

# THOROUGHFARES

## **INTRODUCTION**

Thoroughfares and land use considerations are central to municipal planning. The types and intensity of uses are essential for a community to function properly. A basic need is a circulation system with adequate "major" and "collector" streets. People must be able to transport goods, travel with ease and have a steady flow in and throughout the City. In some communities, the transportation modes include roads, rail, air and water. In La Feria, roads are the primary mode of transportation.

Vehicular, the principal source of transportation for small rural communities, did not become an integral part of the average American life until the 1920's or 1930's. In all growing communities, the role of automobile transportation continues to expand, while railroads transport materials and supplies.

Highways leading into and through La Feria make up almost all of the City's Major Street System. This is a good arrangement because the Texas Department of Transportation provides the construction maintenance cost. Any assistance provided by the State or County in developing or improving streets in La Feria is an asset to the City. Therefore, local officials and citizens should voice a need for street improvements from the State Highway Officials and Cameron County Commissioners. Cities are responsible for maintaining miles of residential streets, so any help in street assistance from other government agencies relieves the City Budget proportionally.

The 1998 Thoroughfare Study prepared by Governmental Services Agency, Inc. was used in developing this updated study.

## **STANDARDS FOR STREET PLANNING**

Normally, between twenty-five (25) to thirty (30) percent of the total developed land in an urban area is devoted to streets and highways. Local streets, sometimes referred to as traffic arteries, are structural facilities that provide necessary environmental space for light and air, space to separate housing and other structures, and an avenue for people to circulate to and from homes, places of employment and recreation, etc.

The pattern of streets determines, to a considerable extent, the distribution of homes, stores, schools and the size, shape and orientation of blocks and lots, and to a limited degree, buildings. Few of the physical facilities in a city are quite as permanent as streets. Once a street is constructed, the utility services installed and the buildings erected on the abutting properties, it is both difficult and expensive to make changes in the location or width of street right-of-ways, but at times, the necessity is worth the effort and expense.

A clear understanding of the functional differences and relationships between various types of streets is essential in planning the City's Future Street System. Street standards as specified in the City's Subdivision Regulations should be reviewed and revised when appropriate changes to right-of-way widths and pavement widths of "residential", "collector" and "major" streets are needed. Established City street standards are:

- "Major" streets or thoroughfares shall have a right-of-way width of eighty feet (80') and a paving width of forty-eight feet (48').
- "Collector" streets shall have a right-of-way width of sixty feet (60') and a paving width of thirty-nine feet (39').
- Local residential streets shall have a right-of-way width of fifty feet (50') and a paving width of twenty-nine feet (29').

#### **Functions of Major, Collector and Residential Streets**

- Avenues for traffic.
- Accommodate right-of-ways for utilities of various types.
- Supply light, air and open spaces to abutting properties.
- Provide access to property.

"Major" streets (thoroughfares) carry the bulk of a city's traffic. It has become increasingly important to concentrate traffic, wherever possible, **on** a system of thoroughfares and **off** of "minor" or local streets. Such a system of thoroughfares would involve twenty-five (25) percent, or less, of the total street system and are generally located approximately one mile apart, except in a Central Business District and industrial area.

"Collector" streets or secondary streets are designed to carry less traffic than "major" streets and are primarily used to carry traffic from residential areas to "major" streets. These "collector" streets are usually located approximately one-half mile apart.

"Minor" or local residential streets that feed traffic to "major" or "collector" streets, have smaller right-of-way and pavement widths.

Exhibit 7-1, on the next page, illustrates cross-sections of "major" and "collector" street standards from the City's Subdivision Ordinance.

## **CITY'S MAJOR AND COLLECTOR STREET SYSTEM**

### **La Feria's Early Street Design**

A properly developed street system is the element that ties the city together and provides for rapid, safe, and efficient movement of people and goods in motor vehicles. U.S. Expressway 83, U.S. Business Highway 83, Rabb Road, Kansas City Road, FM Road 2556 and FM Road 506 are "major" streets that provide the basic framework for vehicular movement to and throughout the City and to a large degree the movement within the City.

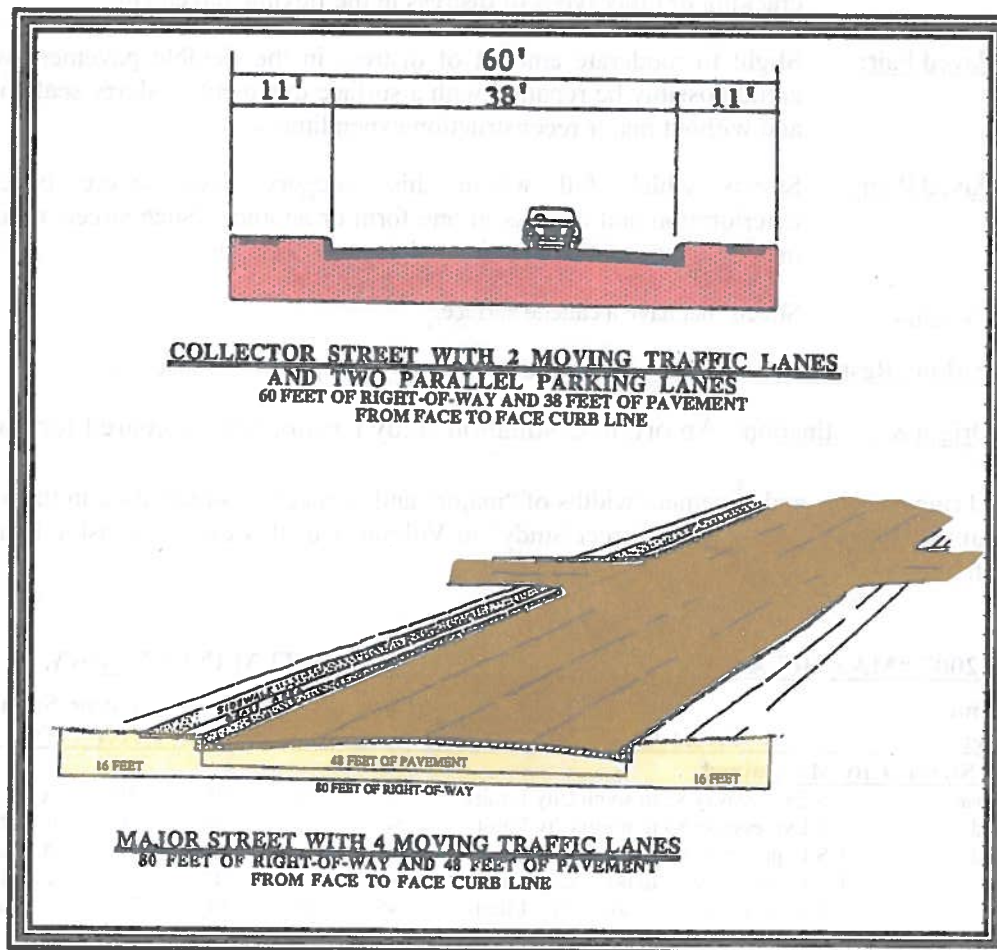
The original Subdivision Plat of the City provided blocks approximately 260 feet in depth by 600 feet in width. In the Central Business District, platted lots were 25 feet wide and 120 feet deep

and in the residential areas, the platted lots were 50 wide and 120 feet deep. Some exceptions to the initial platting standard of blocks 260 feet in width and 600 feet deep are listed hereafter.

1. The residential area west of FM Road 506 and north of the railroad was platted with blocks 180 to 200 feet in width and lots 25 feet in width.
2. The area bordered by "Jessamine Avenue and Magnolia Avenue" and "East Street and West Street" has a formal type design. Property platted on the east side of FM Road 506 is similar with property platted on the west side with a street median on both sides.
3. The area between "Willow Street and Winchester Street" and "Mustang Street and Pancho Maples Drive" was designed in an unusual circular type fashion.
4. A newer subdivision, "Lobitas Estates," on the west side of White Ranch Road and south of US Business Highway 83 was designed with lots 230 feet in depth and 110 feet in width.

#### EXHIBIT 7-1

#### CROSS SECTIONS OF "MAJOR" AND "COLLECTOR" STREET STANDARDS



Source: Design Services, Inc.



Early platted subdivisions in many communities were designed with excessive street right-of-way widths and short blocks (300 feet wide and 300 feet deep). This is not the case in La FERIA where most dedicated City street right-of-ways are 50 to 60 feet in width and blocks six hundred feet or more in length. Exceptions to the City's 50 to 60 feet street right-of-way widths are State and Federal Highways that range up to 300 feet of right-of-way on US Expressway 83 and 100 feet of right-of-way on US Business Highway 83.

### Inventory of Local Streets

Dedicated right-of-way widths, pavement widths and conditions of all city streets are recorded in Volume 2 of the Comprehensive Plan under the title "Street Study" as prepared by Sigler, Winston, Greenwood & Associates, Inc.

### INVENTORY OF "MAJOR" AND "COLLECTOR" STREETS

"Major" and "collector" streets were classified during the street survey of March 2007 as "good", "fair", or "poor". Criteria used in classifying the streets are as follows:

**Paved Good** Uniform pavement sections without evidence of base failures revealing cracking or other types of distress in the flexible pavement.

**Paved Fair:** Slight to moderate amount of distress in the flexible pavement which could possibly be repaired with a surface treatment or slurry seal coating and without major reconstruction expenditures.

**Paved Poor:** Streets which fall within this category have severe pavement deterioration and distress in one form or another. Such streets require a major expenditure for repairs and/or reconstruction.

**Caliche:** Streets that have a caliche surface.

**Parking Restrictions:** The inventory did not identify any parking restrictions.

**Origin & Destination:** An origin destination study has not been prepared for La FERIA.

Dedicated right-of-way and pavement widths of "major" and "collector" streets used in this report were obtained from City Maps, the "Street Study" in Volume 2 of this Comprehensive Plan and the March 2007 Survey of Streets.

### **EXHIBIT 7-2**

#### **2007 "MAJOR" AND "COLLECTOR" STREET SYSTEM INVENTORY**

<b>Street Name</b>		<b>*Standard</b>	<b>Pvmt. Width</b>	<b>R.O.W. Width</b>	<b>Linear Feet</b>	<b>Surface* Type</b>	<b>Condition</b>
<b>City Street</b>	<b>Street Area</b>						
<b><u>Collector Streets City Maintained</u></b>							
Kubiski Road	US Expressway 83 to south City Limits	NS	18'	50'	500'	Asphalt	Good
Bixby Road	US Expressway 83 to north City Limits	NS	---	50'	200'	Caliche	---
Bixby Road	US Expressway 83 to south City Limits	NS	18'	50'	1,000'	Asphalt	Fair
Solis Road	US Expressway 83 to north City Limits	NS	---	50'	400'	Caliche	---
Solis Road	US Expressway 83 to south City Limits	NS	18'	50'	250'	Asphalt	Fair
Canal Street	US Expressway 83 to north City Limits	NS	30'	40'-50'	1,000'	Asphalt C&G	Good
Canal Street	US Expressway 83 to Fourth Street	NS	40'	40'	1,500'	Asphalt C&G	Good
Canal Street	Fourth Street to First Street	S	40'	60'	750'	Asphalt C&G	Good
Canal Street	US Bus Hwy 83 to South Park Drive	S	40'	85.2'	2,500'	Asphalt C&G	Fair
Willow Road	Pancho Maples Drive to south City Limits	NS	30'	60'	2,350'	Asphalt C&G	Good

Street Name		*Stan	Pvmt.	R.O.W.	Linear	Surface*	
City Street	Street Area	dard	Width	Width	Feet	Type	Condition
Fourth Street	Canal Street to Main Street	NS	35'	50'	1,300'	Asphalt C&G	Fair
West Magnolia Ave	Canal Street to West Street	NS	31'	60'	600'	Asphalt C&G	Fair
East Magnolia Ave	West Street to Main Street	S	41'	60'	600'	Asphalt C&G	Fair
South Park Drive	FM Road 506 to West Street	S	40'	60'	650'	Asphalt C&G	Fair
South Park Drive	West Street to Canal Street	S	40'	60'	700'	Asphalt C&G	Good
South Park Drive	Canal Street to west City Limits	NS	40'	50'	1,850'	Asphalt C&G	Good
Parker Road	US Expressway 83 to north City Limits	NS	18'	40'	1,200'	Asphalt	Good
Parker Road	US Bus. Hwy 83 to Parker Circle	NS	40'	40'	3,250'	Asphalt C&G	Good
Parker Road	Parker Circle to S Arroyo Lane	NS	20'	40'	6,250'	Asphalt	Fair
Parker Road	S Arroyo Lane to 440 th Road	NS	18'	40'	1,300'	Asphalt	Fair
Jessamine Avenue	Main Street to Parker Road	NS	31'	60'	1,300'	Asphalt C&G	Good
Virginia Avenue	Parker Road to Canal R-O-W	NS	32'	50'	1,100'	Asphalt C&G	Good
Kanasa City Road	US Bus Hwy 83 to south City Limits	NS	20'	60'	2,000'	16' Concrete	Fair
						4' Asphalt	Fair
Beddoes Road	US Expressway 83 to north City Limits	NS	18'	50'	350'	Asphalt	Fair
<b>TOTAL</b>					<b>33,700'</b>		

**Major Streets City Maintained**

Canal Street	US Bus. Hwy 83 to First Street	NS	40'	85.2'	300'	Asphalt C&G	Good
Commercial Ave.	East Street to Main Street	NS	51'	70'	600'	Asphalt C&G	Good
						One way east	
Commercial Ave.	Main Street to Bus. Hwy 83	NS	51'	70'	200'	Asphalt C&G	Good
East Street	Bus. Hwy 83 to Oleander Avenue	NS	31'	60'	650'	Asphalt C&G	Good
First Street	Canal Street to Main Street	NS	48'	60'	1,350'	Asphalt C&G	Good
Industrial Way	FM Road 506 to Parker Road	NS	43'	60'	1,300'	Asphalt C&G	Good
Kansas City Road	US Expressway 83 to north City Limits	NS	18'	60'	650'	Asphalt	Fair
Kansas City Road	US Expressway 83 to US Bus. Hwy 83	NS	28'	60'	1,350'	Asphalt	Good
Oleander Avenue	East Street to Main Street	NS	31'	60'	600'	Asphalt C&G	Good
Oleander Avenue	Main Street to West Street	NS	41'	70'	600'	Asphalt C&G	Good
Parker Road	US Expressway 83 to US Bus. Hwy 83	NS	33'	40'	1,800'	Asphalt C&G	Fair
Rabb Road	US Expressway 83 to north City Limits	NS	16'	60'	600'	Concrete	Good
Rabb Road	US Expressway 83 to US Bus. Hwy 83	NS	16'	60'	3,300'	Concrete	Good
West Street	Bus. Hwy 83 to First Street	NS	40'	60'	300'	Asphalt C&G	Good
West Street	Bus. Hwy 83 to Oleander Avenue	NS	41'	60'	250'	Asphalt	Good
						North Side C&G	
<b>TOTAL</b>					<b>13,850'</b>		

**Major Streets State & Federal**

FM Road 506	Expressway 83 to north City Limits	S	80'	100'	250'	Asphalt C&G	Good
FM Road 506	Bus. Hwy 83 to Fourth Street	S	64'	80'	700'	Asphalt C&G	Good
FM Road 506	Fourth Street to Seventh Street	S	64'	70'	750'	Asphalt C&G	Good
FM Road 506	Seventh Street to Expressway 83	S	64'	100'	750'	Asphalt C&G	Good
FM Road 506	Lilac Avenue to Bus. Hwy 83	S	60'	80'	2,750'	Asphalt C&G	Good
FM Road 506	South City Limits to Lilac Avenue	NS	60'	70'	1,450'	Asphalt C&G	Good
US Bus. Hwy 83	East City limits to west City limits	S	72'	80'	8,400'	Asphalt C&G	Good
Expressway 83	Kansas City Road to Rabb Road	S	----	300'	17,350'	Asphalt C&G	Good
<b>TOTAL</b>					<b>32,400'</b>		

- Street meeting Subdivision Ordinance is classified as Standard (S). Street not meeting ordinance is classified as (NS).

### **Surface Condition of "Major" and "Collector" Streets Maintained by the City**

Exhibit 7-3 and 7-4 provide statistical data on the Surface Condition of "Major" and "Collector" Streets Maintained by the City. Statistical data on State and Federal Highways excluded from the hereinafter two exhibits to show only those "major" and "collector" streets that require City maintenance.

#### **EXHIBIT 7-3 SURFACE CONDITION MAJOR AND COLLECTOR STREETS THAT ARE MAINTAINED BY THE CITY**

Surface Condition	Linear Feet	Linear Miles	Percent
GOOD	29,400	5.57	62.89 %
FAIR	16,750	3.17	35.83 %
POOR	0	0.00	0.00 %
Unpaved (caliche)*	600	0.11	1.28 %
<b>TOTAL</b>	<b>46,750</b>	<b>8.845</b>	<b>100.00%</b>

Source: Design Service, Inc.

\*Unpaved caliche street.

The above exhibit indicates that approximately 62 percent of the City's "major" and "collector" streets are in "good" condition and 35.23 percent are in fair condition, while none of the streets was in "poor" condition. The condition classifications for the exhibit apply only to paved streets. However, in reality the short caliche sections of Bixby Road and Solis Road on the north side of Expressway 83 could be considered as "poor" streets.

Exhibit 7-4 provides a category of "major" and "collector" streets that are maintained by the City and those maintained by the State and Federal Government. The street classifications include the linear feet, linear miles and percent of each street category of the total developed streets.

#### **EXHIBIT 7-4 SURFACE CONDITION OF MAJOR, COLLECTOR AND RESIDENTIAL STREETS**

Surface Condition	Linear Feet	Linear Miles	PercentDeveloped*
<b>CITY - MAJOR STREETS</b>			
Good	11,400	2.16	14.40 %
Fair	2,450	0.46	3.10 %
<b>SUBTOTAL</b>	<b>13,850</b>	<b>2.62</b>	<b>17.50 %</b>
<b>CITY - COLLECTOR ST.</b>			
Good	15,500	2.94	19.58 %
Fair	16,800	3.18	21.23 %
Caliche	600	0.11	0.76 %
<b>SUBTOTAL</b>	<b>32,900</b>	<b>6.23</b>	<b>41.57 %</b>
<b>STATE &amp; FEDERAL MAJOR STREETS</b>			
Good	32,400	6.14	40.93 %
<b>SUBTOTAL</b>	<b>32,400</b>	<b>6.14</b>	<b>40.93 %</b>
<b>TOTAL</b>	<b>79,150</b>	<b>14.99</b>	<b>100 %</b>

Source: Design Services, Inc.

Exhibit 7-5, on the next page illustrates "major" and "collector" street characteristics by showing as many present conditions as practical on a City Map.











### Right-of-Way and Pavement Widths of Collector and Major Streets

Exhibits 7-6 and 7-7 illustrate right-of-way and pavement widths of "major" and "collector" streets inventoried in 2007. Data accumulated by exhibits in this study were used in the thoroughfare analysis process and in developing goals and objectives for the City's Thoroughfare System. The minimum pavement widths, illustrated in the graphic "Cross Sections of Design Standards", Exhibit 7-1, were used as a guide in making thoroughfare recommendations.

It is important that major street pavement widths meet local standards for safe movement of a high volume of traffic. Typically, a "major" street is a four-lane street and is expensive to develop. La Feria is fortunate that existing highways provide the City with most of the "major" street needs. When a City can build most of the thoroughfare system around State and/or Federal highways, the construction and maintenance expense of the major streets are shifted to the State or Federal Government.

East to west highways are U.S. Expressway 83 and US Business Highway 83. US Expressway 83 was constructed north of US Business Highway 83 in the 1960's. In 2007, US Business Highway 83 was improved to a 72' paved highway with curb and gutters through the City and US Expressway 83 undergoing reconstruction between McAllen and Harlingen. Both of these routes function as major streets in the city. North to south local highways serving as a major streets are FM Road 506, FM Road 2556 and FM Road 733. Another name for FM Road 733 is Kansas City Road.

#### **EXHIBIT 7-6 DEDICATED AND DEVELOPED STREETS MAINTAINED BY THE CITY**

Collector Street R.O.W.	Linear Feet	Linear Miles	Percent
40 ft. R-O-W	13,500	2.71	28.88 %
50 ft. R-O-W	7,950	1.50	17.01 %
60 ft. R-O-W	8,950	1.70	19.14 %
85.2 ft. R-O-W	2,500	0.47	5.35 %
<b>SUBTOTAL</b>	<b>32,900</b>	<b>6.38</b>	<b>70.37 %</b>
<b>Major Street R-O-W</b>			
40 ft. R-O-W	1,800	0.34	3.85 %
60 ft. R-O-W	10,350	1.96	22.14 %
70 ft. R-O-W	1,400	0.26	2.99 %
85.2 ft. R-O-W	300	0.06	0.64 %
<b>SUBTOTAL</b>	<b>13,850</b>	<b>2.62</b>	<b>29.63 %</b>
<b>TOTAL</b>	<b>46,750</b>	<b>9.01</b>	<b>100.00%</b>

Source: Design Services, Inc.

#### **EXHIBIT 7-7 2007 CITY MAJOR AND COLLECTOR STREETS BY PAVEMENT WIDTHS**

Pavement Category	Linear Feet	Linear Miles	Percent
<b>Collector Streets</b>			
18 to 29 ft. Width	12,850	2.43	27.84 %
30 to 37 ft. Width	7,650	1.45	16.58 %
38 to 41 ft. Width	11,800	2.24	25.57 %
<b>Subtotal</b>	<b>32,300</b>	<b>6.12</b>	<b>69.99 %</b>
<b>Major Streets</b>			
16 to 29 ft. Width	5,900	1.12	12.78 %
30 to 37 ft. Width	3,050	0.58	6.61 %
38 to 47 ft. Width	2,750	0.52	5.96 %
48 to 51 ft. Width	2,150	0.41	4.66 %
<b>Subtotal</b>	<b>13,850</b>	<b>2.62</b>	<b>30.01 %</b>
<b>TOTAL</b>	<b>46,150</b>	<b>8.74</b>	<b>100.00%</b>

Source: Design Services, Inc.

### **Curb and Gutter Streets**

Curb and gutters for “major” and “collector” streets are provided on Exhibit 7-2, “2007 Major and Collector Street System Inventory”. Nearly ninety-seven (97) percent of the City paved streets are curbed and guttered. This kind of data indicates that local officials enforced the street standards section of the City’s Subdivision Regulations. Enforcing Subdivision Regulations has helped the City develop a street system that requires a minimum amount of maintenance in comparison to paved streets that are not curbed and guttered.

### **Traffic Counts**

The 2005 twenty-four hour traffic counts were obtained from the Texas Department of Transportation and included on the “2007 Major and Collector Street Characteristics Map”, Exhibit 7-5.

### **Regional Traffic**

Between Brownsville and McAllen there are seven highway crossings over the Rio Grande River between Texas and Mexico. These crossings are located at:

- Brownsville ----- 3
- Los Indios ----- 1
- Nuevo Progreso ---- 1
- Reynosa ----- 1
- Pharr ----- 1

The border crossings connect with US Highway 281, which parallels the Rio Grande. Los Indios is approximately ten miles from downtown La Feria. As industry continues to expand in Mexico, traffic along the border and north on FM Road 506 through La Feria will increase. Exhibit 7-8 is a graphic showing regional highways and border crossings at Los Indios and Nuevo Progreso.

## **THOROUGHFARE SYSTEM ANALYSIS**

### **Linear Feet of Major and Collector and Streets**

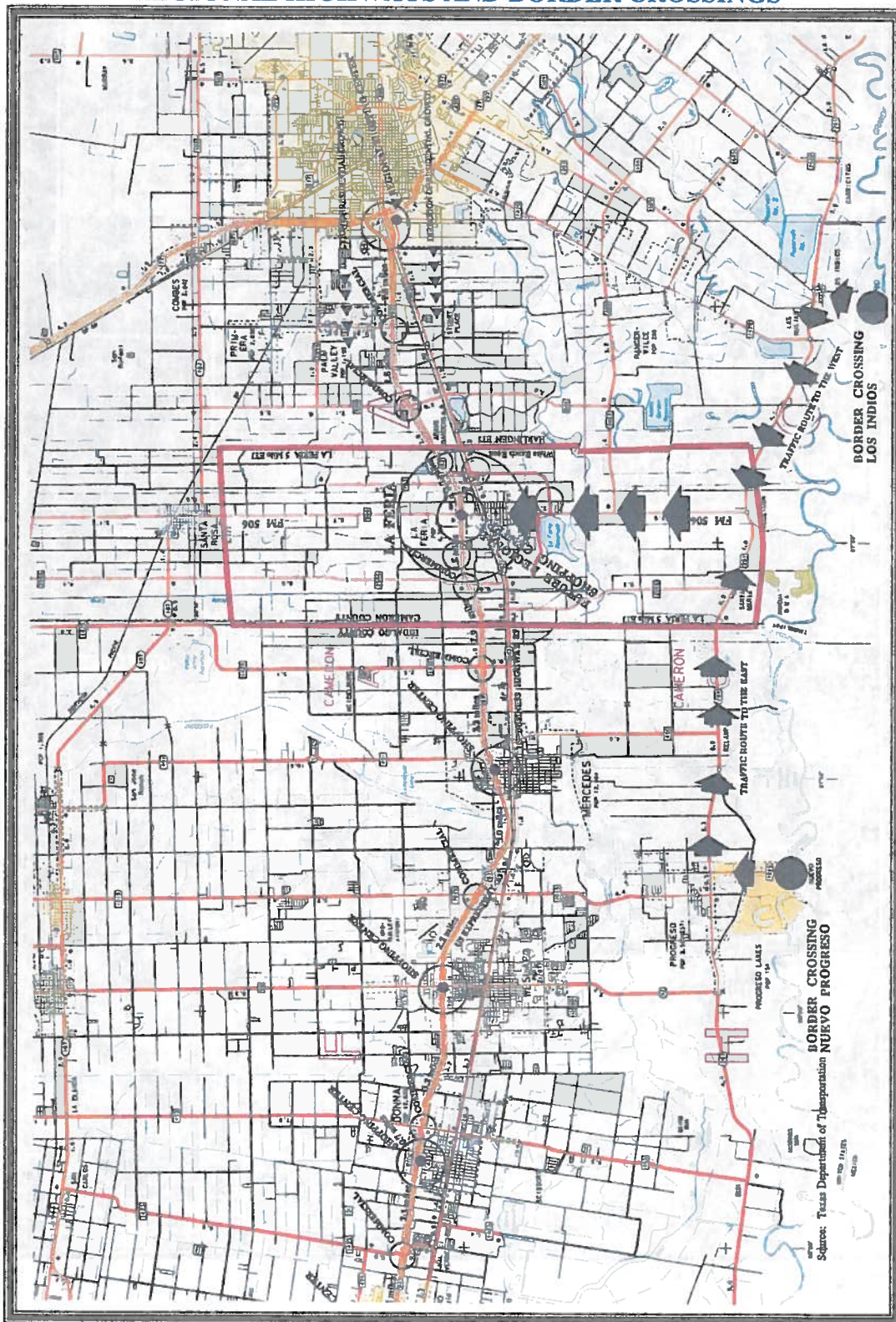
In 1999, there were 32,350 linear feet of “major” streets in the City, but only 11,400 linear feet of these streets were City maintained. The other 20,950 linear feet of “major” streets were State and Federal Highways.

Due to the City’s annexation between 1999 and 2006, “major” streets in the City increased from 32,350 linear feet to 46,250 linear feet for an addition of 13,900 linear feet. This was an increase of 2,450 linear feet of City maintained “major” streets and an increased of 11,450 linear feet of State and Federal Roads classified as “major” streets. As a ratio, State and Federal Roads account for approximately 70 percent of the City’s “major” streets. This is an excellent benefit to the City.

All of the City’s “collector” streets, 32,900 linear feet, are maintained by the City. As identified by the “2007 Thoroughfare Inventory” reported on Exhibits 7-3 and 7-4, fifty-two percent of the paved “collector” streets were in fair condition.



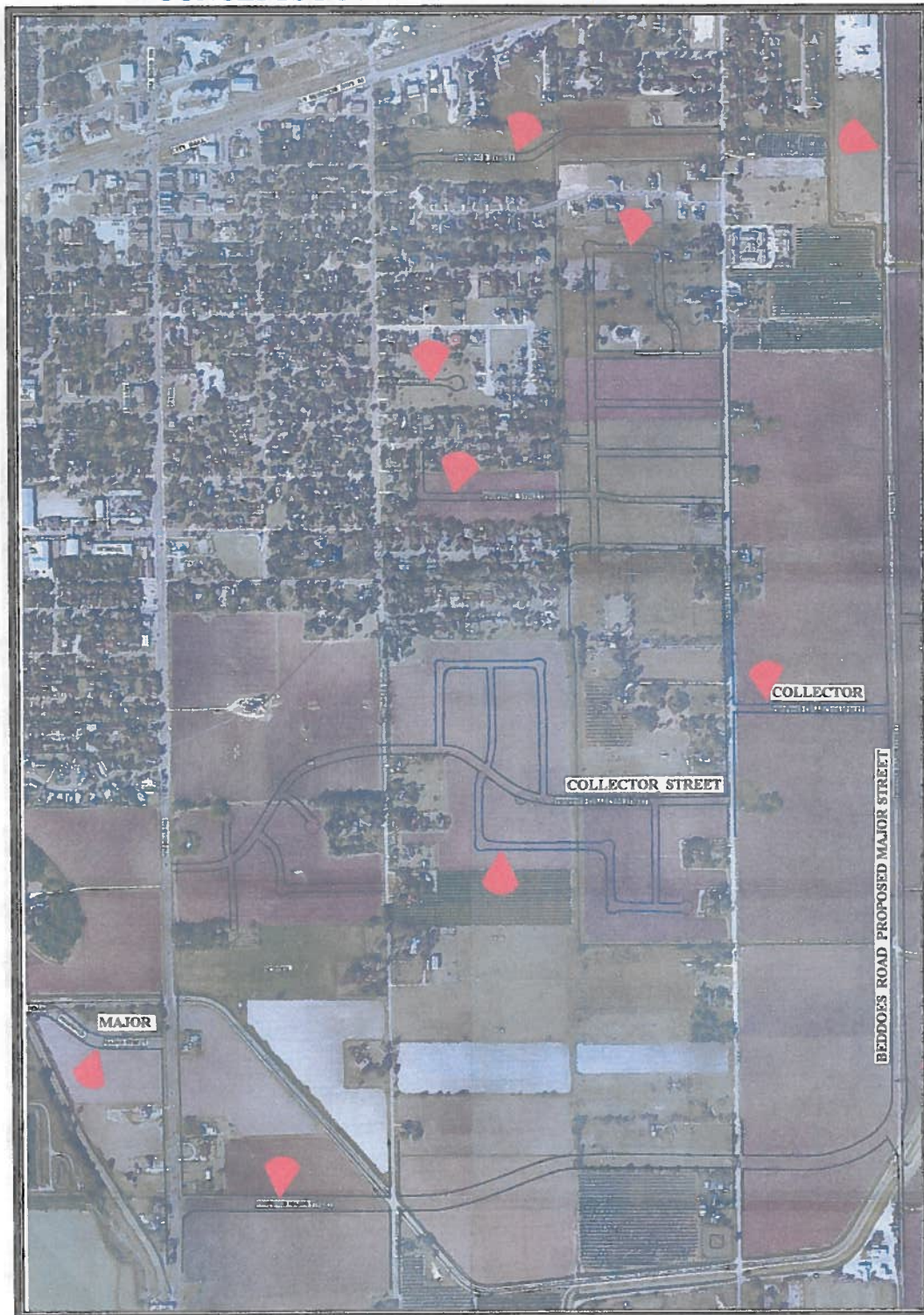
# EXHIBIT 7-8 REGIONAL HIGHWAYS AND BORDER CROSSINGS



Source: Design Services, Inc.



**EXHIBIT 7-9  
PROPOSED ALIGNMENT OF BEDDOES ROAD AS A MAJOR STREET AND  
CONCEPTS FOR NEW RESIDENTIAL STREETS**



Source: Design Services, Inc.



## **Right-of-Ways Widths of Thoroughfares**

### **“Collector” Street Design**

Street standards established in Subdivision Regulations are generally minimum standards, not necessarily desirable standards. The “collector” street standard in the City's Subdivision Ordinance of 60 feet of right-of-way and 39 feet of pavement is a minimum and desirable standard because the pavement width will allow two moving lanes and two parallel parking lanes.

### **“Major” Street Design**

The City's Subdivision Ordinance standards for “major” streets should have 80 feet of right-of-way and 48 feet of pavement for four moving traffic lanes and no parking lanes. In areas of commercial development, it may be more desirable to have four moving traffic lanes and two parallel parking lanes, which would require 60 feet of pavement. A right-of-way width of 80 feet is adequate for a street pavement of 60 feet. Streets anticipated at some future date to carry a heavy traffic load with four moving lanes and a left turn lane needs a right-of-way width of 100 feet. Anticipating the traffic load on a “major” street 20 years in the future is difficult to impossible. Therefore, to prevent future cost in expanding right-of-way widths for “major” streets it would be desirable to require 100 feet of right-of-way for most “major” streets in the “Thoroughfare Plan”. Exhibit 7-10 provides desirable “major” street standards.

### **Analysis of Right-of-way Widths of Major and Collector Streets**

In 2007, only 300 linear feet of the City's 13,850 linear feet of maintained “major” streets that met the Subdivision Ordinance minimum right-of-way standard of 80 feet. “Collector” streets fared a little better with 11,450 linear feet of the City's “collector” streets either meeting or exceeding the Subdivision Ordinance standard of 60' feet

### **Analysis of Pavement Widths of Major and Collector Streets**

The City of La Feria's currently paved widths of “collector” streets range from a width of 18 feet to 40 feet. The Subdivision Ordinance standard width is 39 feet or more. Exhibit 7-7 shows that 11,800 linear feet of the “collector” streets either met or exceeded the City's standard of 39 feet.

The current pavement widths of City maintained “major” streets range from 16 to 51 feet. The Subdivision Ordinance standard width is 48 feet. Information provided by Exhibit 7-3, “2007 Major and Collector Street System Inventory,” shows that 2,150 linear feet of the 13,850 total linear feet of “major streets has a pavement width of 48 feet or more.

### **Analysis of Street Surface Type**

Asphalt and concrete are dominate hard surface materials used in street paving in the City. Rabb Road is a concrete constructed street with a width of 16 feet.

### **Analysis of Curb and Gutter Streets**

There are approximately 78,550 linear feet of paved “major” and “collector” streets in the City with 59,550 linear feet or 75 percent of the streets curbed and guttered on both sides.

### **Analysis of Thoroughfares for their Adequacy to service the City**

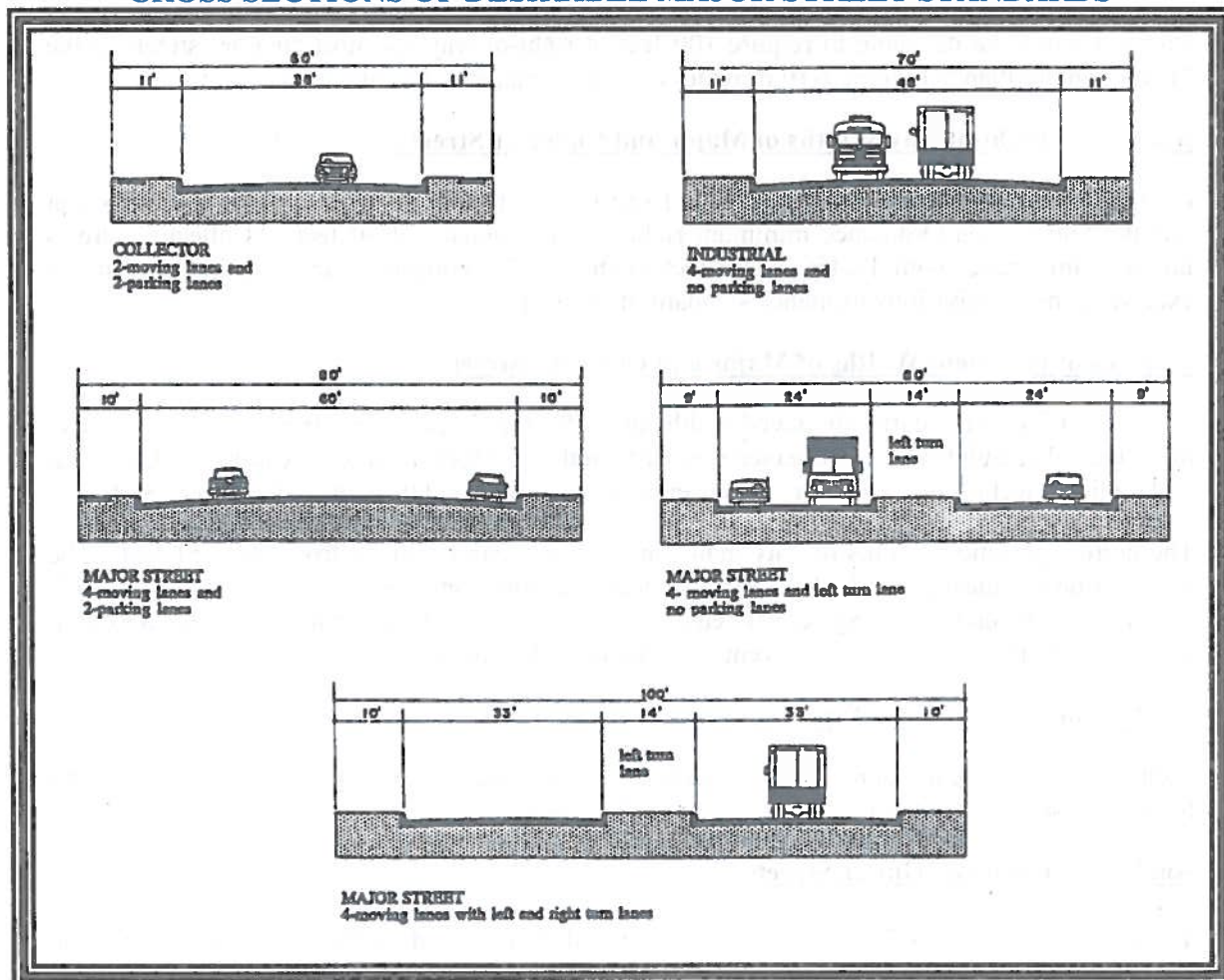
The design of the City has followed a system of irrigation canals and drainage ditches that flow north and south. These manmade features are economic barriers to east and west street construction because of the tremendous cost in expanding streets across irrigation and drainage ditches. The construction of Palm Avenue is an example of extending a street across one of the city's drainage ditches to provide needed east to west vehicle circulation.

The City has a good foundation of thoroughfares for developing an excellent circulation system to serve the existing and forecasted population and the existing and future land uses. The Texas Department of Transportation traffic counts, local traffic habits, prior circulation studies and local street standards were used to analysis the City's Existing Thoroughfare System.

### **THOROUGHFARE PLAN**

#### **EXHIBIT 7-10**

#### **CROSS SECTIONS OF DESIRABLE MAJOR STREET STANDARDS**



Source: Design Services, Inc.



### **Listing and Ranking of Major and Collector Street Problems**

The City of La Feria has several problems associated with its “major” and “collector” street infrastructure. The inventory of conditions of streets revealed the following list and ranking of problems.

- Lack of a east-west “major” street south of US Business Highway 83. • North of 94P
- Under-designed constructed “collector” streets.

Many of the streets designated as “collector” streets were not originally constructed as “collector” streets with 60 feet of right-of-way and 39 feet of pavement.

- Under-designed constructed “major” streets

Many “major” streets designated in Exhibit 7-3 were not originally constructed as “major” streets with 80 to 100 feet right-of-way and 48 to 60 feet of pavement. Some of the streets falling into this category are:

Kansas City Road between US Business Highway 83 and US Expressway 83.

Kansas City Road between US Expressway 83 and the north city limits.

Commercial Avenue Main Street to East Street.

First Street between Canal Street to Main Street.

? — Canal Street between First Street and US Business Highway 83.

? — Oleander Avenue between East Street to West Street.

West Street First Street to Oleander Avenue.

Rabb Road US Business Hwy 83 to the north City Limits.

Parker Road US Business Hwy 83 to US Expressway 83.

- Paved streets without curb and gutters.

A number of paved streets are not curbed and guttered. Curb and gutters protect the edge of paved streets and provide a system for storm water to flow in the community.

### **Thoroughfare Plan Considerations**

The improvement of FM Road 506 to a 60 and 64 foot paved road increased the potential for a convenient heavy traveled roadway through the Central Business District as border crossings are developed between Texas and Mexico. As regional vehicle traffic, increases there will be a need to reroute truck traffic away from the Central Business District. The "Thoroughfare Plan" is designed to reroute truck traffic away from the Central Business District with the development of Beddoes Road into a “major” street from FM Road 506 (near the water treatment plant) to US Business Highway 83.

Another east-west “major” street should be constructed from FM Road 506 at an area south of Dodd Lane to Orange Grove Road as shown on the “Thoroughfare Plan Map”.

### **“Major” and “Collector” Street Policy Considerations**

Recommended “major” and “collector” street improvements in this document are based upon the assumption that the City and region will continue to grow at a rapid or moderate rate over the next 20 years and the following action taken by the City:

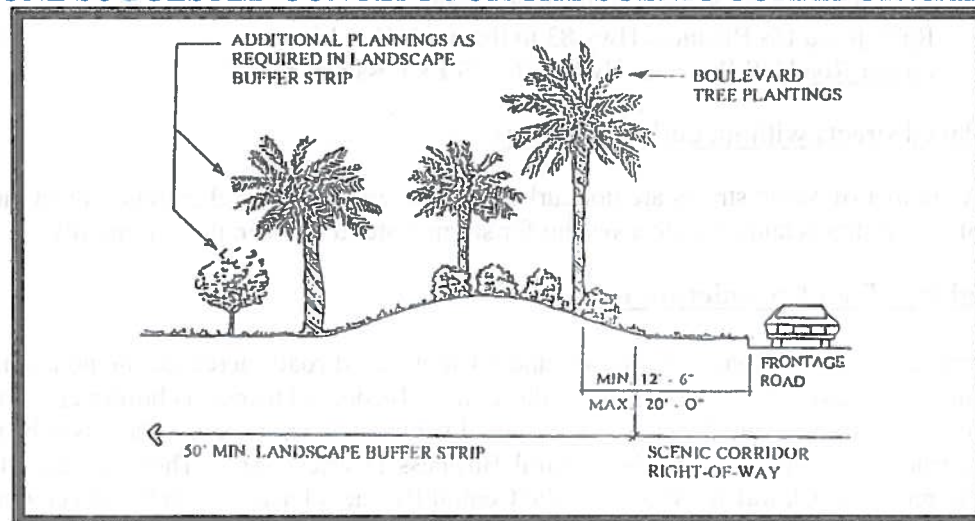
- Adopt the proposed Thoroughfare Plan.
- Implement the stated "Major and Collector Street Goals and Objectives".
- Update and enforce the City's Subdivision Ordinance in requiring developers to dedicate and construct streets within their plat.
- Develop a plan to determine which "major" and "collector" streets can be increased in right-of-way width and pavement width to bring them up to standards as specified by the Subdivision Regulations.
- Review and update the city's Scenic Corridor Ordinance.

### **Suggested Policy for Platting Property**

"Major" and "collector" street designations, shown on the "Thoroughfare Plan", are very important in saving City funds and creating a desirable traffic flow for future citizens through the utilization of State and Federal Highways as "major" streets. Developers should dedicate adequate right-of-way widths and make appropriate street and utility improvements when platting property.

The City Scenic Corridor Ordinance should be implemented to create appropriate street tree development.

### **EXHIBIT 7-11 ONE SUGGESTED CONCEPT FOR THE SCENIC CORRIDOR AREA**



Source: Scenic Corridor Ordinance

The above drawing is from the Scenic Corridor Ordinance, which shows the concept in requiring a 50 feet landscape buffer strip with a berm.

The hereafter photograph was taken on US Highway 281 in Edinburg. The developer used plant material, which would provide a desired height to screen parked cars from the view of passing vehicles. This is an effective screen where a limited buffer strip was used in a commercial area. Where needed, plant material with more height could be used and in some cases, fencing material could be added. In areas of high-rise office buildings on large acreage, or industrial sites on large acreage, a 50 feet landscape buffer strip may be appropriate.



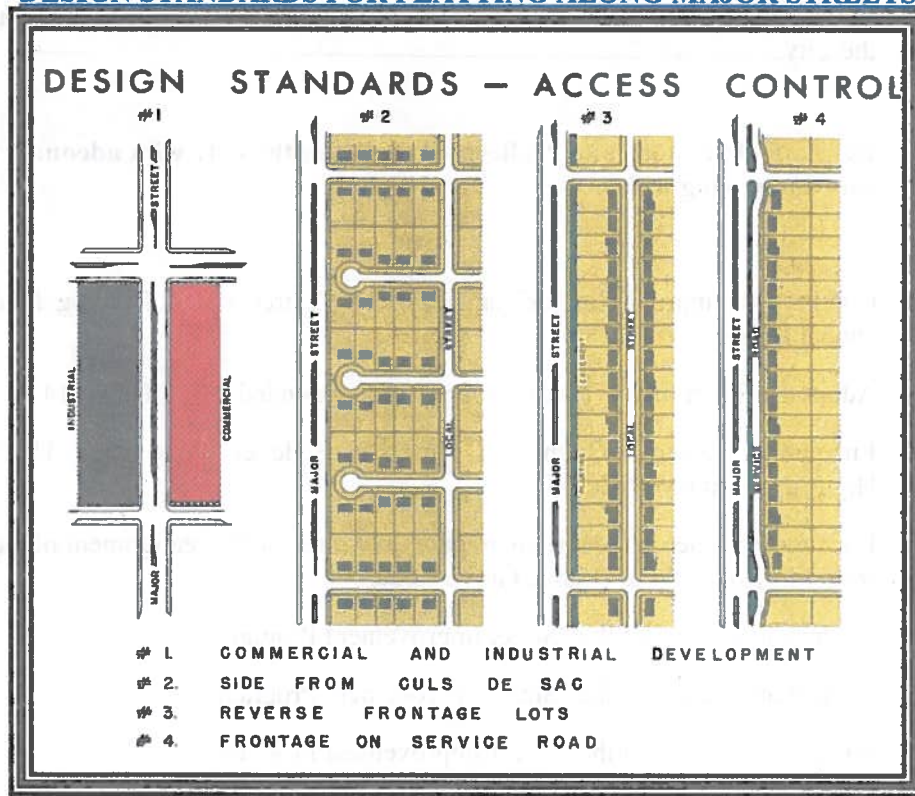
**EXHIBIT 7-12**  
**BUFFER EXAMPLE OF LANDSCAPING A PARKING LOT**



Source: Design Services, Inc.

The City should consider Design Standards for access control when approving plats along “major” streets as shown in the hereafter exhibit.

**EXHIBIT 7-13**  
**DESIGN STANDARDS FOR PLATTING ALONG MAJOR STREETS**



Source: Design Services, Inc.

## **THOROUGHFARE GOALS AND OBJECTIVES**

**Goal # 1      Administer the City's minimum street standards in the Subdivision Ordinance and consider requiring more desirable standards for "major" streets where needed.**

### **Objectives**

- Phase 1    Review the street standards in the Subdivision Ordinance and make changes as needed to carry out City policies.
- Phase 2    Adopt the "Land Use" and "Thoroughfare Plan" and use the two plans as a guide in administering the Subdivision Ordinance.
- Phase 3    Obtain right-of-way designation from property owners along Beddoes Road from US Business Highway 83 to FM Road 506.
- Phase 4    Obtain right-of-way designation from property owners along the proposed route for Dodd Lane from FM Road 506 to Orange Grove Road.
- Phase 5    Revise the City's Scenic Corridor Ordinance to provide a more conservative use in large set-backs where plants would accomplish the desired appearance.
- Phase 6    Encourage Cameron County Commissioners' Court to adopt strong Subdivision Development Standards.
- Phase 7    Seek assistance from County Commissioners' to improve county roads leading into the City.

**Goal # 2      Develop all "major" and "collector" streets in the City with adequate right-of-way and paving widths.**

### **Objectives**

- Phase 1    Continue to improve "major" and "collector" streets by allocating funds in the annual budget.
- Phase 2    Adopt the Street Improvement Program recommended in Exhibits 7-14.
- Phase 3    Encourage Cameron County to construct Beddoes Road from US Business Highway 83 to FM Road 506.
- Phase 4    Encourage Cameron County to prepare drawings for the realignment of Dodd Lane from FM Road 506 to Orange Grove Road.
- Phase 5    Implement Phase 1 of the "Street Improvement Program".
- Phase 6    Implement Phase 2 of the "Street Improvement Program".
- Phase 7    Implement Phase 3 of the "Street Improvement Program".
- Phase 8    Implement Phase 4 of the "Street Improvement Program".



Phase 9 Implement Phase 5 of the "Street Improvement Program".

Phase 10 Review "major" and "collector" street priorities and establish another five-year improvement program.

### **COST ESTIMATES FOR STREET IMPROVEMENTS**

Exhibit 7-14 provides cost estimates for improvements suggested in the "Goals and Objectives" section. The proposed improvements are not in conflict with recommended Water and Wastewater System Improvements prepared in Volume 2 of the Comprehensive Plan. The reader is cautioned that the hereafter estimates are made without benefit of a preliminary engineering analysis of the various proposed projects. A variety of factors influences final costs of projects, many of which cannot be identified without detailed engineering plans and specifications.

Estimates used in determining residential street costs are:

- 1 1/2-inch HMA at \$8.00 - \$10.00 per square yard.
- 8-inch thick granular base course at \$7.50 - \$8.00 per square yard.
- 6-inch compacted subgrade course at \$5.75 - \$6.00 per square yard.
- Curb and gutter at \$8.00 - \$8.50 per linear foot.

### **EXHIBIT 7-14** **THOROUGHFARE IMPROVEMENTS LISTED BY PRIORITY WITH** **COST ESTIMATES**

#### **2011 PHASE 1**

##### **Collector Street**

Resurface West Magnolia Avenue from Canal Street to Main Street.

Pavement is 31 feet in width with curb and gutter

City Contributes to the project ..... \$246,000.

##### **Major Street**

Encourage Cameron County and the Texas Department of Transportation to construct Beddoes Road from US Expressway 83 to FM Road 506 as a "major" street.

City Contributes to the project ..... \$50,000.

#### **2012 PHASE 2**

##### **Collector Street**

Reconstruct Kansas City Road from US Business Highway 83 southward to the city Limit line. Increase the pavement width from 16 feet to 39 feet.

City Contributes to the project ..... \$386,000.

**Major Street**

Reconstruct 650 feet of Kansas City Road from US Expressway 83 to north city limits. Increase ROW from 60 feet to 80 feet and construct pavement to 48 feet.

\$93,000.

**Total..... \$1,537,000.**

**SOURCES OF POSSIBLE FUNDING FOR STREET IMPROVEMENTS**

The Community Development Block Grant program is a financial source for street paving, but because Water and Wastewater Improvements are considered more important than street improvements, it is difficult to receive grant funds for streets. The Office of Rural Community Affairs has established a scoring system that essentially prevents a community from receiving enough points to be competitive in requesting street paving in an application. However, the Lower Rio Grande Valley Council of Governments supports communities in their region on street paving applications. Other sources of funding for local street improvements are the City's General Fund, borrowing funds, Bond Program and street assessments from property owners.