Strategic Regional Arterial

Illinois Route 47
from US Route 30 (Base Line Road) to
Price Road (Illinois Route 173
SRA Alternative Alignment)

FINAL REPORT

Operation GreenLight

Illinois Department of Transportation
August, 1995

FOREWORD

Illinois Route 47 is designated as a Strategic Regional Arterial (SRA) from the Kane/Kendall County Line at US Route 30 (Base Line Road), south of Sugar Grove, to the Illinois Route 173 SRA alternative alignment along Price Road, south of Hebron.

This SRA Report has been prepared for the Illinois Department of Transportation (IDOT) and the SRA Subcommittee of the Chicago Area Transportation Study (CATS) by Meridian Engineers & Planners, Inc.

The Illinois Route 47 SRA is intended to function as part of a regional arterial system. It, along with other SRA routes and the regional expressway and transit systems, will provide a network to carry high volumes of long-distance traffic. This report is one element of a long-range plan for all routes in the SRA network. Together, the route studies constitute a comprehensive, coordinated plan for the entire SRA network.

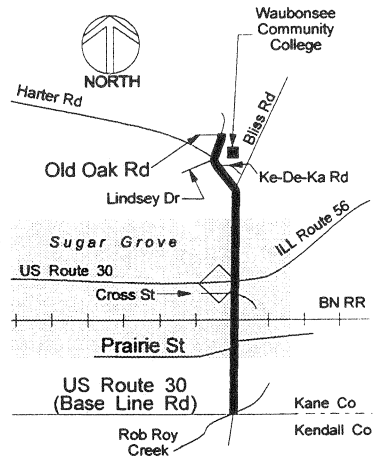
Included in this report are a description of the SRA study objectives and process, a detailed explanation and analysis of the existing route conditions, recommendations for improvements, and documentation of the process including comments received.

Information regarding the study and this report are available from the Illinois Department of Transportation, through the SRA Project Manager - Mr. Rich Starr, 708/705-4095.

EXECUTIVE SUMMARY

SRA studies have resulted in specific segment recommendations for this route's thirteen segments.

Segment 1: US Route 30 (Base Line Road) to Prairie Street (east)

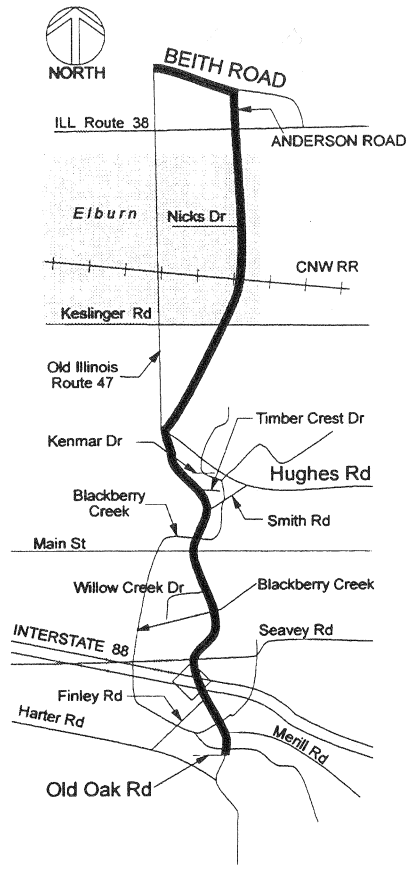


- Develop four 12 ft. through lanes, a grass median, shoulders, and open drainage in a right-of-way expanded to 160 ft.
- Provide single left and right turn lanes at US Route 30.
- Manage access with median breaks at 1/2 mile spacing between Jericho Road and Prairie Street (east), other access right in/right out only.
- Replace structure over Rob Roy Creek with two structures.
- Accommodate a park-and-ride facility at US Route 30.

Segment 2: Prairie Street (east) to Old Oak Road

- Develop four 12 ft. through lanes, a raised median, curb and gutter, and closed drainage from Prairie Street to Bliss Road. The right-of-way between Prairie Street and Illinois Route 56 will be expanded to 120 ft. From Illinois Route 56 to Bliss Road, the existing 180 ft. to 230 ft. right-of-way will be maintained.
- Develop four 12 ft. through lanes, a grass median, shoulders, and open drainage in the existing 200 ft. to 230 ft. right-of-way from Bliss Road to Old Oak Road.
- Provide signals at Prairie Street (east), Illinois Route 56 SB to EB ramp, Bliss Road, and the future Waubonsee Community College access at Lindsey Drive.
- Manage access with median breaks at two locations, other access right in/right out only.
- Replace the BN RR structure.
- Provide WB to NB ramp and standard geometry and structural clearance at Illinois Route 56.
- Coordinate bike linkages at Waubonsee Community College with existing bike paths.

Segment 3: Old Oak Road to Alternative Alignment (Hughes Road)



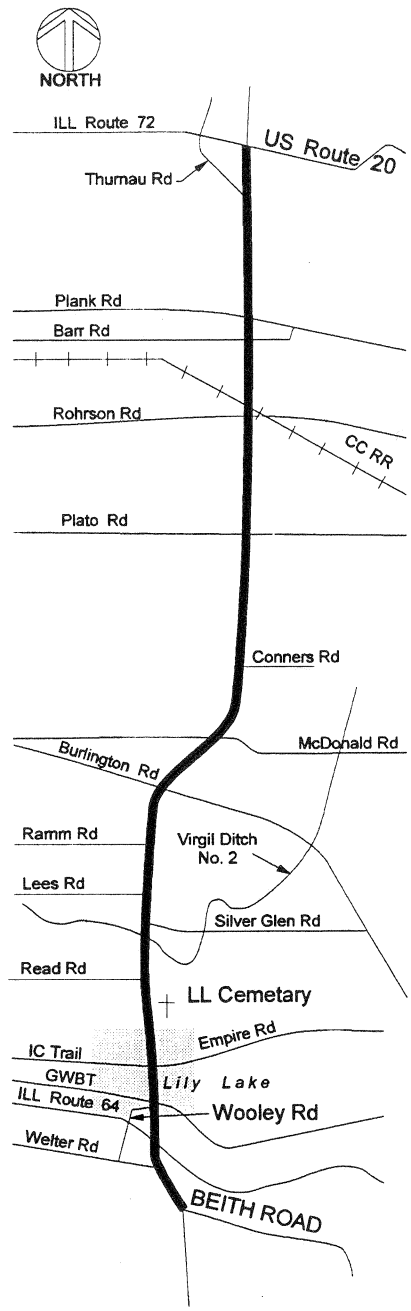
- Develop four 12 ft. through lanes, a grass median, shoulders, and open drainage. The right-of-way between Scott Road and Finley Road will be expanded to 180 ft. From Old Oak Road to Scott Road; and from Finley Road to Hughes Road, the right-of-way will be expanded to 160 ft.-200 ft.
- Develop frontage roads on the west side of Illinois Route 47 between Scott Road and Finley Road.
- Provide single left and right turn lanes at the appropriate approaches at the Interstate 88 intersections.
- Provide signals at Old Oak Road, Scott Road, the Interstate 88 ramps, Seavey Road, Green Road, and Main Street.
- Manage access with median breaks at five locations, other access right in/right out only.
- Replace three structures over Blackberry Creek with two structures each.
- Accommodate a park-and-ride facility at Interstate 88.

Segment 4: Alternative Alignment from Hughes Road to Old Illinois Route 47

- Provide an alternative alignment beginning at Hughes Road and following along an extended alignment of Anderson Road to Illinois Route 38. It then continues along the existing alignments of Anderson and Beith Roads until it intersects with existing Illinois Route 47.
- Develop four 12 ft. through lanes, a grass median, shoulders, and open drainage in a right-of-way expanded to 160 ft.
- Provide single left and right turn lanes at Illinois Route 38.
- Provide signals at Keslinger Road, Nicks Drive, and Illinois Route 38.
- Manage access with median breaks at 1/2 mile spacing and at Beith Road, other access right in/right out only.
- Provide a grade separation at the CNW Railroad.
- Accommodate a Metra station and park-and-ride facility in Elburn.
- Realign Old Illinois Route 47 at Hughes Road.

Segment 5: Old Illinois Route 47 to Woolley Road

- Develop four 12 ft. through lanes, a grass median, shoulders, and open drainage in a right-of-way expanded to 160 ft.
- Provide single left and right turn lanes at Illinois Route 64.
- Provide a signal at Illinois Route 64.
- Manage access with median breaks at two locations, other access right in/right out only.
- Replace the Great Western Bike Trail structure.
- Accommodate a park-and-ride facility at Illinois Route 64.
- Coordinate pedestrian/bicycle linkage to the Great Western Bike Trail, and Lily Lake.



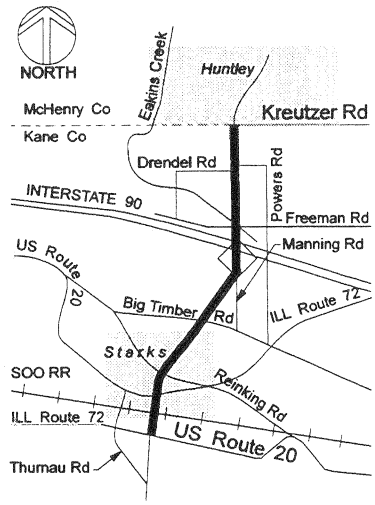
Segment 6: Woolley Road to north of Lily Lake Cemetery

- Develop four 12 ft. through lanes, no median, 16 ft. parkways, curb and gutter, and closed drainage in the existing 80 ft. right-of-way.
- (Post 2010 Improvement) - Develop four 12 ft. through lanes, a raised median, 17 ft. parkways, curb and gutter, and closed drainage in a proposed 100 ft. right-of-way.
- Provide a signal at Empire Road/IC Trail.

Segment 7: North of Lily Lake Cemetery to US Route 20

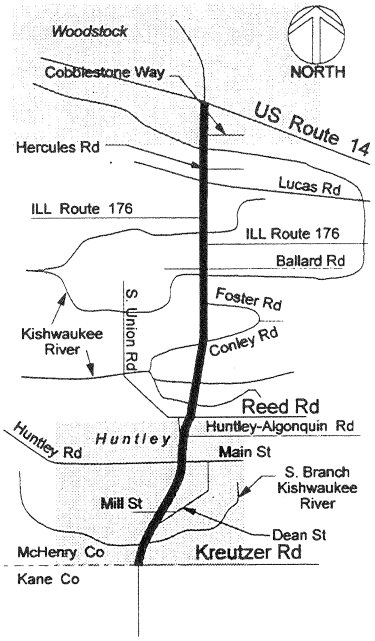
- Develop four 12 ft. through lanes, a grass median, shoulders, and open drainage in a right-of-way expanded to 160 ft.
- Realign Illinois Route 47 near Burlington Road to improve the horizontal alignment.
- Provide signals at Silver Glen Road, Burlington Road, and Plank Road.
- Manage access with median breaks at twelve locations, other access right in/right out only.
- Replace the existing structure over Virgil Ditch No. 2 with two structures.

Segment 8: US Route 20 to Kreutzer Road



- Between US Route 20 and Big Timber Road, develop four 12 ft. through lanes, a grass median, shoulders, and open drainage in a right-of-way expanded to 160 ft.
- Between Big Timber Road and Interstate 90, develop six 12 ft. through lanes, a raised median, curb and gutter, and closed drainage in a right-of-way expanded to 160 ft.
- Between Interstate 90 and Oak Creek Parkway, develop six 12 ft. through lanes, a raised median, curb and gutter, and closed drainage in a right-of-way expanded to 175 ft.
- Between Oak Creek Parkway and Powers Road, develop six 12 ft. through lanes, a raised median, curb and gutter, and closed drainage in a right-of-way expanded to 154 ft.
- Between Powers Road and Kreutzer Road, develop four 12 ft. through lanes, a raised median, curb and gutter, and closed drainage in a right-of-way expanded to 140 ft.
- Provide single left and right turn lanes at US Route 20 and Illinois Route 72.
- Provide signals at US Route 20, Illinois Route 72, Big Timber Road, Freeman Road, Oak Creek Parkway, and Powers Road. Provide signal interconnection between US Route 20 and Illinois Route 72.
- Manage access with median breaks at 1/4 mile spacing, other access right in/right out only.
- Provide complete interchange at Interstate 90 and widen the Interstate 90 structure.
- Accommodate a Metra station and a park-and-ride facility in Starks and a park-and-ride facility at Interstate 90.

Segment 9: Kreutzer Road to Reed Road

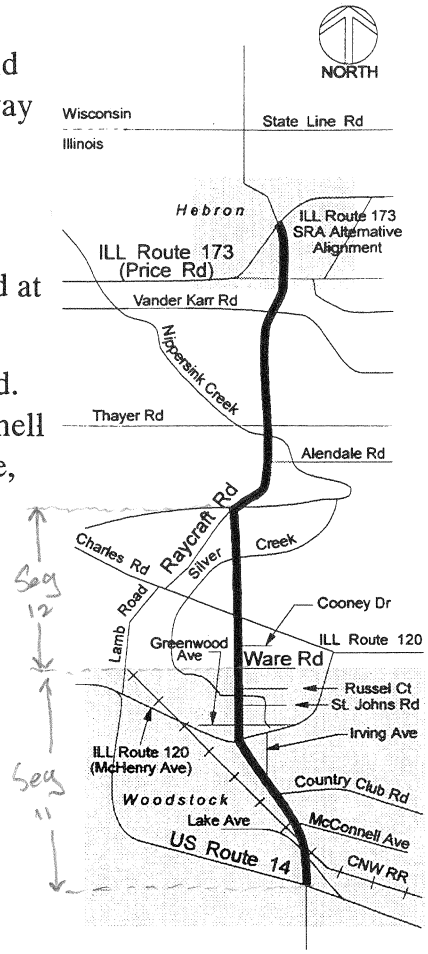


- Develop four 12 ft. through lanes, a median, curb and gutter, and closed drainage. The existing 120 ft. right-of-way from Kreutzer Road to Mill Street will be maintained. From Mill Street to Reed Road the right-of-way will be expanded to 100 ft. A raised median is recommended between Kreutzer Road and Mill Street and between Huntley Algonquin Road and Reed Road. Between Mill Street and Huntley Algonquin Road, a flush median is recommended.
- Provide single left and right turn lanes at Main Street and Huntley Algonquin Road.
- Provide signals at Kreutzer Road, Dean Street, and Mill Street. Provide signal interconnection between Kreutzer Road, Dean Street, Mill Street, Main Street, and Huntley Algonquin Road.
- Manage access with median breaks at three locations, other access, in the locations where a raised median is used, will be right in/right out only.
- Widen the South Branch of the Kishwaukee River structure.
- Accommodate a Metra station and park-and-ride facility in Huntley.

Segment 10: Reed Road to US Route 14

- Develop four 12 ft. through lanes, a grass median, shoulders, and open drainage in a right-of-way expanded to 160 ft. Just south of US Route 14, the existing right-of-way and frontage roads will be maintained.
- Provide single left and right turn lanes at the appropriate Illinois Route 176 intersections.
- Provide signals and signal interconnection at Cobblestone Way and the south frontage road termini at US Route 14.
- Manage access with median breaks at thirteen locations, other access right in/right out only.
- Replace the structure over the Kishwaukee River with two structures.
- Accommodate park-and-ride facilities at Illinois Route 176 (south) and at US Route 14.

Segment 11: US Route 14 to Ware Road



- Develop four 12 ft. through lanes, a flush median, curb and gutter, and closed drainage. The existing 80 ft. right-of-way will be maintained except between Irving Avenue and Greenwood Avenue where the right-of-way will be expanded to 80 ft.
- Provide single left and right turn lanes at US Route 14 and at Illinois Route 120 (McHenry Avenue).
- Provide signals at McConnell Avenue and St. John's Road. Provide signal interconnection between Lake and McConnell Avenues, and between Country Club Road, Irving Avenue, and Illinois Route 120.
- Replace the CNW Railroad structure.
- Coordinate recommendations with the Gewalt Hamilton - Woodstock Access Study (Appendix "A").

Segment 12: Ware Road to Raycraft Road

- Develop four 12 ft. through lanes, a raised median, and closed drainage in a right-of-way expanded to 120 ft.
- Provide single left and right turn lanes and a signal at Charles Road.
- Manage access with median breaks at three locations, other access right in/right out only.
- Replace the structure over Silver Creek with two structures.

Segment 13: Raycraft Road to Price Road (Illinois Route 173 SRA Alternative Alignment)

- Develop four 12 ft. through lanes, a grass median, shoulders, and open drainage in a right-of-way expanded to 160 ft.
- Provide single left and right turn lanes at Price Road (Illinois Route 173).
- Provide signals at Raycraft Road and Price Road.
- Manage access with median breaks at nine locations, other access right in/right out only.
- Replace structures over Slough and Nippersink Creeks with two structures each.
- Accommodate a park-and-ride facility at Price Road (Illinois Route 173).