



McKenzie County
 1300 12th Street SE, Suite 240
 Watford City, ND 58854
 Ph. 701-444-2600
county.mckenziecounty.net

DESIGN STANDARDS FOR NEW CONSTRUCTION OR RECONSTRUCTION OF ROADS

	County Major Collectors (CMC)	Local Roads (County)	Local Roads (Township)	Local Roads (Other)
Bridge Width (Minimum Clear Roadway)	32 ft	32 ft	32 ft	28 ft
Storm Design Frequency (Bridges)	50 year	50 year	25 year	Per NDAC 89-14
Minimum Design Loading (Bridges)	HL-93	HL-93	HL-93	HL-93
Culvert Design Frequency	50 year	50 year	25 year	Per NDAC 89-14
Paved Roadways				
Minimum Travel Way Width (both lanes + shoulders)	24 ft + 4 ft per Shoulder	24 ft + 4 ft per Shoulder	24 ft + 4 ft per Shoulder	24 ft + 2 ft per Shoulder
Minimum Pavement Thickness¹	6 in	6 in	6 in	4 in
Minimum Gravel Thickness¹	12 in	12 in	12 in	8 in
Gravel Roadways				
Minimum Travel Way Width (both lanes + shoulders)	24 ft + 4 ft per Shoulder	24 ft + 4 ft per Shoulder	24 ft + 4 ft per Shoulder	24 ft + 1 ft per Shoulder
Minimum Gravel Thickness¹	8 in	6 in	6 in	6 in
Minimum Design Speed	55 mph	35 mph	35 mph	35 mph
Minimum Right of Way Width	150 feet	150 feet	120 feet	120 feet ²
Maximum Inslope Ratio (H:V)	4:1			
Minimum Separation (Road Top to Ditch Bottom)	4 feet	4 feet	3 feet	3 feet

¹ As required by the County Engineer, pavement section is to be determined by geotechnical report, ADT, and with legal load limits at 105,500 lbs.

² If required by McKenzie County and/or Organized Township.

ADOPTED BY MCKENZIE COUNTY

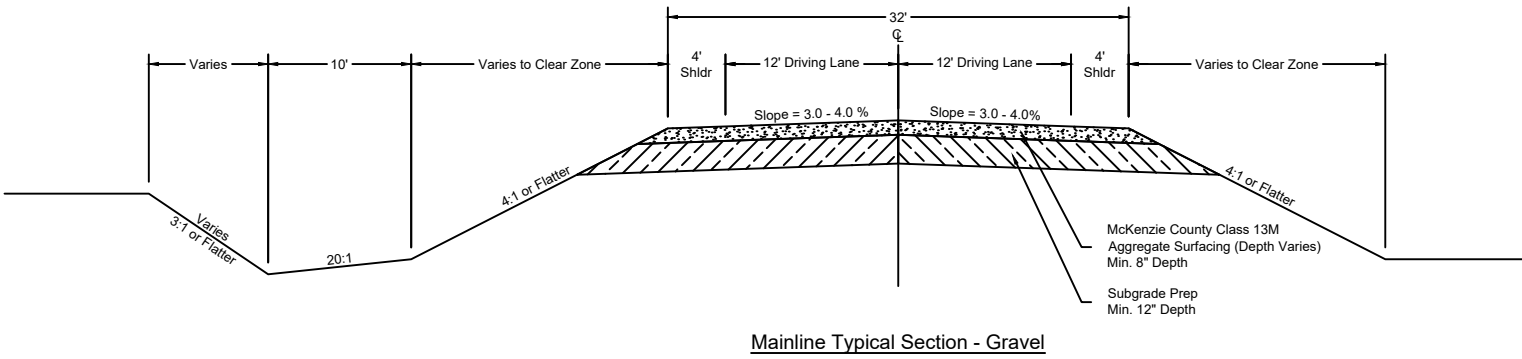
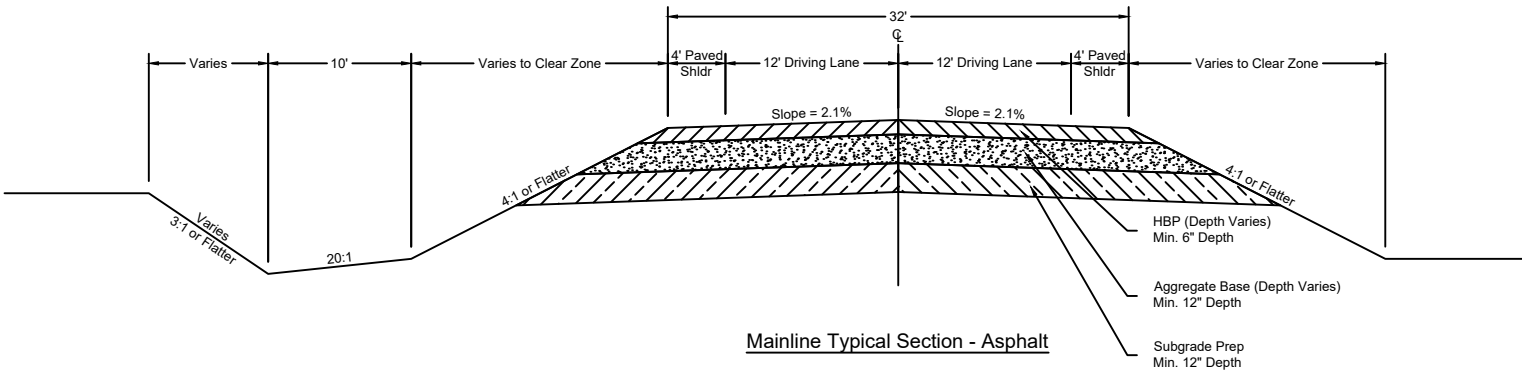
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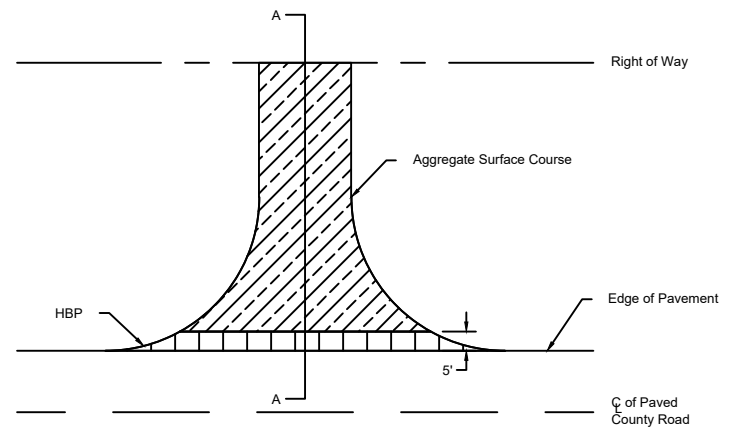
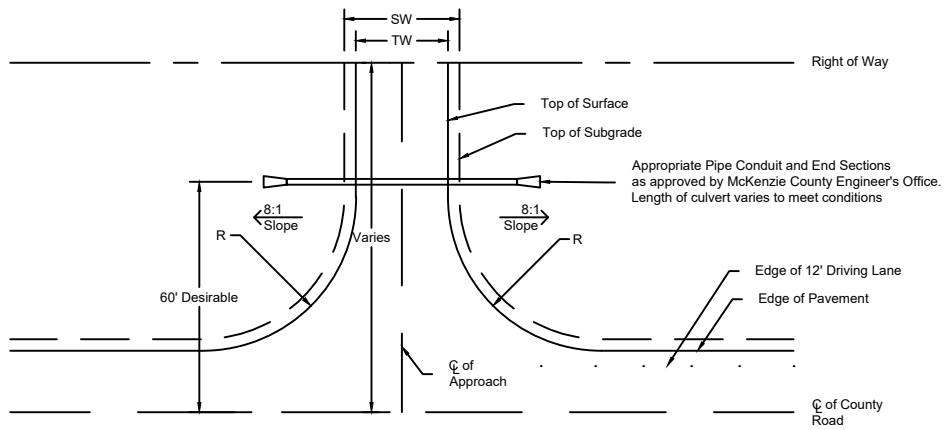
BOARD OF COUNTY COMMISSIONERS CHAIRMAN

ATTEST:

COUNTY AUDITOR

**MCKENZIE COUNTY
CMC TYPICAL SECTION**

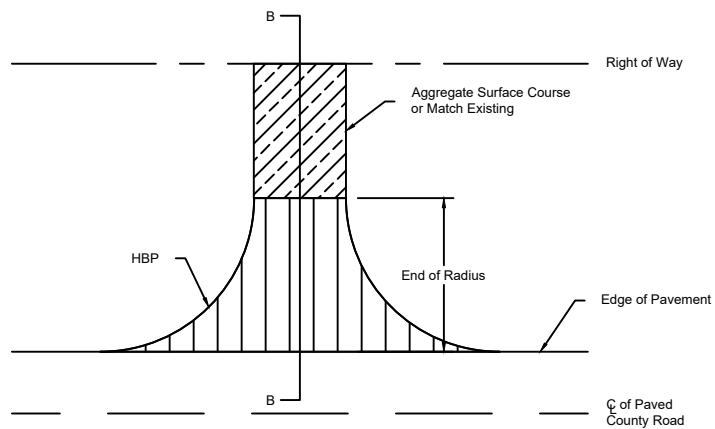




Field Drive Approach

	Field Drives	Private Drives	Section Line or Road
Radius (R)	40 ft	40 ft	50 ft
Top Width (TW)	24 - 40 ft	24 - 40 ft	32 ft
Subgrade Width (SW)	28 - 44 ft	28 - 44 ft	38 ft
Maximum Grade	10%	7%	7%
Storage Platform	24 ft	24 ft	50 ft
Vertical Curve Length	10 ft	10 ft	Varies

Refer to NDDOT Standard Drawing D-203-8 for more information.



Private Drive Approach/Section Line or Road Approach

