



## **STANDARDS FOR RURAL ROAD APPROACHES**

NO CONSTRUCTION SHALL COMMENCE PRIOR TO THE PRELIMINARY INSPECTOR

All approaches shall comply with the requirements contained herein. The following criteria apply to approaches along roadways for all proposed municipal improvements:

- .01 All newly created parcels shall have a means of legal and physical access to a developed municipal roadway. The County shall evaluate the proposed design for every access to ensure that it is acceptable. The final location, configuration, and construction of all proposed approaches shall be approved by the County.
- .02 As a condition of subdivision approval of the land or of Development Permit approval, the County shall inspect existing accesses for compliance with the County Road Approach Standards Guide. If necessary, the County may require the applicant to upgrade or remove these existing accesses. New accesses, if required, shall be built by the applicant in accordance with the County's Road Approach Standards and are subject to County approval.
- .03 Access to Municipal Reserve (MR), Environmental Reserve (ER), or balance parcels shall be provided directly from a developed municipal roadway.
- .04 All construction of new approaches and/or upgrading of existing approaches shall be conducted in accordance with the County's *Standards for Road Approaches*.
- .05 All approaches are to comply with sight distance and superelevation requirements.
- .06 The Developer shall provide evidence that sight distances and horizontal/vertical visibility at all accesses, including driveways, along a road meet the applicable requirements for intersection stopping and approaching sight distances. The current edition of TAC's *Geometric Design Guide for Canadian Roads* should also be reviewed to confirm that the requirements are up to date.
- .07 All approaches will require the installation of a culvert in accordance with the County's *Standards for Road Approaches* unless otherwise specified in writing by the County after a site inspection.
- .08 There shall be no obstructions (e.g. gate, fence, control box) located on the approach within the road ROW.
- .09 Any proposed changes to the existing ditch bottom shall be approved by the County.
- .10 Approaches shall be constructed of the same material and with the same surfacing structure as the adjoining road.
- .11 Approaches shall be in accordance with Table 2.5, which identifies the typical geometric and design requirements for approaches within the County. These requirements are also illustrated in the *Standard Rural Road Drawings*.
- .12 All debris and/or excessive topsoil in the ROW shall be disposed of at a location suitable to the County. All disturbed areas shall be returned to their original grade, loamed, and seeded with a seed mix approved by the County.



Table 2.5- Geometric and Design Requirements for Approaches

GEOMETRIC AND DESIGN COMPONENT	REQUIREMENT
<b>Minimum Distance from: *</b>	
Intersection Centre Line (Centre to Centre) – Local Roads	30 m
Intersection Centre Line (Centre to Centre) – Collectors/Arterials	60 m
Bridge File (Start of Bridge) Deck or Edge of Culvert)	60 m
Centre Line of Highways	200 m
Centre Line of At-Grade Railway Crossing	60 m
Centre Line of Another Approach on Same Side of Road	15 m
<b>Intersection Sight Distance Requirement @ 80 km/h (Design Speed):**</b>	See Standard Rural Road Drawings R-112 and R-114
<b>Maximum Approach Gradient Road Shoulder):</b>	+ 4%**
<b>Single Approach Geometry: ***</b>	
Minimum Roadway Width	6 m
Maximum Roadway Width	10 m
Minimum Corner Radius	7 m
Side Slope Ratio	See Standard Rural Road Drawings R-112 to R-115 (3H:1V maximum)
<b>Joint Approach Geometry:***</b>	
Minimum Roadway Width	15 m
Minimum Corner Radius	10 m
Side Slope Ratio	See Standard Rural Road Drawings R-112 to R-115 (3H:1V maximum)
<b>Culvert Requirements (as required):</b>	
Material	New CSP with Sloped Ends
Minimum Diameter	450 mm
Length ****	As per Alberta Transportation and Economic Corridors requirements
Minimum Cover over Pipe	500 mm or ½ of culvert diameter, whichever is greater
Minimum Size of Rip-Rap	200 mm
Placement of Rip-Rap (at Inlet and Outlet)	Around Sloped Culvert Ends; Extend 1.0 m past Culvert Ends
Minimum Buffer to Power Pole, Power Pole Anchor, or Utility Pedestal from Culvert End	6 m

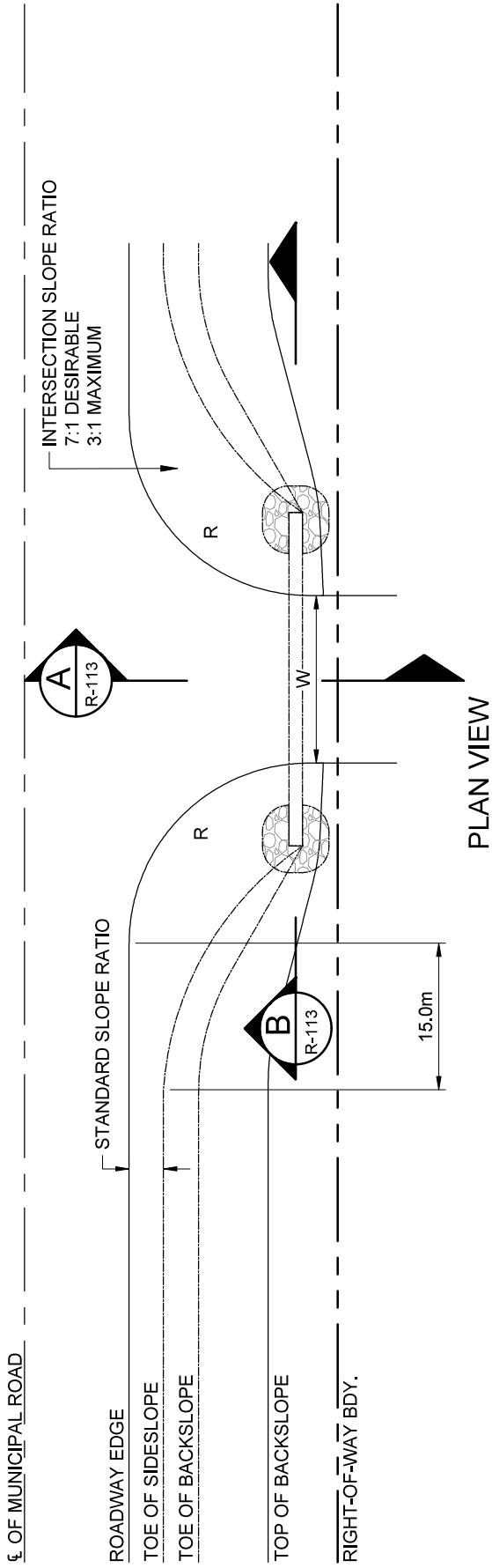
\* Each location should be evaluated using design speeds, traffic volumes, collision history, and professional engineering judgment on a case-by-case basis. Upon inspection, the County may increase this distance.

\*\* Approaches shall not be permitted where superelevation on the primary roadway exceeds 4%.

\*\*\* For Industrial / Commercial road access, the approach top width and corner radii must accommodate the largest design vehicle which will utilize the approach.

\*\*\*\* Culvert length will vary on access width, design side slopes, depth of cover, and existing ditch depth.

NOTE: ACCESS TO BE PROVIDED ONLY WHEN ANGLE OF INTERSECTION IN RANGE OF 80 TO 100 DEGREES.



PLAN VIEW

TABLE 1A-3: DETERMINATION OF ROADWAY WIDTH

USAGE	MINIMUM ROADWAY WIDTH W (m)	MAX ROADWAY WIDTH W (m)	MINIMUM RADIUS OF EDGE OF ROADWAY R (m)
SINGLE ACCESS	6	10	7
JOINT ACCESS	15	15	10

ROADWAY WIDTH AND CURVE RADIUS MAY BE INCREASED ABOVE MINIMUM VALUES TO SUIT SITE SPECIFIC NEEDS.

TABLE 1A-2: ADJUSTMENT FACTORS FOR SIGHT DISTANCE BASED ON APPROACH GRADE

APPROACH GRADE (%)	DESIGN SPEED (km/h)									
	20	30	40	50	60	70	80	90	100	110
6	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2
5	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2
4	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1

TABLE 1A-1: DESIGN INTERSECTION SIGHT DISTANCE (m)

DESIGN SPEED (km/h)	REQUIRED SIGHT DISTANCE (m)
20	65
30	100
40	130
50	160
60	195
70	225
80	260
90	290
100	320
110	355

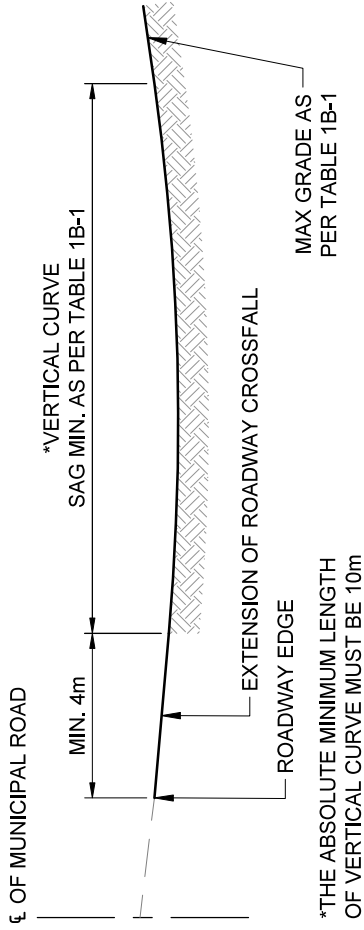
ON APPROACH GRADES GREATER THAN 3%, SIGHT DISTANCE IN TABLE 1A-1 SHALL BE INCREASED BY FACTORS INDICATED IN TABLE 1A-2

ISSUE DATE: JUNE 2024  
 SCALE: N.T.S.  
 DRAWING NO: R-112

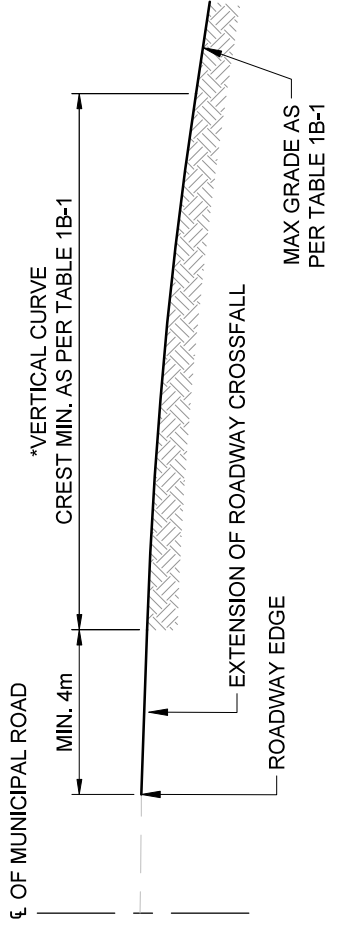
MUNICIPAL STANDARD

TYPICAL GRAVEL APPROACH

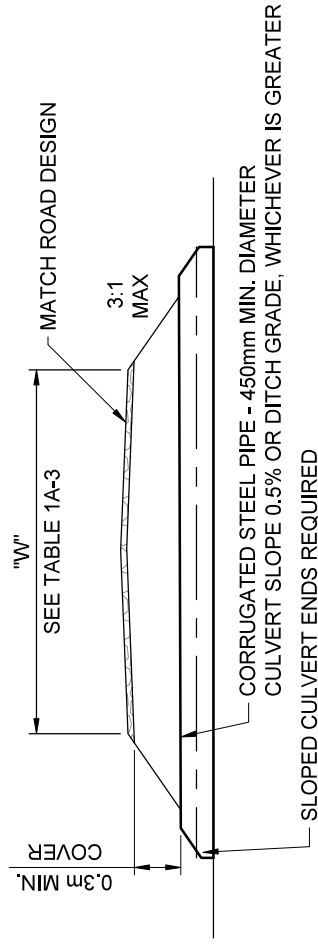




**A** INTERSECTING ROAD IN CUT  
R-112 SCALE NTS



**A** INTERSECTING ROAD IN FILL  
R-112 SCALE NTS



**B** CULVERT/ROAD SECTION  
R-112 SCALE NTS

TABLE 1B-1: VERTICAL GEOMETRY CRITERIA

	MAX. GRADE	MIN. K CREST	MIN. K SAG
SINGLE AND JOINT ACCESS	10%	4	4

NOTE:

APPROACH GRADES BETWEEN 0.5% AND 4% ARE ACCEPTABLE BUT SHALL MATCH THE ROADWAY CROSSFALL. APPROACHES SHALL NOT BE PERMITTED ON CURVES WHERE SUPERELEVATION IS GREATER THAN 4%.

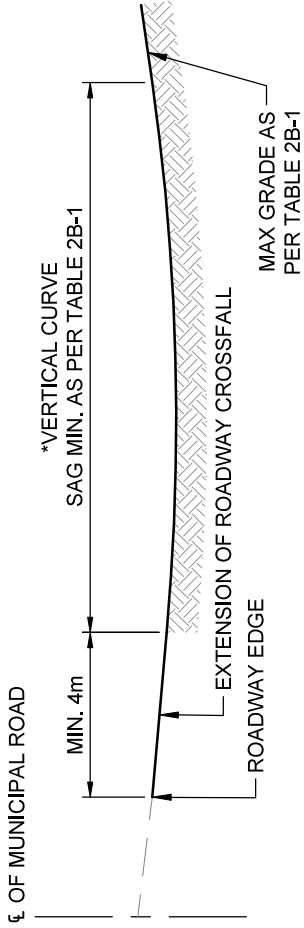
ISSUE DATE:	JUNE 2024
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TYPICAL GRAVEL APPROACH PROFILE

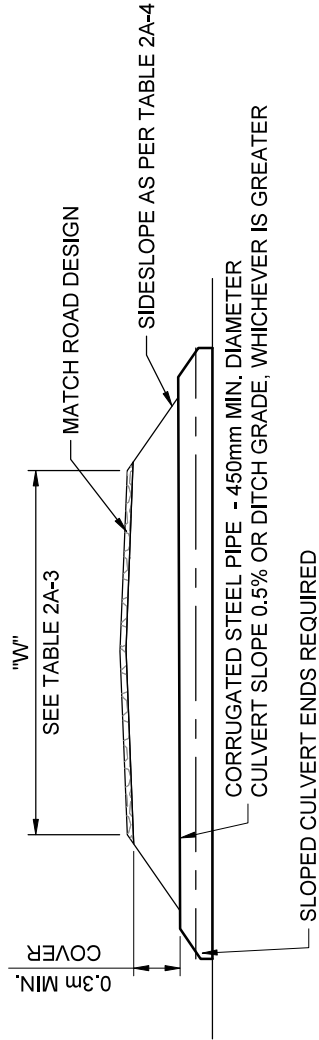






\*THE ABSOLUTE MINIMUM LENGTH OF VERTICAL CURVE MUST BE 10m

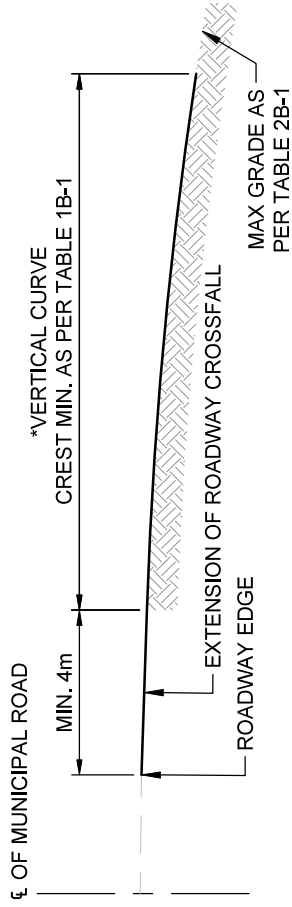
**A** INTERSECTING ROAD IN CUT  
SCALE NTS



**B** CULVERT/ROAD SECTION  
SCALE NTS

USAGE	TREATMENT
RESIDENTIAL	PROPERTY LINE
COMMERCIAL	PROPERTY LINE
AGRICULTURAL	4m OFFSET FROM ROADWAY EDGE
UTILITY MAINTENANCE	4m OFFSET FROM ROADWAY EDGE
PUBLIC ROAD ALLOWANCE	PROPERTY LINE

NOTE:  
APPROACH GRADES BETWEEN 0.5% AND 4% ARE ACCEPTABLE BUT SHALL MATCH THE ROADWAY CROSSFALL. APPROACHES SHALL NOT BE PERMITTED ON CURVES WHERE SUPERELEVATION IS GREATER THAN 4%.



**A** INTERSECTING ROAD IN FILL  
SCALE NTS

SINGLE AND JOINT ACCESS	MAX. GRADE	MIN. K CREST	MIN. K SAG
FIELD APPROACH	10%	4	4
	16%	MIN. K CREST 2	MIN. K SAG 4



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ISSUE DATE: JUNE 2024

TYPICAL PAVED APPROACH PROFILE

SCALE: N.T.S.  
DRAWING NO: R-115