

Title:	Road Classification and Level of Service Policy	Policy: PW 016
Section	n: Public Works	

#### **ACCOUNTABILITY TO VISION STATEMENT**

Flagstaff County has made and continues to make an investment in its road infrastructure and ensuring our future prosperity depends on safeguarding its longevity. Carefully considered and implemented service levels make our roads safe for users and improve quality of life.

#### **POLICY STATEMENT**

Flagstaff County will have a road network system categorized and prioritized into road classifications. The classification system will provide an efficient road network system that acts as a feeder system to the provincial highway network and the local communities within Flagstaff County.

Each road classification is described by criteria, road specifications and level of service. These descriptions provide clarification and ensure roads are designed, operated, and maintained based on the service needs, the type of use and frequency of use. Road classification may change for any number of reasons as development occurs within the County.

#### **DEFINITIONS**

Airport Roads are roads that provide access to the Flagstaff Regional Airport.

**Arterial roads** are the main thoroughfares that generally have the highest traffic volumes within the County's network of roads. The Arterial Road network provides a complementary integrated network of connections for the efficient and timely movement of traffic to the provincial highway system. Refer to Schedule A.

**Collector Roads** funnel local traffic to the primary and secondary highway network, the Arterial Road network, or communities throughout the County. Refer to Schedule B.

**Dust Suppressant** products assist in reducing dust on gravel roads and are listed on Alberta Transportation's Dust Abatement Product List, including and may include Proven Products, Trial Products, and/or Potential Products. Flagstaff County implements a testing program to evaluate the effectiveness, affordability, and environmental compatibility of newly developed and enhanced product. Products used by Flagstaff County shall meet the following criteria or achieve the following outcomes:

- i. Be environmentally responsible and non-corrosive
- ii. Combine effective results with easy application and low cost
- Contribute to dust abatement while being compatible with low clay levels
- iv. Minimize loose gravel and aggregate loss
- v. Increase surface stabilization, minimize washboard and reduce required maintenance

**Field Access Roads** are partially developed roads and provide only seasonal access such as agricultural land, grain storage facilities, single oil lease, etc. Refer to Schedule C.

**Lanes** or **Alleys** are narrow streets or footways typically at the rear of or between rows of buildings, residences, or lots.

**Local Roads** are roads that serve a low volume of traffic and provide year-round access to residences, or farmland. These roads have occasional truck traffic usually related to agricultural production.

**Industrial Park Roads** are roads that provide access to industrial zoned land and for other development which generates frequent truck traffic.

Oil Surface Road is a gravel road that features a thin membrane surface of oil-treated aggregate.

Pavement Surface Road is a road with a hard, smooth surface constructed using materials such as concrete, asphalt or bricks.

**Streets** are main thoroughfares within the hamlets that are wider than an alley or lane and may include sidewalks.

Tarmac means the taxiway, apron, and runway at the Flagstaff Regional Airport.

**Undeveloped Roads** are roads within a statutory road allowance or a registered road plan that is not constructed to provide public access. Evidence of past or present access may exist.

#### A. ROAD CLASSIFICATION AND LEVEL OF SERVICE

Flagstaff County's Road network system is composed of the following classifications.

# 1. Arterial Roads

An Arterial Road generally meets one or more of the following **criteria**:

- Traffic volumes exceeding 100 vehicles per day
- Connects one town to another town
- Connects a town to a provincial highway
- Connects a town to an Arterial road
- Connects a provincial highway to another provincial highway
- Connects traffic going to and from an industrial or surface resource to a provincial highway.

Road Specifications for an Arterial Road are as follows:

- Ban free
- 8-to-10-meter width
- Gravel surface
- Signed as 'Truck Route'

Surface Type	Gravel
Right-of-Way Width (m)	20 - 30
Surface Width (m)	8.0 - 10.0
Sub-Grade (mm)	600 min.
Back Slope	4:1
Grade Slope	4:1
Granular Base (mm)	75

	Level of Service	
Summer Maintenance	Bladed twice per month	
Winter Maintenance	During normal winter conditions, Arterial roads will be cleared of snow within 1 to 2 days of a snow event, unless there is heavy snow and persistent wind	
Graveling Frequency	On average will be re-graveled every three years (dependent on condition) plus spot graveling on problem areas as required	
Dust Suppressant	Dust Suppressant is applied on Arterial Roads:  i. Adjacent to laneways of residences for a span of 200 meters  ii. At strategic locations such as intersections or hills and select lengths of road to reduce frequency of maintenance where grading is required on a weekly basis.	
Roadside Mowing	Twice per year, at a 15-foot width	

Roadside Spraying	Every three years, with spot spraying of noxious weeds annually		
Mulching/Brushing	As required to maintain sightlines and right-of-way clearance to a minimum 40-foot width		
	Road	Location	
Pavement Surface Roads	ATCO Access Road	Rge Rd 154 south for 1.75 miles from Twp Rd 410 to river	

### 2. Industrial Park Roads

or more of the following criteria:

Roads that service industrial parks developed after 2023

An Industrial Park Road generally meets one Road Specifications for an Industrial Park Road are as follows:

- 8-to-10-meter width
- 'Dust-Free" Gravel surface
- Speed Limit of 50 km/hr.

### Minimum Design Standard

Surface Type	Gravel
Right-of-Way Width (m)	20 - 30
Surface Width (m)	8.0 - 10.0
Sub-Grade (mm)	600 min.
Back Slope	4:1
Grade Slope	4:1
Granular Base (mm)	75

Level of Service			
Summer Maintenance	Bladed twice per month		
Winter Maintenance	During normal winter conditions, roads will be cleared of snow within 1 to 2 days of a snow event, unless there is heavy snow and persistent wind		
Graveling Frequency	On average, roads will be re-graveled every three years (dependent on condition) plus spot graveling on problem areas as required		
Dust Suppressant	Dust Suppressant will be applied for the entire length of the road		
Roadside Mowing	Twice per year, at a 15-foot width		
Roadside Spraying	Every three years, with spot spraying of noxious weeds annually		
Mulching/Brushing	As required to maintain sightlines and right-of-way clearance to a minimum 40-foot width		

### 3. Collector Roads

A Collector Road generally meets one or more of the following criteria:

- Traffic volumes exceeding 50 vehicles per day
- Connects an Arterial road to another Arterial road
- Connects urban centers to the provincial highway system or Arterial road
- Connects recreational sites to the provincial highway system or Arterial Road

#### Road Specifications for a Collector Road are as follows:

- 7-to-8-meter width
- Gravel surface

Surface Type	Gravel
Right-of-Way Width (m)	20 - 30
Surface Width (m)	7.0 - 8.0
Sub-Grade (mm)	600 min.
Back Slope	4:1
Grade Slope	4:1
Granular Base (mm)	75

Level of Service		
Summer Maintenance	Bladed once per month	
Winter Maintenance	During normal winter conditions, Collector roads will be cleared of snow within 4 days of a snow event, unless there is heavy snow and persistent wind	
Graveling Frequency	On average, re-graveled every four to five years (dependent on condition) plus spot graveling on problem areas as required	
Dust Suppressant	Dust suppressant is applied to strategic locations such as intersections or hills and select lengths of road to reduce frequency of maintenance where grading is required on a weekly basis.	
Roadside Mowing	Twice per year, at a 15-foot width	
Roadside Spraying	Every three years, with spot spraying of noxious weeds annually	
Mulching/Brushing	As required to maintain sightlines and right-of-way clearance to a minimum 40-foot width	

# 4. Local Roads

A Local Road generally meets one or more of Road Specifications for a Local Road are as the following criteria:

- Low volume roads that generally serve only local traffic
- Serves a local function and is not generally used for long-distance travel

follows:

- 6-to-8-meter width
- Gravel surface

Surface Type	Gravel
Right-of-Way Width (m)	20
Surface Width (m)	6.0 - 8.0
Sub-Grade (mm)	600 min.
Back Slope	6:1
Grade Slope	4:1
Granular Base (mm)	50

	Level of	Service	
Summer Maintenance	Bladed once per month		
Winter Maintenance	During normal winter conditions, Local roads will be cleared of snow within 4 days of a snow event, unless there is heavy snow and persistent wind		
Graveling Frequency	On average, roads will be re-graveled every five years (dependent on condition) plus spot graveling on problem areas as required		
Dust Suppressant	Dust suppressant is applied to strategic locations such as intersections or hills and select lengths of road to reduce frequency of maintenance where grading is required on a weekly basis.  The following are Oil Surface Roads and utilize an oil-based product for dust suppression:		
	Road	Location	
	Strome East Airport Road (Hardisty) Shop Road West Shop Road East	Rge Rd 151, North for 0.4 miles from Hwy 13 Rge Rd 103, south for 2.75 miles from Hwy 13 Twp Rd 442, East for 2.1 miles from Rge Rd 130 Twp Rd 442, East for 0.4375 miles from SH 869	
Roadside Mowing	Twice per year, at a 10-foot width		

Roadside Spraying	Every three years, with spot spraying of noxious weeds annually		
Mulching/Brushing	As required to maintain sightlines and right-of-way clearance to a minimum 40-foot width		
	Road Galahad Access Boad	Location Twp Rd 412, west 4.0 miles from Hwy 36 to SH	
Pavement Surface Roads	Airport Access Road	861 Rge Rd131, north 0.75 miles from Highway 13 to airport access gate	

# 5. Field Access Roads

A Field Access Road generally meets one or more of the following **criteria**:

- Seasonal use only
- No gravel
- A subgrade that does not meet the standard of roads higher within the classification hierarchy

**Road Specifications** for a Field Access Road are as follows:

- 6-to-8-meter width
- Sand/dirt surface

### Minimum Design Standard

Surface Type	Sand/Dirt
Right-of-Way Width (m)	20
Surface Width (m)	6.0 - 8.0
Sub-Grade (mm)	300 min.
Back Slope	N/A
Grade Slope	N/A
Granular Base (mm)	0

Level of Service		
Summer Maintenance	Bladed once per month, weather permitting	
Winter Maintenance	Upon request, a Field Access Road may be plowed, one time only, to permit access to: grain bins, re-locate livestock, and/or oil/gas lease sites	
Graveling Frequency	Field Access roads have an organic surface and will only have aggregate applied to fill in low spots	
Dust Suppressant	Not applicable	
Roadside Mowing	Upon request and at the discretion of the Agricultural Fieldman	
Roadside Spraying	Upon inspection, spot spraying of noxious weeds annually	
Mulching/Brushing	As required to maintain sightlines and right-of-way to a minimum 40-foot width	

# 6. <u>Undeveloped Roads</u>

An Undeveloped Road generally meets one or more of the following **criteria**:

- Seasonal use only
- No gravel
- A subgrade that does not meet the standard of roads higher within the classification hierarchy

**Road Specifications** for an Undeveloped Road are as follows:

- Fully or partially treed
- Having evidence of minimal past traffic (i.e., compacted wheel paths)

Surface Type	N/A
Right-of-Way Width (m)	N/A
Surface Width (m)	N/A
Sub-Grade (mm)	N/A
Back Slope	N/A
Grade Slope	N/A

Granular Base (mr	n)
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Level of Service		
Summer Maintenance	No scheduled maintenance	
Winter Maintenance	No maintenance	
Graveling Frequency	Not applicable	
Dust Suppressant	Not applicable	
Roadside Mowing	Not applicable	
Roadside Spraying	Not applicable	
Brushing/Mulching	Upon request and/or at the discretion of the Transportation Department	

# 7. Streets

A Street generally meets one or more of the following criteria:

Serves as a primary access along the front of a property in a hamlet

Road Specifications for a Street are as follows:

 Recycled Oil surface maintained until inventory is depleted and then reverted to a gravel surface, except for designated roads as identified in policy.

Surface Type	Recycled Oil
Right-of-Way Width (m)	20-30
Surface Width (m)	4.5-26.7
Sub-Grade (mm)	300 min.
Back Slope	N/A
Grade Slope	N/A
Granular Base (mm)	50

	Level of Service	
Summer Maintenance	Street sweeping – twice annually Repairing potholes – as required Crack filling - every three to four years Line painting - every three to four years	
Winter Maintenance	During regular winter conditions, Streets will be cleared of snow within 1 to 2 days of a snow event, unless there is heavy snow and persistent wind. Snow clearing priorities being:  Main streets in and out of the Hamlets  Long-term care center (Galahad) access  Fire hall access  Residential streets  Sand/salt application as required	
Graveling Frequency	As required	
Dust Suppressant	The following are Streets and utilize cold mix without a seal coat for dust suppression:	

e and a second	Galahad	
	Road	Location
	Sir Galahad Street	From Guinevere Avenue West to SH 861
	Lady Helen Street	From Sir Galahad Street to King Arthur Street
	<u>Strome</u>	
	Road	Location
	50 <sup>th</sup> Street Highway Access Road	From 50th Avenue north to 52nd Avenue From Hwy 13 north to 50th Avenue
	52 <sup>nd</sup> Avenue	From RR 151W to the west boundary of hamlet
Mowing	Not Applicable	
Roadside Spraying	As required	
Mulching/Brushing	Tree trimming as required	

### 8. Lanes or Alleys

A Lane or Alley generally meets one or more of the following **criteria**:

 Low volume roads that generally serve as a secondary means of access usually lying along the rear of a property **Road Specifications** for a Lane or Alley are as follows:

Gravel surface

# Minimum Design Standard

Surface Type	Gravel
Right-of-Way Width (m)	6.1
Surface Width (m)	3 – 4
Sub-Grade (mm)	N/A
Back Slope	N/A
Grade Slope	N/A
Granular Base (mm)	50

Level of Service		
Summer Maintenance	Bladed once per year	
Winter Maintenance	Snow clearing of lanes and alleys are low priority and will be completed after all streets have been cleared of snow	
Graveling Frequency	As required	
Dust Suppressant	Not applicable	
Mowing	Not applicable	
Roadside Spraying	As required	
Mulching/Brushing	Tree trimming as required	

# 9. Airport Roads and Tarmac

Airport Roads and Tarmac are inclusive of all gravel, oil, and paved roads within the Flagstaff Regional Airport. This includes:

- Airport Runway
- Airport Apron
- Airport Taxiway

**Road Specifications** for Airport Roads and Tarmac are as follows:

- Access Roads Gravel surface
- Airport Runway and Apron Paved surface
- Airport Taxiway Oil surface

- Aliport taxiway		
	Level of Service	
Summer Maintenance	Line painting – every three to four years Crack filling – every three to four years Repairing potholes – as required Gravel access roads to be bladed twice annually	

Winter Maintenance	During normal winter conditions, the Tarmac will be cleared of snow within 1 to 2 days of a snow event, unless there is heavy snow and persistent winds.  Clearing will be prioritized as follows:  1. Access to the airport 2. Runway and Apron 3. Taxiways to the fuel pumps and terminal building 4. Taxiways to the hangars  Sand/salt application as required.	
Graveling Frequency	As required	
Dust Suppressant	All Taxiways will be maintained with MC-30 oil-based dust suppressant product; reapplication will be as required	
Mowing	Mowing within the airport will be completed once every two weeks	
Roadside Spraying	As required - approximately two times per year	

# **B. CHANGING OF A ROAD CLASSIFICATION**

As use, users, and volumes change on County roads, roads may need to be designated to another classification so that the Level of Service is appropriate to the road usage. Should a re-classification be required, the following items will be considered in Transportation's assessment:

- Financial impact assessment
- Transportation impact assessment
- Development patterns
- Traffic type/Annual Average Daily Traffic
- Road conditions/Structural failures

A report will be prepared for Council summarizing the assessment and a recommendation from the Transportation department; Council will have final approval of a road re-classification.

### C. LEVEL OF SERVICE ASSESSMENT

The level of service (LOS) assessment of roads will be reviewed annually by Transportation to determine if the LOS aligns with this policy, with recommended actions provided based on the LOS and risk assessment in accordance with the Policy CP 012 – Asset Management.

#### D. RELATED DOCUMENTS

Policy CP 012 – Asset Management
Policy PW 013 – Residential Dust Suppressant

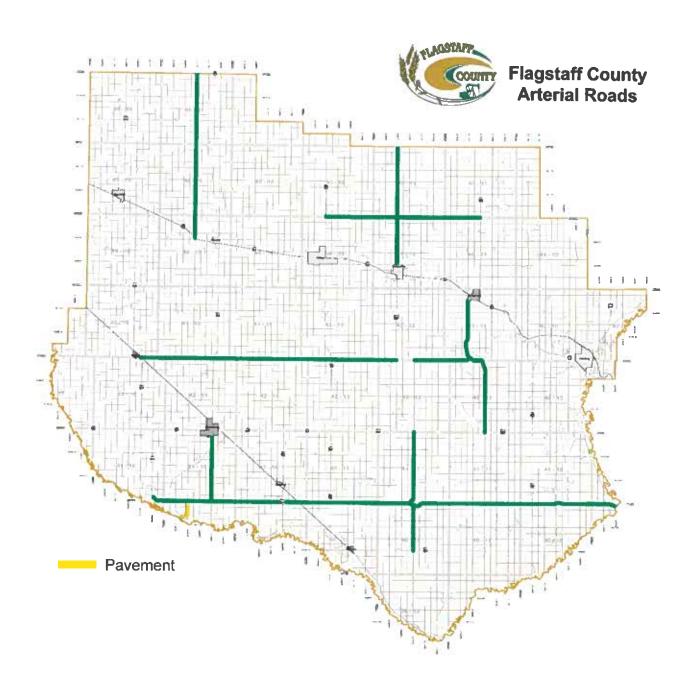
Council Approved: March13,2024	Resolution #: FC20240313.1002	
Reference:	Signature: 8 Current	

Administrative Responsibility:	Review Cycle:	Next Review Date:
Municipal Services	Every three (3) years]	March 2027

# Schedule A - Arterial Roads

Total Arterial Miles:	132.5 miles
Range Road 123 from SH 608 south to SH 602	10.0 miles
Range Road 152 from Village of Forestburg south to Township Road 410	5.5 miles
Range Road 113 from Village of Lougheed south to SH 608	12.0 miles
Range Road 124 from Township Road 460 south to Township Road 442	10.0 miles
Range Road 153 from Hwy 26 south to Hwy 13	14.0 miles
Township Road 410 from SH 855 east to the Battle River **	40.5 miles
Township Road 430 from SH 855 east to Range Road 113	27.5 miles
Township Road 450 from Hwy 36 east to SH 870	13.0 miles

<sup>\*\*</sup>Includes the ATCO Access Road (1.75 miles of pavement and 2.75 of milled pavement)

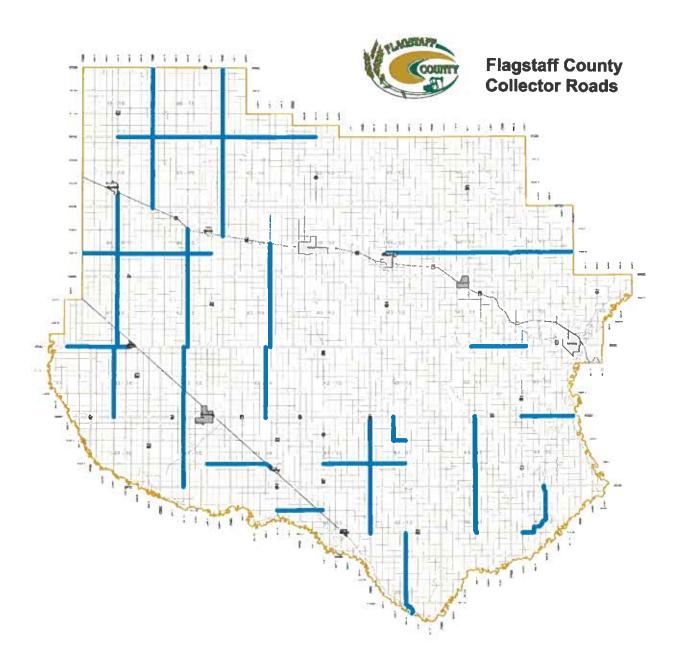


# Schedule B - Collector Roads

Township Dood 400 from SH 055 and to the CO	1=0 :
Township Road 460 from SH 855 east to Hwy 36	17.0 miles
Range Road 160 from Hwy 26 south to Hwy 13	12.25 miles
Range Road 150 from Hwy 26 south to Hwy 13	14.5 miles
Range Road 163 from Hwy 13 south to Township Road 430	13.25 miles
Range Road 153 from Hwy 13 south to Township Road 430	10.0 miles
Township Road 442 from Range Road 170 east to SH 856	11.0 miles
Township Road 430 from Range Road 172 east to Village of Heisler	5.5 miles
Range Road 142 from Hwy 13 south to Township Road 430	8.75 miles
Range Road 164 from Township Road 430 south to Hwy 53	6.0 miles
Range Road 154 from Township Road 430 south to Township Road 410	12.0 miles
Range Road 143 from Township Road 430 south to Hwy 53	6.0 miles
Township Road 412 from Range Road 152 east to Hamlet of Galahad	5.5 miles
Township Road 404 from Range Road 142 east to Hwy 36	4.0 miles
Township Road 412 from Hwy 36 east to Range Road 123	7.0 miles
Range Road 130 from SH 608 south to SH 602	10.0 miles
Range Road 124 from SH 608 south to Township Road 414	2.0 miles
Township Road 414 from Range Road 124 east to Range Road 123	1.0 mile
Range Road 123 from SH 602 south to the Battle River	7.0 miles
Range Road 113 from SH 608 south to SH 602	10.0 miles
Range Road 103 from Township Road 410 southwest to SH 872	5.0 miles
Township Road 430 from Range Road 113 east to SH 872	4.75 miles
Township Road 420 from SH 872 east to Range Road 100	4.5 miles
Township Road 442 from Range Road 124 east to Range Road 100	15.5 miles
Total Collector Miles:	192.5 miles

<sup>\*</sup>Map on following page.

Schedule B - Collector Roads



# Schedule C - Local Roads

