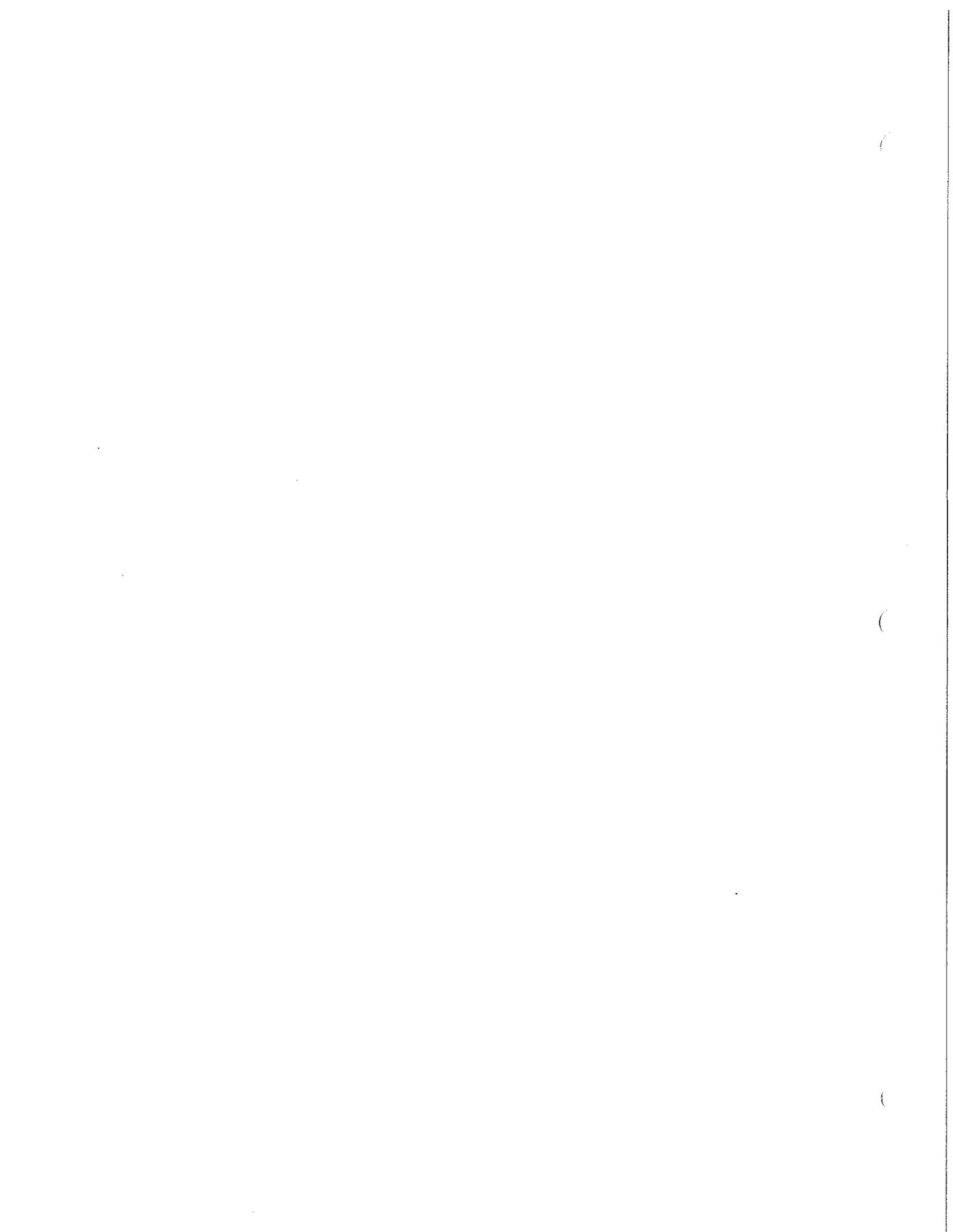


CHAPTER 13

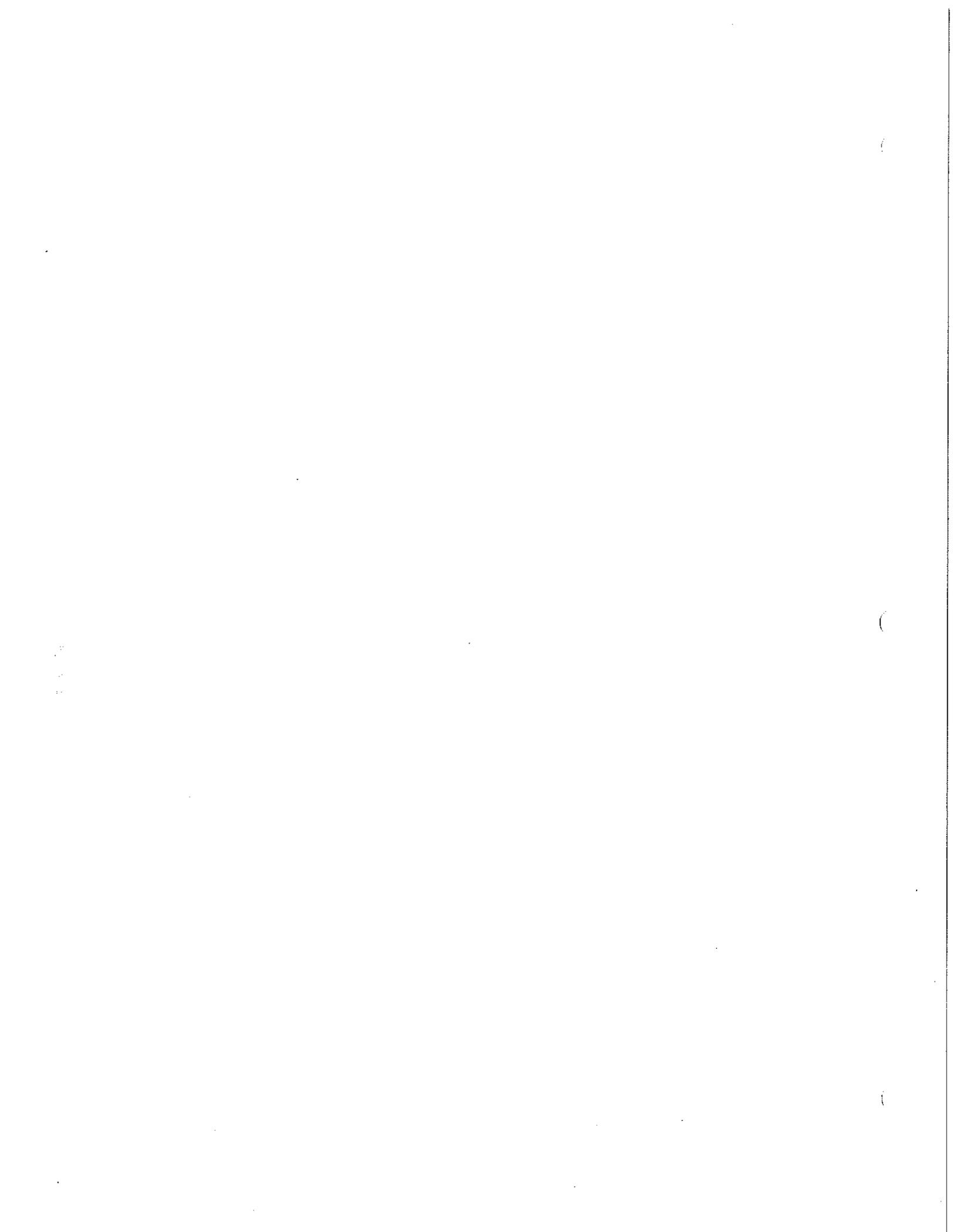
ACCESS REQUIREMENTS AND CRITERIA



CHAPTER 13
ACCESS REQUIREMENTS AND CRITERIA

INDEX

Section	Topic	Page
13.1	General	13.1
13.2	Criteria for Access onto Town of Bennett Roadways	13.1
13.3	Basic Principles for Curb Openings and Driveways	13.6
13.4	Definition of Terms	13.9
13.5	General Requirements	13.10
13.6	Control Dimensions	13.12



CHAPTER 13
ACCESS REQUIREMENTS AND CRITERIA

13.1 General

Access to Town streets and roadways is approved through one of two mechanisms. (1) For new developments, access is granted through Town Board of Trustees approval of the final plat. (2) To obtain access from existing developed property to Town streets, the mechanism is dependent on the zoning:

- a. For planned developments, new or altered access must be obtained through the Towns Administrative Amendment Process. This involves applying through the Planning Department to amend the property final development plan. The application should be accompanied by appropriate plans for the purposed access and technical jurisdiction, including justification for the extent of improvements purposed at the access point.
- b. For straight zoned property, application for access can be made through the Engineering Divisions Submittal Form identified in Chapter 2. This application should be accompanied by plans of the proposed access and technical justification for the access and associated public improvements.

The Engineering staff is available to provide advice on the extent of technical justification for any access request. It is recommended that this advice be sought prior to submitting any application.

13.2 Criteria for Access Onto Town Roadways

13.2.1 State Highways

- 13.2.1.1 Access to State Highways is governed by State Highway Access Code
- 13.2.1.2 The Town has authority to administer the State Highway Access Code of the Colorado

Department of Highways prior to State review.

13.2.2 Freeways

13.2.2.1 All new freeway access in the Town shall meet the requirements of the Colorado Department of Highways and the Denver Regional Council of Governments.

13.2.3 Major Arterials

13.2.3.1 An Access Permit must be obtained from the Town for any private access constructed to a major arterial.

13.2.3.2 Private direct access to major arterials shall be permitted only when the property in question has no other reasonable access to the general street system, or when denial of direct access to the major arterial and alternative direct access to another roadway would cause unacceptable traffic operation and safety problems to the overall traffic flow of the general street system. When private access must be provided, the following shall be considered:

- a. Such access shall continue only until such time as some other reasonable access to a lower function category street is available and permitted. The Access Permit should specify the future reasonable access location(s), if known, and under what circumstances, what changes will be required.
- b. No more than one access shall be provided to an individual parcel or to contiguous parcels under the same ownership unless it can be shown that:
 - (1) allowing only one access conflicts

with safety regulations (e.g., fire access), or (2) additional access would significantly benefit safety and operation of the highway or street and is necessary to the safe and efficient use of the property.

- c. An access shall be limited to right turns only, unless: (1) it has the potential for signalization, (2) left turns would not create unreasonable congestion or safety problems and lower the level of service, and (3) alternatives to the left turns would not cause unacceptable traffic operation and safety problems to the general street system.

13.2.3.3 Public direct access to a major arterial, where left turns are to be permitted must meet the signal spacing criteria following. Those that do not meet these requirements shall be limited to right turns only, unless they meet the requirements of 13.2.3.2.c above. No local streets shall be permitted to intersect major arterials.

13.2.3.4 Spacing and Signalization Criteria

- . In general terms, full access to major arterials shall be limited to one-half intervals, plus or minus approximately 200 feet, in order to achieve good speed, capacity, and optional signal progression. However, to provide flexibility for both existing and future conditions, an approved engineering analysis of signal progression shall be made to properly locate any proposed access that may require signalization. The specifics of this analysis are detailed in the

"Guidelines for Traffic Impact
Studies".

13.2.4 Minor Arterials

13.2.4.1 An access permit must be obtained from the Town for any private access constructed to a minor arterial.

13.2.4.2 Private direct access onto a minor arterial will be permitted if it:

- a. Does not have the potential for signalization as per the requirements of Section 13.2.3.2.b and 13.2.3.2 c above.
- b. Does have the potential for signalization, if it meets the signal spacing requirements for intersecting public streets stated below and does not interfere with the location, planning and operation of the general street system and access to nearby properties.

13.2.4.3 Public direct access to a minor arterial, where left turns are to be permitted, must meet the signal spacing criteria following. Those that do not meet these requirements shall be limited to right turns only until they meet the requirements of Section 13.2.3.2.c above. No local streets shall be permitted to intersect minor arterials.

13.2.4.4 Spacing and Signalization Criteria

a. In general terms, full access to minor arterials shall be limited to one-quarter mile intervals, plus or minus approximately 100 feet, in order to achieve good speed, capacity, and optional signal progression.

b. However, to provide flexibility for both existing and future conditions, an

approved engineering analysis of signal progression shall be made to properly locate any access that may require signalization. The specifics of this analysis are detailed in the "Guidelines for Traffic Impact Studies". (See Appendix B).

13.2.5 Major and Minor Collectors

13.2.5.1 Private access to collectors shall be governed by the curb opening and driveway criteria following. Single family residence access to collectors is not permitted unless access to a lower function category street is not available.

13.2.5.2 Public streets shall intersect minor collectors not closer than 330 feet from each other (centerline to centerline), and shall intersect major collectors not closer than 660 feet from each other (centerline to centerline). On collectors with an ultimate projected traffic volume of less than 2500 V.P.D., intersection spacing may be 250 feet (centerline to centerline).

13.2.6 Local Streets

13.2.6.1 Private access to local streets shall be governed by the curb opening and driveway criteria following.

13.2.6.2 Public streets should not intersect local roadways closer than 150 feet from each other (centerline to centerline). On a local street, the closest intersection to a collector street shall be at least 210 feet (centerline to centerline), and to an arterial street, the closest intersection shall be 210 feet (arterial R.O.W. line to local street centerline) (See Figure 13.A and drawing No. 13.1 within the back of this chapter.)

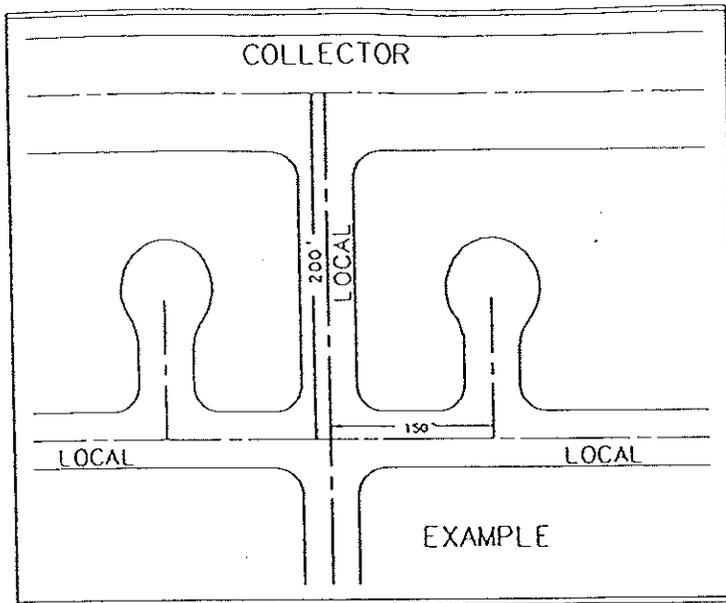


Figure 13.A

13.3 Basic Principles For Curb Openings And Driveways

13.3.1 Certain control values for curb openings and driveways require minimum dimensions in some instances and maximum values for other dimensions. The design of curb openings and driveways within the range of these dimensions will provide for good service on the part of the motorist using the driveway while at the same time minimizing the interference to the traffic using the street. By controlling the location and width of the openings or driveways along the street, it will be possible to avoid or eliminate long open stretches where motorist can indiscriminately drive onto the street. The width of the opening established in these Design Standards are based on studies which indicate that the various width openings will accommodate vehicles of maximum size authorized on the Town streets and highways. In case of conflict between requirements in the various sections of this chapter, the more restrictive condition will normally apply.

13.3.2 The opening of driveway width should be adequate to handle properly the anticipated traffic volume and

character of the traffic, as well as being within the limits specified for the type of property development. The controls established for curb openings and driveways shall apply to existing streets as well as new streets that may be developed in the future.

- 13.3.3 To the greatest extent possible all openings for driveways shall be located at the point of optimum sight distance along the street. For openings and driveways to commercial establishments and service stations there shall be sufficient space reasonable cleared of any obstruction such that drivers entering the property will give sufficient sight distance to enable them to make proper and safe movements. The profile of a driveway approach and the grading of the adjacent area shall be such that when a vehicle is located on the driveway outside the travel portion of the street the driver can see a sufficient distance in both directions so as to enable him to enter the street without creating a hazardous traffic situation. The driveway profile grade within public R.O.W. shall not exceed 4%.
- 13.3.4 Any adjustments which must be made to utility poles, street light standards, fire hydrants, catch basins or intakes, traffic signals or other public improvements or installations which are necessary as a result of the curb openings or driveways shall be accomplished without any cost to the Town. Also any curb opening or driveway which has been abandoned shall be restored by the property owner except where such abandonment has been made at the request of, or for the convenience of the Town.
- 13.3.5 Driveway approaches, whereby the driveway is to serve as an entrance only or an exit only, shall be appropriately signed by, and at the expense of the property owner. The property owner will be required to provide some means of ensuring that the motorist will use the driveway either as an entrance only or an exit only, but not both.

13.3.6 Rural Road Access From Private Driveway

New driveway access from private property to an existing graveled Town road shall be required to install a minimum of 6" of compacted class 6 aggregate base course or equivalent material from R.O.W. line to the edge of the traveled roadway. The width of the driveway within the R.O.W. shall be 24 feet and a minimum 18" diameter corrugated metal pipe (CMP) culvert shall be required at the established ditch flow line. A sketch plan of the installation must be submitted with the access permit application.

13.3.7 Access to Roadways with No Curb Gutter

Private drive access to local, collector or arterial roadways that have no curb and/or gutter improvements shall be constructed to meet the following requirements:

13.3.7.1 Drive shall extend from R.O.W. line to edge of existing driving surface and shall be constructed of:

- * An 8" thick compacted class 6 aggregate base material, or if paved,
- * A minimum 3" thick asphalt pavement over 6" thick class 6 Aggregate base material, i.e., minimum acceptable roadway pavement design.

13.3.7.2 The drive shall be a minimum of 12' wide in the Town R.O.W.

13.3.7.3 An 18" diameter CMP culvert shall be installed at the established roadside ditch flowline beneath the private drive access.

13.3.8 Maintenance of access and drainage improvements within the Town R.O.W. described in Sections 13.3.6 and 13.3.7 shall be the responsibility of the adjacent property owner.

13.4 Definition of Terms

Several terms are used herein which have a somewhat distinct meaning. For the purpose of clarity, the definition of some of these terms are listed below:

Width of curb opening (W) - The width of curb opening measured at the curb line

Edge clearance (E) - The distance measured along curb line from the nearest edge of the curb opening to a point where the property line extended intersects the curb line.

Corner clearance (C) - At an intersecting street the distance measured along the curb line from the projection of the intersecting street right-of-way line to the nearest edge of the curb opening.

Distance between double driveways (D) - The distance measured along the curb line between the inside edge of the 2 adjacent curb openings.

Setbacks (S) - The lateral distance measured perpendicular to the street R.O.W. line and extending from the R.O.W. line to the closest point of a building or gasoline service pump island.

Frontage - The distance along the street R.O.W. line of a single property or development within the property lines. Corner property at an intersection would have a separate frontage along each street.

Residential - Property used primarily for residential purpose such as single family, two-family and multi-family units.

- Single family residential (SF) - single, detached family dwelling units or double bungalows or duplexes.
- Multi family residential (MF) - Three or more attached dwelling units including townhouses, condominiums and apartments.

Commercial - Establishments where the buying and selling of commodities, entertainment or services is carried on. Included are such uses as service stations, office buildings, restaurants, hotels, motels, banks, grocery stores, theaters, parking lots, trailer courts and public buildings.

Service stations - Any property where flammable liquids used as motor vehicle fuel are stored and dispensed from fixed equipment into fuel tanks of motor vehicles.

Industrial or warehouse - Any establishment that manufactures or stores an article or product.

13.5 General Requirements

13.5.1 Number of Openings

SF Residential - In general each SF residential property shall be limited to one access point.

MF Residential - In general, access shall be determined by information provided by the owner/developer in the Traffic Impact Study and by comments generated during the Towns review and acceptance of that study.

Commercial - In general, commercial property having less than 150 feet of frontage and located mid-block shall be limited to one access point to the street. An exception to this rule may be where a building is constructed in the middle of a lot and parking is provided on either side of the building.

A second access point may be allowed for commercial property and service stations having more than 150 feet of frontage where there insufficient frontage to provide for minimum and maximum requirements. For commercial property and service stations located on a corner, one access to each street may be permitted.

Industrial - Access shall be determined on a case by case basis. The Town shall consider good traffic

engineering practice and the information provided by the applicant in the Traffic Impact Study accompanying his submittal.

13.5.2 Amount of Curb Opening Permitted

The total length of curb opening on a street for access to commercial property or service station shall not exceed 40% of the property frontage. This requirement does not apply to residential type curb openings.

13.5.3 Entrance Angle

In general, the entrance angle for all drive approaches shall be as near 90° to the centerline of the street as possible. The minimum angle to be permitted is 90° plus or minus 10° .

13.5.4 Minimum Space Between Openings(D)

The minimum spacing between curb openings shall be 35 feet measured at the curb line. This spacing will apply to the distance between drives serving adjoining properties. This does not apply to residential projects using mountable curb, gutter, and sidewalks. A 50 foot spacing applies to commercial openings.

13.5.5 Joint Entrances

Whenever possible and feasible, joint entrances will be provided to serve two adjacent properties. Joint entrances are to be centered on the common property line.

13.5.6 Access Approaches

Access approaches shall not be approved for parking and loading areas that require backing maneuvers within the Town right-of-way. All off-street

parking areas must include on-site maneuvering areas and aisles to permit user vehicles to enter and exit the site in forward drive without hesitation.

- 13.5.7 If a parcel of land with direct access has been in a state of non-use for more than four years, recommencement of access use shall be considered a change in use. If the use of the access exceeds the design limitations of the access or is non-conforming with the present code, a new permit may be required.

13.6 Control Dimensions

To accomplish the objectives of the basic principles stated earlier, certain control dimensions are necessary. There are many variables which affect these control dimensions. Some of the variables are as follows: type of street classification, type of private property development, volume and type of traffic and width of right-of-way. See figure 13.1

13.6.1 Width of Curb Opening (W)

The total width of curb opening for properties on various Functional Street Classifications shall be in conformance with Table 13.1 and drawing No.47 within the Appendix section.

TABLE 13.1
WIDTH OF CURB OPENING

	RESIDENTIAL		COMMERCIAL	SERVICE STATION	INDUSTRIAL
	SF	MF			
FREEWAY	N/A	N/A	N/A	N/A	N/A
MAJOR ARTERIAL	N/A	**	**	**	**
MINOR ARTERIAL	N/A	**	**	**	**
MAJOR COLLECTOR	N/A	30-35	30-40	30-40	30-40
MINOR COLLECTOR	N/A	30-35	30-40	30-40	30-40
LOCAL	22	30-35	30-40	30-40	30-40

** If allowed under 13.2.3.2.c design as collector

Note: Curb opening of 30' or more must be constructed as a radius curb return

13.6.2 Edge Clearance (E)

Residential

Arterial - None (May not exceed the property line extended)

Local - None (May not exceed the property line extended)

Commercial and Service Station

Arterial - 25 feet minimum

Local - 25 feet minimum

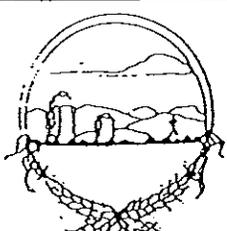
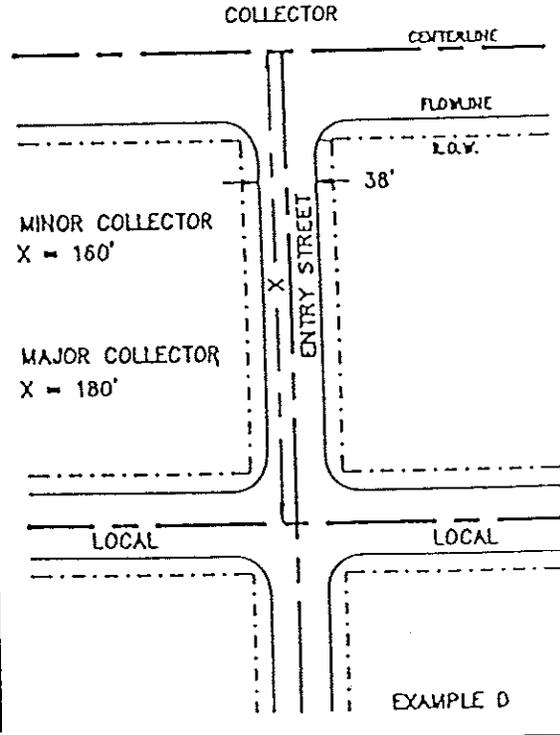
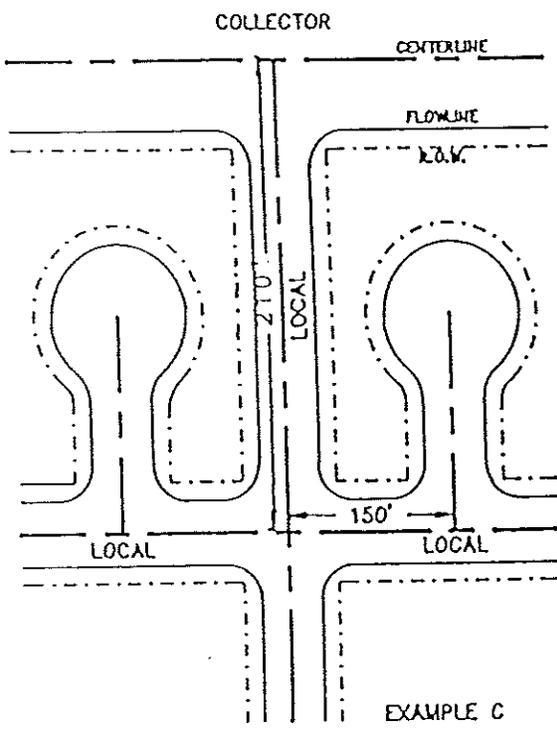
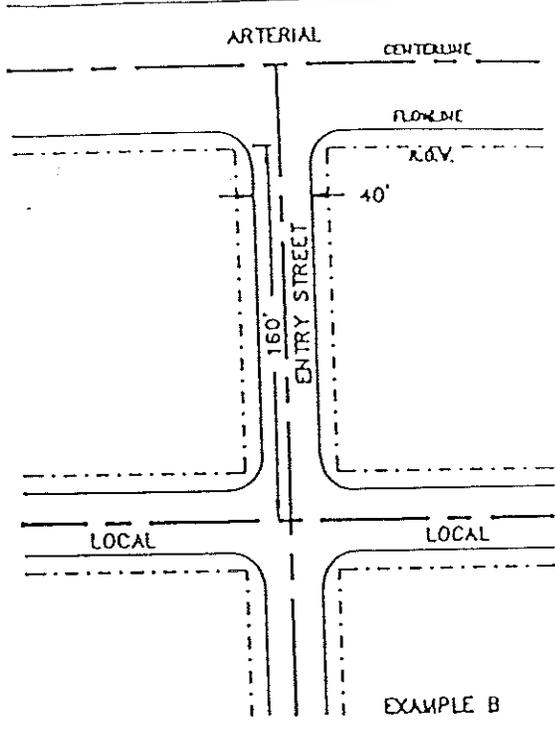
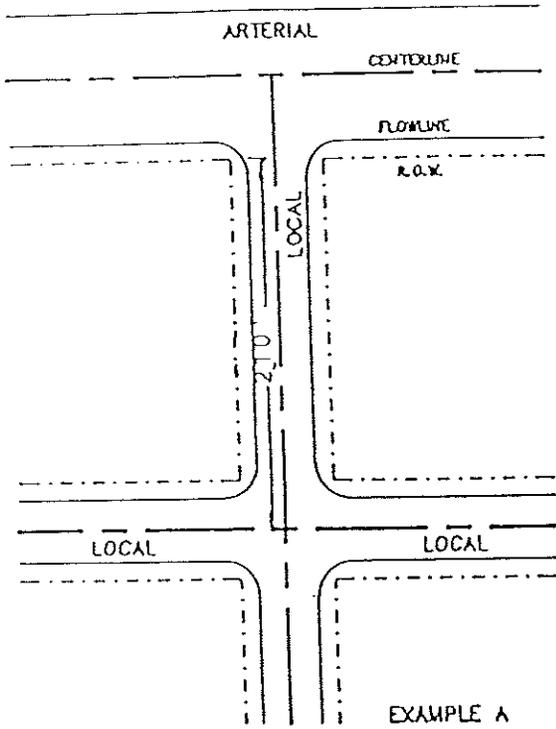
Note: Joint access with adjoining property is encouraged. Joint access shall be the only justification for reducing the minimum edge clearance dimension.

13.6.3 Corner Clearance (C)

It is important to locate driveways away from major intersections. This constraint is as much for the ability to enter and leave the property as for the benefit of intersection safety and operations. Exiting a driveway during peak-hour conditions at traffic signals is difficult where the queue of standing or slow-moving vehicles never allows a sufficient gap for entry from the driveway. Corner clearances are specified in drawing No.48 within the Appendix section and are measured from the curb line.

13.6.4 Sight Distance

Sight distance for curb openings to private property shall consist of a sight triangle conforming to the requirements of Section 4.5.9.2.e of these Roadway Standards. This does not apply to driveways in single family residential projects using mountable curb, gutter, and sidewalks.



INTERSECTION SEPARATIONS

Town of Bennett

Issued: _____

Revised: _____

Drawing No. 12 1