



Alma St and Churchill Ave Road Closure
Work: Intersection Milling & Paving
Lane Closure Hours: 9PM to 5AM
Working Days: Friday Night to Saturday Morning

TABLE 1
TAPER LENGTH CRITERIA AND CHANNELIZING DEVICE SPACING

SPEED (S)	MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W)				MAXIMUM CHANNELIZING DEVICE SPACING		
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	TAPER	TANGENT	CONFLICT
mph	ft	ft	ft	ft	ft	ft	ft
20	160	80	40	27	20	40	10
25	250	125	63	42	25	50	12
30	360	180	90	60	30	60	15
35	490	245	123	82	35	70	17
40	640	320	160	107	40	80	20
45	1080	540	270	180	45	90	22
50	1200	600	300	200	50	100	25
55	1320	660	330	220	50	100	25
60	1440	720	360	240	50	100	25
65	1560	780	390	260	50	100	25
70	1680	840	420	280	50	100	25
75	1800	900	450	300	50	100	25

* - For other offsets, use the following merging taper length formula for L:
For speed of 40 mph or less, $L = WS^2/60$
For speed of 45 mph or more, $L = WS$
Where: L = Taper length in feet
W = Width of offset in feet
S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Use for taper and tangent sections where there are no pavement markings or where there is a conflict between existing pavement markings and channelizers (CA).

SIGN, CHANNELIZER, & TAPER SPACING NOT TO SCALE.
TO BE DETERMINED BY TABLES

- Contractor Notes:
1. All traffic control devices shall conform to the latest edition of California Manual of Uniform Traffic Control Devices and the Standard Specifications for Public Work.
 2. Flashing beacon(s) will be placed at the location(s) indicated for lane closures during the hours of darkness.
 3. All workers shall be equipped with a reflective vest. All flaggers shall also be equipped with a C28 "Stop/Slow" paddle and shall be trained in the proper fundamentals of flagging traffic.
 4. Any conflicting signs shall be covered for the length of the job.
 5. Access to residents and businesses shall be maintained at all times unless noted.
 6. A safe pedestrian route will be maintained at all times.
 7. Lane width will be maintained at 11 foot minimum unless noted otherwise.
 8. Traffic control personnel will accommodate emergency vehicles at all times.
 9. "Uneven Pavement Surface" signs to be installed at all lateral milled transitions.
 10. Engineer has authority to institute changes to ensure safety.

TABLE 2
LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING

SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
20	115	116	120	126
25	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785
70	730	771	825	891
75	820	866	927	1003

* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph
** - Longitudinal buffer space or flagger station spacing
*** - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

TABLE 3
ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
URBAN - 25 mph OR LESS	ft	ft	ft
URBAN - MORE THAN 25 mph TO 40 mph	100	100	100
URBAN - MORE THAN 40 mph	250	250	250
RURAL	350	350	350
EXPRESSWAY / FREEWAY	500	500	500
	1000	1500	2640

* - The distances are approximate, are intended for guidance purposes only, and should be applied with engineering judgment. These distances should be adjusted by the Engineer for field conditions, if necessary, by increasing or decreasing the recommended distances.

Date: 6/25/25 Author: Brett Hickman Project: Palo Alto - Churchill & Alma Intersection
Comments:
Plan Sheet 20

Legend

- Arrowboard (Diamonds)
- Arrowboard (Single)
- Cone

