

TEXAS DEPARTMENT OF TRANSPORTATION
TECHNICAL PROVISIONS
FOR
SH 99 GRAND PARKWAY SEGMENTS H, I-1 AND I-2

ATTACHMENT 11-1
CROSS STREET DESIGN CRITERIA MATRIX

RFP ADDENDUM #7

NOVEMBER 4, 2016

SH 99 GRAND PARKWAY
ATTACHMENT 11-1
Cross Street Design Criteria Matrix
Segment H

| Intersecting Street | Ultimate Typical Section | Jurisdiction | Roadway Classification | Design Speed (mph) | Position (over/under) | Design Vehicle | NORTHBOUND | | | | | Turn Lanes | Median | SOUTHBOUND | | | | |
|------------------------------------|--------------------------|----------------|------------------------|--------------------|-----------------------|----------------|---------------|--|---|-----------------|--------------------|------------|-----------|--------------------|-----------------|-------------------------------------|--|---------------|
| | | | | | | | U-Turn (each) | Clear Zone for Cross Street Thru Lanes | Sidewalk and Min. Usable Width (LF) | Curb and Gutter | Through Lanes | | | Through Lanes | Curb and Gutter | Sidewalk and Min. Usable Width (LF) | Clear Zone for Cross Street Thru Lanes | U-Turn (each) |
| Future Road 2G | A | Montgomery Co. | Urban Local | 45 | Under SH 99 | WB-50 | 1 | 6' | 5' | Y | 2 (12') | 2 (12') | 4' Curbed | 2 (12') | Y | 5' | 6' | 1 |
| IH69/US59 Northbound Frontage Road | J | TxDOT | Urban Collector | 45 | Under SH 99 | WB-50 | 1 | 6' | 5' | Y | 2 (12') | 1 (12') | 0 | N/A | N/A | N/A | N/A | N/A |
| IH69/US59 Mainlanes | N/A | TxDOT | Rural Freeway | 70 | Under SH 99 | N/A | 0 | 30' | Match Existing Mainlanes and Structures | | | | | | | | 30' | 0 |
| IH69/US59 Southbound Frontage Road | J | TxDOT | Urban Collector | 45 | Under SH 99 | WB-50 | N/A | N/A | N/A | N/A | N/A | 1 (12') | 0 | 2 (12') | Y | 5' | 6' | 1 |
| Loop 494 | C | TxDOT | Rural Collector | 45 | Under SH 99 | WB-50 | 0 | 16' | N/A | N | 1 (12') | 2 (12') | 0 | 1 (12') | N | N/A | 16' | 0 |
| Future Thoroughfare #1 | A | Montgomery Co. | Urban Local | 45 | Under SH 99 | WB-50 | 0 | 6' | 5' | Y | 1 (12') 1 (14') | 2 (12') | 2 | 1 (12') 1 (14') | Y | 5' | 6' | 0 |
| Baptist Encampment Road | B | Montgomery Co. | Rural Local | 45 | Under SH 99 | WB-50 | 0 | 10' | N/A | N | 2 (12') | N | 0 | 2 (12') | N | N/A | 10' | 0 |
| FM1485 | G | TxDOT | Rural Collector | 45 | Under SH 99 | WB-50 | 1 | 10' | N/A | N | 1 (12') | 2 (12') | 0 | 1 (12') | N | N/A | 10' | 0 |
| Wilderness Road | H | Montgomery Co. | Rural Local | 45 | Under SH 99 | WB-50 | 1 | 10' | N/A | N | 1 (12') | N | 0 | 1 (12') | N | N/A | 10' | 0 |
| Galaxy Blvd. | A | Montgomery Co. | Urban Local | 45 | Under SH 99 | WB-50 | 0 | 6' | 5' | Y | 1 (12') 1 (14') | 2 (12') | 2 | 1 (12') 1 (14') | Y | 5' | 6' | 0 |
| FM1485 EB (Westbound Frontage Rd) | I | TxDOT | Rural Collector | 45 | Under SH 99 | WB-50 | 1 | N/A | N/A | N/A | N/A | N | 0 | 2 (12') | N | N/A | 16' | 0 |
| Cypress Hollow/ Roots Down Rd. | H | Harris Co. | Rural Local | 45 | Under SH 99 | WB-50 | 0 | 10' | N/A | N | 1 (12') | N | 0 | 1 (12') | N | N/A | 10' | 0 |
| Huffman - Cleveland Road | A | Harris Co. | Urban Local | 45 | Under SH 99 | WB-50 | 0 | 6' | 5' | Y | 1 (12') 1 (14') | 2 (12') | 26 | 1 (12') 1 (14') | Y | 5' | 6' | 0 |

Assumptions:

Urban - Curb and gutter with minimum 5' sidewalk on all urban roadways. Pedestrian accommodations only on Urban Facilities.

Rural - No curb and gutter, minimum 6' shoulders, minimum 10' clear zone (unless otherwise shown).

SH 99 GRAND PARKWAY
ATTACHMENT 11-1
Cross Street Design Criteria Matrix
Segment H

| Intersecting Street | Ultimate Typical Section | Jurisdiction | Roadway Classification | Design Speed (mph) | Position (over/under) | Design Vehicle | EASTBOUND | | | | | Turn Lanes | Median | WESTBOUND | | | | |
|--|--------------------------|--------------|------------------------|--------------------|-----------------------|----------------|---------------|--|-------------------------------------|-----------------|--------------------|------------|--------|--------------------|-----------------|-------------------------------------|--|---------------|
| | | | | | | | U-Turn (each) | Clear Zone for Cross Street Thru Lanes | Sidewalk and Min. Usable Width (LF) | Curb and Gutter | Through Lanes | | | Through Lanes | Curb and Gutter | Sidewalk and Min. Usable Width (LF) | Clear Zone for Cross Street Thru Lanes | U-Turn (each) |
| Future Thoroughfare #2 (Miller Wilson) | A | Liberty Co. | Urban Local | 45 | Under SH 99 | WB-50 | 0 | 6' | 5' | Y | 1 (12') 1 (14') | 2 (12') | 26 | 1 (12') 1 (14') | Y | 5' | 6' | 0 |
| Future Thoroughfare #3 (Community) | A | Liberty Co. | Urban Local | 45 | Under SH 99 | WB-50 | 0 | 6' | 5' | Y | 1 (12') 1 (14') | 2 (12') | 26 | 1 (12') 1 (14') | Y | 5' | 6' | 0 |
| Future Thoroughfare #3A* (Wolf Trot) | A | Liberty Co. | Urban Local | 45 | Under SH 99 | WB-50 | 0 | 6' | 5' | Y | 1 (12') 1 (14') | 2 (12') | 26 | 1 (12') 1 (14') | Y | 5' | 6' | 0 |
| Future Thoroughfare #4 (Kingwood) | A | Liberty Co. | Urban Collector | 45 | Under SH 99 | WB-50 | 0 | 6' | 5' | Y | 1 (12') 1 (14') | 2 (12') | 2 | 1 (12') 1 (14') | Y | 5' | 6' | 0 |
| CR622 | B | Liberty Co. | Rural Local | 45 | Under SH 99 | WB-50 | 0 | 10' | N/A | N | 2 (12') | N | 0 | 2 (12') | N | N/A | 10' | 0 |
| FM686 | D | TxDOT | Rural Collector | 45 | Under SH 99 | WB-50 | 0 | 16' | N/A | N | 2 (12') | 2 (12') | 0 | 2 (12') | N | N/A | 16' | 0 |
| CR621 | B | Liberty Co. | Rural Local | 45 | Under SH 99 | WB-50 | 0 | 10' | N/A | N | 2 (12') | N | 0 | 2 (12') | N | N/A | 10' | 0 |
| FM1960 | D | TxDOT | Rural Arterial | 45 | Under SH 99 | WB-50 | 0 | 16' | N/A | N | 2 (12') | 2 (12') | 0 | 2 (12') | N | N/A | 16' | 0 |
| CR605 | B | Liberty Co. | Rural Local | 45 | Under SH 99 | WB-50 | 0 | 10' | N/A | N | 2 (12') | N | 0 | 2 (12') | N | N/A | 10' | 0 |
| CR603 | B | Liberty Co. | Rural Local | 45 | Under SH 99 | WB-50 | 0 | 10' | N/A | N | 2 (12') | N | 0 | 2 (12') | N | N/A | 10' | 0 |
| CR602 | B | Liberty Co. | Rural Local | 45 | Under SH 99 | WB-50 | 0 | 10' | N/A | N | 2 (12') | N | 0 | 2 (12') | N | N/A | 10' | 0 |

Assumptions:

Urban - Curb and gutter with minimum 5' sidewalk on all urban roadways. Pedestrian accommodations only on Urban Facilities.

Rural - No curb and gutter, minimum 6' shoulders, minimum 10' clear zone (unless otherwise shown).

*NOTE: Crossing includes 14' wide Luce Bayou Canal access road south of roadway; see Sheet 7 of Attachment 19-2.

SH 99 GRAND PARKWAY
ATTACHMENT 11-1
Cross Street Design Criteria Matrix
Segment I-1

| Intersecting Street | Ultimate Typical Section | Jurisdiction | Roadway Classification | Design Speed (mph) | Position (over/under) | Design Vehicle | EASTBOUND | | | | | Turn Lanes | Median | WESTBOUND | | | | |
|---------------------------------------|--------------------------|--------------|------------------------|--------------------|-----------------------|----------------|---------------|--|---|-----------------|--------------------|------------|--------|--------------------|-----------------|-------------------------------------|--------------------------------------|---------------|
| | | | | | | | U-Turn (each) | Clear Zone for Cross Street Thru Lanes | Sidewalk and Min. Usable Width (LF) | Curb and Gutter | Through Lanes | | | Through Lanes | Curb and Gutter | Sidewalk and Min. Usable Width (LF) | Clear Zone for Cross Stet Thru Lanes | U-Turn (each) |
| US90 | E | TxDOT | Rural Arterial | 45 | Under SH 99 | WB-50 | 0 | 30' | N/A | N | 2 (12') | N/A | 0 | 2 (12') | N | N/A | 30' | 0 |
| CR491 | H | Liberty Co. | Rural Local | 30 | N/A | WB-50 | 0 | 10' | N/A | N | 1 (10') | N | 0 | 1 (10') | N | N/A | 10' | 0 |
| FM1413 | D | TxDOT | Rural Collector | 45 | Under SH 99 | WB-50 | 0 | 16' | N/A | N | 2 (12') | 2 (12') | 0 | 2 (12') | N | N/A | 16' | 0 |
| Future Thoroughfare #5A | D | Liberty Co. | Rural Local | 45 | Under SH 99 | WB-50 | 0 | 16' | N/A | N | 2 (12') | 2 (12') | 0 | 2 (12') | N | N/A | 16' | 0 |
| Future Thoroughfare #5B (Sta 2549+95) | H | Liberty Co. | Rural Local | 45 | Under SH 99 | WB-50 | 0 | 10' | N/A | N | 1 (12') | N | 0 | 1 (12') | N | N/A | 10' | 0 |
| Future Thoroughfare #5B (Sta 2551+25) | B | Liberty Co. | Rural Local | 45 | Under SH 99 | WB-50 | 0 | 10' | N/A | N | 2 (12') | N | 0 | 2 (12') | N | N/A | 10' | 0 |
| Future Thoroughfare #5C | D | Liberty Co. | Rural Local | 45 | Under SH 99 | WB-50 | 0 | 16' | N/A | N | 2 (12') | 2 (12') | 0 | 2 (12') | N | N/A | 16' | 0 |
| SH146 | D | TxDOT | Rural Arterial | 45 | Under SH 99 | WB-50 | 0 | 16' | N/A | N | 2 (12') | 2 (12') | 0 | 2 (12') | N | N/A | 16' | 0 |
| FM565* (North Crossing) | D | TxDOT | Rural Collector | 45 | Under SH 99 | WB-50 | 1 | 10' | N/A | N | 2 (12') | 2 (12') | 0 | 2 (12') | N | N/A | 10' | 0 |
| Future Thoroughfare #6 | A | Chambers Co. | Urban Local | 45 | Under SH 99 | WB-50 | 1 | 6' | 5' | Y | 1 (12') 1 (14') | 2 (12') | 4 | 1 (12') 1 (14') | Y | 5' | 6' | 1 |
| IH10 Eastbound Frontage Road | J | TxDOT | Urban Collector | 45 | Under SH 99 | WB-50 | N/A | N/A | N/A | N/A | N/A | 1 (12') | 0 | 2 (12') | Y | 5' | 6' | 1 |
| IH10 Mainlanes | N/A | TxDOT | Rural Freeway | 70 | Under SH 99 | N/A | 0 | 30' | Match Existing Mainlanes and Structures | | | | | | | | 30' | 0 |
| IH10 Westbound Frontage Road | J | TxDOT | Urban Collector | 45 | Under SH 99 | WB-50 | 1 | 6' | 5' | Y | 2 (12') | 1 (12') | 0 | N/A | N/A | N/A | N/A | N/A |
| Future Thoroughfare #7 | A | Chambers Co. | Urban Local | 45 | Under SH 99 | WB-50 | 0 | 6' | 5' | Y | 1 (12') 1 (14') | 2 (12') | 2 | 1 (12') 1 (14') | Y | 5' | 6' | 0 |
| Kilgore Road | A | Chambers Co. | Urban Local | 45 | Under SH 99 | WB-50 | 0 | 6' | 5' | Y | 1 (12') 1 (14') | 2 (12') | 2 | 1 (12') 1 (14') | Y | 5' | 6' | 0 |

Assumptions:

Urban - Curb and gutter with minimum 5' sidewalk on all urban roadways. Pedestrian accommodations only on Urban Facilities.

Rural - No curb and gutter, minimum 6' shoulders, minimum 10' clear zone (unless otherwise shown).

*NOTE: Crossing includes 14' wide Barbers Hill Canal access road south of roadway; see Sheet 18 of Attachment 19-2.

SH 99 GRAND PARKWAY
ATTACHMENT 11-1
Cross Street Design Criteria Matrix
Segment I-2

| Intersecting Street | Ultimate Typical Section | Jurisdiction | Roadway Classification | Design Speed (mph) | Position (over/under) | Design Vehicle | NORTHBOUND | | | | | Turn Lanes | Median | SOUTHBOUND | | | | |
|-----------------------|--------------------------|-----------------|------------------------|--------------------|-----------------------|----------------|---------------|--|-------------------------------------|-----------------|--------------------|------------|--------|--------------------|-----------------|-------------------------------------|--|---------------|
| | | | | | | | U-Turn (each) | Clear Zone for Cross Street Thru Lanes | Sidewalk and Min. Usable Width (LF) | Curb and Gutter | Through Lanes | | | Through Lanes | Curb and Gutter | Sidewalk and Min. Usable Width (LF) | Clear Zone for Cross Street Thru Lanes | U-Turn (each) |
| Wyoming | F | City of Baytown | Urban Local | 45 | Under SH 99 | WB-50 | 0 | 6' | 5' | Y | 1 (14') | 2 (12') | 0 | 1 (14') | Y | 5' | 6' | 0 |
| Lee Drive | A | City of Baytown | Urban Local | 45 | Under SH 99 | WB-50 | 1 | 6' | 5' | Y | 1 (12') 1 (14') | 2 (12') | 2 | 1 (12') 1 (14') | Y | 5' | 6' | 1 |
| Wismer Road | A | City of Baytown | Urban Local | 45 | Under SH 99 | WB-50 | 0 | 6' | 5' | Y | 1 (12') 1 (14') | 2 (12') | 2 | 1 (12') 1 (14') | Y | 5' | 6' | 0 |
| BS146 | A | TxDOT | Urban Arterial | 45 | Under SH 99 | WB-50 | 1 | 6' | 5' | Y | 2 (12') | 2 (12') | 12 | 2 (12') | Y | 5' | 6' | 1 |
| Tri-Cities Beach Road | G | Harris Co. | Rural Local | 45 | Under SH 99 | WB-50 | 0 | 10' | N/A | N | 1 (12') | 2 (12') | 0 | 1 (12') | N | N/A | 10' | 1 |
| FM1405 | A | TxDOT | Rural Collector | 45 | Under SH 99 | WB-50 | 1 | 6' | 5' | Y | 2 (12') | 2 (12') | 4 | 2 (12') | Y | 5' | 6' | 1 |
| Fisher Road | A | Chambers County | Urban Local | 45 | Under SH 99 | WB-50 | 1 | 6' | 5' | Y | 2 (12') | 2 (12') | 16 | 2 (12') | Y | 5' | 6' | 1 |

Assumptions:

Urban - Curb and gutter with minimum 5' sidewalk on all urban roadways. Pedestrian accommodations only on Urban Facilities.

Rural - No curb and gutter, minimum 6' shoulders, minimum 10' clear zone (unless otherwise shown).