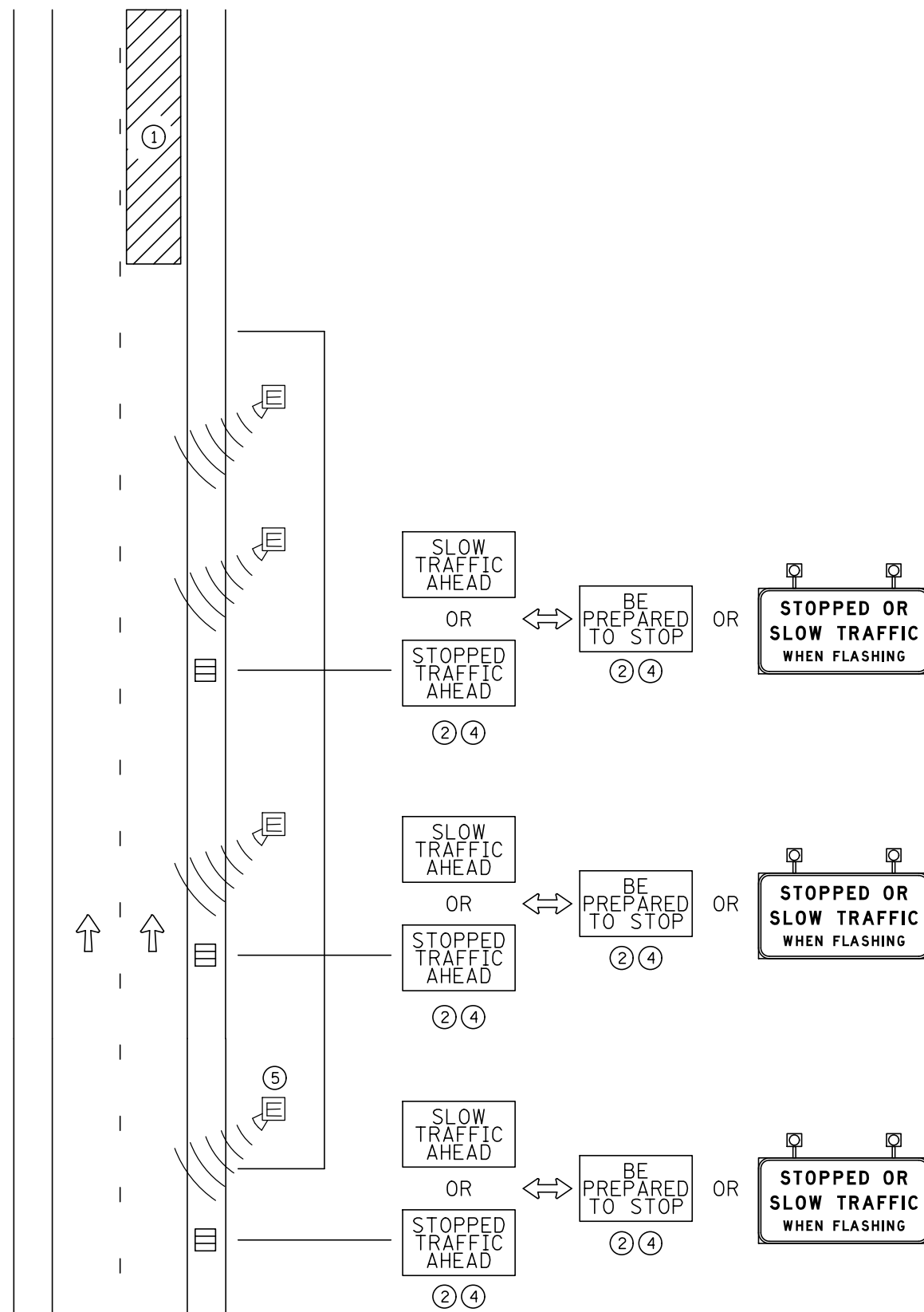


NOT TO SCALE



END OF QUEUE WARNING SYSTEM (EQWS)
MULTI-LANE DIVIDED ROAD

DESIGNER NOTES:

TYPICAL APPLICATION FOR REFERENCE ONLY, NOT TO BE INSERTED INTO PLAN.

- ① AREA CAUSING DELAY.
- ② SEE FIELD MANUAL LAYOUT #7 FOR PROPER SHOULDER DELINEATION FOR TRAILER MOUNTED TRAFFIC CONTROL DEVICES.
3. THE LAYOUT ONLY SHOWS THE ADDITIONAL SIGNAGE REQUIRED TO SETUP A STOPPED TRAFFIC SYSTEM. REFER TO OTHER TTC LAYOUTS FOR THE PROPER TEMPORARY TRAFFIC CONTROL DEVICES BEYOND THE ROAD WORK AHEAD SIGNS. LAYOUT MAY ALSO BE USED IN THE WORK ZONE.
- ④ THE SIGNS ARE SPACED/PCMS INCREMENTALLY (CONSIDER 1/2 TO 1 MILE SPACING) AND ARE ACTIVATED IN RESPONSE TO QUEUED TRAFFIC WHEN THE QUEUE IS DETECTED BETWEEN THE SIGNS.
- ⑤ NON -INTRUSIVE DETECTION DEVICES SHOULD BE SPACED ALONG THE ROUTE AS NEEDED FOR PROPER SYSTEM TO WORK.
6. THE ESTIMATED MAXIMUM QUEUE LENGTH MAY BE DETERMINED BY ENGINEERING ANALYSIS OR PREVIOUS EXPERIENCE, AND SHOULD BE REVIEWED AND FIELD ADJUSTED TO FIT ACTUAL CONDITIONS SUCH THAT THE FIRST WARNING DEVICE IS UPSTREAM OF THE QUEUE.
7. THE STOPPED OR SLOW TRAFFIC AHEAD WHEN FLASHING SIGNS OR THE PCMS SHOULD ACTIVATE AND DEACTIVATE WHEN THE DOWNSTREAM DETECTOR SENSES TRAFFIC SPEEDS MEETING THRESHOLD VALUES AS SET BY THE ENGINEER. AN AVERAGE SPEED DROP OF 20 TO 25 MPH BELOW THE POSTED SPEED LIMIT (POSTED PRIOR TO ROAD WORK IN THE QUEUE AREA) MAY TYPICALLY BE USED FOR A THRESHOLD VALUE ON HIGH SPEED ROADWAYS. TO DEACTIVATE THE SIGNAGE THE AVERAGE SPEED TYPICALLY SHOULD RECOVER TO WITHIN 10 MPH OF THE POSTED SPEED LIMIT OR HIGHER.
8. WHEN NO QUEUE IS DETECTED, ALL THE PCMS SHOULD BE BLANK OR USED FOR ANOTHER ITS SYSTEM.
9. WHEN PCMS DEVICES ARE USED, THE TWO PART MESSAGE SHOULD READ:
--STOPPED/SLOW TRAFFIC AHEAD - - PREPARE TO STOP--
10. AS THE QUEUE EXTENDS BEYOND A CMS LOCATION, THE SIGN SHOULD SWITCH TO ONLY THE "BE PREPARE TO STOP" MESSAGE.
11. APPROVED CMS MESSAGES SHOULD BE SHOWN ON THE TTC PLANS AND LISTED IN THE SPECIAL PROVISIONS. APPROXIMATE CMS LOCATIONS SHOULD ALSO BE SHOWN ON THE TTC PLANS. ALL CMS DISPLAYS SHOULD BE BLANK OR USED FOR ANOTHER ITS SYSTEM WHEN END OF QUEUE WARNING NOTIFICATION MESSAGES ARE NOT WARRANTED.
12. SYSTEM MAYBE BE COMBINED WITH "ACTIVE ZIPPER MERGE", "STATIC ZIPPER MERGE", "CONGESTION ADVISORY" AND/OR "TRAVEL/DELAY TIME INFORMATION" SYSTEMS.