

Roadway Project Engineers,

Standard signal pole placement at intersections is designed and installed in accordance with the attached guidelines.

Traffic signal supports, including structures with cantilevered arms, present a special situation where a breakaway support and/or shielding the fixed object may not be practical or desirable. Please note that traffic signal supports (specifically metal mast arm poles) need not be treated as utility poles (as it relates to clear zone). It is frequently neither feasible nor justifiable due to span length and cost to place them beyond the desired clear zone.

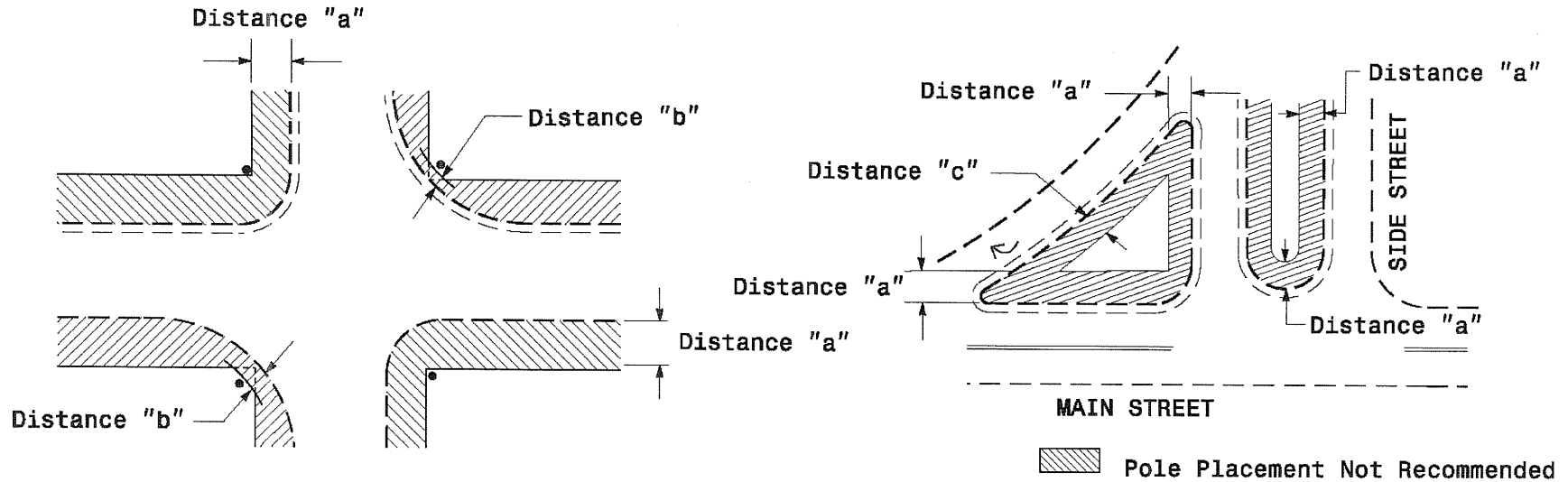
When traffic signals are installed on high speed facilities (generally defined as those having speed limits greater than 50 mph or greater), the signal supports and the signal support boxes should be placed as far away from the roadway as practical. Painted islands should not be used for signal support locations unless a method of shielding is provided.

Placing signal supports in medians should be an exception rather than the rule.

Please make your staff aware of this guidance. Thank you,

Jay Bennett PE
State Roadway Design Engineer

Clear Zone Distances for Pole Placement



Design Speed MPH (km/h)	Distance "a"		Distance "b"		Distance "c"		
	Distance from Face of Curb ft (m)	Distance from EOP ft (m)	Face of Curb ft (m)	EOP ft (m)	Side St. Speed MPH	Distance from Face of Curb ft (m)	Distance from EOP ft (m)
≤40 (64)	12 (3.5)	14 (4.0)	7 (2.0)	10 (3.0)	≤40	7 (2.0)	7 (2.0)
					45-50	7 (2.0)	7 (2.0)
					≥55	10 (3.0)	12 (3.0)
45-50 (72-80)	16 (5.0)	18 (5.5)			≤40	7 (2.0)	7 (2.0)
					45-50	10 (3.0)	12 (3.5)
					≥55	12 (4.5)	14 (4.5)
≥55 (88)	22 (6.5)	22 (6.5)			≤40	7 (2.0)	7 (2.0)
					45-50	10 (3.0)	12 (3.5)
					≥55	12 (3.5)	14 (4.5)

- Note 1: When traffic signals are installed on high-speed facilities, the signal supports should be placed as far away from the roadway as practical.
- Note 2: Painted islands should not be used for pole locations unless a method of protection is provided (such as a guardrail).

Distances are the desired minimum from the face of pole

Reference: "Roadside Design Guide" 2002 AASHTO

Standard Pole Placement

SIGNALS & GEOMETRICS SECTION
 TRAFFIC ENGINEERING AND SAFETY SYSTEMS BRANCH
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

7-04

STD. NO.

10.0

SHEET 1 OF 1