

ROAD DEVELOPMENT AGREEMENT

THIS AGREEMENT MADE this ____ day of _____ A. D. 2008
BETWEEN:

THE RURAL MUNICIPALITY OF LUMSDEN No. 189,
a municipal corporation, (hereinafter referred to as the "*Municipality*"),
OF THE FIRST PART,
-and-

(hereinafter referred to as the "*Developer*")
OF THE SECOND PART.

WHEREAS:

The developer is the owner or is entitled to become the owner of certain properties located within the Municipality, as more particularly described in Appendix "A" hereunto attached and forming a part of this Agreement (the "Land");

The Developer requires a road to be developed on the municipal road allowance to service the land or Council has, as part of a development application required the Developer to construct a road in accordance to Appendix "A".

ARTICLE 1:00 DEVELOPER'S RESPONSIBILITIES

1.1 "Construction Deposit"

The Developer agrees to deposit cash in trust with the municipality, in an amount determined by the municipality for the construction and engineer inspection of an access road to the "Land" on the municipal road allowance, designed and constructed in accordance with municipal standards as set out in Appendix "A" to this agreement.

1.2 "Construction Map"

The Developer shall provide the municipality with a map which shows in detail the location, length and width of the proposed access road. This map shall form part of Appendix "A" to this agreement.

1.3 "Gravelling Deposit"

The Developer agrees to deposit cash in trust with the municipality, in an amount determined by the municipality, for the gravelling of the road in the year of construction and the two years immediately following construction of the said road. The deposit shall be calculated based on current budgeted cost of gravel for the respective division; and an application rate of 150 yards per mile in the year of construction and 100 yards in each of years immediately after construction.

1.4 "Indemnification"

The Developer shall indemnify and save harmless the Municipality against legal action resulting from a breach of any of the terms or conditions of this agreement by the Developer.

ARTICLE 2:00 MUNICIPALITY'S RESPONSIBILITIES

2.1 “Road Construction”

The municipality agrees to be responsible for construction of the road upon receipt of the deposit required from the Developer to cover the road development costs. The deposit may be refunded to the Developer in the event the work does not commence within 90 days of receiving the deposit, and no construction date is scheduled within the next 60 days.

2.2 “Completion Inspection”

The municipality agrees to arrange for the Municipal Engineer or Manager of Public Works to inspect the completed road construction and provide the Developer with a “*letter of completion*” indicating the road has been completed to the municipal standards outlined in Appendix “B”.

2.3 “Road Gravel Application”

The municipality agrees to arrange for a contractor to apply road gravel at the rate of 150 yards per mile in the year of construction and 100 yards per mile in each of the years immediately following construction.

2.4 “Deposit”

The municipality agrees to refund to the Developer any unused balance of the “Deposit in Trust”, after all actual construction expenditures are received and a completion certificate or *letter of completion* has been issued.

ARTICLE 3.0 ROAD DEVELOPMENT AND APPROACHES

3.1 The Parties agree that all approaches shall be constructed and maintained according to the terms set out in this agreement and standards set out in Appendix “B”.

3.2 The Developer shall construct, at his own cost, a road to service the entire frontage of all sites in the Plan and a road to connect the Plan with the rest of the development, as shown on Schedule “B” attached hereto. This road shall be constructed to main farm access standard, on a 66 foot wide road allowance, as indicated on Appendix “B”. The interior subdivision road, if applicable, shall be constructed to same standard, with the exception of the Slope Standard and Grade Height. The slope standard for the internal subdivision road shall be a 4 to 1 slope and the grade height shall be .65 meters.

3.3 Where sloping or backfilling will extend beyond the 66 foot wide road allowance, an agreement with the landowner must be signed and compensation paid. A copy of all executed agreements with landowners shall be provided to the municipal office, prior to the start of any construction.

3.4 The size and standard of the road and any necessary culverts shall be further detailed in the construction drawings, which shall comply with the Municipal Road Program Manual of Saskatchewan Highways and Transportation. In the case of a new road, 1 approach for each quarter section must be provided to allow proper land access.

3.5 The Developer hereby agrees to provide or arrange for snow removal and road maintenance, at the Developer’s own cost, throughout the construction of the road or roads until the construction of the road is completed.

3.6 Upon the issuing of a certificate of completion, in accordance with section 2.2, the municipality shall provide road maintenance and snow removal in accordance with municipal service delivery policies. The municipality’s responsibility for maintenance shall be as outlined in The Municipalities Act

ARTICLE 4:00 BINDING AGREEMENT

4.1 This agreement shall be binding upon the parties, their heirs, successors and lawful assigns. The Developer may not assign the terms and conditions of this Agreement in whole or in part without approval of the Council of the Municipality. The Municipality may require, as a condition to the grant of its consent to any assignment or transfer, that the Assignee or Transferee execute a copy of this Agreement and agree to be bound thereby.

IN WITNESS WHEREOF the parties hereto have executed this Agreement as of the day and year first above written.

RURAL MUNICIPALITY OF LUMSDEN NO. 189,

PER: _____
Reeve

S E A L

PER: _____
Administrator

DEVELOPER,

PER: _____

WITNESS:

PER: _____

Print Name

APPENDIX "A"

ROAD DEVELOPMENT DESCRIPTION AND MAPS

1) Property to be serviced:	_____	_____	Acres,
2) Length of Road:	_____	metres (_____ miles) ,
3) Construction Contractor:	_____	,	
4) Gravel Contractor:	_____	,	
5) Estimated construction amount:	\$ (Road Construction, Engineer Fee & Culverts)		
6) Actual Gravel Amount:	Yr 1 \$ (yds),	Yr 2 \$ (yds),	Yr 3 \$ yds)

THE RURAL MUNICIPAL OF LUMSDEN No. 189

APPENDIX "B"

**GENERAL STANDARDS OF CONSTRUCTION
MAIN FARM ACCESS ROAD**

Summary Description of Basic Standards:

1. Minimum right-of-way width – 20m. Ditch widths may be reduced to accommodate construction on a 20m right of way. The Manager of Public Works in consultation with municipal council must approve any other deviations from the standard. Culvert placement and sizes are to be determined in consultation with the Manger of Public Works.
2. Full width of right-of-way to be cleared.
3. The standard basic top width for Main Farm Access roads is 7 m. On all curves and on fills over 2 m in height, the top width is to be a minimum of 0.6 m wider than the basic top width.

Top widths should be widened as follows:

Fills 2 m to 3 m - 7.6 m top width

Fills over 3 m - 8.0 m top width

These widths are to be used even if guard rails are not required.

4. Sideslopes - 3:1 up to 2 m.
 - Variable 2 m to 3 m (toe of slope to be 6 m from shoulder).
 - 2:1 over 3 m.Sideslopes can be flattened above 3:1 where this will aid in disposing of objectionable material.
5. Backslopes - 5:1, with a maximum of 2:1.
 - 5:1 backslope is to be maintained until top of backslope reaches the edge of right-of-way.
6. Snow clearance - When shoulder grade elevation is 0.3 m or less above natural surface at 15.0 m to 20.0 m from centre line then the backslope must be flattened using a variable slope of 5:1 to 2:1 maximum to 20 m from centre line.
7. Minimum radius of curvature - 250 m. (May Be relaxed with written approval from municipal council.
8. Maximum gradient - 9%. In unusual circumstances - 11%.
9. Stopping sight distance - 85 m (minimum 60 km/hr design).
10. Clear vision at road intersection - minimum of 85 m from the point of intersection on municipal roads and grid intersections to a maximum of 85 m on Main Farm Access roads using 60 km/h design speed.

General Standards of Construction - continued

Appendix "B"

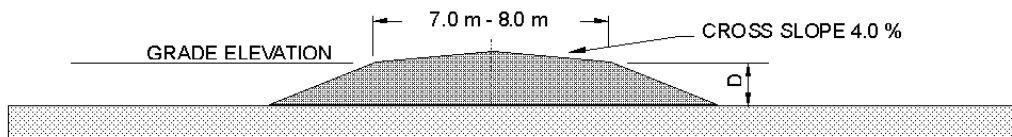
11. Installation of all necessary drainage structures and construction of drainage ditches. Riprap only where necessary to avoid undue erosion.
- Minimum culvert diameter of 400 m.
12. Construction of all road connections and approaches.
13. The average shoulder elevation of the road surface to be approximately 0.5 m above the adjacent ground surface, except in cuts.
14. Road surface shall not be less than 1 m above high water level on ground water table (ie., level to which free water would rise in a hole sunk in the ground).
15. Road surface, sideslopes, ditches and backslopes shall be bladed smooth to conform to the standard cross-section.
16. Gravel surfacing required (see article 2.3)
17. Curves must be constructed with the proper super-elevation.
18. Alignment - T-intersections at road intersections and a preferred minimum radius of 300 m curves for all necessary road diversions with an absolute minimum radius of 250 m.

Maps listed below are on next few pages ...

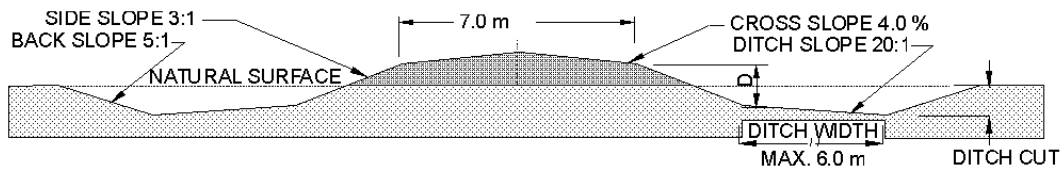
- **TYPICAL CROSS SECTIONS – MAIN FARM ACCESS ROAD**
- **MUNICIPAL INTERSECTIONS & APPROACH CONSTRUCTION**
- **MUNICIPAL APPROACH CROSS SECTION**
- **MUNICIPAL VERTICAL SIGHT DISTANCE AT INTERSECTION**
- **MUNICIPAL SIGHT TRIANGLES**

TYPICAL CROSS SECTIONS – MAIN FARM ACCESS ROAD**CROSS SECTION OF EMBANKMENT**

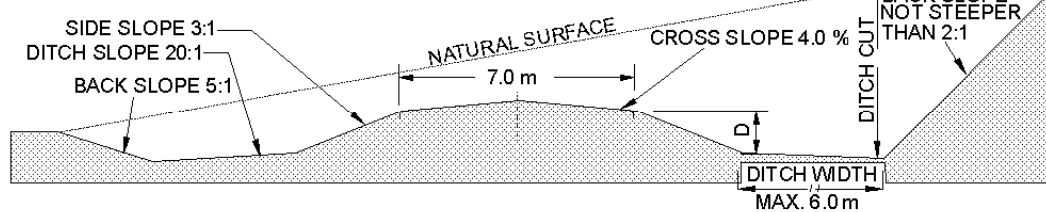
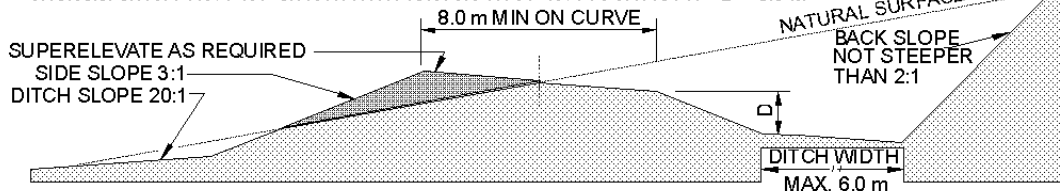
D LESS THAN 2.0 m - SIDE SLOPES 3:1
 D FROM 2.0 m to 3.0 m - TOE OF SLOPES 6.0 m FROM SHOULDER
 D EXCEEDS 3.0 m - SIDE SLOPES 2:1
 FILLS 2.0 m TO 3.0 m - 7.6 m TOP WIDTH
 FILLS OVER 3.0 m - 8.0 m TOP WIDTH
 (ON CURVES - WIDEN ABOVE BY 1.0 m)

**CROSS SECTION OF EMBANKMENT AND SIDE DITCH D = 0.9 m**

D CAN BE REDUCED TO 0.8 m WHEN NOT REQUIRED FOR DRAINAGE OR SNOW CLEARANCE.

**CROSS SECTION OF CUT D = 0.9 m**

MINIMUM 0.5 m D IN TOTAL CUT SECTION & REDUCE DITCH WIDTH TO 3.0 m.

**CROSS SECTION OF SIDEHILL ROADWAY ON A CURVE D = 0.9 m****Note:**

1. Basic top width: 7.0 m.
2. Right-of-way: purchased minimum - 30.0 m.
or easement minimum - 46.0m.
3. Design speed: 60 km/h vertical, 80 km/h horizontal
4. Snow clearance: when shoulder grade elevation is 0.3 m or less above natural surface at 15.0 m to 20.0 m from centerline then backslope must be flattened out to 20.0 m from centerline.

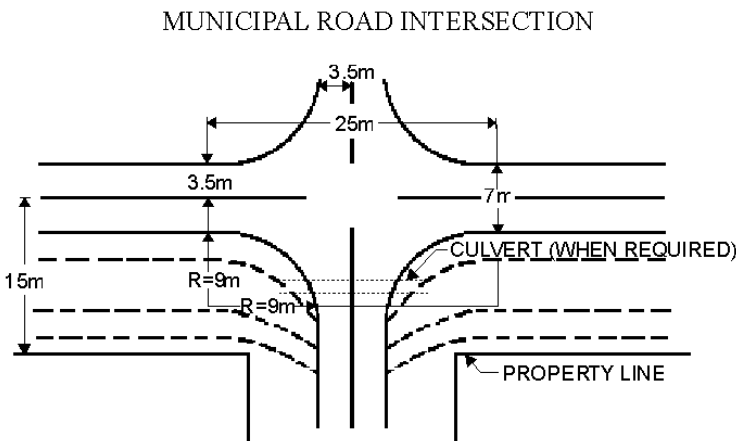


**Highways and
Transportation**

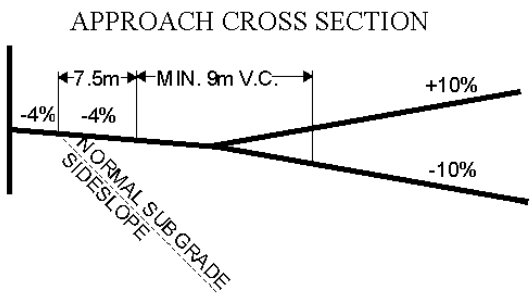
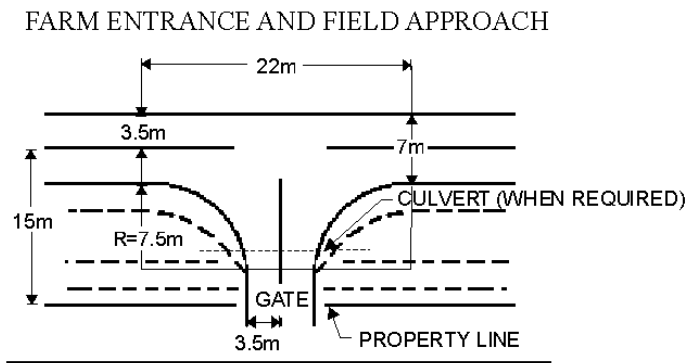
**TYPICAL CROSS SECTIONS
 MAIN FARM ACCESS ROADS - MUNICIPAL
 7000 30m +/- RIGHT-OF-WAY
 Subgrade Construction**

RECOMMENDED BY:		DIRECTOR TECH. STDS. & POLICIES	DATE		STANDARD PLANNING	51030
APPROVED BY:		ASSIST. DEPUTY MINISTER OPERATIONS DIVISION	DATE		SHEET	30 of 32

MUNICIPAL INTERSECTIONS & APPROACH CONSTRUCTION



NOTE:
USE R=15M FOR ALL MAIN FARM ACCESS, PRIMARY GRID AND HIGHWAY INTERSECTIONS



NOTE:
1. USE MIN. 9m V.C. FOR FARM ENTRANCES AND FIELD APPROACHES.
2. TRAFFIC GRAVEL SHALL BE PLACED TO THE EDGE OF THE RIGHT-OF-WAY ON ALL ROAD INTERSECTIONS AND FARM ENTRANCES



Highways and
Transportation

STANDARD APPROACHES - MUNICIPAL
Subgrade Construction

RECOMMENDED BY:		DIRECTOR TECH. STDS. & POLICIES	DATE		STANDARD PLAN NO	53111
APPROVED BY:		ASSIST. DEPUTY MINISTER OPERATIONS DIVISION	DATE		SHEET	15 of 32

MUNICIPAL APPROACH CROSS SECTION

TYPICAL CROSS SECTION

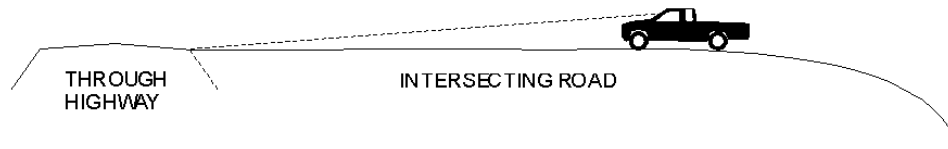
CULVERT SIZE	COVER	CULVERT LENGTH
400mm	0.3m	10m
400mm	0.4m	12m
400mm	0.6m	13m
500mm	0.3m	10m
500mm	0.4m	12m
500mm	0.6m	13m
600mm	0.3m	10m
600mm	0.4m	12m
600mm	0.6m	13m

**Highways and
Transportation**

STANDARD APPROACH - MUNICIPAL

Subgrade Construction

RECOMMENDED BY:		DIRECTOR TECH. STDS. & POLICIES	DATE		STANDARD PLAN NO	53112
APPROVED BY:		ASSIST. DEPUTY MINISTER OPERATIONS DIVISION	DATE		SHEET	16 of 32

MUNICIPAL VERTICAL SIGHT DISTANCE AT INTERSECTIONS

- (1) The minimum sight distance is:

DESIGN SPEED OF INTERSECTING ROAD km/hr	MINIMUM SIGHT DISTANCE m
130	370
120	355
110	340
100	310
90	280
80	240
70	200
60	160

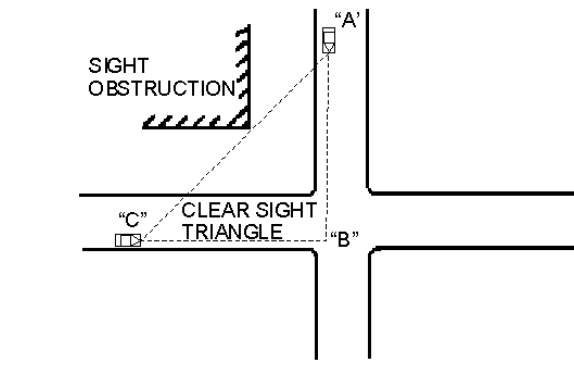
- (2) Height of Eye 1.05 metres above the road surface.
 (3) Sight distance to be measured to the road surface (edge of shoulder) of the through highway.
 (4) The design speed to be used for the intersecting road will be:
 (a) Special roads, Grid roads, access to urban areas, picnic and camp sites – use design speed.
 (b) Primary Grid roads – 80km/hr.
 (c) Other Municipal roads – 60km/hr.
 (d) Minimum design speed to be used – 60km/hr.



**Highways and
Transportation**

**VERTICAL SIGHT DISTANCE AT INTERSECTIONS - MUNICIPAL
Subgrade Construction**

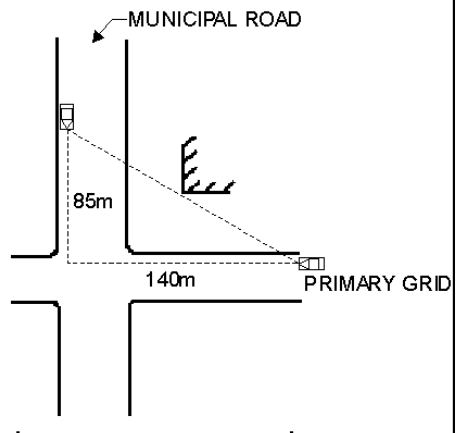
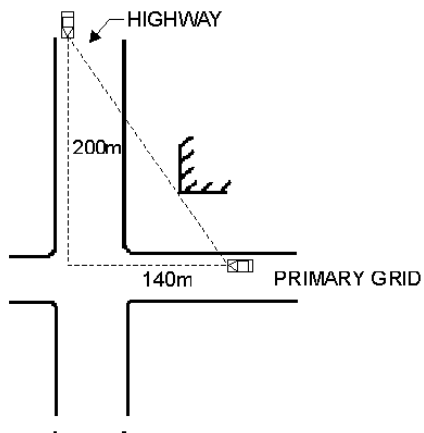
RECOMMENDED BY:		DIRECTOR TECH. STDS. & POLICIES	DATE		STANDARD PLAN NO	53114
APPROVED BY:		ASSIST. DEPUTY MINISTER OPERATIONS DIVISION	DATE		SHEET	18 of 32

MUNICIPAL SIGHT TRIANGLES

THE RECOMMENDED CLEAR SIGHT TRIANGLES FOR GRID ROAD INTERSECTIONS WITH ALL OTHER ROADS, INCLUDING HIGHWAYS, SHALL BE BASED UPON THE STOPPING SIGHT DISTANCE (S.S.D.) OF THE RESPECTIVE DESIGN SPEEDS OF THE ARTERIES INVOLVED

THE S.S.D. FOR THIS PURPOSE SHALL BE AS FOLLOWS:

	SPEED	S.S.D.
HIGHWAY	100km/hr	200 m
PRIMARY GRID	80 km/hr	140 m
MAIN FARM ACCESS ROAD & MUNICIPAL	60 km/hr	85 m



Highways and
Transportation

SIGHT TRIANGLES - MUNICIPAL
Subgrade Construction

RECOMMENDED BY:		DIRECTOR TECH. STDS. & POLICIES	DATE		STANDARD PLAN NO	53113
APPROVED BY:		ASSIST. DEPUTY MINISTER OPERATIONS DIVISION	DATE		SHEET	17 of 32