

***Roadway Classification
Design Standards and
Policies***

***Pueblo, Colorado
November, 2004***

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Chapter 1. General Provisions for Roadway Classification Design Standards and Policies

1.1 JURISDICTION

All of the policies and design criteria set forth in this manual are adopted pursuant to the authority of the City of Pueblo's Code of Ordinances as amended and shall apply to all public roadways within the incorporated areas of the City.

1.2 PURPOSE AND INTENT

It is the purpose and intent of the Roadway Classification Design Standards and Policies contained in this manual to promote the health, safety, convenience and general welfare of the people of Pueblo, Colorado. They are not intended, nor should they be construed, to create any new rights, remedies or benefits for any person, firm, corporation or entity.

All Master Development Plans, Subdivisions, Resubdivisions, Planned Unit Developments, Special Area Plans or other proposed developments submitted for approval under the provisions of the Code of Ordinances shall include adequate roadway provisions and shall comply with the roadway design criteria and policies set forth herein. All final roadway designs, analyses and reports shall be prepared under the supervision of a Professional Engineer, licensed as such in the State of Colorado.

1.3 MODIFICATIONS

Requests for modification to the roadway classification design standards and policies set forth herein shall be submitted in accordance with City of Pueblo's Code of Ordinances.

1.4 PERMITS AND OTHER REQUIREMENTS

The developer and/or landowner shall be required to obtain all permits required by Federal, State or Local Agencies in conjunction with work covered under this manual.

1.5 LIABILITY

The adoption of this manual shall not create any duty to any person, firm, corporation or other entity with regard to the application, enforcement or non-enforcement of this manual. No persons, firms, corporations or other entities shall have a private right of action, claim or civil liability remedy against the City of Pueblo or its officers, employees or agents for any damage arising out of, or in any way connected with the adoption, application, enforcement, or non-enforcement of this manual. Nothing in this manual shall be construed to create any liability under or to waive any of the immunities limitations on liability or other provisions of the Governmental Immunity Act, C.R.S. 24-10-101 et seq., or to waive any immunities or limitations on liability otherwise available to the City of Pueblo or its officers, employees or agents.

Review and approval by the City of the Roadway Classification Designs and Policies proposed in any submittal does not relieve the engineer who designs such improvements from his or her professional responsibilities for the adequacy of the design of said improvements.

Chapter 2. Roadway Policy

2.1 INTRODUCTION

The policy statements contained in this chapter provide the basis for roadway classification design standards and policies within the City of Pueblo and are to be used in conjunction with all other current Pueblo City Ordinances which pertain to roadway design.

2.2 PURPOSE

The purpose of this manual is to adopt transportation design practices, which will lead to City roadways that are safer, less congested and more accessible to walk along, ride or drive on.

2.3 DESIGN OBJECTIVES

Roadway Classification Design Standards are intended to meet the following seven objectives:

1. Security: Driver safety and accessibility for emergency vehicles.
2. Convenience: Roadways that are convenient for users.
3. Comfort: Roadways that consider the comfort of motorists, pedestrians and bicyclists.
4. Welcome: Roadways that welcome users into the community.
5. Association: Roadways that enable pedestrians and bicyclists to meet and socialize with one another.
6. Efficiency: Roadways that are efficient paths of travel and which efficiently use land and resources.
7. Aesthetics: Roadways that are attractive in design and incorporate landscaping, streetscaping and views.

2.4 ROADWAYS

The following standards apply to public roadways, which are dedicated public rights of way maintained by the City of Pueblo. Also included in the standards are private driveways, which are privately built and maintained. The classifications *Alley (Residential and Commercial)*, *Country Lane*, *Local 30, 32, and 36*, *Business Local*, *Neighborhood Collector*, *Mixed Use Collector*, *Business Collector*, *Minor Arterial*, *Major Arterial*, *Parkway* and *Private Driveway*, *Private Parking Court*, *Private Roadways* are defined in this manual.

2.4.1 - Curb and Gutter: Curb and gutter type, vertical or ramp, shall remain consistent in type throughout the entire block length unless otherwise approved by the Director of Public Works. Vertical curb is required around parks, embankments or along locations where access is discouraged.

2.4.2 - Roadway Width: Roadway width shall generally remain consistent through the entire block. Transitions in roadway width shall occur at intersections unless otherwise approved by the Director of Public Works.

Chapter 3. Roadway Standards

3.1 PRIVATE DRIVEWAY

Private Driveways should discourage problems such as forcing too many dwelling units to share the same driveway. Such problems include neighbor disputes over blocking the drive, access for emergency vehicles and the placement of garbage receptacles. The following standards are intended to minimize these issues while allowing design flexibility.

Private Driveway - Residential	
Land Use	Residential
Function	Access to home or garage
Emergency Access	Detached single-family units cannot share private driveways. All sides of primary structure must be within 150' of a public ROW or private street.
Allowable Designs	Private drive may dead end at private lots

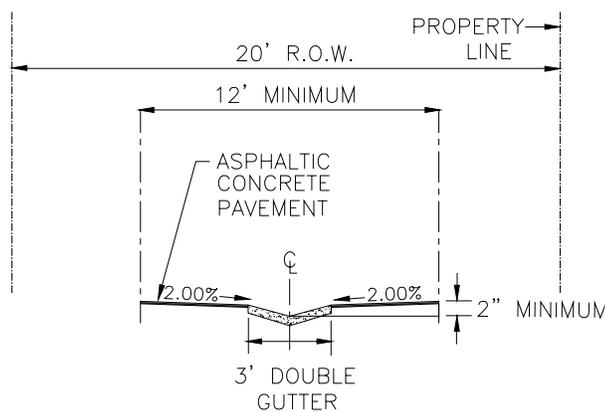
Private Driveway – Parking Court	
Land Use	Residential
Function	Access to several homes or garages
Roadway Width	Configuration must accommodate two off-street cars per residence plus accommodate trash collection.
Emergency Access	All sides of primary structure must be within 150' of a public ROW or private street.
Allowable Designs	Parking courts may dead end at private lots

3.2 ALLEYS

Alleys have traditionally functioned as an access to rear garages. Alleys can also be used for utility placement, which in turn relieves local streets from the disruption of having a utility line serviced. Alleys improve the aesthetics of neighborhoods by hiding the least architecturally interesting part of a house, the garage, in back. By placing the garage access off an alley, the fronts of homes benefit from a continuous landscaped area unbroken by large driveways. Alleys can also hide the garbage and recycling containers awaiting pick-up; some cities have placed mailboxes in the alley for more efficient mail delivery.

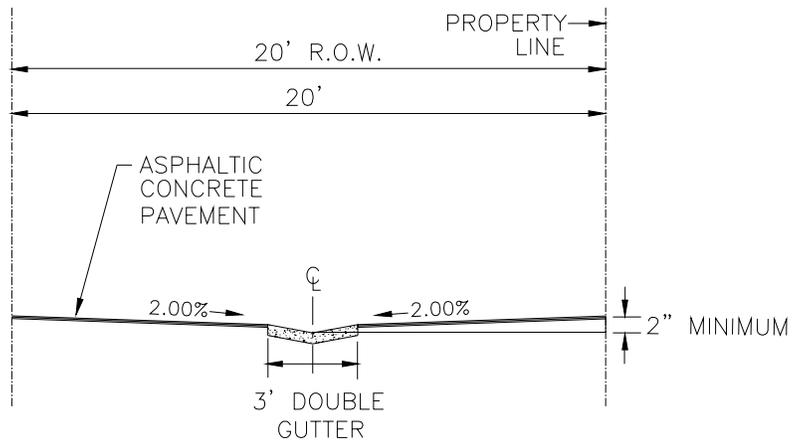
All garages, carports or parking areas must be set back five feet from the alley right-of-way to provide cars with adequate turning movement.

Alley - Residential	
Land Use	Residential
Function	Access to home or garage
Speed Limit	15 mph
Roadway Width	12-20' paved surface
ROW	20' (garage, 5' apron, 4' unpaved, 12' paved, 4' unpaved, 5' apron, garage)
Road Segment Length	Must correspond to roadway block length
Emergency Access	Alleys cannot be the primary or only access; alleys may not dead end
Allowable Designs	Alleys may not dead end, they must connect to a local street



RESIDENTIAL ALLEY
 20' RIGHT-OF-WAY
 5' MINIMUM SETBACK

Alley - Commercial	
Land Use	Commercial
Function	Access to back of business/deliveries
Speed Limit	15 mph
Roadway Width	20' plus 5' apron for turning movement into garage or rear yard
ROW	20'
Emergency Access	Alleys cannot be the primary or only access; alleys cannot dead end.
Allowable Designs	Alleys cannot dead end, they must connect to a local roadway

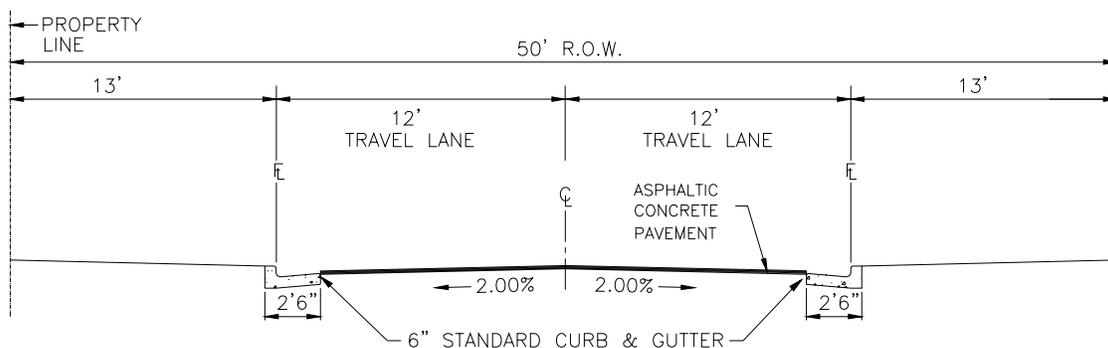


COMMERCIAL ALLEY
20' RIGHT-OF-WAY
 5' MINIMUM SETBACK

3.3 COUNTRY RESIDENTIAL LANES

In very low density, large lot residential areas, roadways may not benefit from all of the attributes associated with urban residential areas. On-street parking and sidewalks are not used in low-density areas where houses sit on lots that are one acre and larger. The Country Residential Lane accommodates this type of development. Small segments of a Country Residential Lane may also be used in more urban areas as part of a special design feature.

Country Residential Lane	
Land Use	Low Density Residential (1 acre and larger)
Function	Access to very low density residential
Speed Limit	30 to 35 mph
Roadway Width	24'
ROW	50'
On-Street Parking	None
Off-Street Parking	2 spaces per house
Sidewalk	Approved off-street trail and/or pedestrian connections may be used for pedestrians and bicyclists in lieu of sidewalk
Curb	Curb and drainage design must be approved by the City's Department of Public Works.
Road Segment Length	2640' for 1 acre lots and larger. When used as a special design feature in a denser residential area, roadway segment cannot exceed 330'
Emergency Access	Must retain 20' clearance space on roadway

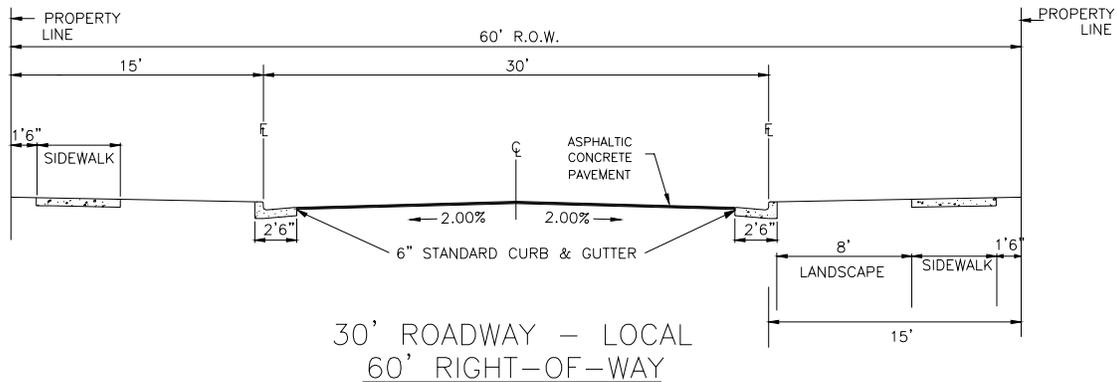


24' ROADWAY
 COUNTRY RESIDENTIAL LANE
 50' RIGHT-OF-WAY

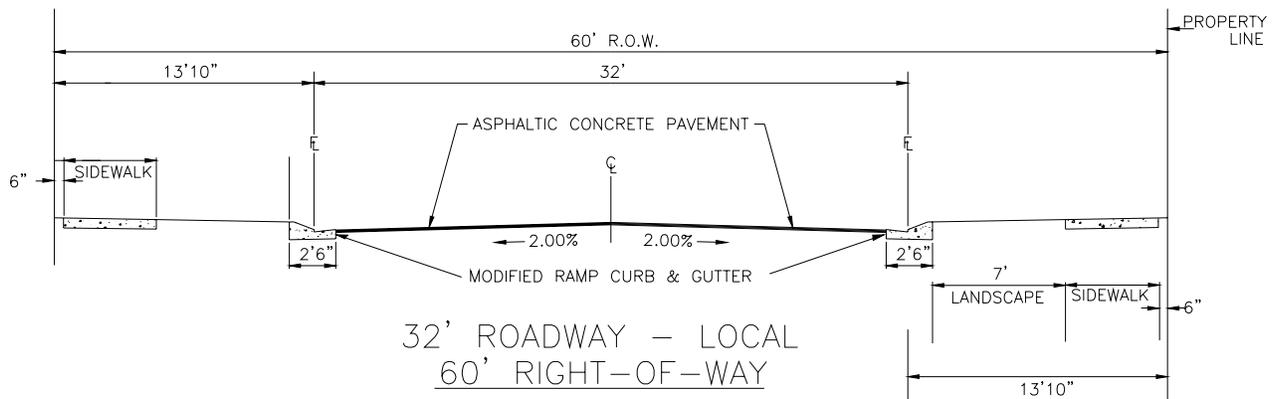
3.4 LOCAL ROADWAYS

Local roadways make up the foundation of Pueblo’s street system. Local roadways define the character of a neighborhood and are shared by the widest variety of users. The following local roadway standards serve different types and configurations of neighborhoods. In addition to local roadways intended for residential areas, there is a local business roadway standard intended for business campus areas with very low traffic generation.

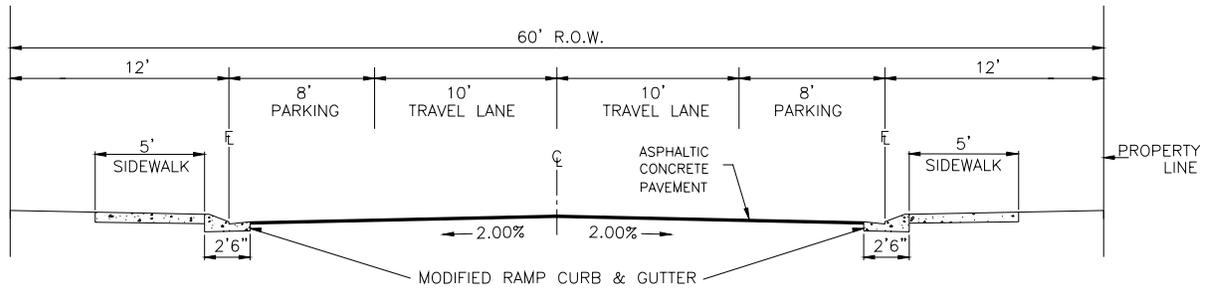
Local Street - Local 30' *	
Land Use	Residential
Function	Access to and through residential areas
Speed Limit	30 mph
Roadway Width	30'
ROW	60'
On-Street Parking	On-street parking both sides of street
Off-Street Parking	2 spaces per house
Sidewalk	5' attached or detached sidewalk
Curb	Vertical curb with attached or detached sidewalk Ramp curb with detached sidewalk only
Road Segment Length	660' before intersecting with another street
Emergency Access	Must retain a 20' clearance for emergency vehicles, an emergency vehicle pullover on one side of street may be substituted for one intersection.
Allowable Designs	Street may dead end in a cul-de-sac (maximum cul-de-sac length is 660'). Roundabouts, knuckles, and other designs may be considered during design review.
*	A 28' roadway width may be requested, removing parking, in unique situations, i.e. adjacent to neighborhood pocket parks.



Local Street - Local 32'	
Land Use	Residential
Function	Access to and through residential areas
Speed Limit	30 mph
Roadway Width	32'
ROW	60'
On-Street Parking	On-street parking both sides of street
Off-Street Parking	2 spaces per house
Sidewalk	5' attached or detached sidewalk
Curb	Vertical or ramp curb
Road Segment Length	660' before intersecting with another street
Emergency Access	Must retain a 20' clearance for emergency vehicles, a pullover on one side of street may be substituted for one intersection
Allowable Designs	Street may dead end in a cul-de-sac (maximum cul-de-sac length is 660').

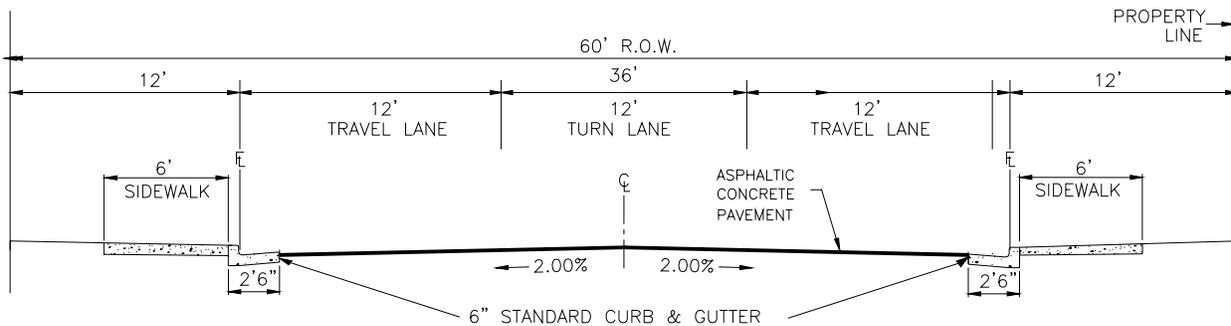


Local Street – Local 36'	
Land Use	Residential
Function	Access to and through residential areas.
Speed Limit	30 mph
Roadway Width	36'
ROW	60'
On-Street Parking	On-street parking both sides of street
Off-Street Parking	2 spaces per house
Sidewalk	5' attached or detached sidewalk (detached sidewalk would require a pedestrian easement and an 8' landscape area).
Curb	Vertical or ramp
Road Segment Length	1320' before intersecting with another street
Emergency Access	Must retain a 20' clearance for emergency vehicles.
Allowable Designs	Local 36' may dead end into a cul-de-sac (maximum length is 660')



36' ROADWAY – LOCAL
60' RIGHT-OF-WAY

Local Street – Local Business 36'	
Land Use	Office, Low Density Mixed Use
Function	Access to and through business campus settings
Speed Limit	30 mph
Roadway Width	36'
ROW	60'
On-Street Parking	None
Off-Street Parking	Per ordinance according to zone or use
Sidewalk	6' minimum attached or detached sidewalk (detached sidewalk would require a pedestrian easement and an 8' landscape area).
Curb	Vertical curb
Road Segment Length	1320' before intersecting with another street
Emergency Access	Must retain a 20' clearance for emergency vehicles.
Allowable Designs	Local 36' may dead end into a cul-de-sac (maximum length is 660')



36' ROADWAY – BUSINESS LOCAL
60' RIGHT-OF-WAY

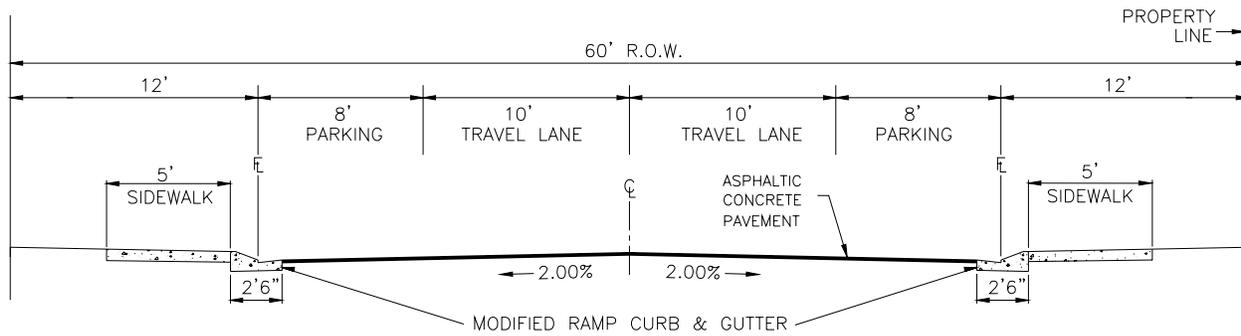
3.5 COLLECTORS ROADWAYS:

The neighborhood collector is a roadway, which collects traffic from a local roadway, yet remains in the neighborhood and is residential in character. This is the only collector roadway which allows houses to face the street. To protect the residential character, these roadways should not be widened in the future.

The mixed-use collector roadway collects traffic from nearby local roadways. The mixed-use collector would typically form the edge of a neighborhood or connect two different neighborhoods. These collectors carry more traffic than the neighborhood collector and therefore have a wider ROW to allow for a future turn lane or additional width in the future. Constructing residential homes that face a mixed-use collector roadway is not permitted.

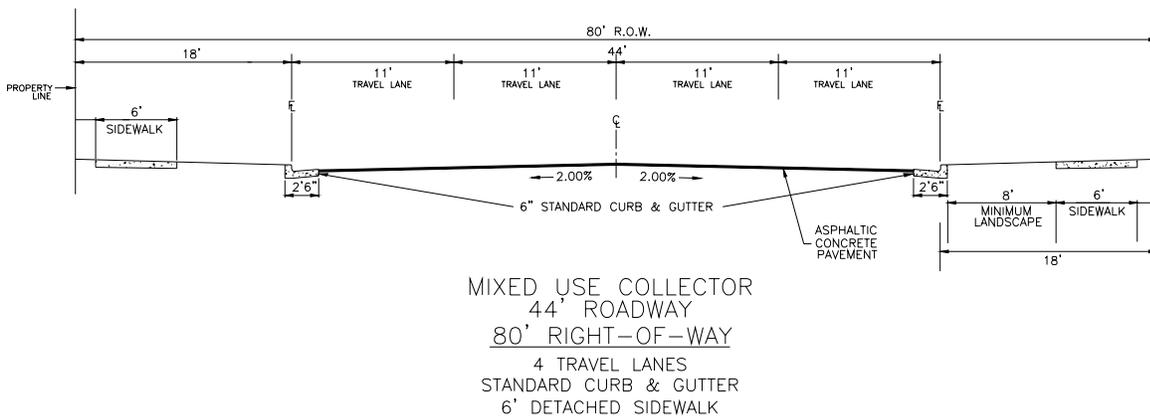
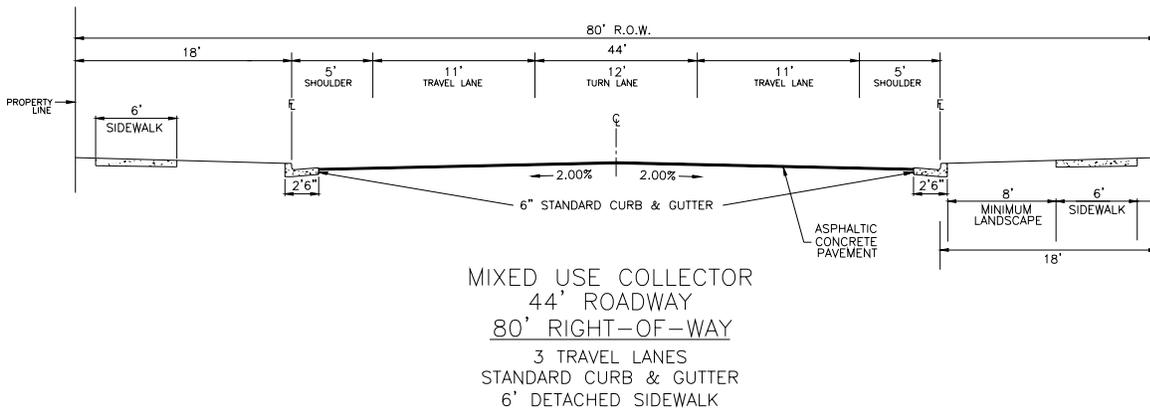
The business collector roadway is similar to the mixed-use collector; however, it serves primarily commercial rather than residential development. A business collector is a roadway on which the access to many businesses is located; therefore, speeds are kept low. This type of street may be typified as “Main Street” or it may be in an office park or suburban shopping area. The business collector allows more flexibility in types of functions such as on-street parking, type of sidewalk and landscaping. The collector street design standards are shown on the following pages.

Collector – Neighborhood Collector	
Land Use	Residential
Function	Access to and through residential areas.
Speed Limit	30 mph
Roadway Width	36'
ROW	60'
On-Street Parking	On-street parking both sides of street
Off-Street Parking	2 spaces per house
Sidewalk	5' attached or detached sidewalk (detached sidewalk would require a pedestrian easement and an 8' landscape area).
Curb	Vertical or ramp curb
Road Segment Length	1320' before intersecting with another street
Emergency Access	Must retain a 20' clearance for emergency vehicles.
Allowable Designs	Houses may face a neighborhood collector. Neighborhood collector cannot be widened to a 4-lane roadway. Neighborhood collector may not dead end into a cul-de-sac.

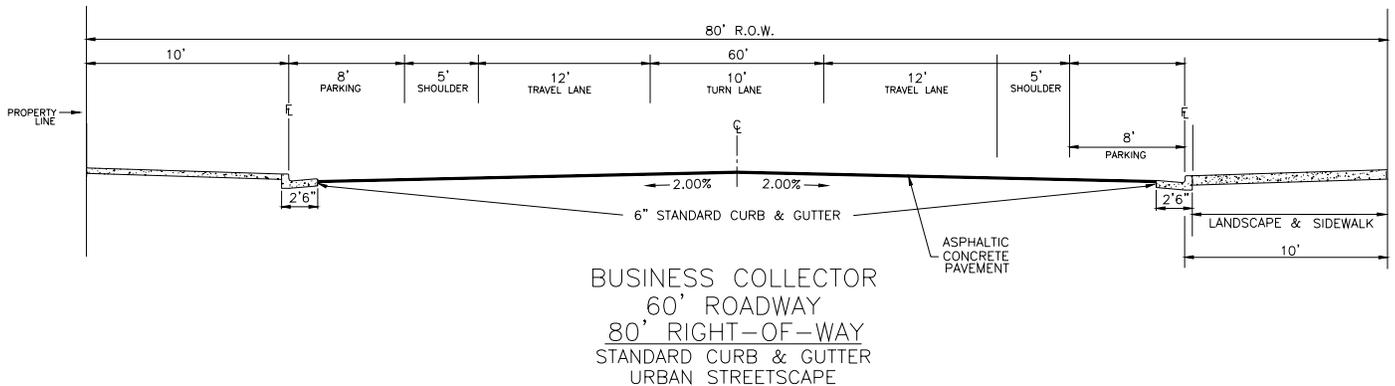


36' ROADWAY
 NEIGHBORHOOD COLLECTOR
 60' RIGHT-OF-WAY

Collector – Mixed Use Collector	
Land Use	Mixed Use
Function	Runs between neighborhoods, forms outside edge of neighborhoods
Speed Limit	30 to 35 mph
Roadway Width	44'
ROW	80'
On-Street Parking	None
Off-Street Parking	Adjacent properties must comply with zone district regulations
Sidewalk	6' minimum detached sidewalk
Curb	Vertical curb
Road Segment Length	1320' before intersecting with another street
Emergency Access	Must retain a 20' clearance for emergency vehicles.
Allowable Designs	Residential homes cannot face a mixed-use collector. A mixed-use collector cannot dead end and must intersect with other roadways.



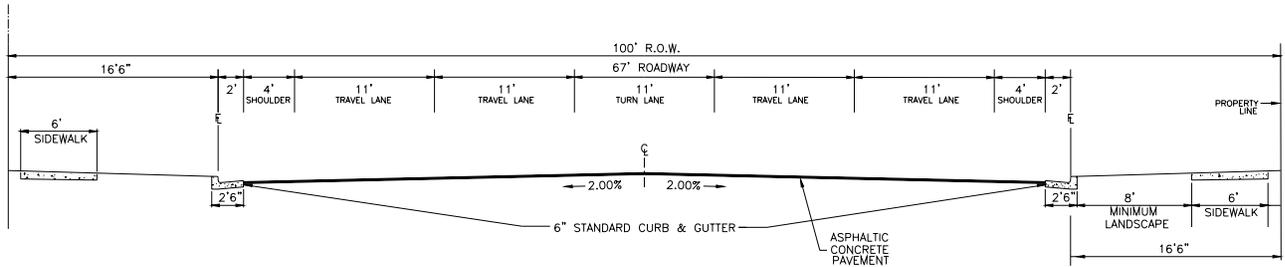
Collector – Business Collector	
Land Use	Commercial, mixed use, very urban residential
Function	Local commercial access, “main street” character, shopping and employment
Speed Limit	30 mph
Roadway Width	60’
ROW	80’
On-Street Parking	On-street parking both sides of street
Off-Street Parking	Adjacent properties must comply with zone district regulations
Sidewalk	6’ minimum detached sidewalk separated by urban landscaping
Curb	Vertical curb
Road Segment Length	1320’ before intersecting with another street
Emergency Access	Must retain a 20’ clearance for emergency vehicles.
Allowable Designs	Residential homes cannot face a business collector. A business collector cannot dead end and must intersect with other roadways.



3.6 ARTERIAL ROADWAYS:

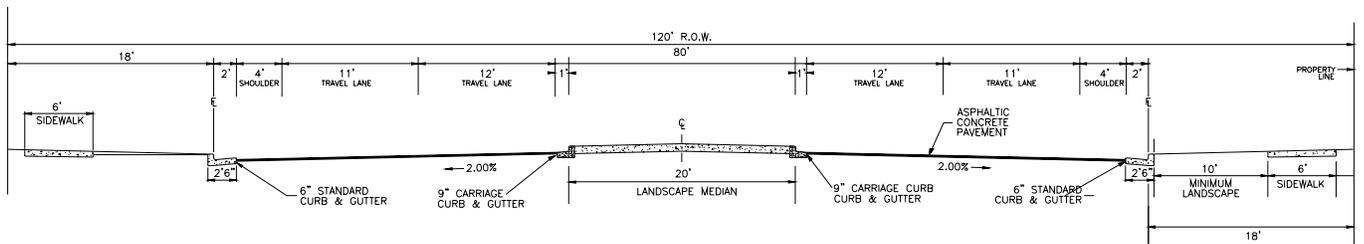
The City has two types of arterials; the minor arterial and the major arterial. Each of these arterials may be constructed as a Parkway according to the Citywide Parkway Plan.

Arterial – Minor Arterial	
Land Use	Mixed Use
Function	Provides for high capacity roadways which connect neighborhoods, areas and regional features with many points of access
Speed Limit	35 to 40 mph
Roadway Width	67' or 74' with landscaped median (2' curb -4' shoulder- 11' lane-11' lane-1.5' curb – 16' median-1.5' curb - 11' lane- 11' lane-4' shoulder-2' curb)
ROW	100' or 104' with a raised median
Off-Street Parking	Adjacent properties must comply with zone district regulations
Sidewalk	6' detached sidewalk or approved off road trail connection
Road Segment Length	Points of access must be approved by the Traffic Engineer and the Colorado Department of Transportation when roadway is classified as a State Highway
Emergency Access	Must retain a 20' clearance for emergency vehicles.



MINOR ARTERIAL
 67' ROADWAY
 100' RIGHT-OF-WAY
 STANDARD CURB & GUTTER
 6' DETACHED SIDEWALK
 REQUIRES ADDITIONAL ROW
 FOR RIGHT TURN LANES

Arterial – Major Arterial	
Land Use	Mixed Use
Function	Provides for continuous traffic movement connecting neighborhoods, areas and regional features at higher speeds with limited access.
Speed Limit	40 to 45 mph
Roadway Width	80'
ROW	120'
Median	All principal arterials are divided roadways
Off-Street Parking	Adjacent properties must comply with zone district regulations
Sidewalk	6' minimum detached sidewalk or approved off road trail connection
Road Segment Length	Points of access must be approved by the Traffic Engineer and the Colorado Department of Transportation when roadway is classified as a State Highway
Emergency Access	Must retain a 20' clearance for emergency vehicles.



MAJOR ARTERIAL
 80' ROADWAY WITH 20' MEDIAN
 120' RIGHT-OF-WAY
 STANDARD CURB & GUTTER
 6' DETACHED SIDEWALK

Chapter 4. Parkways

4.1 CITY PARKWAYS

In the character of the linear park, the adopted City Parkway Plan designates particular Arterials and Collectors to receive landscaping treatment in the center median. The median design of these designated parkways must be approved by the Department of Planning and Development.

[Reserved]

Chapter 5. Private Roadway

5.1 PRIVATE ROADWAY

This section of the *Roadway Classification Design Standards and Policies* is intended to encourage livable and sustainable private neighborhoods that are unique and creative in design and character. This standard sets forth the minimum requirements for private roadway developments; however, situations may arise where it is desirable to waive or vary these requirements. Waivers may be requested by the developer or staff and shall be approved by the Planning and Zoning Commission and Pueblo City Council.

A Private Roadway is defined as a roadway built on a parcel of land not dedicated to the public. This parcel shall be encompassed by a dedicated access ingress/egress easement recorded with the Pueblo County Clerk and Recorder.

All private roadways shall comply with the applicable provisions of the Americans with Disabilities Act (ADA) as specified in the most recent edition of the Accessibility Guideline (ADAAG Manual).

Structural requirements for asphalt pavement design shall comply with City of Pueblo Pavement Design Criteria and be approved by the Director of Public Works. Structural requirements for concrete pavement shall be engineered and stamped by a licensed Colorado Professional Engineer.

Private roadways that function as “through roadways” or attract traffic not associated with the development shall not be permitted. These roadways shall be platted as public roadways and constructed to the *Standard Construction Specifications and Standard Details for the City of Pueblo, Colorado* as adopted by the Pueblo City Council.

Secondary access will be required in developments generating over 600 vehicle trips per day.

Private Roadway	
Land Use	Single and multi-family residential, low density commercial
Function	Circulation within a small, contained area.
Speed	20
Roadway width	30’ or 24’ with visitor parking areas and fire truck mobility ensured
ROW	N/A
Off-Street Parking	Per zoning code; Plot layout shall be designed to ensure no portion of a vehicle will overhang a sidewalk when parked in a driveway.
Sidewalk	Case by Case
Emergency Access	Must retain a 20’ clearance for emergency vehicles.

ROADWAY CLASSIFICATION DESIGN STANDARDS

Roadway Classification:	Major Arterial	Minor Arterial	Business Collector	Mixed Use Collector	Neighborhood Collector	Business Local - 36'	Residential Local - 36'	Residential Local - 32'	Residential Local - 30' *	Country Residential Lane	Commercial Alley	Residential Alley	Private Roadways
Right of Way (ROW) Width	120'	100' 104' with median	80'	80'	60'	60'	60'	60'	60'	50'	20'	20'	N/A
Roadway width (FL to FL)	80'	67'	60'	44'	36'	36'	36'	32'	30'	24'	20'	12' -20'	30'; or 24' with visitor parking areas and fire truck mobility ensured
Median Width	20'	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of Travel Lanes	4	5 (incl. LT)	3 or 5 (incl. LT)	3 or 4	2	3 (incl. LT)	2	2 (restricted)	2 (restricted)	2	1	1	Case by Case
Left Turn Lanes Required	Y (at access)	Y	Y	Y	Possible	Y	N	N	N	N	N	N	N
Right Turn Lanes Required	Y (at access)	Y**	Y**	Y**	Y**	Y**	N	N	N	N	N	N	N
Designated Shoulder / Bike	Y	Y	Y	Possible	N	N	N	N	N	N	N	N	N
Shoulder / Bike Lane Width (including gutter)	6'	6'	5' or N/A	5' or N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
On-Street Parking Lane Width	None	None	8'	None	8'	None	7'	7'	7'	None	None	None	7'
Off-Street Parking Requirements	Per Zoning Code	Per Zoning Code	Per Zoning Code	Per Zoning Code	Per Zoning Code	Per Zoning Code	Per Zoning Code	2 off-street per dwelling unit	2 off-street per dwelling unit	2 off-street per dwelling unit	Per Zoning Code	Per Zoning Code	Per Zoning Code
Minimum Sidewalk Width	6'	6'	6'	6'	5'	6'	5'	5'	5'	Case by Case	None	None	Case by Case
Sidewalk (Attached or Detached)	D	D	A or D	D	A or D***	A or D***	A or D***	A or D	A (vertical curb) or D	D	N/A	N/A	A or D
Minimum Landscape Tree Yard	10'	8'	4' (URBAN)	8'	8'	8'	8'	7'	8'	Varies	N/A	N/A	N/A
Posted Speed Limit, mph	40 - 45	35 - 40	25 - 30	25 - 35	25 - 30	25 - 30	25 - 30	25 - 30	25 - 30	25-35	15	15	N/A
Design Speed Limit, mph	50	45	35	40	30	30	30	30	30	35	N/A	N/A	20
Access	Limited - CDOT Access Code	Limited - CDOT Access Code	Limited	Limited	Minimal Restrictions	Minimal Restrictions	Minimal Restrictions	Minimal Restrictions	Minimal Restrictions	Minimal Restrictions	Unlimited	Unlimited	Unlimited
Driveway Configuration	Radius	Radius	Curb Cut or Radius	Curb Cut or Radius	Curb Cut or Radius	Curb Cut or Radius	Curb Cut	Curb Cut	Curb Cut	Curb Cut	N/A	N/A	Radius
Curb Type (Vertical or Ramp)	V	V	V	V	V or R	V	V or R	V or R	V or R	V or R	N/A	N/A	Case by Case
Minimum Distance Between Intersections	**T - 400' 4-WAY - 2640'	**T - 400' 4-WAY - 2640'	400'	125'	125'	125'	125'	125'	125'	125'	N/A	N/A	N/A
Maximum Distance Between Intersections	2640'	2640'	1320'	1320'	1320'	1320'	1320'	660'	660'	2640'	N/A	N/A	N/A
Maximum Cul-de-sac Length	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed	660'	660'	660'	660'	Not Allowed	Not Allowed	Not Allowed	660'
Minimum Centerline Radius	1235' w/ normal crown or AASHTO	945' w/ normal crown or AASHTO	455' w/ normal crown or AASHTO	500' w/ normal crown or AASHTO	310' w/ normal crown or AASHTO	200'	200'	200'	200'	500'	N/A	N/A	100'
General Land Uses	All Areas	All Areas	Urban Business	Mixed Use	Single Family Multi-Family	Office Park Low Density Mixed Use	Single Family Multi-Family	Single Family Multi-Family (Low Density)	Single Family Multi-Family (Low Density)	Single Family, 1-acre lots	Business	Single Family Multi-Family	Single Family Multi-Family Low Density Commercial

* A 28' roadway width may be requested, removing parking, in unique situation, i.e. adjacent to neighborhood pocket parks.

** Right turn lane warranted per CDOT access code.

***Detached sidewalk will require a pedestrian easement with an 8' landscape area.

NOTE: Roadway width at future signalized intersection require laneage to minimize vehicular delay.