ROUTE CLASSIFICATION

For use of this form, see ATP 3-34.81/MCWP 3-17.4; the proponent agency is TRADOC.

SECTION I

1. SERIAL NUMBER	2. TO
3. FOR INFORMATION	4. DATE/TIME GROUP
5. NUMBER OF SHEETS OR ENCLOSURES	6. RECONNAISSANCE OFFICER/NCO
7. UNIT	8. FORMATION
9. SIGNATURE	

10. UNITS USED IN THE FORM *(Please check)*

☐ CENTIMETERS ☐ INCHES ☐ FEET ☐ MILES ☐ METERS ☐ KILOMETERS ☐ CENTIGRADE ☐ FAHRENHEIT

11. MAPS	
12. COUNTRY	13. NAME
14. EDITION	15. SHEET NUMBER
16. SERIAL	17. SCALE

SECTION II

1. ROUTE CLASSIFICATION *(See Section VII, Block 7.1.)*	2. LIMITED BY SECTIONS
/ / / ( ) ( ) ( ) 1 2 3 4 5 5 5	

SECTION III

1. ROAD CLASSIFICATION *(See Section VII, Block 7.2.)*	2. WEATHER *(Include last rainfall, if known, plus the temperature)*	3. GRID REFERENCE - START
4. ROAD		

SECTION A		5. PREFIX	6. LIMITED FACTORS	7. WIDTH	8. CONSTRUCTION	9. LENGTH	10. OBSTRUCTIONS
11. START GRID	12. FORMULA						
	13. SHOULDERS						
SECTION B							
11. START GRID	12. FORMULA						
	13. SHOULDERS						
SECTION C							
11. START GRID	12. FORMULA						
	13. SHOULDERS						
SECTION D							
11. START GRID	12. FORMULA						
	13. SHOULDERS						

14. GRID REFERENCE - END:

SECTION IV

1. ENCLOSURES

SERIAL	TITLE	ATTACHED	SERIAL	TITLE	ATTACHED
1	OVERLAY(S)	☐	6	RAPID BRIDGE ASSESSMENT(S)	☐
2	MAP(S)	☐	7	DETAILED BRIDGE ASSESSMENT(S)	☐
3	DETAILED SKETCH(ES)	☐	8	PHOTOGRAPH(S)	☐
4	CALCULATION(S)	☐	9	OTHER *(Describe):*	☐
5	WORK ESTIMATE(S)	☐	10	OTHER *(Describe):*	☐

SECTION V

1. OBSTRUCTIONS AND RECOMMENDATIONS FOR UPGRADES

2. SERIAL	3. OBSTRUCTION DETAILS *(Including existing MLC)*	4. ROAD SECTION	5. GRID	6. RECOMMENDATION FOR UPGRADE *(Including new MLC)*	7. MANPOWER	8. EQUIPMENT/ VEHICLES	9. CONSTRUCTION MATERIAL	10. TIME	11. NEW MLC

SECTION VI

1. ROUTE CHART

	a. NAME
	b. UNIT
	c. DATE/TIME GROUP
	d. SCALE
	e. REMARKS

2. NOTES

SECTION VII

7.1. FACTORS USED IN ROUTE CLASSIFICATION FORMULAS. *For example, 3.5/X/70/3.9(OB)*

SERIAL	FACTOR	SYMBOL	MEANING
1	WIDTH	For example, 3.5 meters	The width of the narrowest part for any given section.
2	ROUTE TYPE	X	All-weather route - waterproof surface, never closed by weather other than snow or flooding.
		Y	Limited all-weather route - loose or light surface, sometimes reduced volumeof traffic due to bad weather.
		Z	Fair weather route - quickly impassable in adverse weather.
3	MLC	For example, 70	The maximum MLC of the vehicle which can use the route in convoy.
4	OVERHEAD CLEARANCE	For example, 3.9	The minimum vertical distance between the route or road surface and any overhead obstruction. Only included if height is less than the required for the MLC.
5	OBSTRUCTION TO TRAFFIC OTHER THAN A BRIDGE	(OB)	Temporary or single obstructions.
		(T)	Regular, recurrent and serious snow blockage.
		(W)	Regular, recurrent, and serious flooding.

7.2. FACTORS USED IN ROAD CLASSIFICATION FORMULAS.

SERIAL	FACTOR	SYMBOL	MEANING
1	PREFIX	A	No limiting factors.
		B	One or more limiting factors.
2	LIMITING FACTORS: SHARP CURVES	c	Radius less than 25 meters and deflecting the direction more than 90. ^{o}
	STEEP GRADIENTS	g	Gradients of 7 percent or over.
	POOR DRAINAGE	d	Inadequate or blocked drainage.
	WEAK FOUNDATIONS	f	Unstable, loose, or easily displaced.
	ROUGH SURFACE	s	Likely to reduce convoy speed
	EXCESSIVE CAMBER OR SUPER ELEVATION	j	Likely to cause heavy vehicle to skid or drag towards roadside.
	DOUBTFUL CONDITIONS	?	Indeterminate or doubtful conditions expressed with ? and (). For example, (f?).
	SHOULDERS	-	No symbol, but written reports should specify.
3	WIDTH	__/__	Width of travelled way or total width including shoulders (when they are usable).
4	CONSTRUCTION MATERIAL: TYPE X ROUTE	k	Concrete.
		kb	Bituminous or asphaltic concrete.
	TYPE X OR Y ROUTE	p	Paving brick or stone.
		rb	Bitumen penetrated macadam, water-bound macadam with superficial asphalt or tar cover.
	TYPE Y ROUTE	r	Water-bound macadam, crushed rock or coral.
		l	Gravel or lightly metaled.
	TYPE Y OR Z ROUTE	nb	Bituminous surface treatment on natural earth, stabilized soil, sand-clay, and so forth.
	TYPE Z ROUTE	n	Natural earth, stabilized soil, sand-clay, shell, cinders, and so forth.
		b	Bituminous construction. To be used alone only when type of bituminous construction cannot be determined.
		v	Various other types not mentioned above.
5	LENGTH	(km)	The length of the section in kilometers may be added in brackets if desired.
6	OBSTRUCTIONS: SNOW FLOODING	(OB)	Symbol at the end of the formula indicates existence of obstruction.
		(T)	Regular, recurrent and serious snow blockage.
		(W)	Regular and sufficiently flooding which impedes traffic flow.

7.2. FACTORS USED IN ROAD CLASSIFICATION FORMULAS. (continued)

NOTE. Consider the following as obstructions:

- Overhead clearance less than 4.3 meters.
- Reductions in road widths which limit traffic capacity, such as craters.
- Gradients of 7 percent and over.
- Curves with less than a 25-meter radius and deflecting more than 90.°
- Ford and ferries.

Example: B/c(f?)/3.2/4.8/p/(4.5km)(OB)(T)

According to the width, classify a route or road as follows:

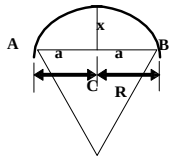
- **Limited access**. Up to 3.5 meters wide; it permits passage of isolated vehicles in one direction only.
- **Single lane.** From 3.5 to 5.5 meters wide; it permits use only in one direction at any one time.
- **Single flow.** From 5.5 to 7.5 meters wide; it permits isolated vehicles to pass or travel in the opposite direction to the main flow.
- **Double flow.** Over 7.3 meters wide; it permits two columns of vehicles to proceed simultaneously.

7.3. MEASURING THE RADIUS OF AN EXSISTING CURVE.

Step 1. A chord AB is set out as shown and bisected at C, so that AC = BC = a.

Step 2. From point C, the perpendicular offset (x) is measured at point D on the curve.

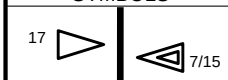
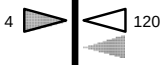
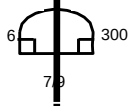
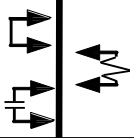
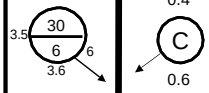
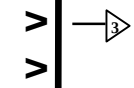
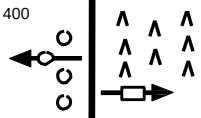
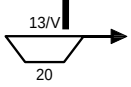
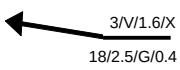
Step 3. The radius is calculated from the formula. $R = \frac{x^2 + a^2}{2x}$



7.4. CONVERSION FACTORS.

U.S. UNITS	MULTIPLIED BY	EQUALS METRIC UNITS
CENTIMETER	0.39370	INCH
FOOT	0.30480	METER
INCH	2.54000	CENTIMETER
KILOMETER	0.62137	MILE
METER	3.28084	FEET
MILE	1.60934	KILOMETER
TEMPERTURE		
CENTIGRADE DEGREES	$C^o = \frac{5(F° - 32)}{9}$	FAHRENHEIT DEGREES
FAHRENHEIT DEGREES	$F^o = \frac{9C^o}{5} + 32$	CENTIGRADE DEGREES

7.5. SYMBOLS AND DESCRIPTIONS

SYMBOLS	DESCRIPTION
	Sharp curve. Less than 25 meters (the figure indicates radius) [left] Series of sharp curves. The figures indicate the number of curves/radius [right]
	Steep grade. Arrows point up hill; grade in percent (length of the arrows may show the length of the grade when the scale allows)
	Constriction. Left-Width Right-Total length
	Arch constriction. Left-Width Right-Overhead clearance
	Tunnel. Left-Height Right-Length Bottom-Roadway and total width (include footpath)
	Underpass constriction. Width [left] and height [right]
	Obstacle bypass. Easy-Can be crossed within the immediate vicinity by a NATO track equivalent to a 2.5-ton truck. Difficult-Can be crossed within the immediate vicinity, but some work will be necessary to prepare the bypass. Impossible-Can be crossed after repairing, building of a new construction, or by a detour.
	Level crossing. The figure indicates the height of the power line aboveground.
	Bridge. Arrow to the location Top segment-MLC Left-Overhead clearance In the middle-Serial number Underneath-Roadway width Right-Overall length Culvert. Arrow to location. Top-Depth of fill Bottom-Diameter of pipe]
	Limits of sector. Left Critical point. Right-to be numbered and described in a remark frame)
	Concealment. Line of trees (deciduous) Left-Evergreen Right-Woods Possibility of driving off the road. Denoted by an arrow. For wheeled vehicles, the figure indicates the length of road where driving off is possible [left] or for tracked vehicles [right]).
	Ferry. Arrow to the location Top-serial number and type (V = vehicle, P = pedestrian) Bottom-MLC
	Ford. Arrow to the location. Top-serial number, type, current velocity of stream, seasonal limitations (V = vehicle, P = pedestrian, X = without seasonal limitations, Y = seasonal limitations). Bottom-length of crossing, width of ford, nature of bottom, depth (M = mud, C = clay, S = sand, G = gravel, R = rock, P= artificial paving).
	Difficult approach to cross-site. Symbol omitted for easy.