

APPENDIX B

STREET DESIGN AND CONSTRUCTION STANDARDS

Table 1 Minimum Sight Distance Standards for Subdivision Accesses

Posted Speed	Sight Distance		
	Standard Vehicle	Larger Vehicle	Mobility
20	155	230	n/a
25	200	300	n/a
30	250	375	n/a
35	305	455	n/a
40	360	540	580
45	425	635	710
50	495	740	840
55	570	855	990
60	645	965	1150

Posted Speed figures are in Miles Per Hour (MPH)

Sight Distance figures are in feet (ft.)

Table 2 Access Design Standards for Low and Medium Volume Accesses

Basic Standards		Low Volume	Medium Volume
Min. Access Width:*			
	Majority Passenger Vehicles	12	22
	>30% Larger Vehicles	30	30
Min. Corner Clearance To:**			
	Unsignalized Intersection	75	100
	Signalized Intersection	125	125
Min. Access Spacing: ***			
	MPH of External Road		
	35 or less	n/a	n/a
	40	175	175
	45	265	265
	50	350	350
	55 or more	525	525

* Minimum widths for low or medium volume accesses shall be either the minimum cross section width of the internal subdivision street or the minimum access width in Table 2, whichever width is greater.

** Minimum corner clearance shall be the distance measured from the edge of an internal subdivision access excluding radii to the edge of an external street excluding radii.

*** Minimum access spacing shall be the distance measured from the edge of an internal subdivision access excluding radii to the edge of a neighboring access excluding radii.

Table 3 Design and Construction Standards for Town Streets or Private Ways

Item	Major Local Street	Minor Local Street	Ind./Comm.	Major Private Road	Minor Private Road
Average Daily Traffic (ADT)/Lots Served ⁽¹⁾	> 400 AADT	400 AADT	n/a	> 10 lots	10 Lots
Surface Type	Paved	Paved	Paved	Paved	Gravel
Min. Right-of-Way Width	60'	50'	50'	50'	50'
Min. Traveled Way Width ⁽²⁾	22'	20'	24'	20'	18'
Primary Shoulder Type ⁽³⁾	Paved	Paved	Paved	Gravel	Gravel
Min. Primary Shoulder Width without Curb	4'	2'	4'	2'	2'
Min. Primary Shoulder Width with Curb	5'	2'	4'	2'	n/a
Min. Primary Shoulder Width with Sidewalk	5'	2'	4'	2'	n/a
Secondary Shoulder Type	Gravel	Gravel	Gravel	Gravel	n/a
Min. Secondary Shoulder Width without Curb	2'	2'	2'	2'	n/a
Min. Clear Zone Width (each Side)	8'	7'	7'	n/a	n/a
Min. Esplanade Width	n/a	5'	n/a	n/a	n/a
Minimum Vertical Clearance	14'	14'	14'	14'	14'
Min. Grade	0.50%	0.50%	0.50%	0.50%	0.50%
Min. Grade with Curb	1.00%	1.00%	1.00%	1.00%	1.00%
Max. Grade	7%	8%	6%	11%	11%
Min. Centerline Radius	350'	180'	200'	100'	60'
Min. Tangent between curves of reverse alignment	200'	100	200	100'	n/a
Min. Angle of Street Intersection ⁽⁴⁾	90	60	90	60'	60'
Max. Grade at Intersections ⁽⁵⁾	2%	2%	2%	2%	2%
Min. Curb Radii	30'	25'	30'	25'	15'
Max. Dead End Street Length	See Section 543 Streets and Section 911.M.5(b)(5) Dead End Streets				
Min. Sidewalk Width	5'	5'	5'	n/a	n/a
Min. Paved Apron ⁽⁶⁾					20'

Additional Standards:

(1) See Section 911 (M) for street connection requirements.

(2) Add 8' of width for each lane of on-street parking.

(3) See Section 911 (M)(5)(b)(6) for shoulder and sidewalk requirements.

(4) Angle must be maintained for at least 60' from the intersection.

(5) Maximum grade must be maintained for at least 60' from the intersection.

(6) A negative 2.0% grade from the existing edge of pavement must be provided to an appropriate drainage way that is no less than 5 feet from the travel surface or private way it intersects.

Table 4 Street Construction Standards and Dimensions

Material	Major Local Street	Minor Local Street	Ind./Comm.	Major Private Road	Minor Private Road
Surface Type	Paved	Paved	Paved	Paved	Gravel
Aggregate Sub-Base Courses					
Type D*	21"	21"	27"	21"	18"
Crushed Aggregate Base Course**	3"	3"	3"	3"	3"
Hot Bituminous Pavement					
Total Thickness Compacted	5"	4"	5"	4"	n/a
Base Course, HMA 19.0mm	3.5"	2.5"	3.5"	2.5"	n/a
Surface Course, HMA 9.5mm	n/a	1.5"	n/a	1.5"	n/a
Surface Course, HMA 12.5mm	1.5"	n/a	1.5"	n/a	n/a
Paved Apron					
Aggregate Sub-Base Courses					
Type D					18"
Type B					n/a
Crushed Aggregate Base Course**					3"
Hot Bituminous Pavement					3"
Bituminous Concrete Sidewalk:					
Crushed Aggregate Base Course	10"	10"	10"	n/a	n/a
Pavement Surface Course***	(2)-1.25"	(2)-1.25"	(2)-1.25"	n/a	n/a

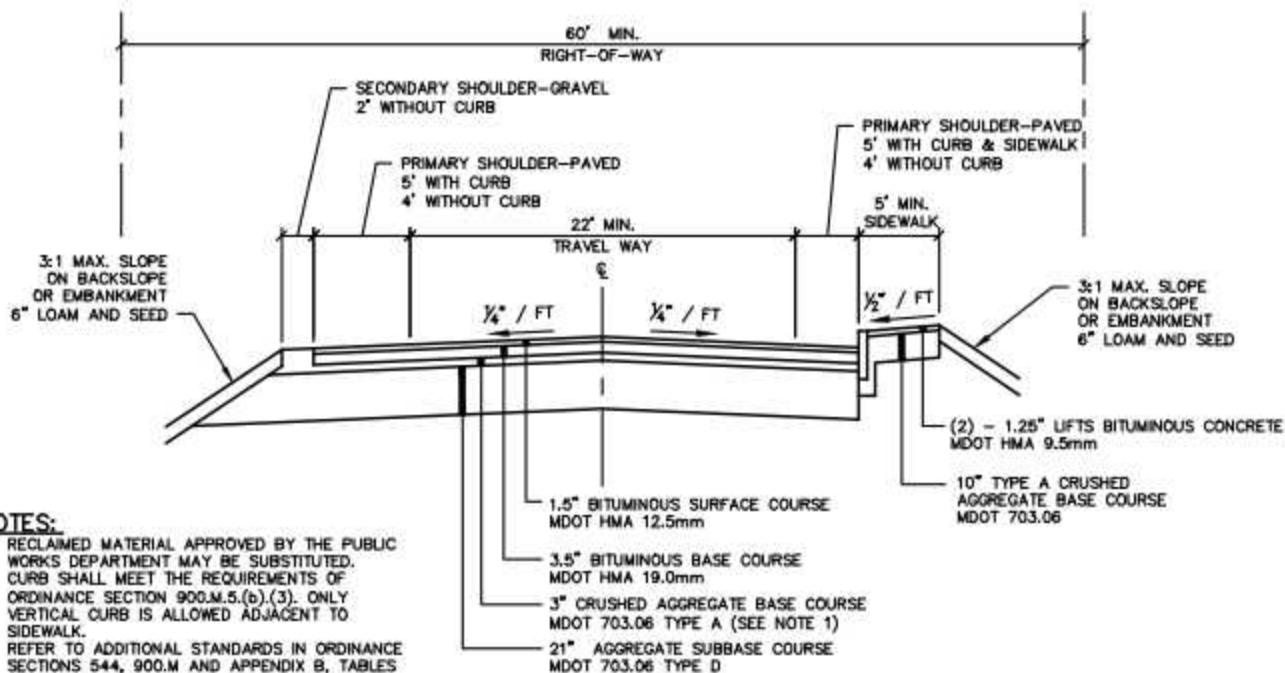
Notes:

(#) = Required number of courses.

* The Planning Board or Director of Public Works, as appropriate, may reduce the required depth of ASCG Type D from 27" to 21" if the applicant provides a geotechnical evaluation performed by a professional engineer. The evaluation must include gradations, California Bearing Ratios, and a design (based on AASHTO design methods) which indicates that 21" of ASCG Type D will be adequate to handle the estimated vehicular weight loads.

** Material shall be Crushed Aggregate Base Course, Type A, or Reclaimed asphalt approved by the Public Works Department.

***Material shall be HMA 9.5mm.

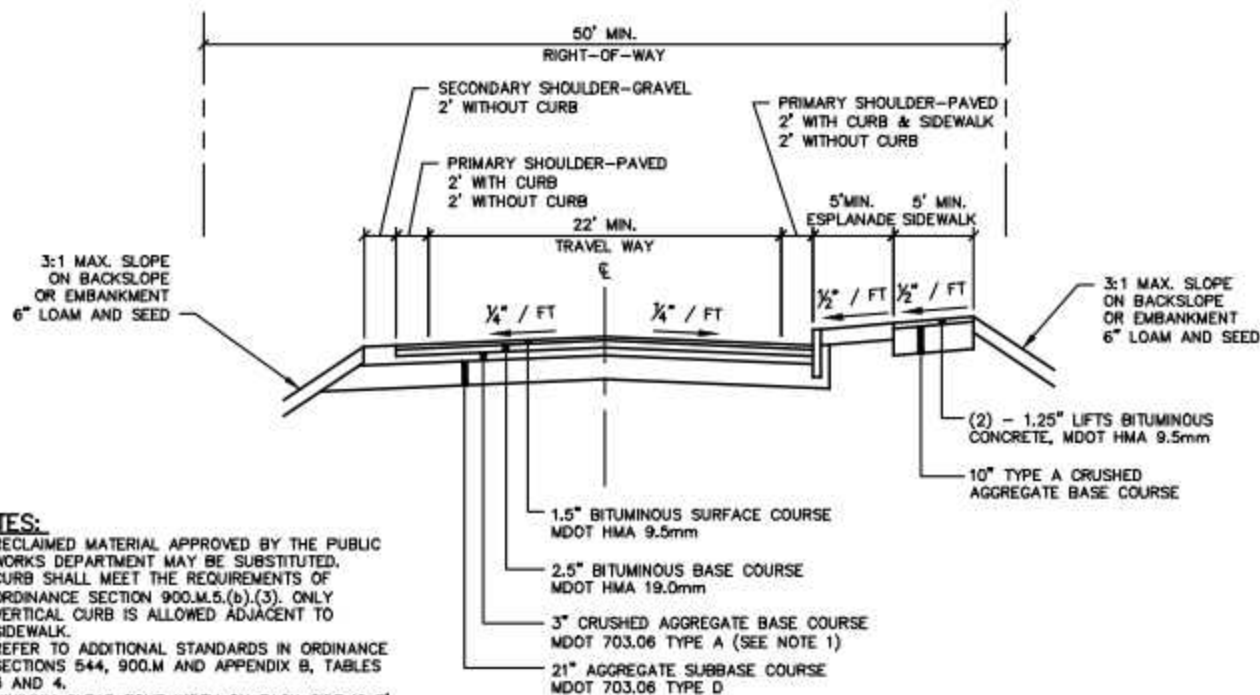


NOTES:

1. RECLAIMED MATERIAL APPROVED BY THE PUBLIC WORKS DEPARTMENT MAY BE SUBSTITUTED. CURB SHALL MEET THE REQUIREMENTS OF ORDINANCE SECTION 900.M.5.(b).(3). ONLY VERTICAL CURB IS ALLOWED ADJACENT TO SIDEWALK.
2. REFER TO ADDITIONAL STANDARDS IN ORDINANCE SECTIONS 544, 900.M AND APPENDIX B, TABLES 3 AND 4.
3. MINIMUM CLEAR ZONE WIDTH ON EACH SIDE IS 8', MEASURED FROM EDGE OF TRAVEL WAY.

MAJOR LOCAL STREET

NOT TO SCALE

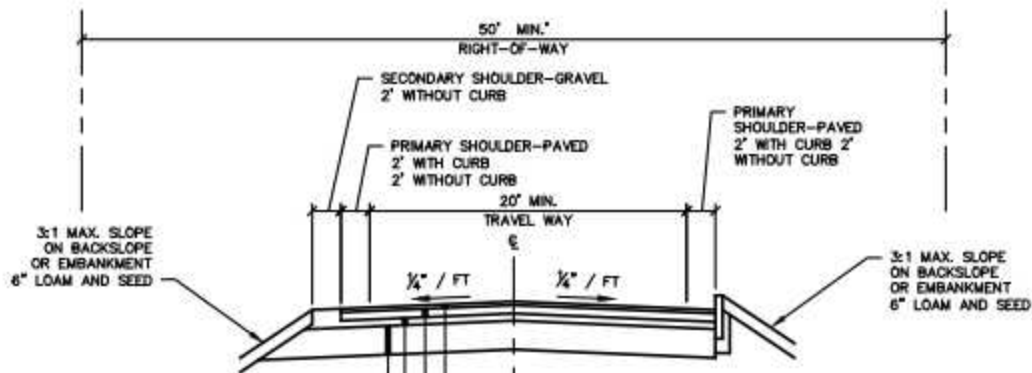


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4. MINIMUM CLEAR ZONE WIDTH ON EACH SIDE IS 7', MEASURED FROM EDGE OF TRAVEL WAY.

MINOR LOCAL STREET

NOT TO SCALE



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1.5" BITUMINOUS SURFACE COURSE
MDOT HMA 9.5mm

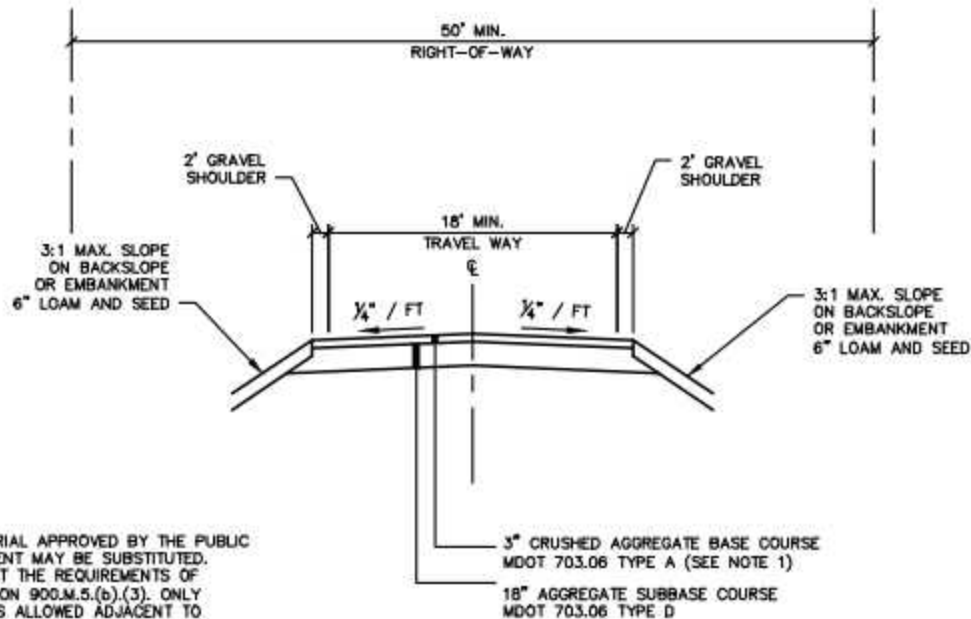
2.5" BITUMINOUS BASE COURSE
MDOT HMA 19.0mm

3" CRUSHED AGGREGATE BASE COURSE
MDOT 703.06 TYPE A (SEE NOTE 1)

21" AGGREGATE SUBBASE COURSE
MDOT 703.06 TYPE D

MAJOR PRIVATE ROAD

NOT TO SCALE

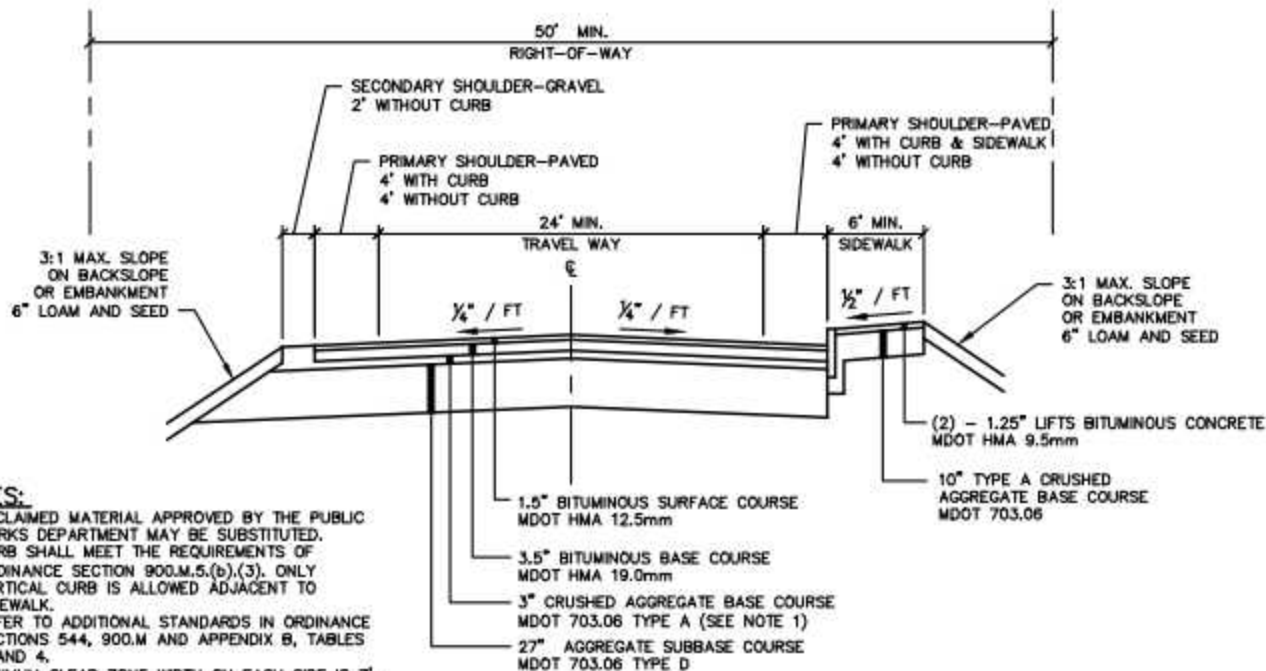


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MINOR PRIVATE ROAD

NOT TO SCALE

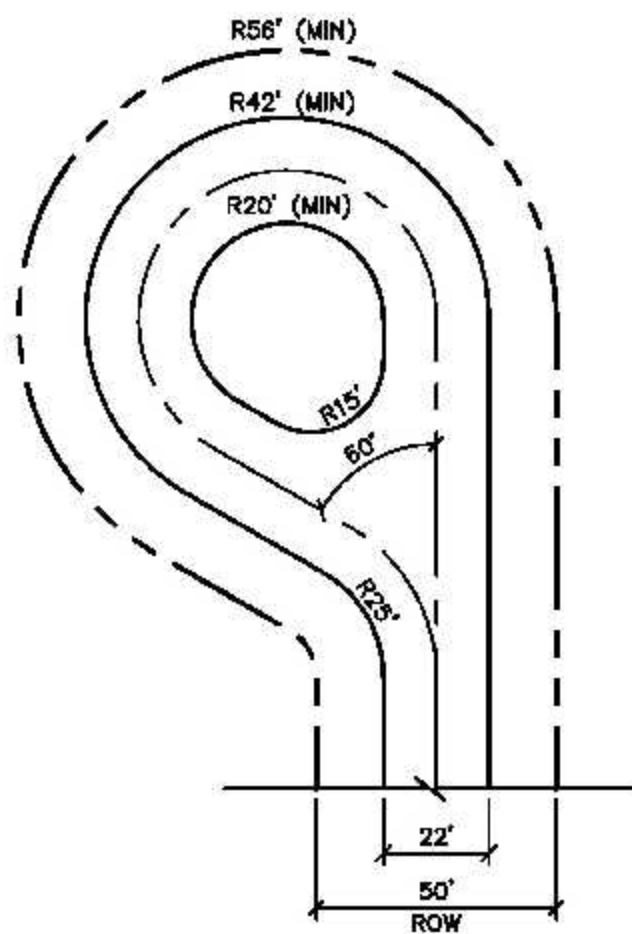


INDUSTRIAL/COMMERCIAL STREET

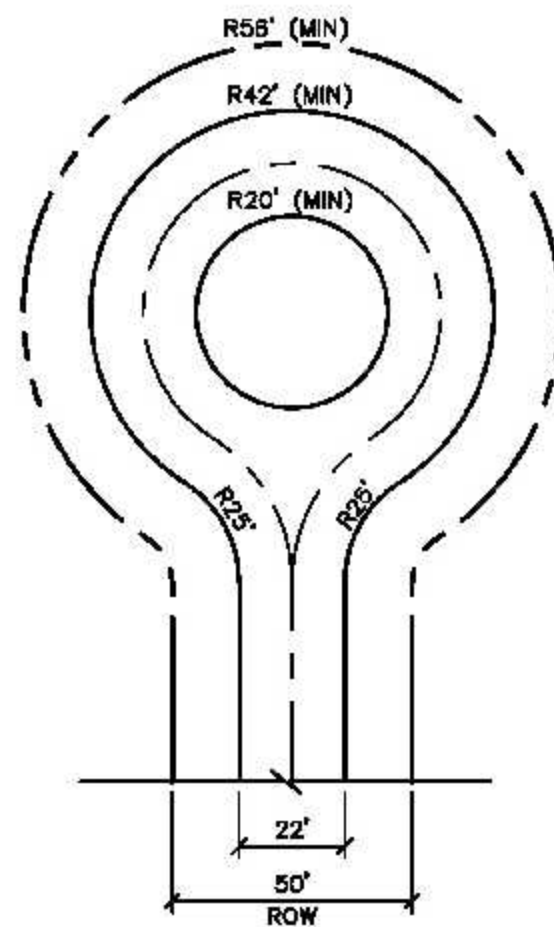
NOT TO SCALE



1. REFER TO ORDINANCE SECTIONS 500.B.8.(f).(2) AND 900.M.5.(b).(5).(iv) FOR HAMMERHEAD DESIGN CRITERIA.



CIRCULAR OFFSET



CIRCULAR

LOCAL STREET CUL-DE-SAC

NOT TO SCALE