-day reserve through the planning horizon. Given the cost to develop a brand-new fuel farm and the deficiency of only 20,000 gallons of JetA, the development alternative focused on how to best configure the additional tank(s) within the existing fuel farm as illustrated on **Figure 5-30**.

---

[Intentional Page Break]

DRAFT



## 5.8 RECOMMENDED DEVELOPMENT PLAN SUMMARY

The overall guiding principle of this chapter is to provide airport infrastructure and facilities which adequately serves the community needs and is flexible to respond to industry trends. Alternatives must meet FAA design criteria and be implementable with the existing infrastructure and environment. As shown, a wide range of alternatives were evaluated and necessary given the FAA approved forecast and resulting facility requirements created for this MPU.

The alternative evaluation process included identifying, evaluating, and finally selecting the best viable concepts into one recommended airport development plan as illustrated on **Figure 5-31**.

Concepts were first prepared based on feasible solutions to meet demand within the developable areas of the Airport. Next, these concepts were evaluated by EVAAD for their ability to realistically meet the demands along with impacts. Criteria used to evaluate alternatives include operational performance, best planning practices, demand, and potential financial feasibility. The concepts were then narrowed, which were then presented to the public during the public workshop to obtain feedback to determine preferred development plan as presented below:

- ✈ Acquire aviation easements for portions of the Runway 4-22 and Runway 18-36 RPZ's outside the Airports control.
- ✈ Close and convert Runway 9-27 into a taxiway given the pavement condition, FAA grant funding ineligibility, and no benefit to wind coverage.
- ✈ Runway 18-36 and Runway 9-27 runway declination changes should be further analyzed and implemented alongside future runway rehabilitation or reconstruction projects.
- ✈ Modification of all taxiways to conform with FAA design standards (i.e., pavement geometry, runway to taxiway separation, hot spot mitigation, etc.) and to improve airfield operational efficiency and safety.
- ✈ Relocate portions of Taxiway A from A2 to Taxiway G to be 400 feet from Runway 4-22 to expand the commercial apron.
- ✈ Straighten Taxiway C at the approach end of Runway 36 to provide additional general aviation and non-aeronautical developable space.
- ✈ Provide taxiway shoulders for Taxiway A and Taxiway G to accommodate ADG IV aircraft operations to coincide with FAA recommendations.
- ✈ Expand the terminal curb by approximately 87 linear feet.
- ✈ Proceed with a plan west terminal expansion to provide approximately 8,800 sq ft of holdroom space and a total of 10 narrowbody parking positions. Plan for a second terminal expansion to the central core of the terminal if needed after the west terminal expansion to provide additional concession and/or security screening checkpoint space.
- ✈ Decommission four ticket counters to provide additional room for security screening queuing.
- ✈ Add another security screening machine to provide a total of three security screening lanes in PAL 2.
- ✈ Reconfigure lower level to provide approximately 1,000 square feet of space for outbound/inbound baggage make-up operations in PAL 4.

- ✈ Realign Genot Drive and Bussing Drive to provide additional space for rental car and public parking.
- ✈ Proceed with planned expansions to the solar covered lot, economy lot, and satellite lot to provide additional public Parking. In PAL 3, evaluate the need for additional public parking and feasibility to build a parking garage.
- ✈ Continue to reserve areas earmarked for rental car expansion such as the ready and return and QTA area's. Revisit conceptual development plans to confirm adherence to tenant operational requirements and industry standards.
- ✈ Reserve the development area to the westside of the airport located to the northwest for larger aeronautical development (i.e. cargo, large business, or MRO)
- ✈ Reserve the development area to the westside of the airport located to the southwest for future non-aeronautical and/or general aviation development.
- ✈ Earmark available land at the eastern portion of the Airport for future non-aeronautical industrial development.
- ✈ Monitor the Airport's fuel storage reserve and start planning for additional fuel storage capacity in PAL 4.

---

[Intentional Page Break]

