# Inventory-based Rating System™ for Gravel Roads Quick Guide

## Surface Width

**Good**

22 ft or more
(6.7 m)

**Fair**

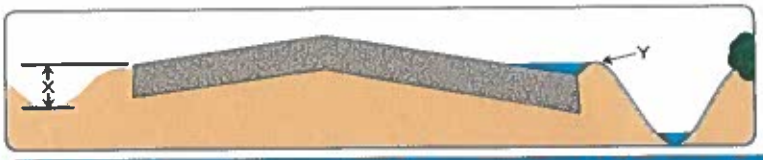
16 to 21 ft
(4.9 to 6.4 m)

**Poor**

15 ft or less
(4.6 m)

1. Include any shoulder in the width that is suitable for travel
2. Be aware of trees and slopes that may influence your width perception
3. Orientate yourself by physically measuring the width until you are comfortable making accurate estimates from your vehicle

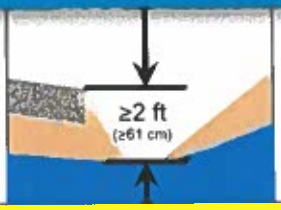
## Drainage Adequacy




**Good**

X is 2 ft or more
(61 cm)

No secondary ditches (Y) present




**Fair**

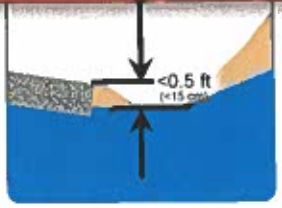
X is 0.5 to <2 ft
(15 to <61 cm)

OR X is 2 ft or more AND secondary ditches present


**Poor**

X is <0.5 ft
(15 cm)

Secondary ditches may or may not be present




1. Note whether driveway culverts are present; if they are, then drainage is most likely good or fair
2. Be aware of conditions that would not warrant ditching (i.e., tops of hills) that may influence your perception of ditches
3. Measure the actual ditch depth until you are comfortable estimating accurately from your vehicle
4. Be aware of tall grass hiding ditches

## Structural Adequacy

**Good**

>7 in of good gravel
(18 cm)


**Fair**

4-7 in of good gravel
(10 to 18 cm)


**Poor**

<4 in of good gravel
(10 cm)


1. Look into what is causing structural problems; more gravel is not a remedy for bad cross-slope drainage

2. If you do not know the segment's history, ask someone who does; otherwise, rate during thaw, wet, and/or dry periods to determine when the road is impassable and when ruts and potholes are present.

IF THICKNESS IS NOT KNOWN:

GOOD: NO STRUCTURAL DISTRESSES

FAIR: SOME | DURING WET PERIODS

RUTS: Prevalent, substantial, and > 1-inch deep

POTHOLES: Prevalent, substantial, and > 3-feet wide

POOR: MANY | THROUGHOUT THE ENTIRE YEAR

### Rating Lookup Chart

| Width | Drain | Struc | IBR # |
|---|---|---|---|
| Good | Good | Good | 10* |
| Good | Good | Good | 9 |
| Good | Good | Fair | 8 |
| Good | Good | Poor | 7 |
| Good | Fair | Good | 9 |
| Good | Fair | Fair | 8 |
| Good | Fair | Poor | 6 |
| Good | Poor | Good | 7 |
| Good | Poor | Fair | 6 |
| Good | Poor | Poor | 5 |
| Fair | Good | Good | 8 |
| Fair | Good | Fair | 7 |
| Fair | Good | Poor | 6 |
| Fair | Fair | Good | 7 |
| Fair | Fair | Fair | 6 |
| Fair | Fair | Poor | 5 |
| Fair | Poor | Good | 6 |
| Fair | Poor | Fair | 5 |
| Fair | Poor | Poor | 4 |
| Poor | Good | Good | 5 |
| Poor | Good | Fair | 4 |
| Poor | Good | Poor | 3 |
| Poor | Fair | Good | 4 |
| Poor | Fair | Fair | 3 |
| Poor | Fair | Poor | 2 |
| Poor | Poor | Good | 3 |
| Poor | Poor | Fair | 2 |
| Poor | Poor | Poor | 1 |

*Segment is < 1 year old

For more information, see *IBR System™ Training Manual* at ctt.mtu.edu/asset-management resources


Michigan Transportation Asset Management Council

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