

SECTION 7

INVENTORY OF SELECTED INTERSECTIONS AND RECOMMENDATIONS FOR FURTHER STUDY

The study corridor includes a total of 19 signalized intersections. Through consultation with Campbell County and the KYTC, seven intersections were selected for a field view and evaluation of current conditions. Sketches of five of the most problematic intersections are provided, showing approximate geometrics, number of lanes and lane use designations, pedestrian crosswalks, traffic signal arrangements and indications (including pedestrian signals), and nearby access points.

The southern portion of the study corridor, from KY536 to East Alexandria Pike in Cold Spring includes the City of Alexandria and new development north and south of KY9 (AA highway). Many parcels adjacent to US27 remain undeveloped or underdeveloped. Significant intersections along this portion include KY10, KY709, KY9 (AA highway) and Crossroads Boulevard.

- KY10: The intersection at KY10 (Figure 7-1) experiences a significant number of vehicle accidents. Deficiencies include the limited sight distance and the lack of clear travel paths through the intersection from KY10.
- KY709: KY709 provides a connection between US27 and the AA highway. KY709 also provides access to Village Green Shopping Center. The lack of a safe pedestrian crossing and sight distance deficiencies due to curvature are problems at this location.
- KY9 (AA highway): US27 near KY9 includes three signalized intersections and turn lanes within ½ mile. Recently, new commercial development has opened along Crossroads Boulevard on the north side of KY9, as well as recent development just south of KY9. The Crossroads Boulevard commercial center continues to expand and may include future residential development. Intersection delays at Crossroads Blvd. and US27 (Figure 7-2) can be expected, as this is currently the only entrance and exit point. The modification of turn lanes, signage and eventual signalization from southbound US27 to KY9 should be investigated.

This southern portion of the study corridor is a developing area where development pressures are just beginning or will soon occur. As a developing area, access management is fundamental to preventing the mobility and safety problems caused by multiple curb cuts and improperly spaced and coordinated traffic signals. A corridor plan should be developed which proposes a system of public and private streets and access points. This plan should be officially adopted for governing the provision of access to property parcels along US27. The plan should also specify appropriate number, location, and spacing of traffic

Figure 7-1
Alexandria Pike (US 27) and KY 10 Intersection

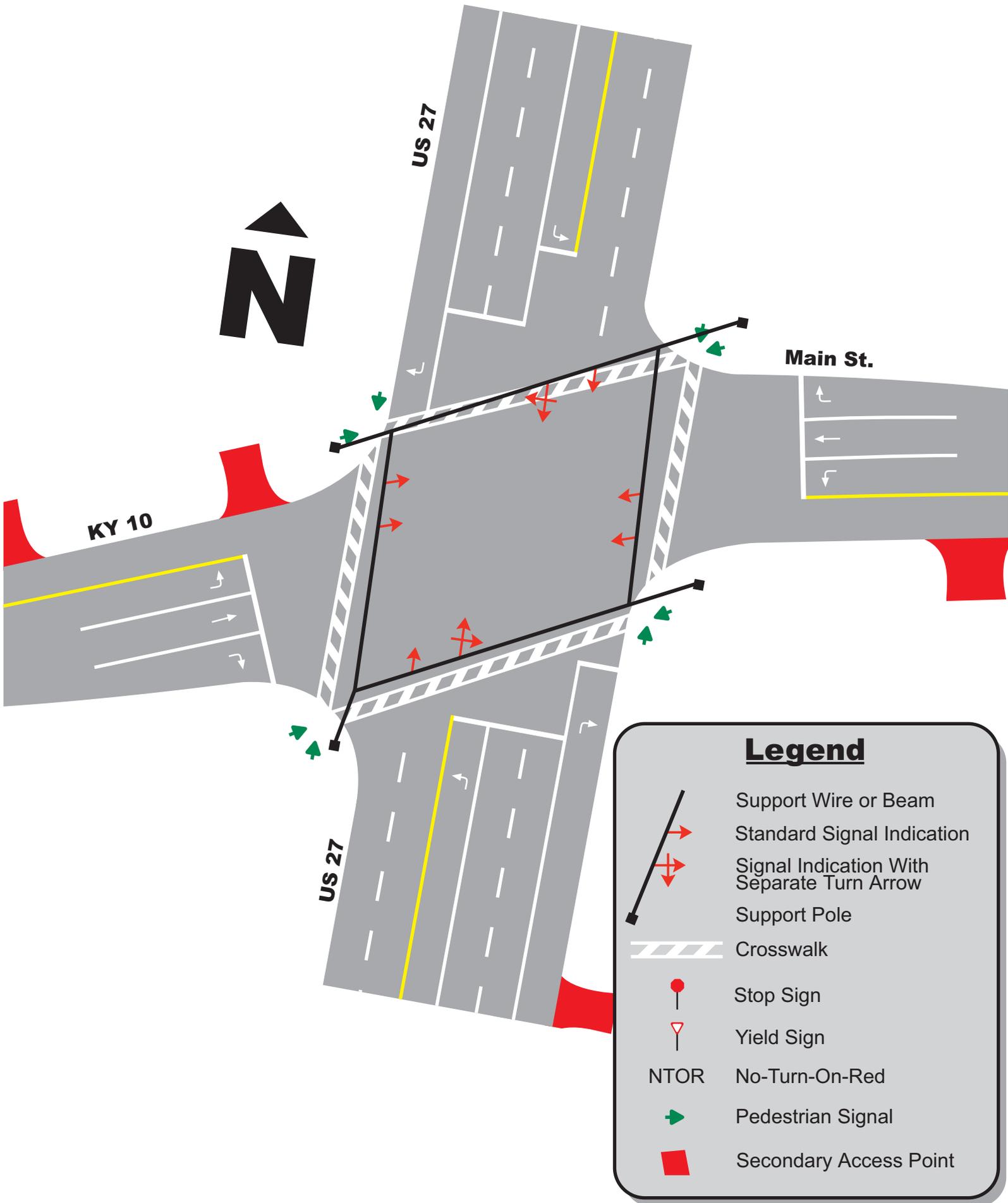
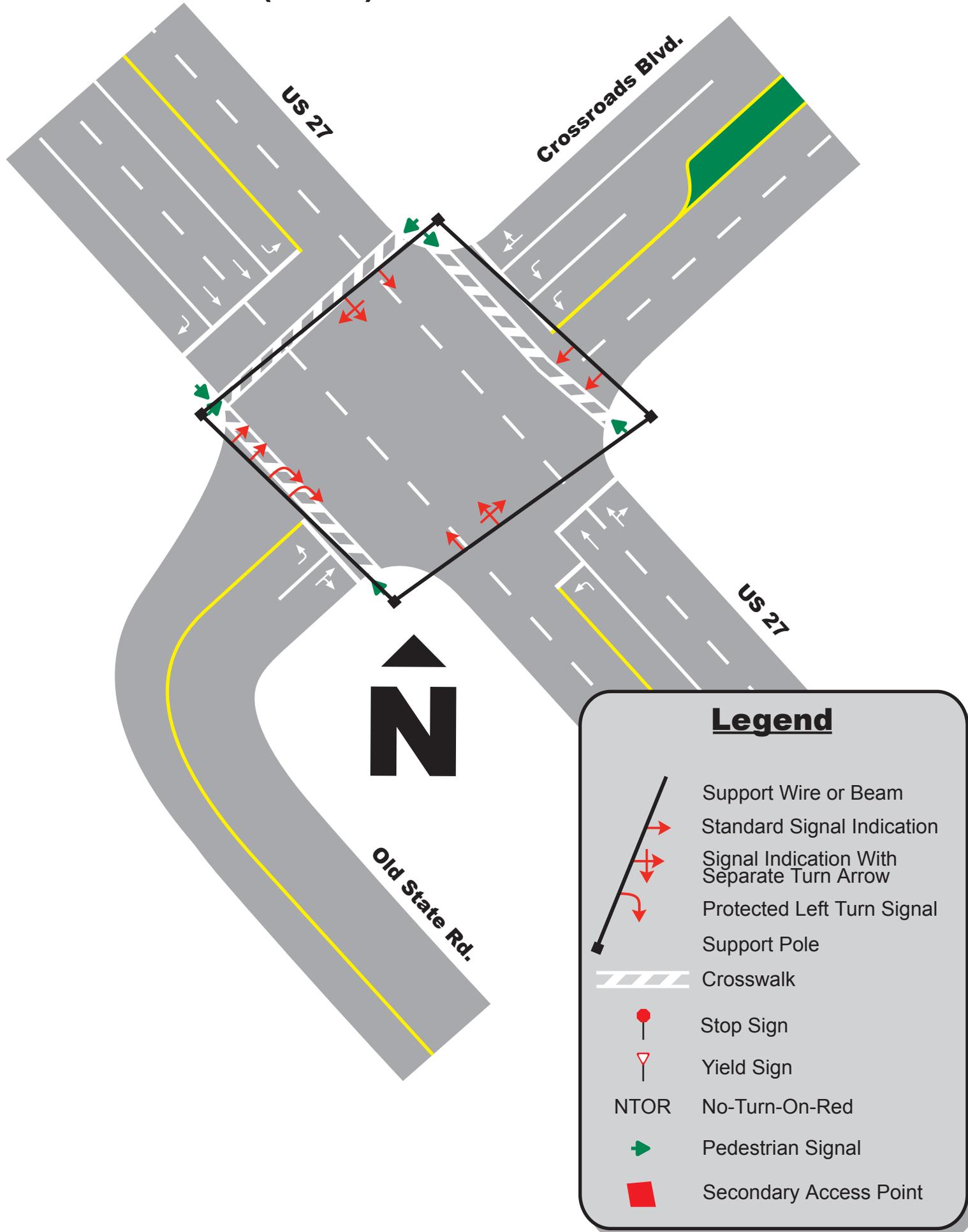


Figure 7-2
Alexandria Pike (US 27) and Crossroads Blvd. Intersection



signals, a key component in the long-range preservation of mobility in the corridor. For implementation of access management to be consistent, predictable, and equitable for all private development within the corridor, close cooperation among state, county and local governments is essential. Access management can be incorporated into local laws by modifying county or municipal subdivision regulations, amending local zoning laws, or including access management as part of a comprehensive plan, master plan, or thoroughfare plan.

The northern portion of the study area, East Alexandria Pike in Cold Spring to I-471, can be considered a developed area and efforts should be made to optimize the existing system. Significant intersections along this portion include KY1998, KY2345 and US27 at I-471. The Kentucky Transportation Cabinet has installed a coordinated progressive signal system in this area.

- Bunning Lane: County staff has informed OKI of a potential housing development off Bunning Lane consisting of at least 400 units. The current intersection with US27 is not designed to accommodate the resulting additional traffic. The feasibility of providing a connection opposite of East Alexandria Pike should be studied.
- KY1998 (Industrial Road): This intersection has poor sight distance for approaching traffic from KY1998 (Figure 7-3).
- KY2345 (Martha Layne Collins Drive): This intersection serves as the south entrance to the Northern Kentucky University campus. New campus development is expected to greatly increase future traffic at this intersection (Figure 7-4). Adding a second left turn lane from northbound US27 to KY2345 should be studied.
- US27 and I-471 (Figure 7-5): Traffic from southbound I-471 can experience significant backups, particularly in the afternoon peak period. Signal timing to accommodate left turn movements onto and out of lightly traveled Sunset Drive causes additional delays for southbound US27 and I-471 travel. The elimination of these left turn movements should be further studied. The feasibility of extending Sunset/Faren Drive to Nunn Drive and allowing only westbound (toward campus) traffic should be investigated.

Further study of this northern portion of the corridor should include a review of the current signal progression system and the retrofitting access management solutions. According to KYTC, no comprehensive traffic signal system review has been done since US27 was reconstructed about a decade ago. Such a review is needed. The review should include current traffic volumes and turning counts, development of updated signal timing/progression plans, and a review of current signal technologies to assess the potential need for hardware/software updates along US27.

Figure 7-3

Alexandria Pk. (US27) and Industrial Rd. (KY1998) Intersection

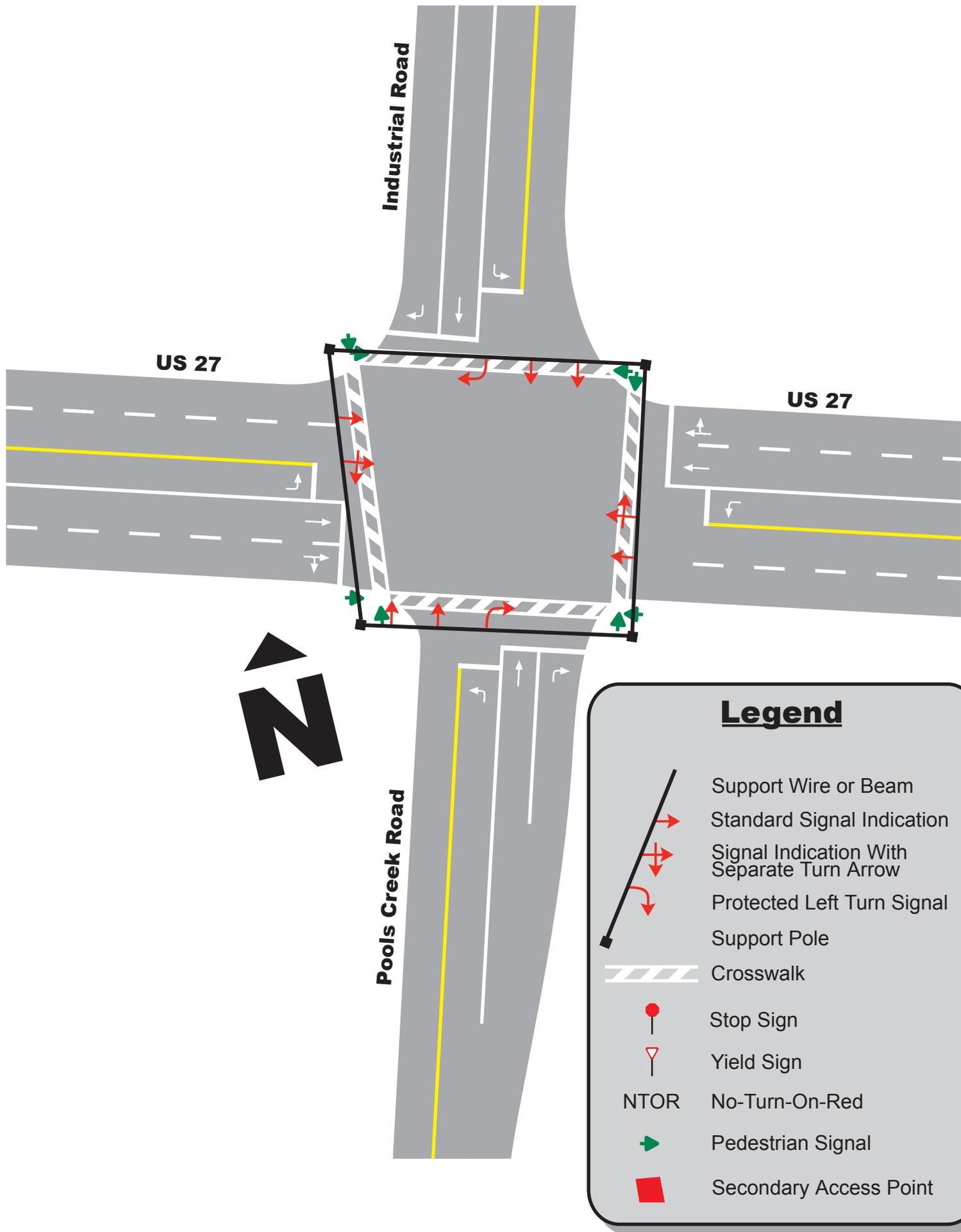
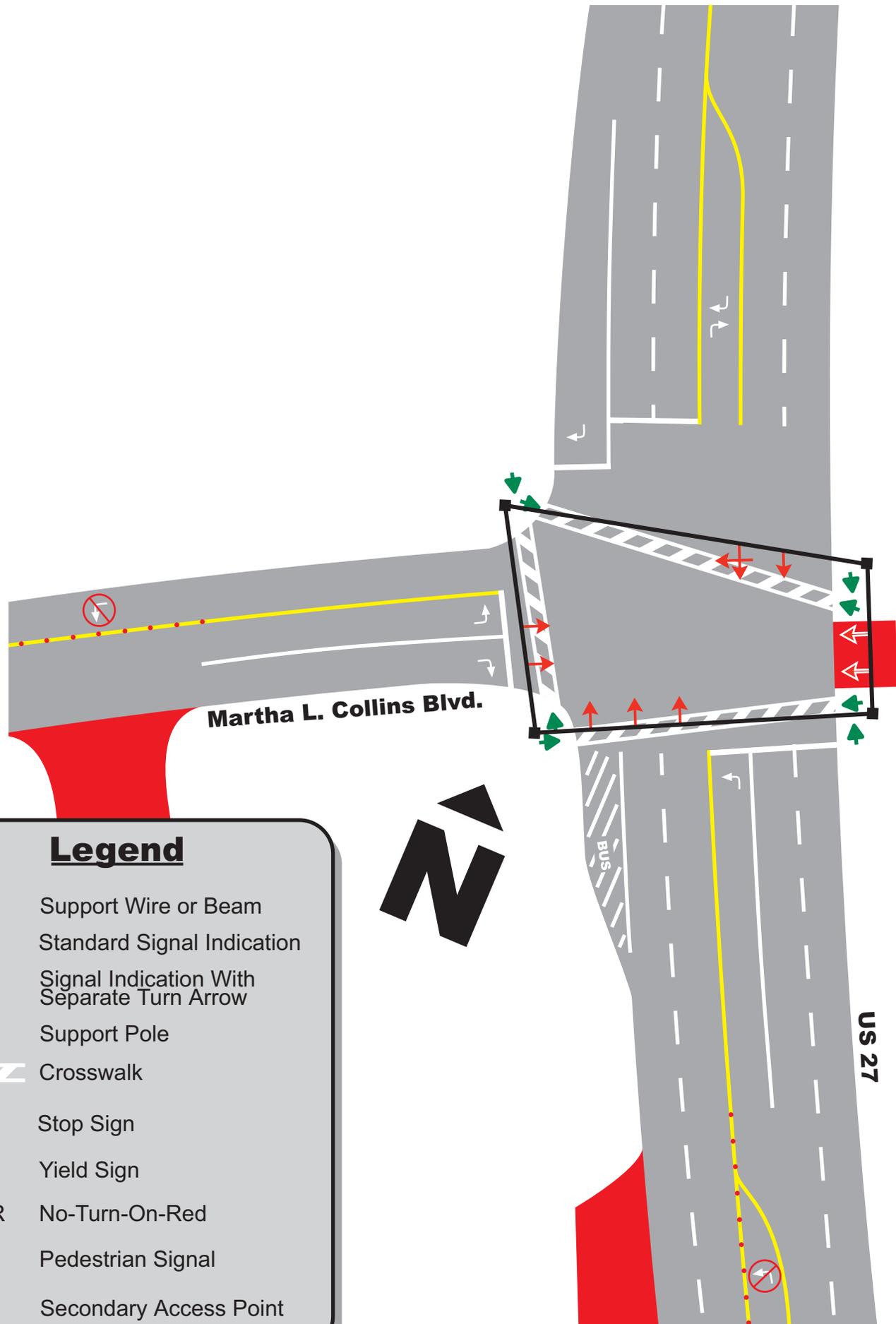


Figure 7-4

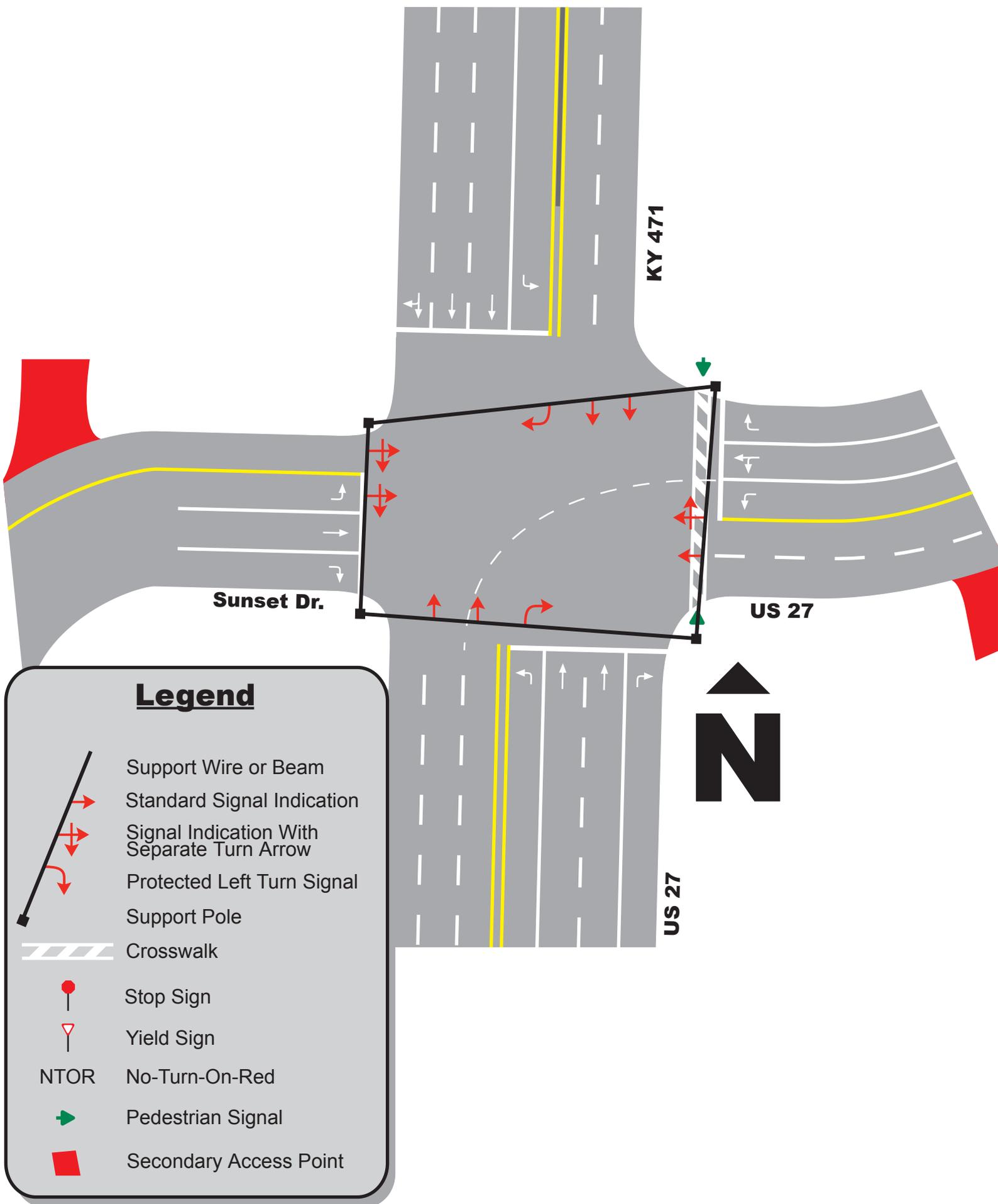
Alexandria Pk. (US27) and Martha L. Collins Blvd. Intersection



Legend

-  Support Wire or Beam
-  Standard Signal Indication
-  Signal Indication With Separate Turn Arrow
-  Support Pole
-  Crosswalk
-  Stop Sign
-  Yield Sign
-  NTOR
-  Pedestrian Signal
-  Secondary Access Point

**Figure 7-5
Alexandria Pike (US 27) and KY 471 Intersection**



Legend

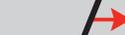
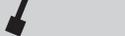
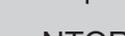
-  Support Wire or Beam
-  Standard Signal Indication
-  Signal Indication With Separate Turn Arrow
-  Protected Left Turn Signal
-  Support Pole
-  Crosswalk
-  Stop Sign
-  Yield Sign
-  NTOR No-Turn-On-Red
-  Pedestrian Signal
-  Secondary Access Point

Figure 7-6
Pictures of Selected Intersections
Alexandria Pike (US 27)

US 27 Northbound approaching
KY 10



US 27 at KY 709



US 27 at Crossroads Blvd.
Facing south toward KY 9



KY 1998 (Industrial Rd.)
At US 27



US 27 at Collins Dr. (KY 2345)
Facing south



US 27 at Sunset Av. And I-471
Facing north



