

- If loop detectors are used:
 - Locate detectors graphically on plan layout sheet.
 - Indicate any special features/functions of loop detector
 - Determine the appropriate number of turns for each loop detector.
 - A Loop Detector Chart as shown below and in Figure 4-1, may be shown on plan if clarity is needed.
- Vehicle detector design details are provided in the Traffic Detector Handbook (FHWA-IP-90-002) and available online at:

<http://www.fhwa.dot.gov/publications/research/safety/lp90002/index.cfm>

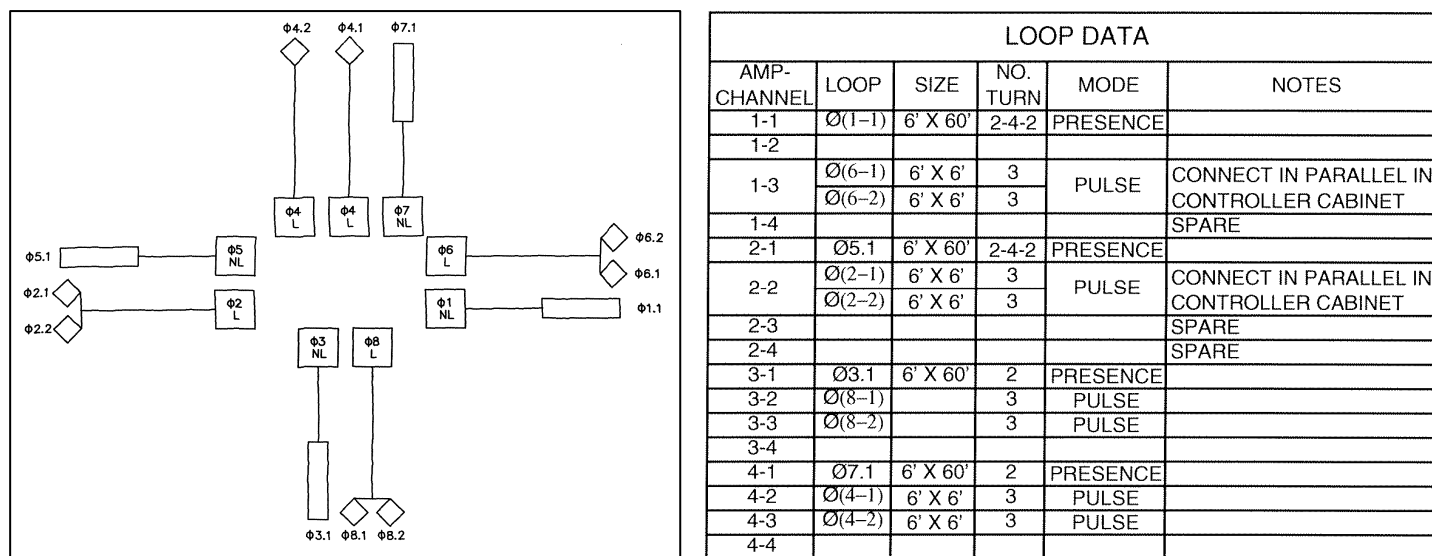


Figure 4–1: LOOP DETECTOR CHARTS

Step 13 – Locate Junction Boxes and Conduit Runs

- Locate junction boxes to serve detectors.
- Locate a junction box for the Electrical Service Connection (if appropriate).
 - Refer to VDOT Standards for SE-1 thru SE-5.
- Locate intermediate junction boxes.
 - Conduit runs should not be greater than 250-feet without intermediate junction boxes.
- Locate junction boxes to serve signal and pedestal poles.
 - Avoid gravel shoulders and close to curbs where errant vehicles may drive over.
- Determine junction box sizes.
 - Refer to VDOT Road and Bridge Standards, Volume II, Section 1300 for standard junction box sizes and types.
 - Refer to NEC SECTION 370 for properly sizing junction boxes.