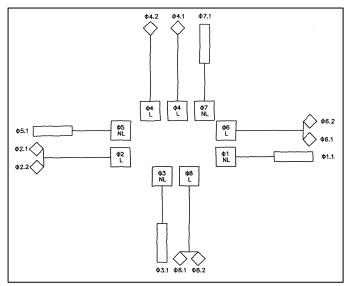
- If loop detectors are used:
 - Locate detectors graphically on plan layout sheet.
 - Indicate any special features/functions of loop detector
 - Determine the appropriate number of turns for each loop detector.
 - A Loop Detector Chart as shown below and in Figure 4-1, may be shown on plan if clarity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

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



LOOP DATA					
AMP- CHANNEL	LOOP	SIZE	NO. TURN	MODE	NOTES
1-1	Ø(1-1)	6' X 60'	2-4-2	PRESENCE	
1-2					
1-3	Ø(6-1)	6' X 6'	3	PULSE	CONNECT IN PARALLEL IN
	Ø(6-2)	6' X 6'	3		CONTROLLER CABINET
1-4					SPARE
2-1	Ø5.1	6' X 60'	2-4-2	PRESENCE	
2-2	Ø(2–1)	6' X 6'	3	PULSE	CONNECT IN PARALLEL IN
	Ø(2-2)	6' X 6'	3		CONTROLLER CABINET
2-3					SPARE
2-4					SPARE
3-1	Ø3.1	6' X 60'	2	PRESENCE	
3-2	Ø(8–1)		3	PULSE	
3-3	Ø(8–2)		3	PULSE	
3-4					
4-1	Ø7.1	6' X 60'	2	PRESENCE	
4-2	Ø(4–1)	6' X 6'	3	PULSE	
4-3	Ø(4–2)	6' X 6'	3	PULSE	
4-4					

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 <u>VDOT Road and Bridge Standards</u>, Volume II, Section 1300 for standard junction box sizes and types.
 - Refer to <u>NEC SECTION 370</u> for properly sizing junction boxes.