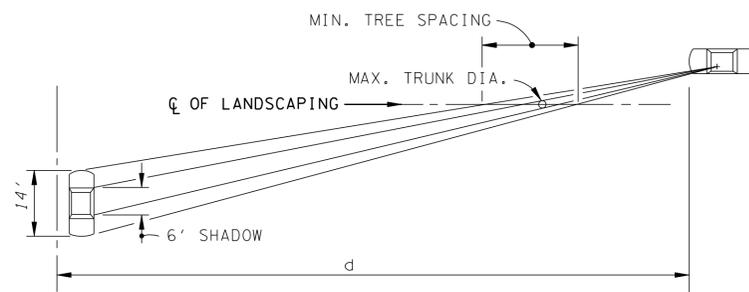
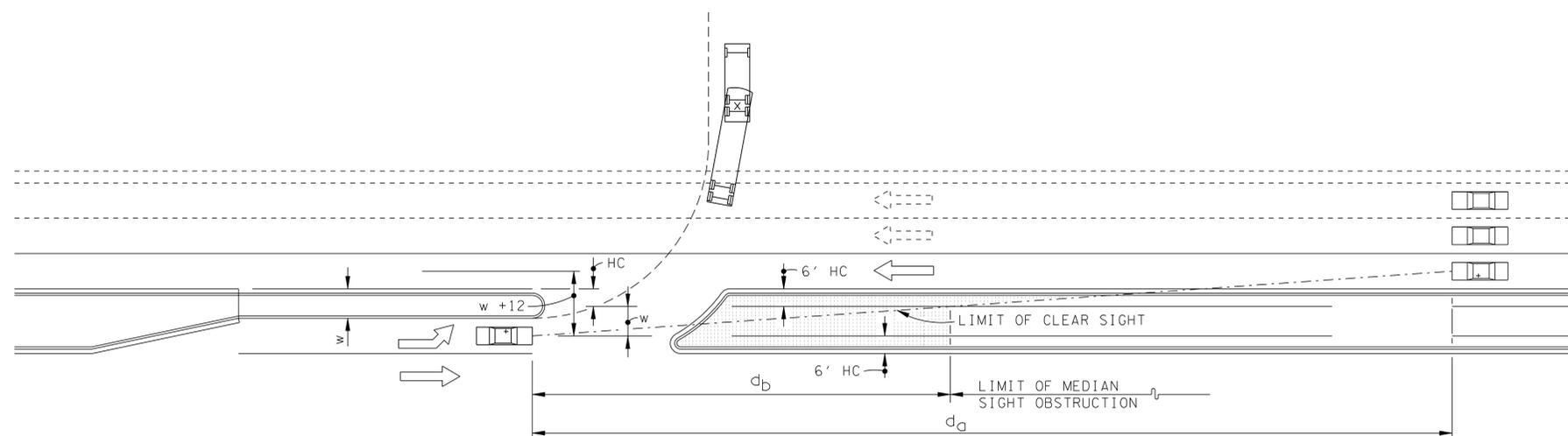


VERTICAL LIMITS OF CLEAR SIGHT DISTANCE

(SEE GENERAL NOTE C1 ON SHEET RD01-SD-1)



HORIZONTAL LIMITS OF CLEAR SIGHT DISTANCE



CHANNELIZED DIRECTIONAL MEDIAN OPENINGS

LEGEND

AREAS FREE OF SIGHT OBSTRUCTIONS

DESIGN NOTES

THE CORRIDOR DEFINED BY THE LIMITS OF CLEAR SIGHT IS A RESTRICTED PLANTING AREA. DRIVERS OF VEHICLES ON THE INTERSECTING ROADWAY AND VEHICLES ON THE MAJOR ROADWAY SHOULD BE ABLE TO SEE EACH OTHER CLEARLY THROUGHOUT THE LIMITS OF 'd' AND 'd_a'. IF IN THE ENGINEERS JUDGEMENT, LANDSCAPING INTERFERES WITH THE LINE OF SIGHT CORRIDOR PRESCRIBED BY THESE STANDARDS THE ENGINEER MAY REARRANGE, RELOCATE OR ELIMINATE PLANTINGS. PLANTS WITHIN THE RESTRICTED AREAS ARE LIMITED TO SELECTIONS AS FOLLOWS:

GROUND COVER & TRUNKED PLANTS (SEPARATE OR COMBINED):

GROUND COVERS - PLANT SELECTION OF LOW GROWING VEGETATION WHICH AT MATURITY DOES NOT ATTAIN A HEIGHT GREATER THAN 18" BELOW THE SIGHT LINE DATUM.
FOR GROUND COVER IN COMBINATION WITH TREES, THE FOLLOWING HEIGHTS BELOW THE SIGHT LINE DATUM WILL APPLY: 24" FOR TREES < 11" DIA.

TRUNKED PLANTS - PLANT SELECTION OF A MATURE TRUNK DIAMETER 4" OR LESS MEASURED AT 6" ABOVE THE GROUND. CANOPY OR HIGH BORNE FOLIAGE SHALL NEVER BE LOWER THAN 5' ABOVE THE SIGHT LINE DATUM. THESE SELECTIONS SHALL BE SPACED NO CLOSER THAN 20'.

TREES:

TREES CAN BE USED WITH LAWN; PAVERS; PAVEMENT; GRAVEL, BARK OR WOOD CHIP BEDS; GROUND COVERS OR OTHER DEPARTMENT APPROVED MATERIAL. THE CLEAR SIGHT WINDOW MUST BE IN CONFORMANCE WITH THE 'WINDOW DETAIL' MODIFIED TO ATTAIN THE HEIGHT REQUIREMENTS LISTED IN 'GROUND COVERS' ABOVE. TREE SIZE AND SPACING SHALL CONFORM TO THE FOLLOWING TABULAR VALUES:

DESIGN SPEED (MPH)	30	35	40	45	50	55	60
MINIMUM SPACING	4< ϕ <11	22	27	33	40	45	60
(C. TO C. OF TRUCK)	12< ϕ <18	91	108	126	146	165	193

ϕ = DIAMETER WITHIN LIMITS OF SIGHT WINDOW (INCHES)

SIZES AND SPACINGS ARE BASED ON THE FOLLOWING CONDITIONS:

- A SINGLE LINE OF TREES IN THE MEDIAN PARALLEL TO BUT NOT NECESSARILY COLINEAR WITH THE CENTERLINE,
- A STRAIGHT APPROACHING MAINLINE, WITHIN SKEW LIMITS AS DESCRIBED IN GENERAL NOTE B.
- TREES $\leq 11"$ IN DIAMETER CASTING A VERTICAL 6' WIDE SHADOW BAND ON A VEHICLE ENTERING AT STOP BAR LOCATION WHEN VIEWED BY MAINLINE DRIVER BEGINNING AT DISTANCE 'd'; SEE SHADOW DIAGRAM.
- TREES WITH DIAMETERS $\leq 11"$ INTERMIXED WITH TREES WITH DIAMETERS $11" \leq 18"$ ARE TO BE SPACED BASED ON TREES WITH DIAMETERS $> 11" \leq 18"$.

FOR ANY OTHER CONDITIONS THE TREE SIZES, SPACINGS AND LOCATIONS SHALL BE DETAILED IN THE PLANS; SEE DESIGN NOTE NO. 8.

CHANNELIZED DIRECTIONAL MEDIAN OPENINGS

Design Speed MPH	d_a (FEET)								
	1 LANE CROSSED			2 LANE CROSSED			3 LANE CROSSED		
	P	SU	COMB.	P	SU	COMB.	P	SU	COMB.
30	245	285	330	265	320	360	285	350	390
35	285	335	385	310	370	420	335	405	460
40	325	380	440	355	425	480	380	465	525
45	365	430	495	395	475	540	430	520	590

THE d_a VALUES IN THE TABLE WERE ESTABLISHED BY THE METHOD REFERENCED IN DESIGN NOTE 12, AND ARE APPLICABLE TO URBAN, PREDOMINANTLY CURBED ROADWAYS WITH DESIGN SPEEDS OF 45 MPH OR LESS. FOR HORIZONTAL CLEARANCE (HC) OF SIX FEET (6'), THE VALUES FOR d_b MAY BE DETERMINED BY THE EQUATION $d_b = d_a(w/(w+12))$. FOR ROADWAYS WITH NONRESTRICTED CONDITIONS, d_a AND d_b SHOULD BE BASED ON THE GEOMETRY FOR THE LEFT TURN STORAGE AND ON CLEAR ZONE WIDTHS.

P = PASSENGER VEHICLE
SU = SINGLE UNIT TRUCK
COMB. = COMBINATION
d = CLEAR LINE SIGHT DISTANCE
 d_a = CLEAR LINE SIGHT DISTANCE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INTERSECTION
SIGHT DISTANCE
LANDSCAPE AND
OBSTRUCTION