f. I-95/MD 543 Interchange Option 7: Partial Cloverleaf – Single Loop *(see Figure 49)*

This option would include a diamond interchange with the addition of a single loop ramp from westbound MD 543 to southbound I-95. Two full traffic signals would be included with this option similar to existing conditions.

The I-95 northbound approach would consist of five lanes. A two-lane diagonal ramp would lead to MD 543 northbound and southbound with the fifth lane of I-95 northbound dropping at this ramp. A one-lane diagonal ramp from MD 543 would merge into I-95 northbound. Four I-95 northbound lanes would continue north to MD 22.

The I-95 southbound approach would consist of four lanes. A one-lane outer connection ramp would lead to MD 543 northbound and southbound. The loop ramp in the northwest quadrant would serve traffic from MD 543 northbound to I-95 southbound adding the fifth lane on I-95 southbound. A two-lane diagonal ramp from MD 543 southbound would merge into I-95 southbound.

Two through lanes would generally be provided on MD 543, with additional turn lanes at the interchange ramps.

Bicyclists along MD 543 will be accommodated through the interchange with 8'-0" wide shoulders. The intersections along MD 543 at the ramp junctions were developed to be compact to limit vehicle speeds, and to include signalization for most vehicle movements through the intersections. Where free-flowing

movements were unavoidable, designs were based on near minimum turning conditions in an effort to limit vehicle speeds.

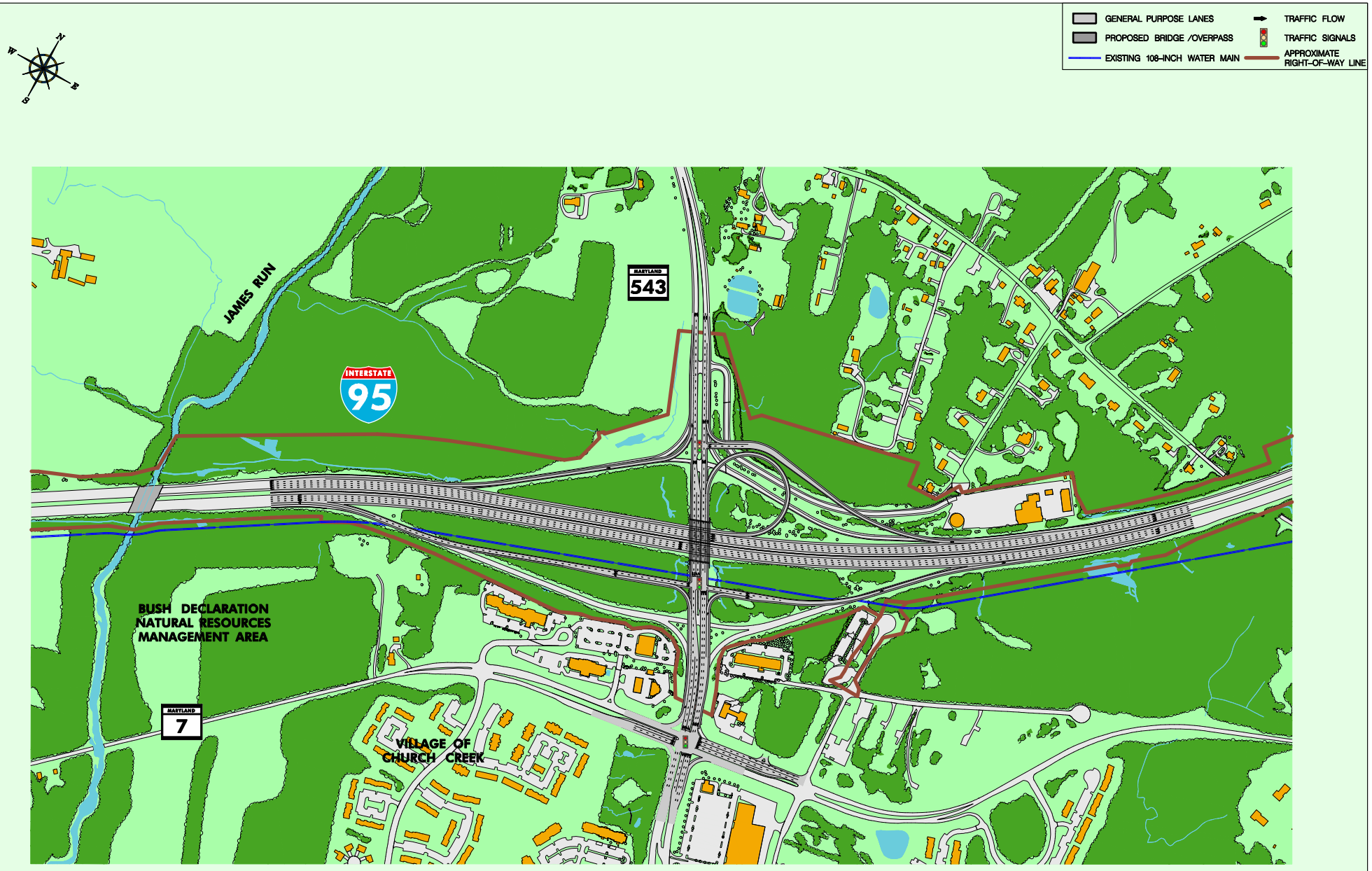

FIGURE 49 – GENERAL PURPOSE LANE – I-95 AT MD 543 INTERCHANGE OPTION 7: PARTIAL CLOVERLEAF – SINGLE LOOP

g. I-95/MD 22 Interchange Option 1: Partial Cloverleaf – Double Loop with Modifications to CD roads *(see Figure 50)*

This option would maintain the existing partial cloverleaf configuration with no modifications. The existing interchange contains loops in the northwest and southeast quadrants. One full traffic signal along MD 22 provides access for the I-95 northbound off-ramp. One full traffic signal along MD 22 provides access for the I-95 southbound off-ramp. I-95 through the interchange would consist of four GPLs in each direction.

The existing I-95 northbound approach adds a one-lane collector/distributor roadway. A one-lane ramp then leads to MD 22. The existing I-95 southbound approach adds a one- lane collector/distributor roadway. A one-lane ramp then leads to MD 22.

There are no modifications to MD 22 through the interchange. Two through lanes are generally provided, with additional turn lanes at the interchange ramps. Bicyclists are accommodated through the interchange with 8'-0" wide shoulders.

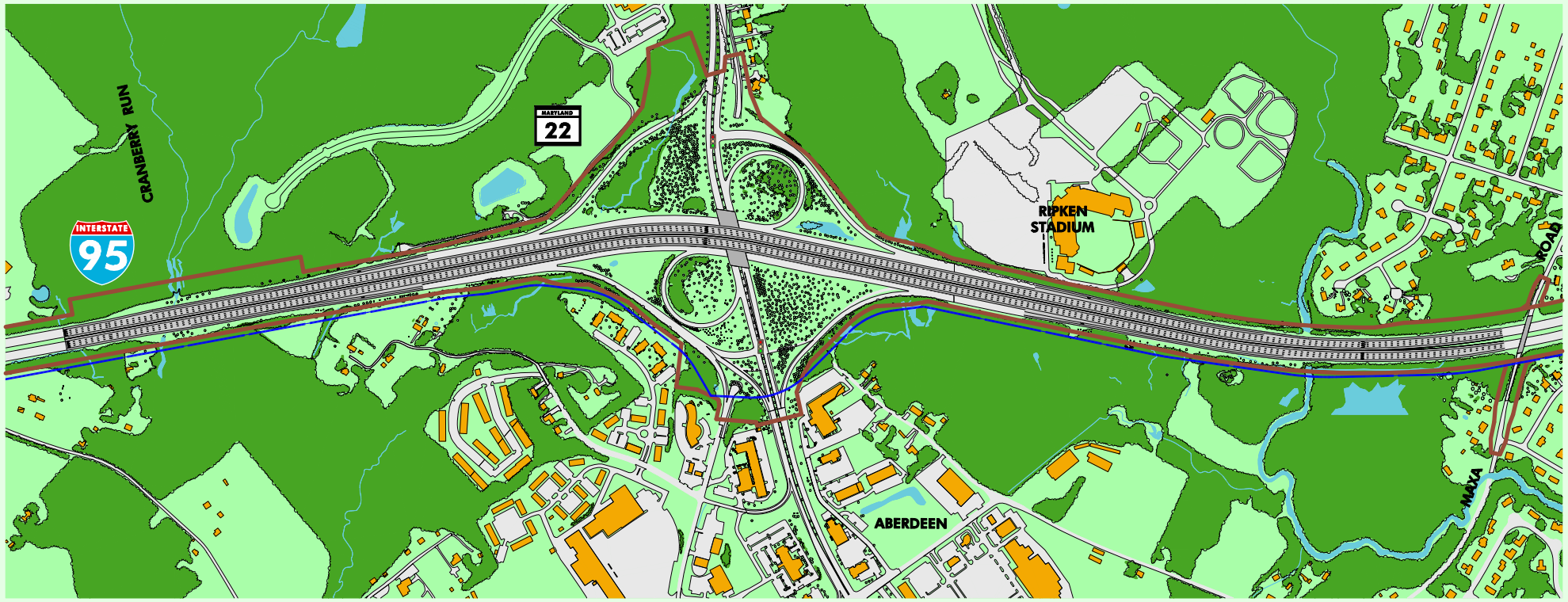

FIGURE 50 – GENERAL PURPOSE LANE – I–95 AT MD 22 INTERCHANGE OPTION 1: PARTIAL CLOVERLEAF – DOUBLE LOOP WITH MODIFICATIONS TO CD ROADS

3. Express Toll Lanes Alternate

a. Mainline

This alternate would include adding ETLs to the existing GPLs to accommodate the projected traffic demand. This alternate would extend the typical section of Section 100 from just north of the MD 43 interchange to north of MD 24 interchange. This typical section consists of four GPLs and two ETLs in each direction. From north of MD 24 to north of MD 543, three existing GPLs would be retained, providing three GPLs and two ETLs in each direction. The ETLs would terminate at MD 543 providing four GPLs to the project limits north of MD 22. Improvements would be proposed at the MD 152, MD 24, and MD 543 interchanges. At the northern limit of Section 200, the four GPLs will merge to tie into the existing three GPLs in each direction.

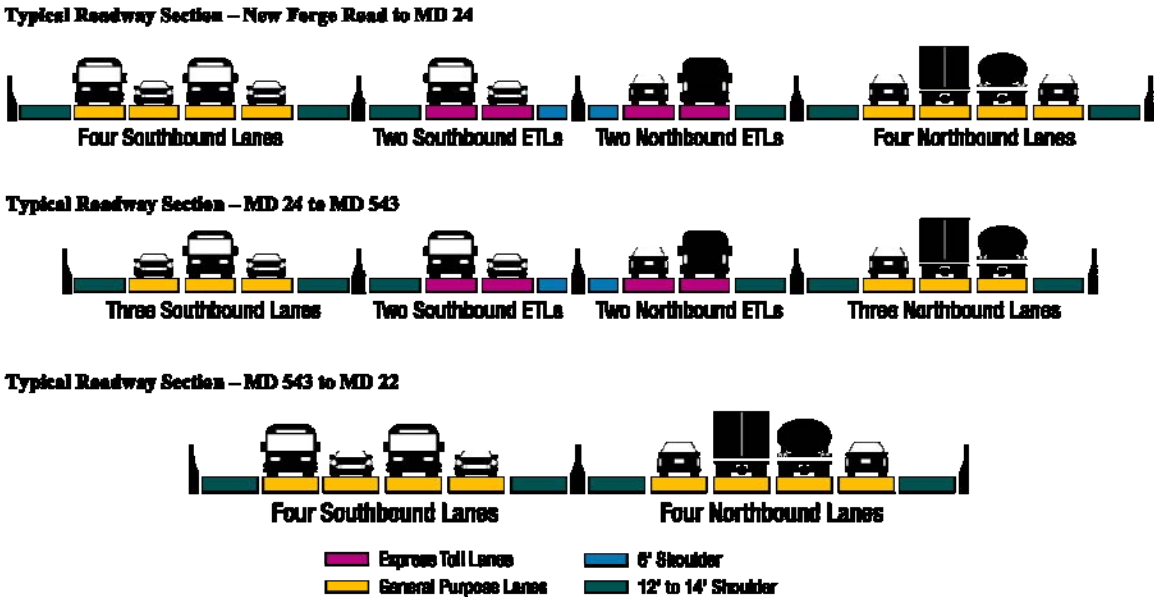

Figure 51 – Recommended Express Toll Lane Alternate

b. I-95/MD 152 Interchange Option 1A: Diamond with ETL Median Access Ramps *(see Figure 52)*

This option would consist of a diamond interchange. The interchange includes median ETL ramp access to MD 152. Two full traffic signals would serve I-95 GPL traffic and one full traffic signal would serve I-95 ETL traffic. This option incorporates cul-de-sacs to eliminate direct access from Old Mountain Road into the interchange ramp area. The Old Mountain Road bridge over I-95 would be removed and would not be replaced.

The I-95 northbound approach would consist of four GPLs and two ETLs through the interchange. A one-lane diagonal GPL ramp would lead to MD 152 northbound and southbound. A one-lane diagonal ramp from MD 152 would merge into I-95 GPL northbound. One-lane, left-side median ETL ramp would connect I-95 northbound ETLs to MD 152 northbound and southbound. A one-lane, left-side median ETL ramp would lead to the I-95 northbound ETLs.

The I-95 southbound approach would consist of four GPLs and two ETLs through the interchange. A one-lane diagonal GPL ramp would lead to MD 152 northbound and southbound. A two-lane diagonal ramp from MD 152 would merge into I-95 GPL southbound. One-lane, left-side median ETL ramps would connect I-95 southbound ETLs to MD 152 northbound and southbound. A one-lane, left-side median ETL ramp would lead to the I-95 southbound ETLs.

Two through lanes would generally be provided on MD 152, with additional turn lanes at the interchange ramps.

Bicyclists along MD 152 will be accommodated through the interchange with 8'-0" wide shoulders. The intersections along MD 152 at the ramp junctions were developed to be compact to limit vehicle speeds, and to include signalization for most vehicle movements through the intersections. Where free-flowing movements were unavoidable, designs were based on near minimum turning conditions in an effort to limit vehicle speeds.

FIGURE 52 – EXPRESS TOLL LANE – I-95 AT MD 152 INTERCHANGE
OPTION 1A: DIAMOND WITH MEDIAN ACCESS RAMPS

c. I-95/MD 152 Interchange Option 4A: Partial Cloverleaf – Single Loop with ETL Median Access Ramps *(see Figure 53)*

This option would include a diamond interchange, with a single loop ramp from northbound I-95 to northbound MD 152. The interchange includes median ETL ramp access to MD 152. Two full traffic signals would serve I-95 GPL traffic and one full traffic signal would serve I-95 ETL traffic. This option incorporates cul-de-sacs to eliminate direct access from Old Mountain Road into the interchange ramp area. The Old Mountain Road bridge over I-95 would be removed and would not be replaced.

The I-95 northbound approach would consist of four GPLs and two ETLs through the interchange. A one-lane diagonal GPL ramp would lead to MD 152 southbound, followed by a one-lane loop GPL ramp to MD 152 northbound. A one-lane, left-side median ETL ramp would lead to MD 152. A one-lane, left-side median ETL ramp would lead to the I-95 northbound ETLs.

The I-95 southbound approach would consist of four GPLs and two ETLs through the interchange. A one-lane diagonal GPL ramp would lead to MD 152 northbound and southbound. A two-lane diagonal ramp from MD 152 would merge into I-95 GPL southbound. One-lane, left-side median ETL ramps would connect I-95 southbound ETLs to MD 152 northbound and southbound. A one-lane, left-side median ETL ramp would lead to the I-95 southbound ETLs.

Two through lanes would generally be provided on MD 152, with additional turn lanes at the interchange ramps.

Bicyclists along MD 152 will be accommodated through the interchange with 8'-0" wide shoulders. The intersections along MD 152 at the ramp junctions were developed to be compact to limit vehicle speeds, and to include signalization for most vehicle movements through the intersections. Where free-flowing movements were unavoidable, designs were based on near minimum turning conditions in an effort to limit vehicle speeds.