

South Carolina Department of Transportation
Traffic Engineering Guidelines

NUMBER: TG-31

SUBJECT: Placement of Stop Lines and Stop Signs at Unsignalized Intersections


BACKGROUND: Stop lines should be used to indicate stop location at unsignalized intersections. Section 3B.16 of the 2009 MUTCD states that, in the absence of a marked crosswalk, the stop line should be placed at the desired stopping point but should not be placed more than 30 feet or less than 4 feet from the nearest edge of the intersecting traveled way. State law requires that a vehicle approaching a stop sign shall stop at a clearly marked stop line, but if none is present, then at the point nearest the intersecting roadway before entering it. Stop line distance, stop sign distance, and sight distance as defined in Figure TG-31-1 are the three criteria used for determining the preferred stop line and stop sign placement. This Traffic Guideline was developed to clarify use and placement of stop lines along with stop signs.

GUIDELINES: Engineering judgment should be used when considering placement of stop lines, verifying that the 4' to 30' placement allows for a clear sight triangle for viewing in both directions. In general, stop lines should be placed at a distance of 4 to 10 feet in advance of the mainline to maximize sight distance to crossing traffic. Stop bar placement greater than 10 feet would be acceptable at skewed intersections in order to facilitate left turning movements from the major street or where significant truck volumes are present.

Per Section 2B.10 of the 2009 MUTCD, STOP (R1-1) signs should be placed no farther than 50 feet from the edge of pavement of the intersecting roadway. In general, stop signs should be placed near the edge of the travelway (typically between 6'-12') for the minor road approach to maximize the sign visibility to approaching traffic. This placement may be near the radius return or farther back from the intersection to maximize sign visibility. The stop line and the stop sign do not have to be placed at the same location on the minor street approach.

If a situation arises where an intersection does not meet the required sight distance, the intersection should undergo further evaluation to determine if intersection warning signs are warranted. Engineering judgment should be used when determining if intersection warning signs are warranted and the location in which they will be placed.

Dashed edgelines should also be placed at the intersecting roadway to enforce the stop condition, define the extended edgeline or point of conflict with the intersecting roadway, and provide additional channelization for mainline traffic at wide or skewed intersections. Refer to Figure TG-31-1.

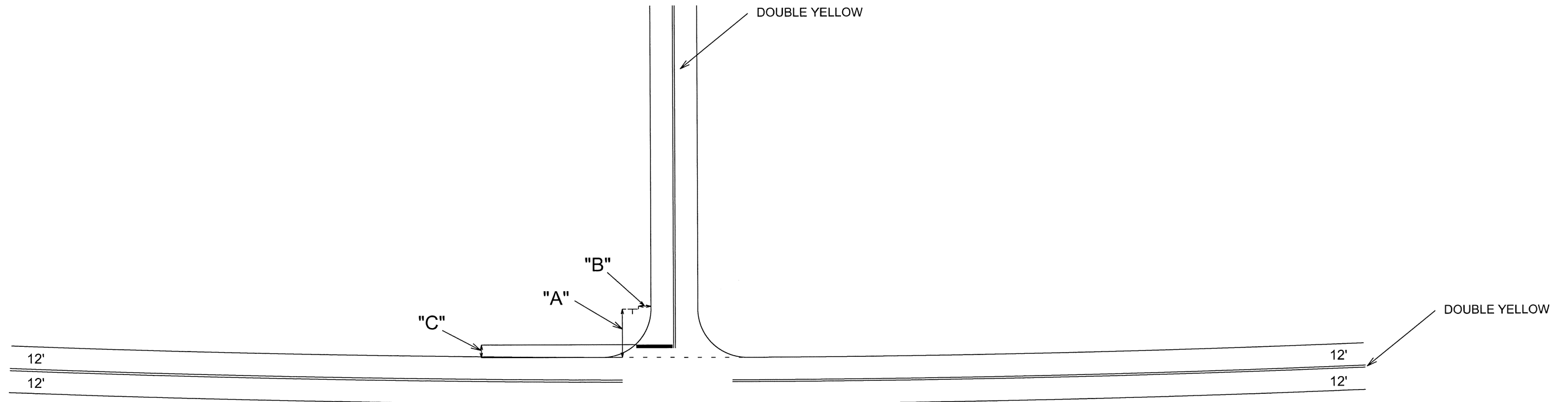
Approved: 

Director of Traffic Engineering

January 27, 2014
Date



TYPICAL PLACEMENT FOR STOP SIGNS AND STOP BARS AT UNSIGNALIZED INTERSECTIONS



Drawing not to scale

"A" = 6'-50' FROM EDGE OF TRAVEL WAY TO STOP SIGN
"B" = 6'-12' FROM EDGE OF TRAVEL WAY TO STOP SIGN

NOTE: Typically placed at the beginning of the radius.

"C" = 4'-30' FROM EDGE OF TRAVEL WAY TO STOP LINE - LIMITS

NOTE: Typically placed between 4'-10' from the edge of travelway. - DESIRED
If > 10', verify that proper sight distance exists.

NOTE: Typically the stop sign precedes the stop bar.

FIGURE TG-31-1

FIGURE TG-31-1

DIRECTOR OF TRAFFIC ENGINEERING

DATE