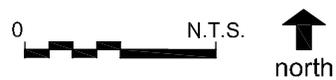
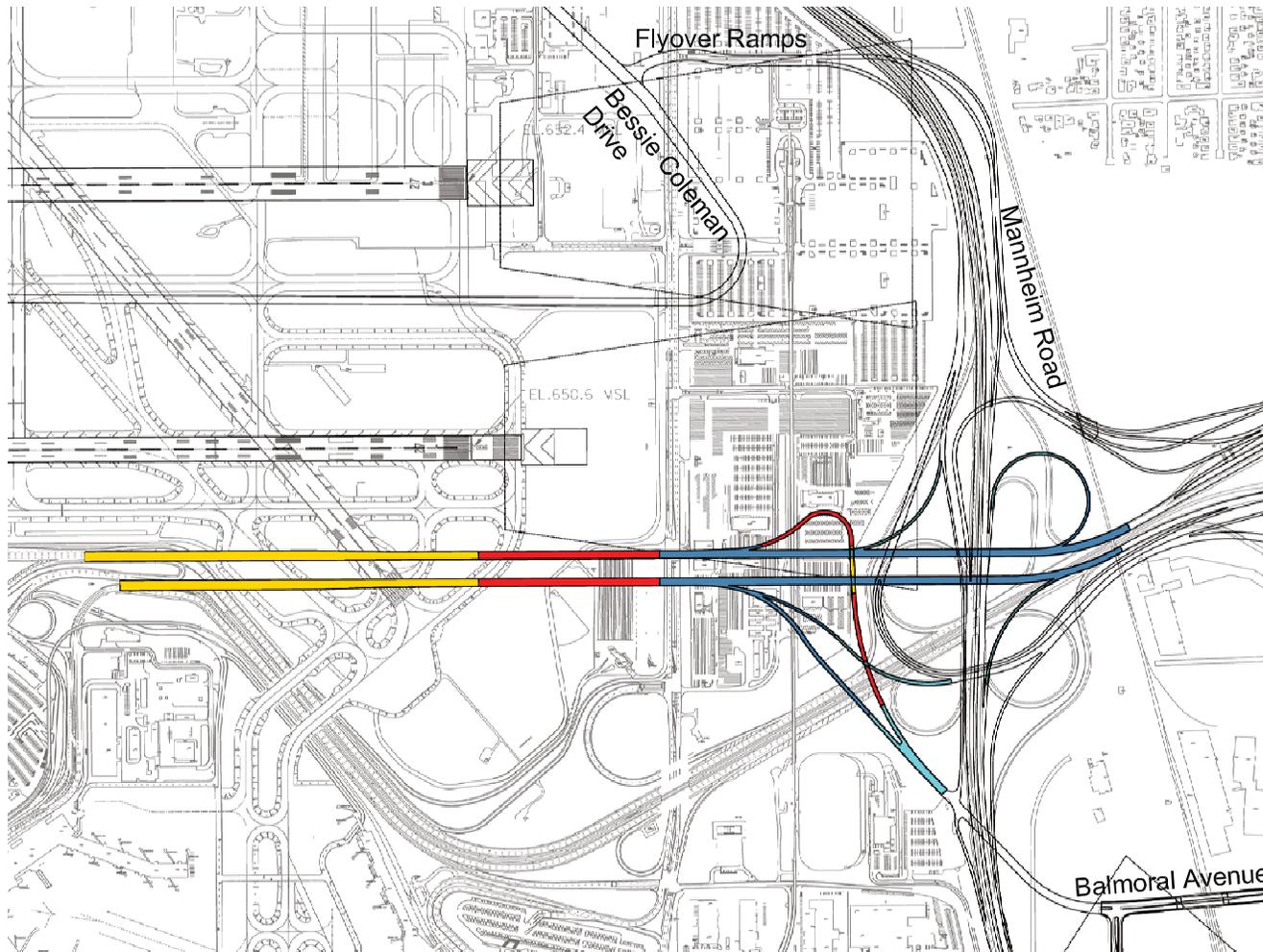


Source: Kimley Horn and Associates, Inc.; Martinez Corp. Aerial Photography (Nov. 2001);
Department of Aviation Airport Management and Records
Prepared by: Kimley-Horn and Associates, Inc.

Exhibit V-97



**I-190 Concepts
Concept 2**

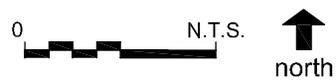


LEGEND

-  Elevated Sections
-  Elevated Transition Sections
-  Surface Sections
-  Below Grade Transition Sections
-  Below Grade Sections

Source: Kimley Horn and Associates, Inc.; Martinez Corp. Aerial Photography (Nov. 2001);
Department of Aviation Airport Management and Records
Prepared by: Kimley-Horn and Associates, Inc.

Exhibit V-98



**I-190 Concepts
Concept 3**

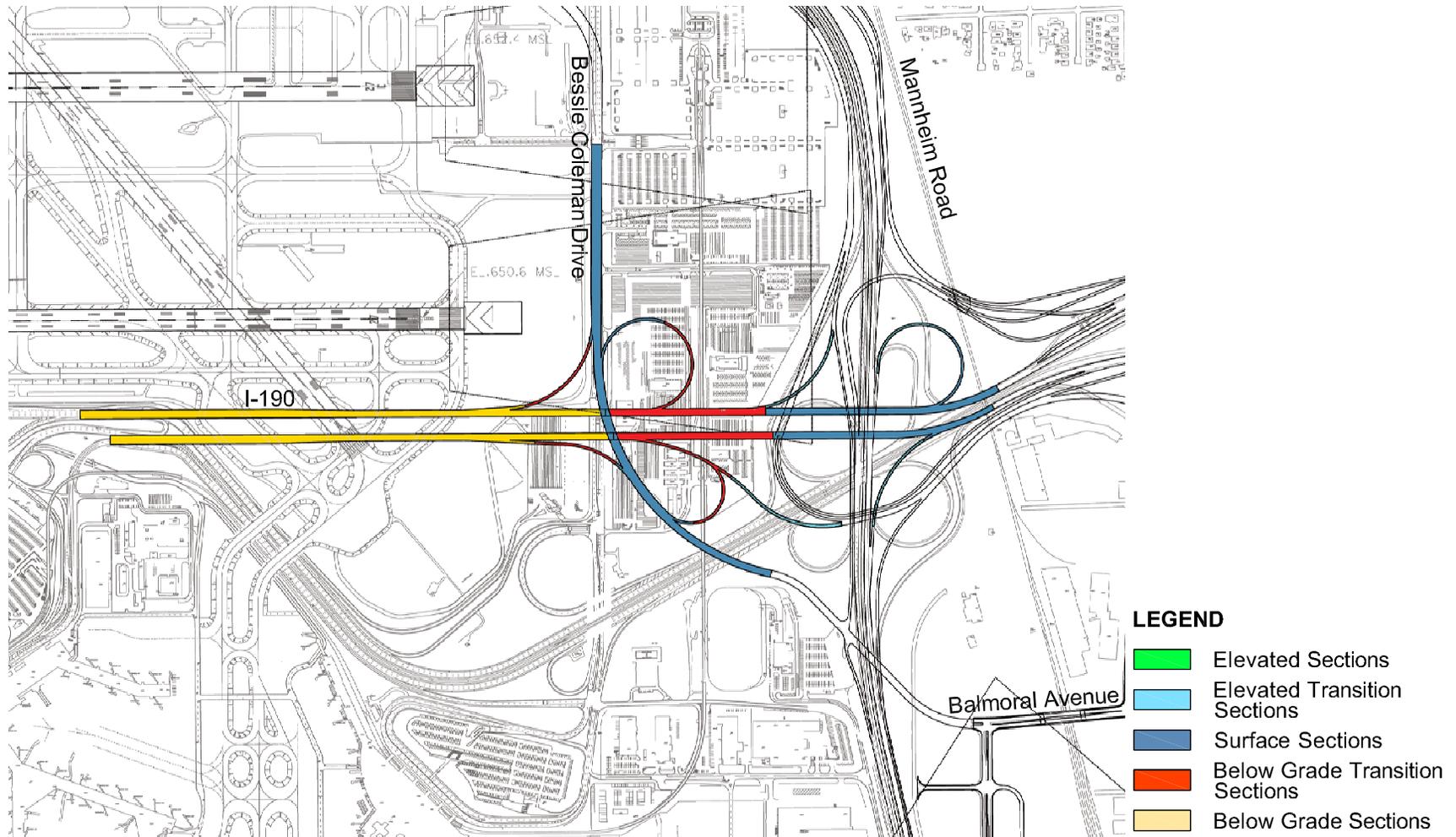
- *Concept 4*, depicted in **Exhibit V-99**, is similar to Concept 3 in regards to the relocation of I-190. However, in this concept Bessie Coleman Drive and Balmoral Drive are connected. Free flow movements are provided between the terminal area and Bessie Coleman Drive/Balmoral Drive. Two proposed ramps are located in the RPZ for Runway 9C-27C, but they comply with height restrictions.

Although alternatives for straightening the alignment of I-190 at the Airport entrance were developed, these concepts were not refined or evaluated for inclusion in the preferred ground access concept. The purpose of this alternatives exercise was to assess opportunities for terminal development in the East Terminal Area; however, this additional space was ultimately not needed to support the preferred terminal plan. These concepts are presented in the Master Plan for documentation purposes only, since they may be deemed worthy of further consideration at a future date.

5.4.2.5 WGP Roadway Concepts

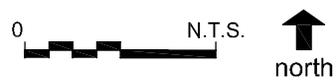
The other roadway improvements that were identified in the WGP planning to support traffic demand are retained in the preferred ground access plan, with two refinements, which are discussed at the end of this section. The WGP roadway improvements include the following:

- *Terminal 5/6 Complex Access Roadways*. The upper and lower level curbside roads for Terminal 5 are extended to serve the proposed Terminal 5/6 Complex. These access roadways will remain independent of the access roadways serving the Terminal Core Area.
- *Lee Street/I-90 Interchange*. To improve regional access to the Northeast Quadrant from the north and west suburbs, a new directional interchange between the Airport and I-90 is planned just east of Lee Street. This project includes new ramps to and from the west on I-90 and relocates the existing eastbound on-ramp farther east. The ramps would be connected to Higgins Road by a proposed roadway that would extend south from I-90 east of Lee Street.
- *Bessie Coleman Drive*. Bessie Coleman Drive provides access to the ground access and collateral development areas on the east side of the Airport. The WGP projected increased demand on this roadway independent of the WGP-planned terminal development and proposed a new alignment and extension of Bessie Coleman Drive north and northwest to connect with Higgins Road and the proposed Lee Street/I-90 interchange improvements. To support planned improvements to I-190, discussed in Section 5.4.2.4, the ramps at the I-190/Bessie Coleman Drive interchange are modified to accommodate the improvements, and Bessie Coleman Drive is widened and slightly realigned to the east of the interchange.
- *Zemke Road Extension*. To support planned development in the Northeast Quadrant, improved access from Mannheim Road would be accommodated by extending Zemke Road to the west to intersect with the realigned Bessie Coleman Drive.
- *Mannheim Road Flyover Ramps*. A series of proposed ramps would provide free-flow access from I-190 and northbound Mannheim Road into the Northeast Quadrant to improve traffic flow and decrease congestion. The Mannheim Road flyover ramps are part of the I-190 improvements projects discussed in Section 5.4.2.4. Although the City of Chicago is involved in this effort, IDOT is the sponsor of this project.



Source: Kimley Horn and Associates, Inc.; Martinez Corp. Aerial Photography (Nov. 2001);
Department of Aviation Airport Management and Records
Prepared by: Kimley-Horn and Associates, Inc.

Exhibit V-99



I-190 Concepts Concept 4

- *Balmoral Avenue Extension.* The Balmoral Avenue extension would cross Mannheim Road on an overpass and connect to Bessie Coleman Drive adjacent to Terminal 5 to provide additional Airport access directly from the Rosemont hotel and convention facilities east of the Airport. This improvement also includes ramps at southbound Mannheim Road, which is a part of the I-190 improvements project and primarily under the jurisdiction of others.

It is noted that the development of Terminal 4 will not necessitate a specific roadway improvement project. The curbside facilities of Terminal 4 will consist of a reallocation of Terminal 3 curbside between the two terminals. Terminal 4 will be accessed along the existing Terminal Core Area access roadway system.

The preferred plan required some refinements of the roadway plan proposed as part of the WGP in the Northeast Quadrant. The inclusion of Runway 9C-27C in the preferred airfield plan requires a shift in the proposed alignment of Bessie Coleman Drive and some changes in the alignment of the Mannheim Road flyover ramps to avoid impacts to 14 CFR part 77 approach surfaces and the RSA. These roadway refinements and the other unrefined WGP roadway improvements are shown in **Exhibit V-100**. A description of the concept refinement follows:

- The proposed extension of Bessie Coleman Drive is realigned to the east in the vicinity of the proposed Runway 27C end.
- The flyover ramps connecting Mannheim Road and Bessie Coleman Drive were modified to connect with the new alignment of Bessie Coleman Drive.

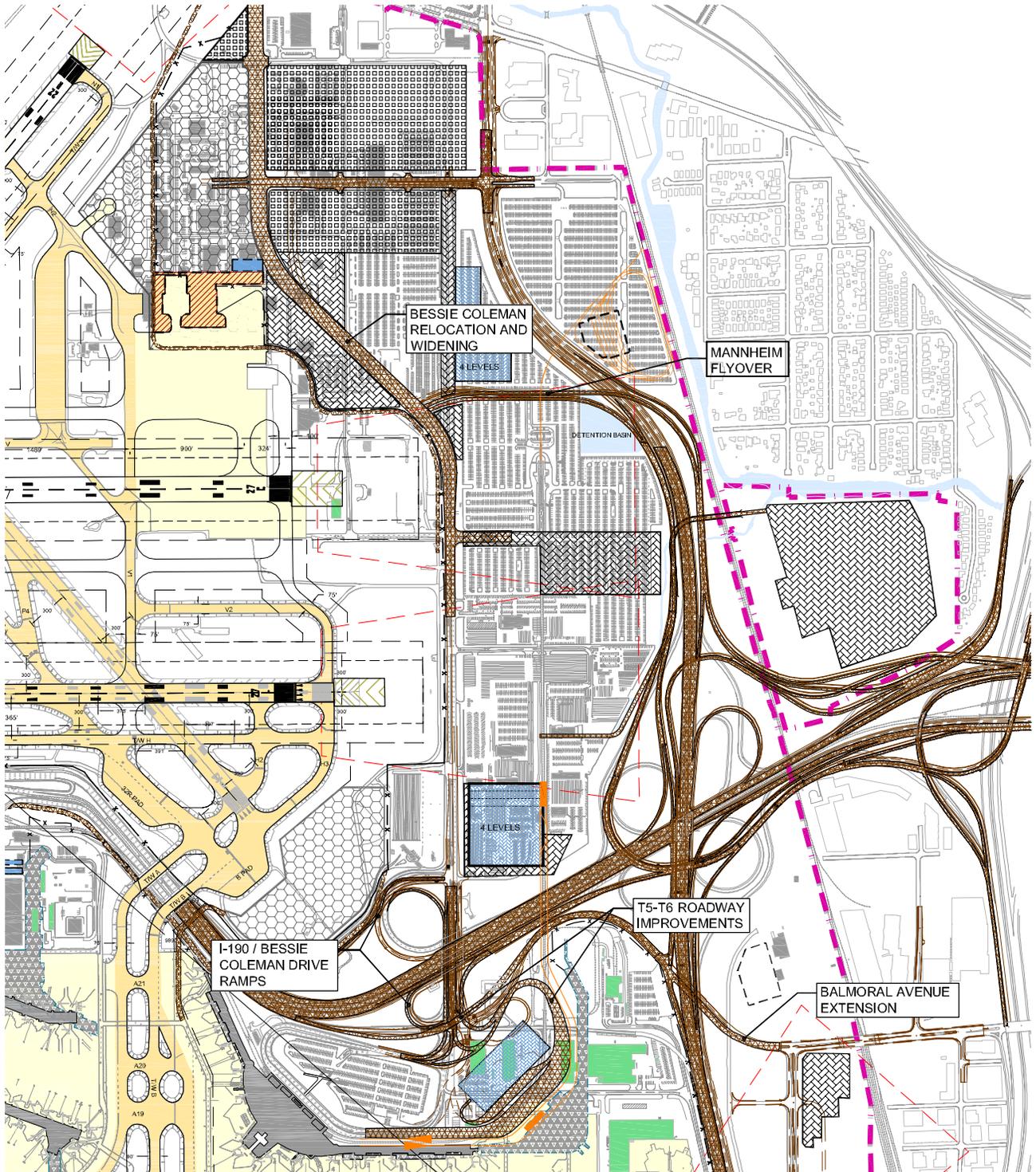
5.4.3 Public Parking

Based on the preferred terminal plan, new parking facilities on the west side of the Airport are needed to support the landside element of the West Terminal Complex. Additionally, existing and planned (i.e., WGP) public parking facilities on the east side of the Airport were evaluated for their ability to accommodate passenger growth projected for the Terminal Core and East Terminal Areas over the planning horizon. In addition to providing parking on both the east and west sides of the Airport, the need to accommodate two types of parking, short-term and long-term parking facilities at both the east and west locations, were assessed.

The following discussions of public parking by location (i.e., east and west) and type (i.e., short-term and long-term) are preceded by a refinement of the parking requirements identified in Section 4.4.2 given the nature and timing of the preferred concept.

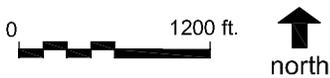
5.4.3.1 Refinement of Public Parking Requirements

Preliminary public parking requirements and assumptions were established in Section 4.4.2. The preferred terminal concept includes terminal facilities on both the east and west sides of the Airport, requiring the provision of parking on both sides. Given the possibility that an interim program year could produce higher passenger volumes (and associated parking demand) on the east side of the Airport if the landside component of the West Terminal Complex were to not open until a late phase of development, an early phasing concept was developed to evaluate needs of public parking requirements on the east side of the Airport. This early phasing concept included the opening of the landside component of the West Terminal Complex in 2015, thus, the year 2014 was selected for evaluation of parking requirements for the east side of the Airport.



Source: Ricondo & Associates, Inc.; Martínez Corp. Aerial Photography (Nov. 2001);
Department of Aviation Airport Management and Records
Prepared by: Ricondo & Associates, Inc.

Exhibit V-100



World Gateway Program Roadway Improvements

The basic assumptions supporting the development of public parking facility requirements defined in Section 4.4.2 do not change. Based on those assumptions, **Table V-17** summarizes the refined public parking facility requirements for 2014 and 2018 as they apply to the east and west sides of the Airport. In 2018, when passengers will access both the east and west sides of the Airport, the demand for parking at the West Terminal Complex was based on the forecast of passenger activity, as presented in Section III. Public parking requirements are based on peak month originating enplanements, which in 2018, include 2,192,320 peak month originating enplanements on the east side, or 84 percent, and 408,146 peak month originating enplanements on the west side, or 16 percent, as established in Section 4.4.2.

Table V-17

Summary of Public Parking Facility Requirements

	Peak Month Originating Enplanements	Public Parking Stalls		
		Short-Term	Long-Term	Total
2014 – East Side	2,257,225	16,653	13,625	30,278
2014 – West Side	0	0	0	0
2014 – Total	2,257,225	16,653	13,625	30,278
2018 – East Side	2,192,320	16,174	13,234	29,408
2018 – West Side	408,146	3,010	2,465	5,475
2018 – Total	2,600,466	19,184	15,699	34,883

Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Public parking requirements are projected to meet the highest level of demand, which on the east side is experienced in 2014, per the preliminary phasing. Based on this phasing concept, there would be 64,905 more peak month originating enplanements on the east side in 2014 than in 2018.

5.4.3.2 East Side Short-Term Public Parking Concept

The WGP includes expansion of short-term public parking in the Terminal Core Area, as well as development of new short-term parking associated with Terminal 6. In this concept, a total of 21,280 short-term public parking stalls are provided in the Terminal Core and East Terminal Areas (15,707 stalls in the proposed expansion of Lot A, 1,048 in Lot B, 575 in Lot C, 1,050 in Lot D, and 2,900 in the proposed Terminal 6 parking structure).⁵ This development proposed of 21,280 stalls meets projected facility requirements for short-term public parking on the east side of the Airport as presented in Table V-17. Therefore, no alternative concepts were considered.

5.4.3.3 East Side Long-Term Public Parking Concepts

Estimated facility requirements for long-term parking on the east side closely matched the requirements projected in the WGP. The WGP included an expansion of the existing Lot E surface parking southward (into the existing rental car area), the inclusion of public parking in the northwest portion of Lot F, and the development of a new six-level elevated parking structure in Lot E. Based

⁵ *Final Environmental Assessment, Chicago O'Hare International Airport, World Gateway Program and Other Capital Improvements*, Table 2-7: Public Parking Summary, February 8, 2003

on the preferred airfield concept defined under this master planning process, the proposed WGP long-term elevated parking structure was located within the RPZ for new Runway 9C-27C. The need for relocation of the parking structure, as well as several other programmatic differences between the WGP and the development plan, prompted the reconsideration of land use allocation in the Northeast Quadrant of the Airport.

- *Concept 1*, depicted in **Exhibit V-101**, includes long-term parking located between the area proposed for future development and the Mannheim Road flyover ramps. It is not likely that a parking structure could be constructed on the parcel west of Bessie Coleman Drive, due to its location within the eastern RPZs of Runways 9C-27C and 9R-27L. A second parcel, at the northeast corner of I-190 and Mannheim Road, provides additional space for parking; however, the I-190/Mannheim Road ramp interchanges make the ability to provide access to this parcel difficult.
- *Concept 2*, depicted in **Exhibit V-102**, accommodates long-term parking on the west side of Mannheim Road. This concept provides sufficient area to develop a parking structure north of the Mannheim Road flyover ramps; however, as depicted, the demand can be met without a parking structure.
- *Concept 3*, depicted in **Exhibit V-103**, is a refinement of Concept 2. Upon finalization of the parking requirements, area not needed to support long-term public parking was dedicated to other land uses. The preferred concept includes development of a four-level parking structure to the north of the Mannheim Road flyover ramps and maintains the existing Lot E ATS Station.⁶ This concept provides 10,153 stalls in surface parking and 3,472 stalls in a proposed elevated parking structure, for a total of 13,625 long-term public parking stalls.

Each of the concept development alternatives satisfied the facility requirements for long-term parking spaces on the east side of the Airport. The individual components (i.e., public parking, rental car facilities, etc.) of each of the three Northeast Quadrant land use alternatives were not evaluated independently. Rather, each concept as a whole was evaluated, as discussed in the following paragraphs.

Concept 1 offers the advantage of preserving a highly visible development opportunity on the parcel defined to the south by I-190, to the west by Bessie Coleman Drive, to the north by the Runway 9R-27L RPZ, and to the east by Mannheim Road. Preserving this parcel for future development, however, requires that the planned consolidated rental car facility be located elsewhere. In this case, the consolidated rental car facility is located north of the Runway 9C-27C RPZ and east of Mannheim Road. This site is currently planned for use as the relocated ATS O&M and test track facility. Locating the consolidated rental car facility in this location increases travel time and distance for rental car passengers using the ATS and would force the ATS O&M facility to be located elsewhere.

⁶ Subsequent comment from the FAA on the draft December 2002 Airport Layout Plans Package resulted in the removal of public parking from the new Runway 9C-27C extended OFA as well as the closure of the Lot E ATS station. Chapter VI discusses refinement of this concept to address the FAA's comment.