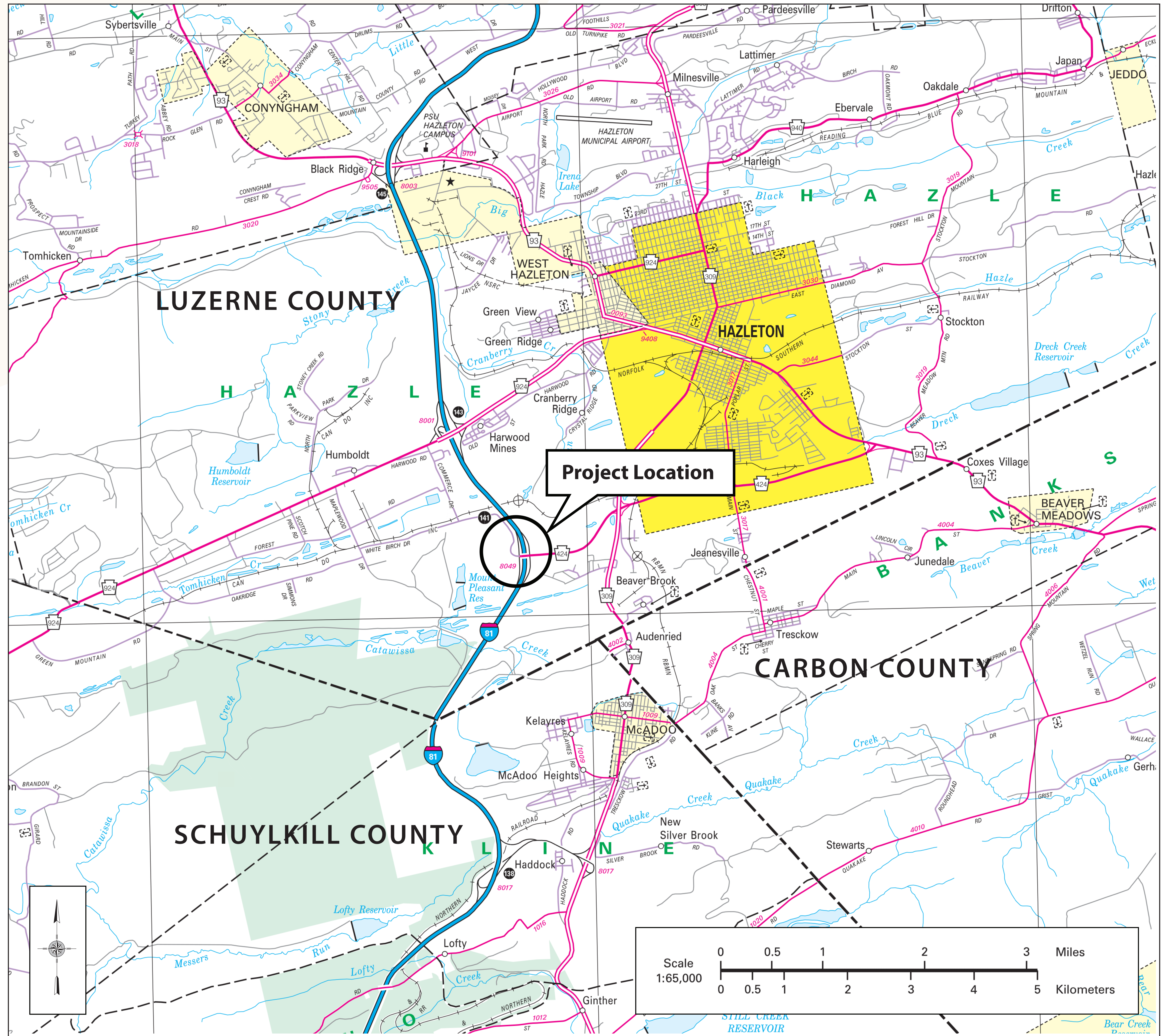
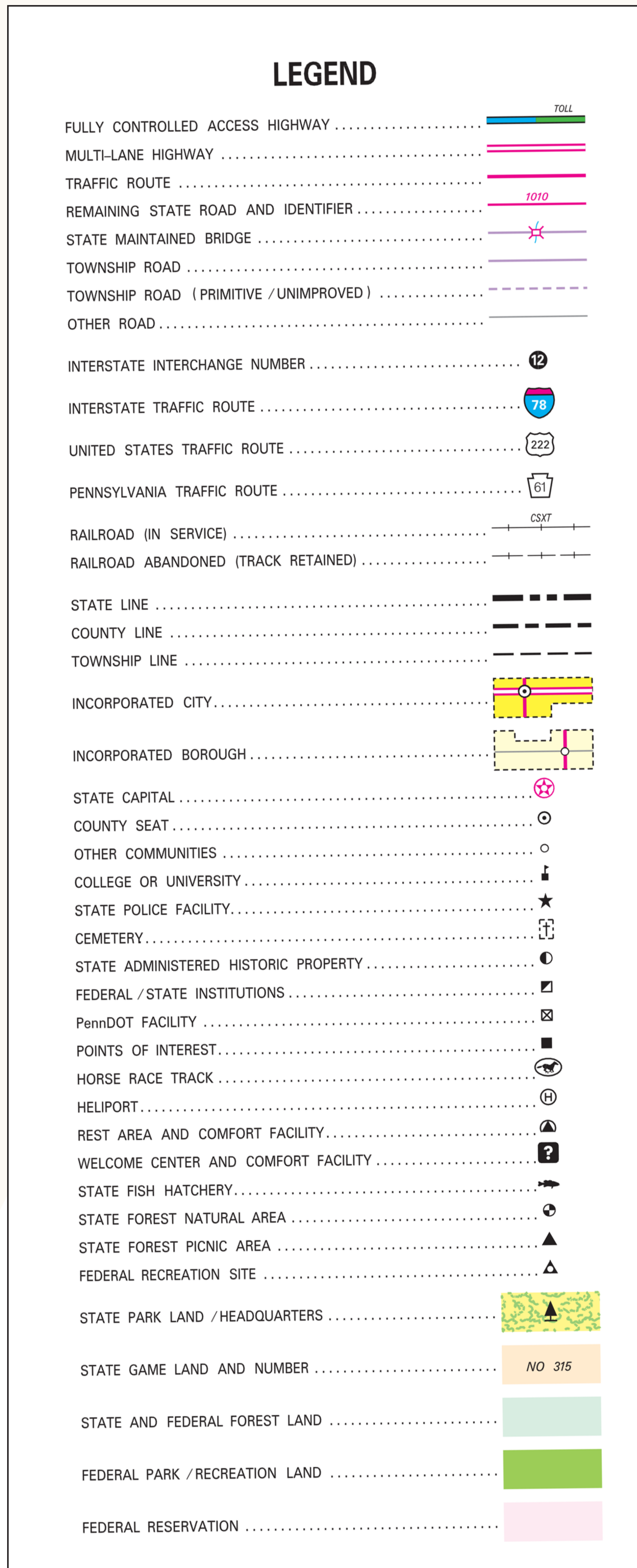
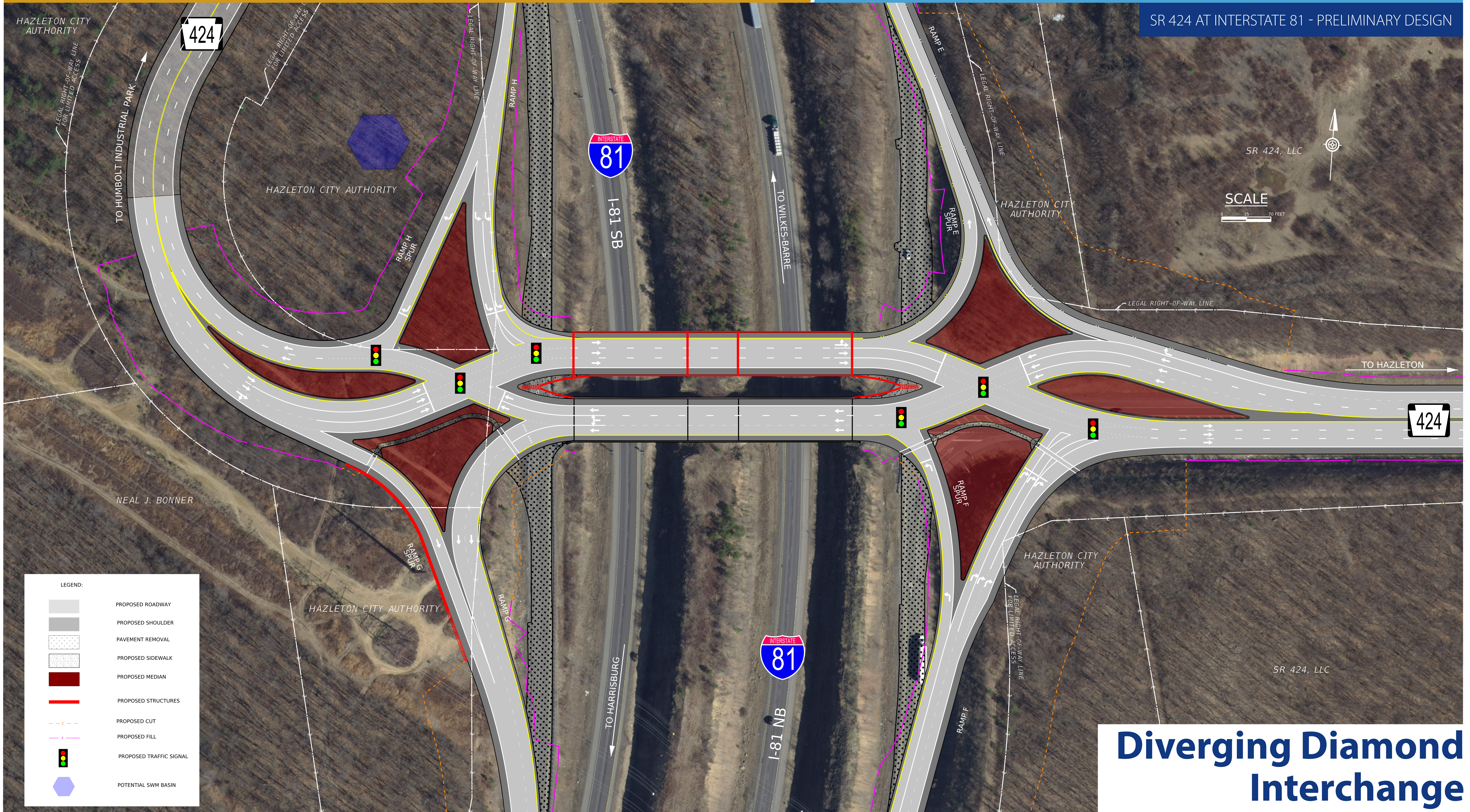


Project Location Map

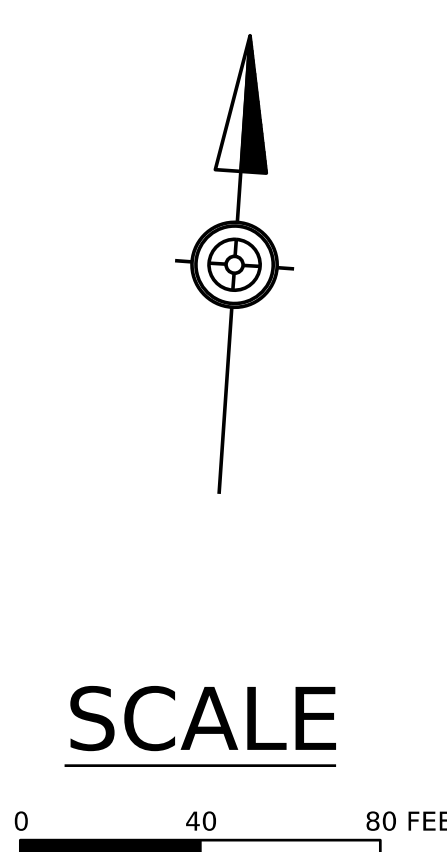
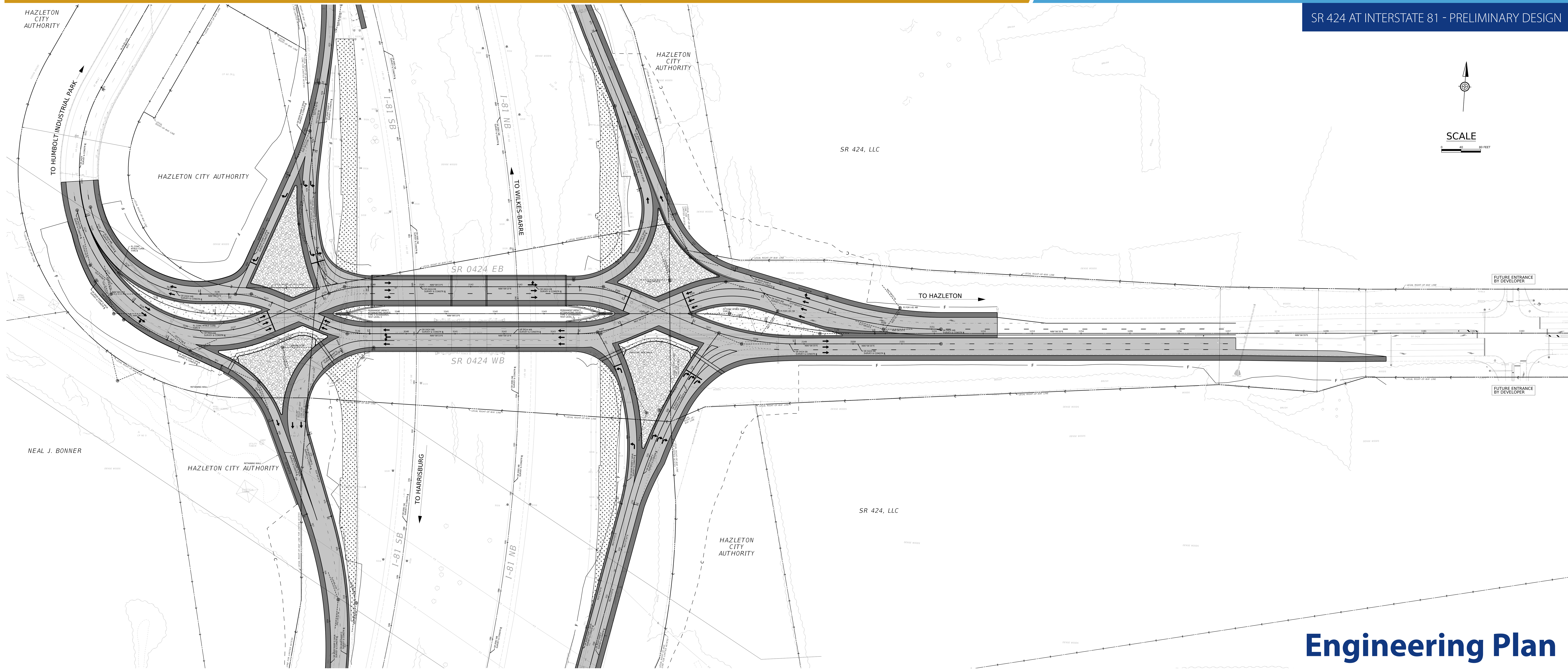




Diverging Diamond Interchange



Diverging Diamond Interchange



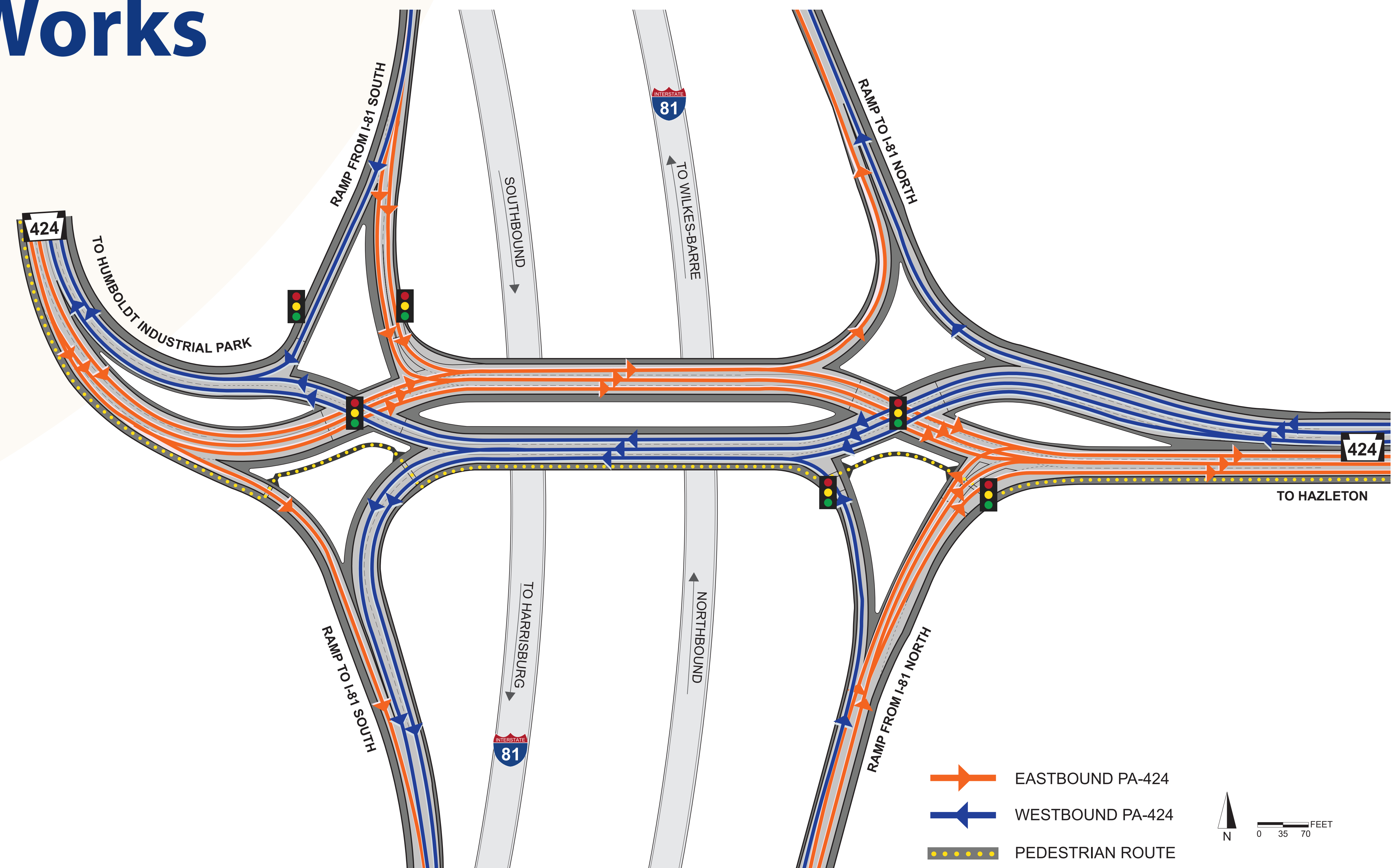
Engineering Plan

How a Diverging Diamond Works

A diverging diamond interchange (DDI) is a unique form of a diamond interchange where the side road traffic (PA 424) crosses over to the left side of the road at a signalized intersection prior to the bridge over I-81. This allows for left turns to be made to/from the ramps without any through traffic conflicts. The side road (PA 424) traffic crosses back to the right side of the road at a signal beyond the bridge.

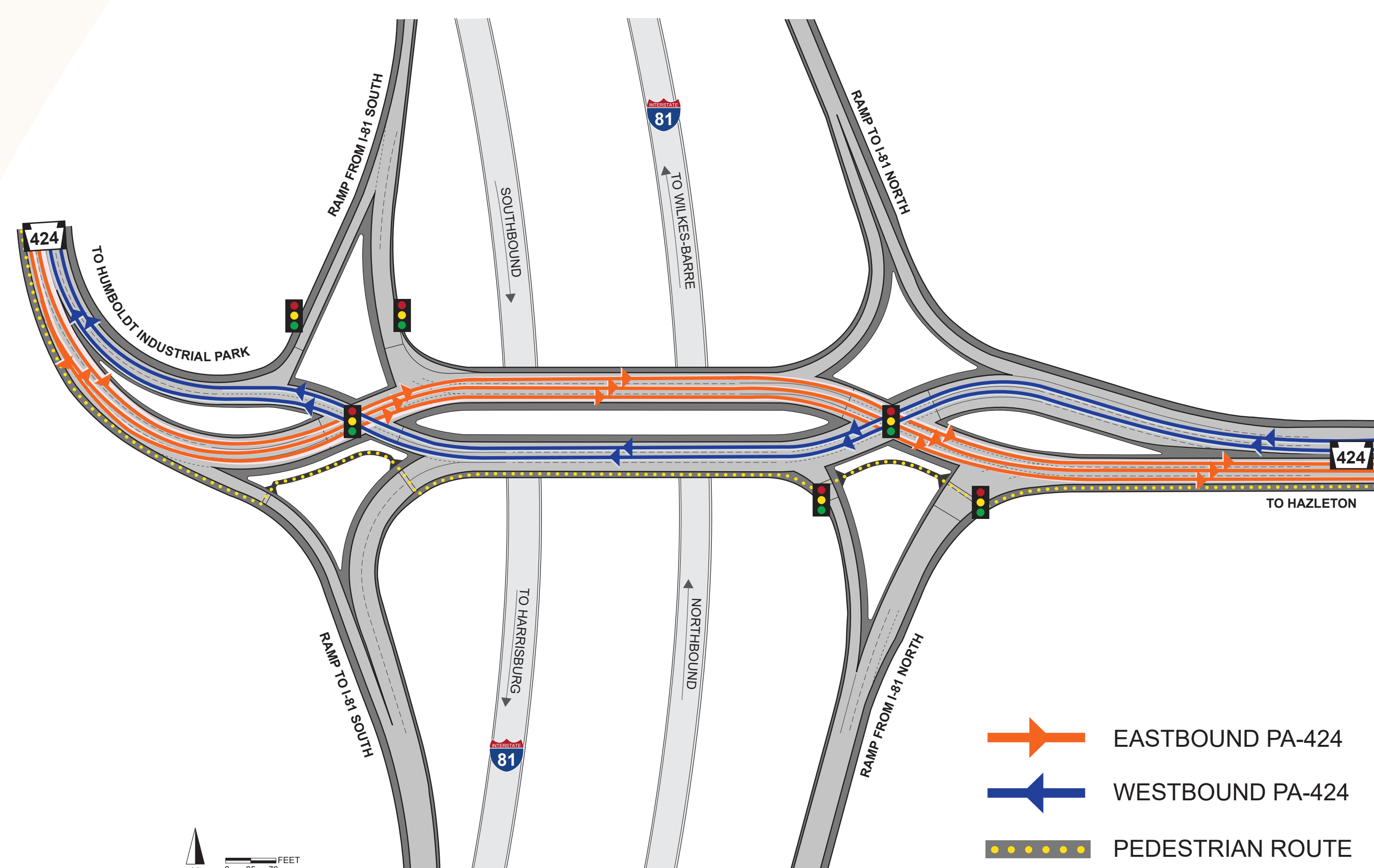
The DDI configuration has fewer signal phases and generally shorter signal cycle lengths than a standard diamond interchange configuration. The DDI provides more green signal time to each traffic movement, alleviating congestion. Additionally, the DDI's direct left turns reduce the number of conflict points (compared to a standard diamond interchange), which has been proven to reduce the number of crashes.

OVERVIEW



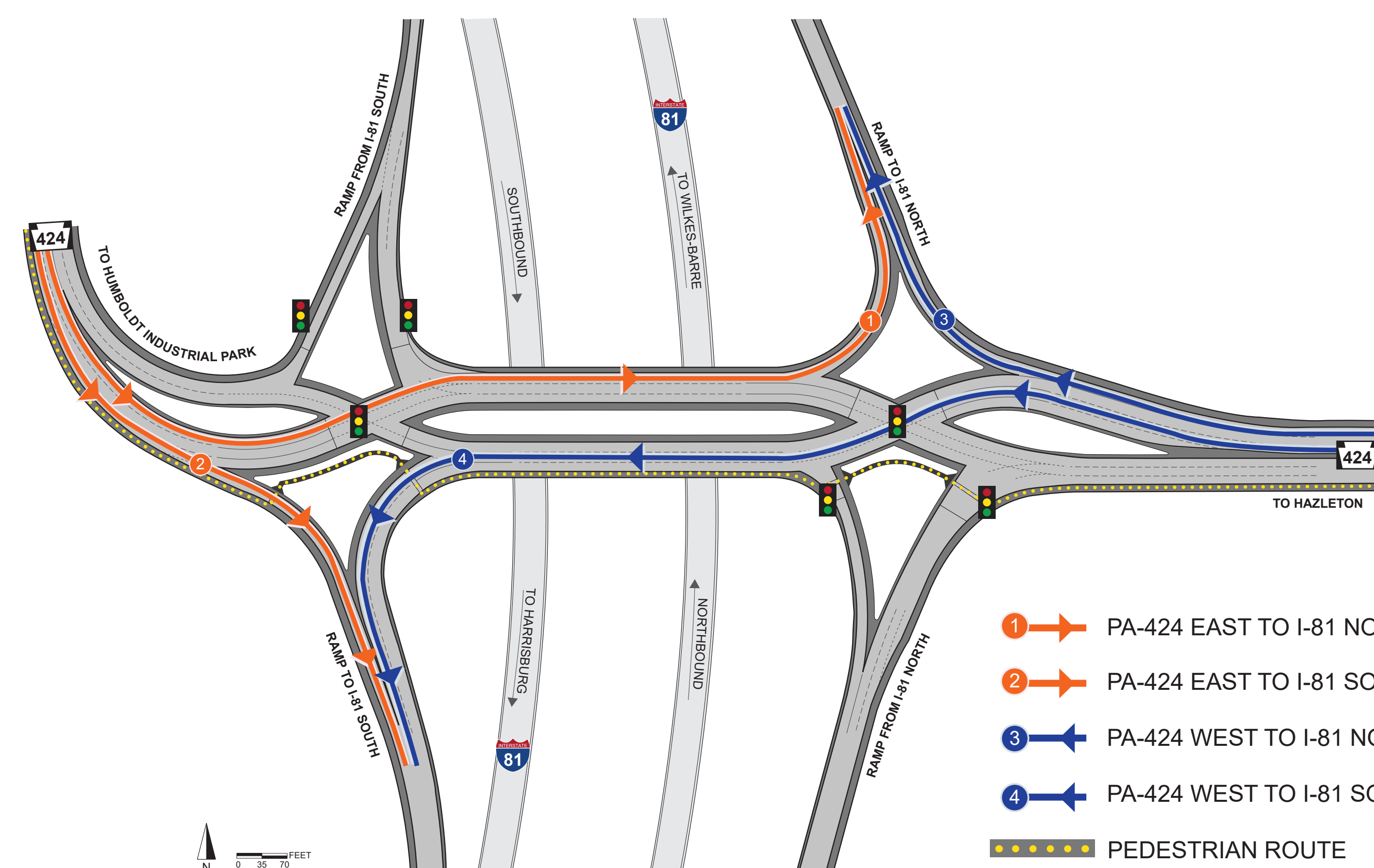
PA 424 THROUGH TRAFFIC

PA 424 traffic crosses over to the left side of the road at a signal prior to the bridge over I-81. Traffic then crosses back to the right side at a signal beyond the bridge.



PA 424 TO I-81 MOVEMENTS

Traffic from PA 424 can turn right prior to the first signal onto an I-81 on-ramp (movements 2 & 3) or turn left immediately following the bridge (movements 1 & 4).



I-81 TO PA 424 MOVEMENTS

Traffic from the I-81 off-ramps can turn right at a signal directly on to PA 424 (movements 2 & 3) or turn left at a signal directly on to PA 424 (movements 1 & 4).

