

CHAPTER SIX
THOROUGHFARE PLAN

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The ability to transport people and goods from one place to another is one of the basic components of the economic and social system upon which a community depends. Consequently, the adequacy of the major street system will have a substantial impact on the rate and pattern of its future growth. To ensure that the street system is able to expand efficiently and that it remains consistent with the Future Land Use Plan requires careful, long-range planning.

This section will review the street and highway system of Belton. This examination will include an explanation of the various types of streets and the designation of the major street system.

STANDARD STREET CLASSIFICATIONS

Street classifications are based on the functions of a hierarchy of vehicle origin-destination movements. Movement from one section of the City to another is carried on arterials which are, ideally, uninterrupted corridors designed for the smooth flow of a large volume of traffic. Sub-section movement occurs on collector streets which connect residential areas with arterials and local traffic generators. The lowest level of the system, local streets, carries the traffic flow to abutting properties.

The following is a further explanation of these classifications and their design standards.

Arterial Streets

Arterial streets should function to connect areas of principal traffic generation and important rural highways. They provide for distribution and collection of traffic to and from collector streets and local streets. The arterial street is given preferential treatment over collector and local streets in signing and signalization of intersections. It is preferable that local streets do not have direct access to arterials, but are provided access to the arterial through the collector street system. Parking on arterials should be restricted in all cases where it interferes with traffic flow.

Access to private property along an arterial should be controlled to avoid hazards and the interference of traffic flow due to ingress and egress traffic movements. Access control can

be achieved at differing levels through subdivision design, street design, and curb cut regulations. Two such methods include backing-up of lots along the arterial and utilization of a frontage road or access street. A landscaped buffer along the arterial will help maintain the viability of abutting land for residential purposes.

The following criteria are recommended for arterial streets:

Right-of-Way Width	80-100 feet
Pavement Width	48- 60 feet
Moving Lanes	2-4 (12-foot moving lanes)
Parking Lanes	0-2 (10 feet wide)
Volume	6,000-20,000 vehicles per day
Driving Speeds	20-45 miles per hour (20 in CBD)

Collector Streets

Collector streets serve traffic desiring to travel between major arterials and local streets and are used mainly for traffic movement within residential, commercial and industrial areas. Collector routes provide the combined services of through traffic service or are developed to discourage any long distance of continuous through traffic.

For safe accommodation of local traffic movement and effective preservation of the character of residential areas, experience has shown that collector streets should be spaced at intervals of about one-half mile in cities like Belton which have a low to moderate density.

The following criteria are recommended for collector streets:

Right-of-Way Width	70-80 feet minimum
Pavement Width	24-44 feet
Moving Lanes	2 (12-foot moving lanes)
Parking Lanes	0-2 (10 feet wide)
Volume	1,000-6,000 vehicles per day
Driving Speeds	20-30 miles per hour

Local Streets

The primary function of local streets is to provide access to abutting property. Continuity of local streets is not important and through traffic should be discouraged. Local streets should be designed to intersect with a collector street and provide easy access to adjacent property.

The following criteria are recommended for local streets:

Right-of-Way Width	50-60 feet minimum
Pavement Width	28-36 feet
Moving Lanes	2 (10-foot moving lanes)
Parking Lanes	0-2 (8 feet wide)
Volume	Up to 1,500 vehicles per day
Driving Speeds	10-30 miles per hour

Rural Arterials

The purpose of a rural arterial is to serve as a temporary link in the circulation system until development warrants constructing the road to urban standards. Frequently, it is necessary to complete such a link years before the adjacent areas develop; therefore, their interim use is to connect presently developed areas with existing highways, commercial areas, etc. In addition, by designating these roads as rural arterials, sufficient right-of-way width can be acquired as an area develops. Rural arterial construction is similar to that of urban arterials except that curb and gutter is absent.

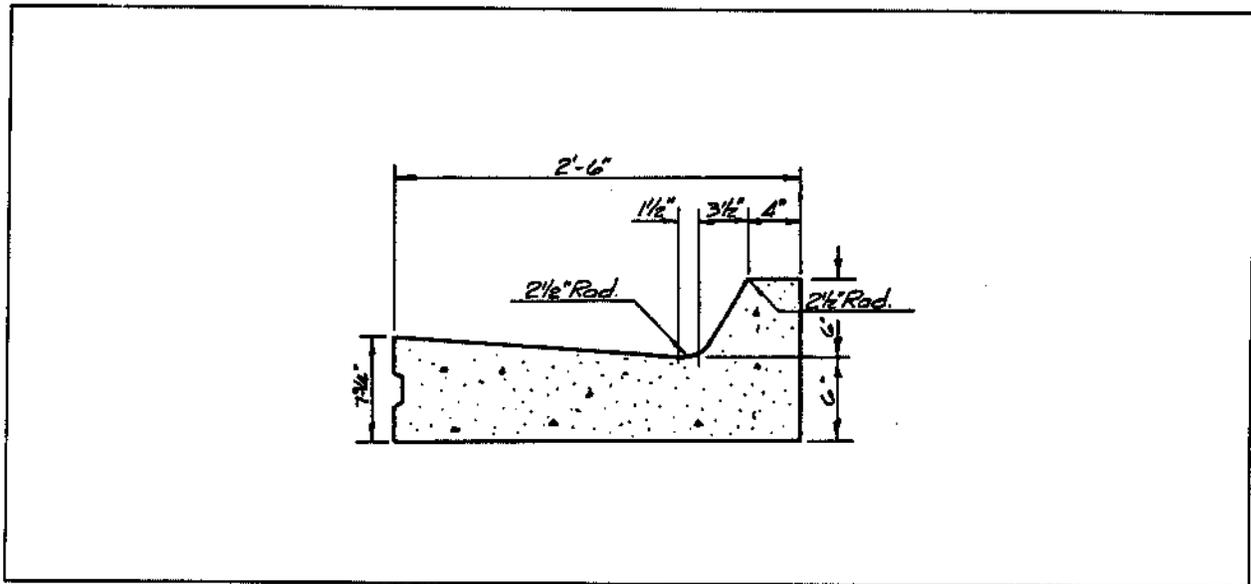
The following criteria are recommended for rural arterial streets:

Right-of-Way	100-120 feet
Pavement Width	24 feet
Moving Lanes	2 (12-foot moving lanes)
Parking Lanes	0
Volume	6,000-20,000 vehicles per day
Driving Speeds	30-45 miles per hour

Curbs and Gutters

A typical curb and gutter design is shown below. The integral curb and gutter system serves two functions. First, it provides a surface drainage channel along the side of the street. Second, access control is improved with the use of a 6" curb. All urban streets should include curbs and gutters.

Figure 6-1
INTEGRAL CURB AND GUTTER



DESIGNATION OF THE MAJOR STREET SYSTEM

The various types of streets described above fit together to form a network of streets to service the needs of each land use throughout the City. How well the transportation needs are met depends upon how closely the street network can be matched to the existing land use pattern. As the City of Belton grows, however, the demands made upon the street network could change. Therefore, it is important that the future land use pattern be considered along with the existing pattern when decisions regarding street classifications are made.

As a general rule, arterials should be located at one-mile intervals and collectors locate midway between arterials. This general rule, however, must often be modified to accommodate land uses with high traffic demand, the existing street system or natural features which disrupt the normal street pattern. For example, additional streets are often needed leading to or within the CBD because of the unusually high volume of traffic which is generated.

Given the probable traffic demand of the future land use pattern as discussed in the previous section and the existing street network, it is possible to develop a street classification system. This system is shown on the Future Land Use Map and is listed below.

Arterials:

- (1) Holmes Road
- (2) Prospect
- (3) Cleveland
- (4) North Scott
- (5) Y Highway
- (6) Mullen Road
- (7) Kentucky Road
- (8) County Line Road (155th Street)
- (9) 163rd Street
- (10) Markey Road
- (11) 58 Highway
- (12) Cambridge Road
- (13) Frontage Road (58 to Cambridge)

Collectors:

- (1) Walker Road (Markey to Cambridge)
- (2) Westover
- (3) Scott Avenue
- (4) Main Street
- (5) Second Street*
- (6) Section 13 Cambridge - 58 Interconnect
- (7) Frontage Road (Cambridge to 195th Street)
- (8) Harris Avenue
- (9) Spring Valley Road (163rd to Bel-Ray Drive)
- (10) Springer Street
- (11) Springdale Lane/Bel-Ray Drive/Bel-Ray Blvd.
- (12) Turner County Road
- (13) Mill Street
- (14) 175th/Sunrise Drive/South Avenue

* As stated in the 1983 Plan, Second Street is maintained as a collector at this time; however, once the intersection of North Scott and 58 Highway is improved, Commercial should be the collector paired with Main Street.