2.2 Design Refinements since Tier Two Draft Environmental Impact Statement

The comments received on the Tier Two Draft EIS prompted several design features to be revisited. In several cases, the comments were determined to warrant changes to the engineering plans (see Appendix B for additional details regarding comment letters and IDOT responses). Changes included revisions to roadway features and property access. Each of the major features that were re-evaluated is briefly discussed in the following subsections.

2.2.1 I-294 Off-Ramp Location to County Line Road

The Maywood Sportsmen's Club provided a comment letter to IDOT and suggested that the off-ramp from I-294 to County Line Road be relocated to avoid safety issues that include: turning vehicles to and from their facility, water quality concerns, displacement of club facilities, and lighting issues both from their facility and oncoming vehicle headlights. These concerns required a series of seven meetings with the Maywood Sportsmen's Club, City of Elmhurst, Village of Northlake, Illinois Tollway, and others to find an acceptable solution. Five alternates were developed during the course of these discussions that would address the concerns of the Maywood Sportsmen's Club. The placement of the ramp had to be sensitive to the maintenance of travel performance on the mainline of I-294. Movement of the ramp exit too far north would result in a poor weaving section between the connection of the West Bypass corridor with I-294 near Grand Avenue, and the off-ramp from I-294 to County Line Road. A poor weaving section would generate traffic turbulence resulting in slower mainline speeds and congestion and operational issues. The objective in this analysis was to avoid proposing a new ramp location with unacceptable design conditions, maintain safe ingress and egress to the Maywood Sportsmen's Club, manage stormwater runoff to avoid lake contamination, and to provide access to the second largest employer (McMaster-Carr) in Elmhurst from the ramp.

In the review of the alternates by the stakeholders, it was agreed that Alternate B would best meet the objectives outlined above (see Figure 2-3).



In further evaluation of the preferred location, the Maywood Sportsmen's Club requested a screen or wall along their property line facing County Line Road to reduce headlight glare into their facility. The preferred arrangement for the ramp has been relocated to reduce the concerns of the Maywood Sportsmen's Club and includes the sight screen. The sight screen is approximately 1,100 feet in length, and will likely be a post and concrete panel construction. Drainage located along the Maywood Sportsmen's Club property will be a closed system comprised of a piped system that would be conveyed to open channel drainage located in the in-field areas of the roadway and conveyed to nearby stream channels. The closed drainage system (stormwater pipe system) would be extended beyond the south end of the sight screen for about 200 feet to the entrance of the club. This feature would capture roadway runoff that would otherwise drain to the lake. With the planned drainage system, all roadway runoff would be directed away from the Maywood Sportsmen's Club lake. In a meeting on June 19, 2012, the stakeholders acknowledged agreement with the ramp arrangement shown in Figure 2-3. The final arrangement for the ramp would have no impact to wetlands, waters, threatened or endangered species, or cultural resources. Some additional land acquisition (0.65 acre) and tree displacements are required.

2.2.2 Frontage Road Design between IL 83 and York Road

Both the Village of Bensenville and Elk Grove Village suggested that the frontage road system between IL 83 and York Road be revised (see Figure 2-4). They indicated that the proposed arrangement was circuitous, added to driver confusion, and impaired access to industrial and commercial development in the vicinity. The primary issue was the frontage road cross-over from the south side of the mainline to the north side at Supreme Drive. In further review of the arrangement, the frontage road was extended approximately 1,500 feet to IL 83 on the south side of the mainline. The extended frontage road from Supreme Drive to IL 83 would be one-way in the eastbound direction. The



arrangement still requires the cross-over for west bound travel on the frontage road for connection with IL 83. However, the extension provides greatly improved access to properties between IL 83 and Supreme Drive on the south side of the mainline. The revised frontage road system remains in the original footprint of the project; therefore, no additional right-of-way is needed, no environmental resources are impacted, and there are no displacements of residential or commercial properties required. The at-grade railroad crossing by the frontage roads will require review and approval from the Interstate Commerce Commission (ICC).

2.2.3 Internal Circulation Road in Hamilton Lakes' Development

The Village of Itasca and Hamilton Lakes' Development have been involved in the proposed EO-WB project from its inception. They have commented frequently on design aspects and, in particular, access to and from the community and a major development (Hamilton Lakes' Development) near the I-290 and Elgin O'Hare corridor interchange. During the Tier Two process, many access refinements have been considered for properties near the I-290 and Elgin O'Hare corridor interchange. During the review of the 2040 roadway plans, the Village of Itasca and Hamilton Lakes' Development requested an additional design refinement that would improve traffic circulation at the interchange area, and within the Hamilton Lakes' Development with the addition of an approximately 1,000-foot roadway section connecting Park Boulevard to Pierce Road (see Figure 2-5). This new roadway section would improve the existing traffic distribution into and through the development, and would also provide improved traffic flow to future development planned within the site. The traffic movement at the intersection of Park Boulevard and Pierce Road along with the new extension would warrant a signal. The added roadway would not impact any natural resources nor displace any residential or commercial structures.



2.2.4 Intersection Design at IL 72 and Elmhurst Road

The intersection at IL 72 (Higgins Road/Touhy Avenue) and Elmhurst Road would be impacted by EO-WB related traffic and requires improvements to accommodate future traffic. As shown in the Tier Two Draft EIS, four design alternates were considered to improve future conditions including:

• Intersection Widening Alternate

- Continuous Flow Intersection (CFI) Alternate
- Quadrant Bypass (Old Higgins Road) Alternate
- Quadrant Bypass (Greenleaf Avenue) Alternate

With the close of the public comment period on May 14, 2012, stakeholders requested additional study regarding the potential solutions at this location. Two alternates were reevaluated including the Quadrant Bypass (Old Higgins Road) and the Quadrant Bypass (Greenleaf Avenue). The refinements included design measures to improve overall traffic performance and adjustments that would reduce environmental issues identified during earlier studies.

The Quadrant Bypass (Old Higgins Road) Alternate includes several new features (see Figure 2-6). First, the configuration of the existing IL 72 and Elmhurst Road intersection would be generally maintained; however, four travel lanes are provided for northbound travel, adding to the efficiency of this travel movement. Additionally, Old Higgins Road would be realigned at the connection with Elmhurst Road. These modifications would

eliminate one turn phase at the existing IL 72 and Elmhurst Road intersection and provide more green time to critical movements. In addition, the realignment of Old Higgins Road provides added spacing between the intersections of IL 72 and Elmhurst Road and Old Higgins Road and Elmhurst Road with the objective to reduce northbound intersection queues from spilling through the Old Higgins Road and Elmhurst Road intersection. This alternate would only impact one business property (displacing a vacant building), and



would impose minor constraints to business access in the southeast quadrant of the IL 72 and Elmhurst Road intersection (i.e., right-in/right-out). Although, access would be slightly impaired for several businesses from IL 72, each of these properties has full access from Old Higgins Road.

The Quadrant Bypass (Greenleaf Avenue) Alternate includes a realignment of the bypass to avoid displacement of the Rogers property, and reduction of the width of Greenleaf Avenue near the connection with Elmhurst Road (see Figure 2-7). These modifications avoid the displacement of six businesses, and further reduce business impacts at the intersection of Greenleaf Avenue and Elmhurst Road. The narrowed right-of-way reduces impact to



business parking and traffic circulation within adjacent business properties. Although, the displacement of the Rogers property is avoided, some of the tenant parking would be impacted. Adjacent undeveloped properties would be purchased for replacement parking. This concept would also require the closure of several driveways near the Greenleaf Avenue and Elmhurst Road intersection. Impacts to natural resources would consist of 0.25 acre of low quality wetland.

The evaluation of the two remaining intersection alternates concluded that the Quadrant Bypass (Old Higgins Road) Alternate is the preferred alternate. This alternate provides an acceptable level of traffic performance for all critical movements, and exhibits comparatively fewer impacts including: less right-of-way requirements, fewer displaced business parking spaces, less disruption to business property ingress and egress, and fewer natural resource impacts. Additionally, this alternate, unlike the Quadrant Bypass (Greenleaf Avenue) Alternate, would not involve O'Hare Airport's Runway 9L-27R RPZ. The Quadrant Bypass (Greenleaf Avenue) Alternate would require properties in the RPZ for replacement of business parking, which would require FAA approval for the release of the property for non-aviation uses. For the reasons stated above, the Quadrant Bypass (Old Higgins Road) Alternate is preferred.

Presently, the interchange improvement at the Elmhurst Road and I-90 interchange is planned early in the phasing, and the north leg of the West Bypass corridor is planned late in the phasing. This sequence causes traffic impacts to occur at the intersection of IL 72 and Elmhurst Road that require improvements to be operational by 2022. The construction phasing for the overall project is continually being refined and should adjustments in phasing occur, then further discussions regarding the scope of the intersection improvement may be initiated.

