Texas Department of Transportation
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DALLAS DISTRICT

DESIGN SCHEMATIC

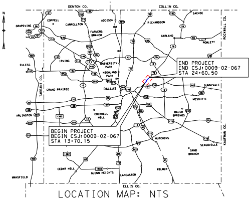
MOHAMED K. BUR, PE DISTRICT ENGINEER

SH 78 AT GASTON AVENUE

CSJ LIMITS 0009-02-067: AT GASTON AVE.		
PROJECT LENGTH:		0.207 MILES
AVERAGE DAILY TRAFFIC:		(SEE TRAFFIC DIAGRAM)
ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
SH 78 (E. GRAND AVE.)	30 MPH	URBAN PRINCIPAL ARTERIAL
SH 78 (GARLAND RD.)	30 MPH	URBAN PRINCIPAL ARTERIAL
GASTON AVE.	30 MPH	URBAN MINOR ARTERIAL
LA VISTA DR.	30 MPH	URBAN MAJOR COLLECTOR
WINSTED DR.	30 MPH	URBAN MINOR COLLECTOR
CROSS STREETS	30 MPH	URBAN LOCAL STREET

BASIS OF DESIGN: TxDOT ROADWAY DESIGN MANUAL 2014
EQUATIONS: NONE RAILROADS: NONE DESIGN EXCEPTIONS: YES

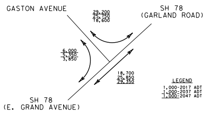
ALL COORDINATES SHOWN HEREON ARE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM OF 1983, TEXAS NORTH CENTRAL ZONE NO. 4202, NORTH AMERICAN DATUM OF 1983 (NAD83) AS DETERMINED BY GPS OBSERVATIONS USING THE TXDOT VRS NETWORK, GEOID 12A MODEL WITH A GRID-TO-SURFACE CONVERSION FACTOR OF 1.000136506 (DALLAS COUNTY). ELEVATIONS ARE BASED ON NAVD 1988 BY TXDOT GPS VRS RTK OBSERVATIONS.


N
DENTON CO.
COLLIN CO.
SACHSE
COPPELL
GRAPEVINE
CARROLLTON
ADDISON
RICHARDSON
FARMERS BRANCH
GARLAND
ROWLETT
ROCKWALL CO.
EULESS
IRVING
UNIVERSITY PARK
HIGHLAND PARK
DALLAS
GRAND PRAIRIE
TARRANT CO.
SUNNYVALE
MESQUITE
ARLINGTON
COCKRELL HILL
BALCH SPRINGS
HUTCHINS
SEAGOVILLE
KAUFMAN CO.
SAND BRANCH
CEDAR HILL
GLENN HEIGHTS
LANCASTER
WILMER
MANSFIELD
ELLIS CO.
END PROJECT
END CSJ:0009-02-067
STA 24+60.50
BEGIN PROJECT
BEGIN CSJ:0009-02-067
STA 13+70.15

LOCATION MAP: NTS
DALLAS COUNTY

SUBMITTAL: AUGUST 2018

PRELIMINARY
FOR INTERIM REVIEW ONLY.
NOT FOR PERMITTING, BIDDING, OR CONSTRUCTION.
Prepared by or under the Direct Supervision of
CAREN D. CHAMBERS P.E. 99772
9/27/2018


GASTON AVENUE
SH 78
(GARLAND ROAD)
29,200
25,750
18,600
6,000
5,350
3,850
18,700
25,850
29,350
SH 78
(E. GRAND AVENUE)
LEGEND
1,000-2017 ADT
1,000-2037 ADT
1,000-2047 ADT

TEXAS DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROGRAMMING AND PLANNING DIVISION MEMORANDUM
JUNE 22, 2016

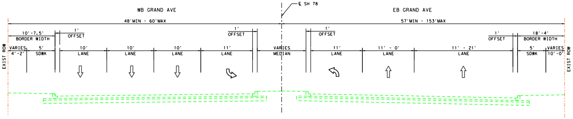
SCHEMATIC PLAN & PROFILE

SH 78 AT GASTON AVE

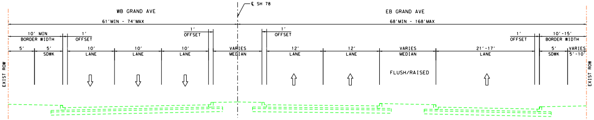
ROLL 1 OF 1 ROLLS

Michael Baker
INTERNATIONAL

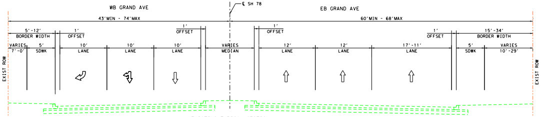
1501 LBJ Freeway, Suite 650,
Dallas, TX 75234
Phone: (469)801-8500
MBAKERINTL.COM
TBPE Registration No. F-2677


℄ SH 78
WB GRAND AVE
EB GRAND AVE
48'MIN - 60'MAX
57'MIN - 153'MAX
10'-7.5' BORDER WIDTH
1' OFFSET
1' OFFSET
1' OFFSET
1' OFFSET
18'-4' BORDER WIDTH
VARIES 4'-2'
5' SDWK
10' LANE
10' LANE
10' LANE
11' LANE
VARIES MEDIAN
11' LANE
11' - 0' LANE
11' - 21' LANE
5' SDWK
VARIES 10'-0'
EXIST ROW
EXIST ROW

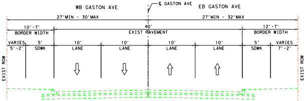
EXISTING TYPICAL SECTION
SH 78 (GRAND AVE)
BEG PROJ TO STA 109+25
NTS


℄ SH 78
WB GRAND AVE
EB GRAND AVE
61'MIN - 74'MAX
68'MIN - 168'MAX
10' MIN BORDER WIDTH
1' OFFSET
1' OFFSET
1' OFFSET
1' OFFSET
10'-15' BORDER WIDTH
5'
5' SDWK
10' LANE
10' LANE
10' LANE
VARIES MEDIAN
12' LANE
12' LANE
VARIES MEDIAN
FLUSH/RAISED
21'-17' LANE
5' SDWK
VARIES 5'-10'
EXIST ROW
EXIST ROW

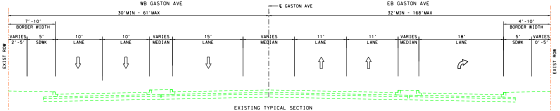
EXISTING TYPICAL SECTION
GASTON AVE TO SH78 (GARLAND RD)
STA 16+55 TO STA 18+36
NTS


℄ SH 78
WB GRAND AVE
EB GRAND AVE
43'MIN - 74'MAX
60'MIN - 68'MAX
5'-12' BORDER WIDTH
1' OFFSET
1' OFFSET
1' OFFSET
1' OFFSET
15'-34' BORDER WIDTH
VARIES 7'-0'
5' SDWK
10' LANE
10' LANE
10' LANE
VARIES MEDIAN
12' LANE
12' LANE
17'-11' LANE
5' SDWK
VARIES 10'-29'
EXIST ROW
EXIST ROW

EXISTING TYPICAL SECTION
GASTON AVE TO SH 78 (GARLAND RD)
STA 18+36 TO END PROJ
NTS


℄ GASTON AVE
WB GASTON AVE
EB GASTON AVE
27'MIN - 30'MAX
27'MIN - 32'MAX
10'-7' BORDER WIDTH
40' EXIST PAVEMENT
12'-7' BORDER WIDTH
VARIES 5'-2'
5' SDWK
10' LANE
10' LANE
10' LANE
10' LANE
5' SDWK
VARIES 7'-2'
EXIST ROW
EXIST ROW

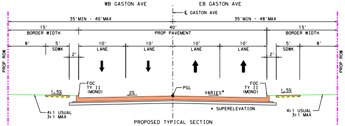
EXISTING TYPICAL SECTION
GASTON AVE
STA 13+70 TO STA 15+26
NTS


℄ GASTON AVE
WB GASTON AVE
EB GASTON AVE
30'MIN - 61'MAX
32'MIN - 168'MAX
7'-10' BORDER WIDTH
4'-10' BORDER WIDTH
VARIES 2'-5'
5' SDWK
10' LANE
10' LANE
VARIES MEDIAN
15' LANE
VARIES MEDIAN
11' LANE
11' LANE
VARIES MEDIAN
18' LANE
5' SDWK
VARIES 0'-5'
EXIST ROW
EXIST ROW

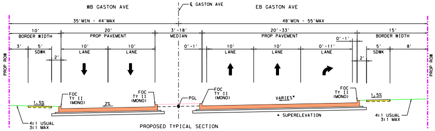
EXISTING TYPICAL SECTION
GASTON AVE
STA 15+26 TO STA 16+55
NTS

TIME: 3:33:10 PM
PEN TABLE - $PENTABS

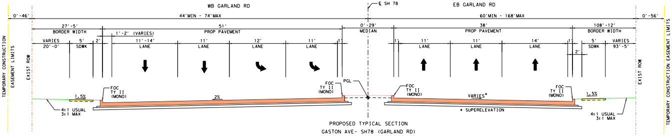
DATE: 9/27/2018
FILE: ...\78PP•SCHEMATIC•02-01.dgn
ROLLPLOT - $PLTDRVLS


WB GASTON AVE
EB GASTON AVE
℄ GASTON AVE
35'MIN - 40'MAX
35'MIN - 48'MAX
15' BORDER WIDTH
40' PROP PAVEMENT
15' BORDER WIDTH
8'
5' SDWK
2'
10' LANE
10' LANE
10' LANE
10' LANE
2'
5' SDWK
8'
PROP ROW
PROP ROW
FOC TY II (MONO)
FOC TY II (MONO)
1.5%
2%
PGL
VARIES*
1.5%
* SUPERELEVATION
4:1 USUAL 3:1 MAX
4:1 USUAL 3:1 MAX

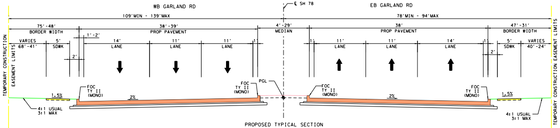
PROPOSED TYPICAL SECTION
GASTON AVE- SH78 (GARLAND RD)
STA 13+70.15 TO STA 14+65
NTS


WB GASTON AVE
℄ GASTON AVE
EB GASTON AVE
35'MIN - 44'MAX
48'MIN - 55'MAX
10' BORDER WIDTH
20' PROP PAVEMENT
3'-18' MEDIAN
20'-33' PROP PAVEMENT
15' BORDER WIDTH
3'
5' SDWK
2'
10' LANE
10' LANE
0'-1'
10' LANE
10' LANE
0'-11' LANE
0'-1'
2'
5' SDWK
8'
PROP ROW
PROP ROW
1.5%
FOC TY II (MONO)
2%
FOC TY II (MONO)
PGL
FOC TY II (MONO)
VARIES*
FOC TY II (MONO)
1.5%
* SUPERELEVATION
4:1 USUAL 3:1 MAX
4:1 USUAL 3:1 MAX

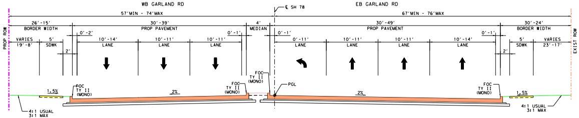
PROPOSED TYPICAL SECTION
GASTON AVE- SH78 (GARLAND RD)
STA 14+65 TO STA 16+33.59
NTS


WB GARLAND RD
℄ SH 78
EB GARLAND RD
0'-46'
44'MIN - 74'MAX
60'MIN - 168'MAX
0'-56'
27'-5' BORDER WIDTH
51' PROP PAVEMENT
0'-29' MEDIAN
38' PROP PAVEMENT
108'-12' BORDER WIDTH
1'-2' (VARIES)
VARIES 20'-0'
5' SDWK
2'
11'-14' LANE
11' LANE
12' LANE
11' LANE
1'
1'
11' LANE
11' LANE
14' LANE
1'
2'
5' SDWK
VARIES 93'-5'
TEMPORARY CONSTRUCTION EASEMENT LIMITS
EXIST ROW
EXIST ROW
TEMPORARY CONSTRUCTION EASEMENT LIMITS
FOC TY II (MONO)
1.5%
2%
FOC TY II (MONO)
PGL
FOC TY II (MONO)
VARIES*
FOC TY II (MONO)
1.5%
* SUPERELEVATION
4:1 USUAL 3:1 MAX
4:1 USUAL 3:1 MAX

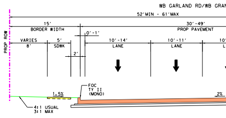
PROPOSED TYPICAL SECTION
GASTON AVE- SH78 (GARLAND RD)
STA 16+33.59 TO STA 19+35
NTS

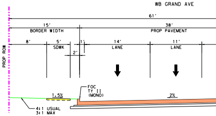

WB GARLAND RD
℄ SH 78
EB GARLAND RD
109'MIN - 139'MAX
78'MIN - 94'MAX
75'-48' BORDER WIDTH
38'-39' PROP PAVEMENT
4'-29' MEDIAN
38' PROP PAVEMENT
47'-31' BORDER WIDTH
1'-2'
VARIES 68'-41'
5' SDWK
2'
14' LANE
11' LANE
11' LANE
1'
1'
11' LANE
11' LANE
14' LANE
1'
2'
5' SDWK
VARIES 40'-24'
TEMPORARY CONSTRUCTION EASEMENT LIMITS
TEMPORARY CONSTRUCTION EASEMENT LIMITS
FOC TY II (MONO)
1.5%
2%
FOC TY II (MONO)
PGL
FOC TY II (MONO)
2%
FOC TY II (MONO)
1.5%
4:1 USUAL 3:1 MAX
4:1 USUAL 3:1 MAX

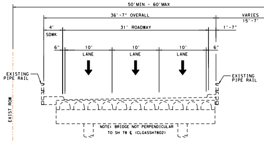
PROPOSED TYPICAL SECTION
GASTON AVE- SH78 (GARLAND RD)
STA 19+35 TO STA 20+15.70 WB
STA 19+35 TO STA 19+98.54 EB
NTS


WB GARLAND RD
℄ SH 78
EB GARLAND RD
57'MIN - 74'MAX
67'MIN - 76'MAX
26'-15' BORDER WIDTH
30'-39' PROP PAVEMENT
4' MEDIAN
30'-49' PROP PAVEMENT
30'-24' BORDER WIDTH
0'-2'
0'-1'
0'-1'
0'-1'
VARIES 19'-8'
5' SDWK
2'
10'-14' LANE
10'-11' LANE
10'-11' LANE
0'-11' LANE
10'-11' LANE
10'-11' LANE
10'-14' LANE
2'
5' SDWK
VARIES 23'-17'
PROP ROW
EXIST ROW
1.5%
FOC TY II (MONO)
2%
FOC TY II (MONO)
FOC TY II (MONO)
PGL
2%
FOC TY II (MONO)
1.5%
4:1 USUAL 3:1 MAX
4:1 USUAL 3:1 MAX

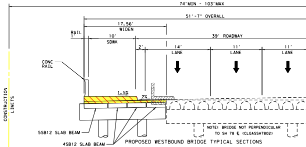
PROPOSED TYPICAL SECTION
GASTON AVE - SH 78 (GARLAND RD)
STA 21+35.04 TO STA 23+25 WB
STA 21+35.36 TO STA 23+25 EB
NTS


WB GARLAND RD/WB GRAN
52'MIN - 61'MAX
15' BORDER WIDTH
30'-49' PROP PAVEMENT
0'-1'
VARIES 8'
5' SDWK
2'
10'-14' LANE
10'-11' LANE
PROP ROW
1.5%
FOC TY II (MONO)
2%
4:1 USUAL 3:1 MAX

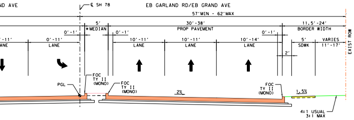

WB GRAND AVE
61'
15' BORDER WIDTH
38' PROP PAVEMENT
8'
5' SDWK
1'
2'
14' LANE
11' LANE
PROP ROW
1.5%
FOC TY II (MONO)
2%
4:1 USUAL 3:1 MAX


50'MIN - 60'MAX
36'-7" OVERALL
VARIES 15'-7"
4' SDWK
31' ROADWAY
1'-7"
6"
10' LANE
10' LANE
10' LANE
6"
EXISTING PIPE RAIL
EXISTING PIPE RAIL
EXIST ROW
NOTE: BRIDGE NOT PERPENDICULAR TO SH 78 ℄ (CLGASSH7802)

EXISTING WESTBOUND BRIDGE TYPICAL SECTIONS

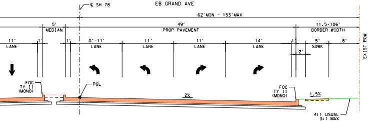

74'MIN - 103'MAX
51'-7" OVERALL
17.56' WIDEN
RAIL 1'
10' SDWK
39' ROADWAY
2'
14' LANE
11' LANE
11' LANE
CONC RAIL
CONSTRUCTION LIMITS
1.5%
2%
5SB12 SLAB BEAM
4SB12 SLAB BEAM
NOTE: BRIDGE NOT PERPENDICULAR TO SH 78 ℄ (CLGASSH7802)

PROPOSED WESTBOUND BRIDGE TYPICAL SECTIONS
STA 20+15.70 TO STA 21+35.04
BRIDGE WIDENING

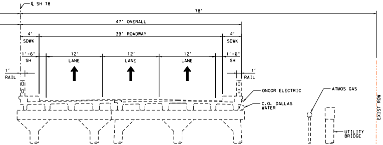

ND AVE
℄ SH 78
EB GARLAND RD/EB GRAND AVE
57′MIN - 62′MAX
5′
* MEDIAN
30′-38′
PROP PAVEMENT
11.5′-24′
BORDER WIDTH
0′-1′
0′-1′
0′-1′
′-11′
ANE
0′-11′
LANE
10′-11′
LANE
10′-11′
LANE
10′-14′
LANE
5′
SDWK
VARIES
11′-17′
2′
EXIST ROW
FOC
TY II
(MONO)
FOC
TY II
(MONO)
FOC
TY II
(MONO)
PGL
2%
1.5%
4:1 USUAL
3:1 MAX

PROPOSED TYPICAL SECTION
GASTON AVE - SH 78 (GARLAND RD)
STA 23+25 TO STA 24+60.50
SH 78 (GRAND AVE)
STA 104+42.80 TO STA 106+77
NTS

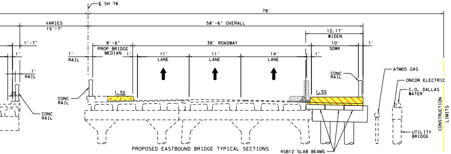
* NO PROP RAISED MEDIAN
STA 104+42.80 TO STA 105+49.30


℄ SH 78
EB GRAND AVE
62′MIN - 153′MAX
5′
MEDIAN
49′
PROP PAVEMENT
11.5-106′
BORDER WIDTH
11′
LANE
1′
1′
0′-11′
LANE
11′
LANE
11′
LANE
14′
LANE
1′
5′
SDWK
8′
2′
EXIST ROW
FOC
TY II
(MONO)
PGL
2%
FOC
TY II
(MONO)
1.5%
4:1 USUAL
3:1 MAX

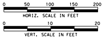
PROPOSED TYPICAL SECTION
SH 78 (GRAND AVE)
STA 106+77 TO STA 109+10.69
NTS


℄ SH 78
78′
47′ OVERALL
39′ ROADWAY
4′
SDWK
4′
SDWK
1′-6″
SH
1′-6″
SH
12′
LANE
12′
LANE
12′
LANE
1′
RAIL
1′
RAIL
ONCOR ELECTRIC
C.O. DALLAS
WATER
ATMOS GAS
UTILITY
BRIDGE
EXIST ROW

EXISTING EASTBOUND BRIDGE TYPICAL SECTIONS


℄ SH 78
78′
VARIES
15′-7′
58′-6″ OVERALL
12.17′
WIDEN
1′-7″
8′-6″
PROP BRIDGE
MEDIAN
38′ ROADWAY
10′
SDWK
1′
1′
1′
RAIL
1′
11′
LANE
11′
LANE
14′
LANE
1′
1′
RAIL
2%
CONC
RAIL
CONC
RAIL
1.5%
1.5%
CONC
RAIL
2%
ATMOS GAS
ONCOR ELECTRIC
C.O. DALLAS
WATER
UTILITY
BRIDGE
CONSTRUCTION
LIMITS
4SB12 SLAB BEAMS

PROPOSED EASTBOUND BRIDGE TYPICAL SECTIONS
STA 19+98.54 TO STA 21+35.36
BRIDGE WIDENING

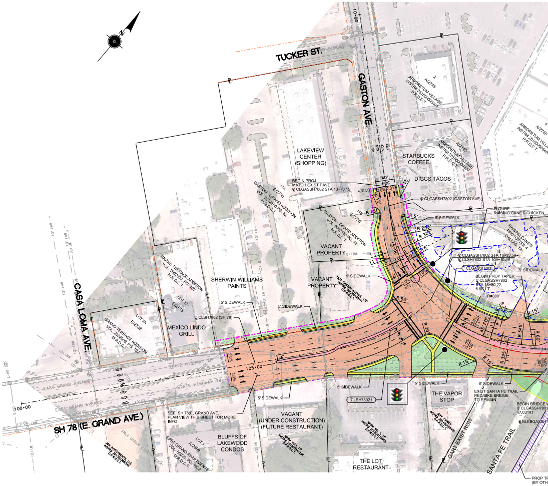


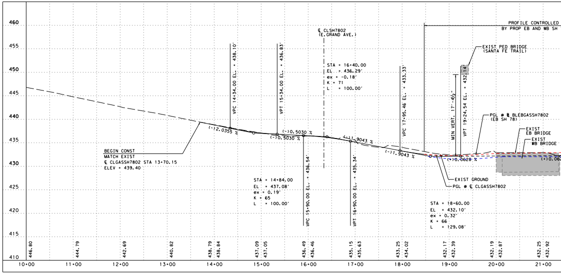
COLOR LEGEND

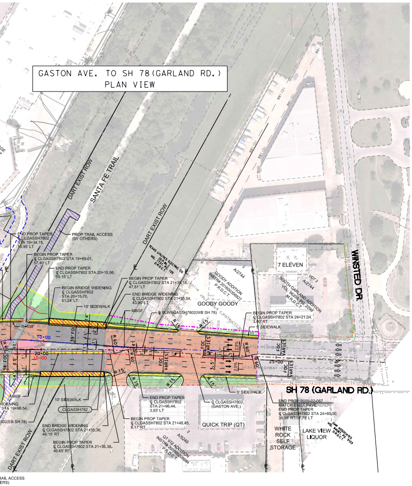
🟧	PROP PAVEMENT
🟥	PROP RAISED MEDIAN
▨	PROP BRIDGE WIDENING (W/SIDEWALK)
⬜	EXIST BRIDGE TO REMAIN
🟨	PROP BRIDGE MEDIAN
🟨	PROP SIDEWALK
▨	PROP TRAIL ACCESS (BY OTHERS)
🟩	BORDER AREA
—	PROP RETAINING WALL
— · —	CENTERLINE OR BASELINE
— · · —	PROP ROW
— · —	TEMPORARY CONSTRUCTION EASEMENT LIMITS
— · —	EXIST ROW
XXXXXXXX	CURVE NUMBER
←	PROP TRAFFIC FLOW
⇦	EXIST TRAFFIC FLOW
🚦	PROP SIGNALIZED INTERSECTION
········	MBGF

NOTES:

1. MEDIAN OPENINGS WERE DETERMINED IN COORDINATION WITH LOCAL GOVERNMENT. FNAL LOCATION OF MEDIAN OPENINGS WILL BE DETERMINED IN THE PS&E DEVELOPMENT PHASE IN COORDINATION WITH THE LOCAL GOVERNMENTS.
2. DIMENSION ARE TO NOMINAL FACE OF CURB, RAIL, BARRIER, OR WALL UNLESS NOTED OTHERWISE.
3. OWNERSHIP INFORMATION SHOWN ON SCHEMATIC OBTAINED FROM STUDY DOCUMENTS AND ARE SHOWN FOR INFORMATION PURPOSES ONLY.
4. EXISTING CULVERT LOCATIONS, SIZE, AND ELEVATIONS OBTAINED FROM RECORD DOUCMENTS AND ARE SHOWN FOR INFROMATION PURPOSES ONLY.
5. ADA RAMPS ARE NOT DEPICTED IN THE PLAN.
6. CURBS ON SH 78 AND GASTON ARE TYPE II UNLES NOTED OTHERWISE.
7. CONVENTIONAL ROADWY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
8. EXISTING FEATURES FOR CANE'S PROPERTY WERE NOT FIELD SURVEYED.
9. EXACT USE OF THE BORDER AREA FROM THE SIDEWALK TO THE RIGHT-OF-WAY LINE WILL BE DETERMINED IN THE PS&E DEVELOPMENT PHASE IN COORDINATION WITH THE ADJACENT PROPERTY OWNER AND THE LOCAL GOVERNMENT.


N
TUCKER ST.
GASTON AVE.
CASA LOMA AVE.
SH 78 (E. GRAND AVE.)
SANTA FE TRAIL
LAKEVIEW CENTER (SHOPPING)
STARBUCKS COFFEE
DIGGS TACOS
FUTURE RAISING CANE'S CHICKEN
VACANT PROPERTY
VACANT PROPERTY
SHERWIN-WILLIAMS PAINTS
MEXICO LINDO GRILL
THE VAPOR STOP
VACANT (UNDER CONSTRUCTION) (FUTURE RESTAURANT)
BLUFFS OF LAKEWOOD CONDOS
THE LOT RESTAURANT
BEGIN PROJ
MATCH EXIST PAVE
℄ CLGASSH7802 STA 13+70.15
℄ CLGASSH7802 (GASTON AVE.)
℄ CLSH7802 (SH 78)
℄ CLGASSH7802 STA 16+33.59
℄ CLSH7802 STA 109+10.69
BEGIN PROP TAPER
℄ CLGASSH7802
STA 18+80.22,
6.65′ LT
R=300′
CLSH78021
5′ SIDEWALK
EXIST SANTA FE TRAIL PED/BIKE BRIDGE TO REMAIN
BEGIN BRIDGE W
℄ CLGASSH7802
DART EXIST ROW
SEE SH 78 (E. GRAND AVE.) PLAN VIEW THIS SHEET FOR MORE INFO
EAST GRAND AVENUE
STATE HIGHWAY 78
105+00
100+00
PROP TR (BY OTH
GRAND TERRACE ADDITION
GASTON - GRAND ADDITION
ARBORETUM VILLAGE
EAST GRAND APARTMENTS




GASTON AVE. TO SH 78(GARLAND RD.)
PLAN VIEW
DART EXIST ROW
SANTA FE TRAIL
DART EXIST ROW
END PROP TAPER
℄ CLGASSH7802
STA 19+34.75,
19.95' LT
PROP TRAIL ACCESS
(BY OTHERS)
BEGIN PROP TAPER
℄ CLGASSH7802 STA 19+69.01,
57.40' LT
END PROP TAPER
℄ CLGASSH7802 STA 20+15.98,
55.15' LT
BEGIN BRIDGE WIDENING
℄ CLGASSH7802
STA 20+15.70,
51.24' LT
10' SIDEWALK
BEGIN PROP TAPER
℄ CLGASSH7802 STA 21+35.16,
47.81' LT
END BRIDGE WIDENING
℄ CLGASSH7802 STA 21+35.04,
43.90' LT
MBGF
℄ BLWBGASSH7802(WB SH 78)
TEXAS UTILITIES ELECTRIC CO
(D.P.&L.)
VOL. 1737, PG. 125
D.R.D.C.T.
GOODY ADDITION
INSTR# 201600356927
P.R.D.C.T.
A/2744
GOODY GOODY
7 ELEVEN
LOT 2
A/2744
SOUTH GARLAND ADDITION
VOL. 86209, PG. 2299
M.R.D.C.T.
WINSTED DR.
BEGIN PROP TAPER
℄ CLGASSH7802 STA 24+21.04,
3.00' RT
5' SIDEWALK
R=538'
T0+00
20+00
10+00
39' FOC
38' FOC
R 60'
R 15'
FOC VARIES
2.0%
3.5'
25+00
SH 78 (GARLAND RD.)
5' SIDEWALK
END PROJ: 0009-02-067
MATCH EXIST PAVE
END PROP TAPER
℄ CLGASSH7802 STA 24+60.50,
39.58' RT/37.78' LT
MBGF
10' SIDEWALK
CLGASSH782
WIDENING
STA 19+98.54,
802(EB SH 78)
END PROP TAPER
℄ CLGASSH7802
STA 21+96.44,
3.93' LT
℄ CLGASSH7802
(GASTON AVE.)
BEGIN PROP TAPER
℄ CLGASSH7802 STA 21+46.45,
8.17' RT
END BRIDGE WIDENING
℄ CLGASSH7802 STA 21+35.36,
46.15' RT
BEGIN PROP TAPER
℄ CLGASSH7802 STA 21+35.38,
46.65' RT
QUICK TRIP (QT)
WHITE ROCK SELF STORAGE
LAKE VIEW LIQUOR
DAR ASSOCIATES
VOL. 94087, PG. 5103
D.R.D.C.T.
A/5249
QT 972 ADDITION
INSTR# 200900208694
P.R.D.C.T.
DART EXIST ROW
RAIL ACCESS
ERS)

```
Beginning chain CLGASSH7802 description
Description: Option 2 Prop Centerline Gaston-SH 78 East Leg
*******************************************************************************

Point CLGASSH780201    X     2,512,201.76 Y     6,983,971.86 Sta      10+00.00

Course from CLGASSH780201 to PC CLGASSH781 S 49° 00' 07.88" E Dist 433.44

                               Curve Data
                              *----------*
Curve CLGASSH781
P.I.   Station           17+19.59  X        2,512,744.86  Y         6,983,499.78
Delta         =      81° 20' 41.56" (LT)
Degree        =      17° 12' 21.38"
Tangent       =            286.15
Length        =            472.77
Radius        =            333.00
External      =            106.05
Long Chord    =            434.05
Mid. Ord.     =             80.44
P.C.   Station           14+33.44  X        2,512,528.90  Y         6,983,687.51
P.T.   Station           19+06.21  X        2,512,962.94  Y         6,983,685.04
C.C.                               X        2,512,747.35  Y         6,983,938.83
Back          = S  49° 00' 07.88" E
Ahead         = N  49° 39' 10.56" E
Chord Bear    = S  89° 40' 28.66" E

Course from PT CLGASSH781 to PC CLGASSH782 N 49° 39' 10.56" E Dist 170.33

                               Curve Data
                              *----------*
Curve CLGASSH782
P.I.   Station           21+10.40  X        2,513,118.56  Y         6,983,817.23
Delta         =       2° 35' 09.52" (RT)
Degree        =       3° 49' 10.99"
Tangent       =             33.86
Length        =             67.70
Radius        =          1,500.00
External      =              0.38
Long Chord    =             67.70
Mid. Ord.     =              0.38
P.C.   Station           20+76.54  X        2,513,092.76  Y         6,983,795.31
P.T.   Station           21+44.24  X        2,513,145.32  Y         6,983,837.97
C.C.                               X        2,514,063.88  Y         6,982,652.11
Back          = N  49° 39' 10.56" E
Ahead         = N  52° 14' 20.09" E
Chord Bear    = N  50° 56' 45.32" E

Course from PT CLGASSH782 to CLGASSH780202 N 52° 14' 20.09" E Dist 588.42

Point CLGASSH780202    X     2,513,610.51 Y     6,984,198.29 Sta      27+32.66

*******************************************************************************
Ending chain CLGASSH7802 description
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```
Beginning chain CLSH7802 description
*******************************************************************************

Point CLSH780201       X     2,512,189.65 Y     6,982,875.34 Sta     100+00.00

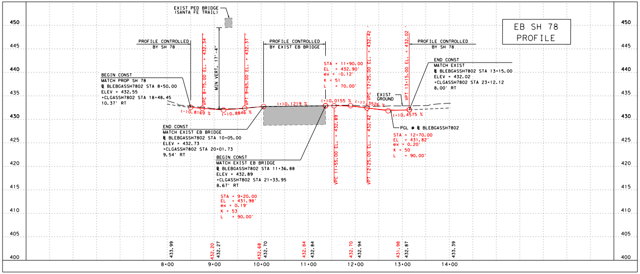
Course from CLSH780201 to PC CLSH78021 N 39° 46' 50.45" E Dist 690.19

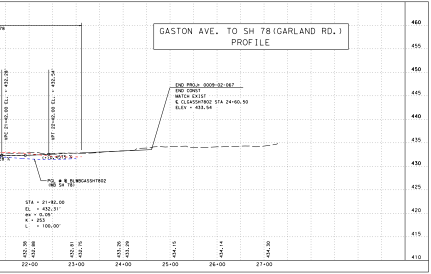
                               Curve Data
                              *----------*
Curve CLSH78021
P.I.   Station          107+89.52  X        2,512,694.83  Y         6,983,482.09
Delta         =      33° 13' 13.42" (LT)
Degree        =      17° 12' 21.38"
Tangent       =             99.34
Length        =            193.08
Radius        =            333.00
External      =             14.50
Long Chord    =            190.38
Mid. Ord.     =             13.90
P.C.   Station          106+90.19  X        2,512,631.27  Y         6,983,405.75
P.T.   Station          108+83.26  X        2,512,706.18  Y         6,983,580.78
C.C.                               X        2,512,375.36  Y         6,983,618.82
Back          = N  39° 46' 50.45" E
Ahead         = N   6° 33' 37.03" E
Chord Bear    = N  23° 10' 13.74" E

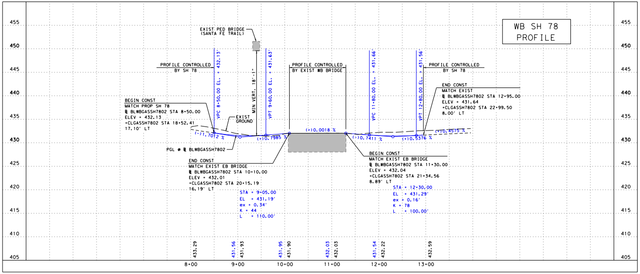
Course from PT CLSH78021 to CLSH780202 N 6° 33' 37.03" E Dist 27.42

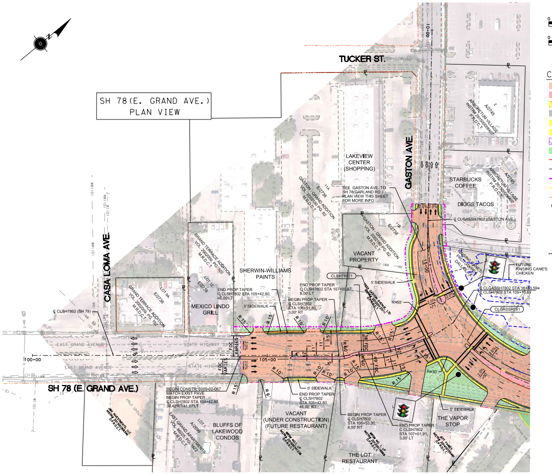
Point CLSH780202       X     2,512,709.31 Y     6,983,608.01 Sta     109+10.68

*******************************************************************************
Ending chain CLSH7802 description
```


EB SH 78
PROFILE
EXIST PED BRIDGE
(SANTA FE TRAIL)
PROFILE CONTROLLED
BY SH 78
MIN VERT. 17'-4"
VPC 8+75.00 EL. = 432.34'
VPT 9+65.00 EL. = 432.37'
PROFILE CONTROLLED
BY EXIST EB BRIDGE
STA = 11+90.00
EL = 432.90'
ex = -0.12'
K = 51
L = 70.00'
VPC 12+25.00 EL. = 432.42'
VPT 13+15.00 EL. = 432.02'
PROFILE CONTROLLED
BY SH 78
END CONST
MATCH EXIST
℄ BLEBGASSH7802 STA 13+15.00
ELEV = 432.02
=CLGASSH7802 STA 23+12.12
8.00' RT
BEGIN CONST
MATCH PROP SH 78
℄ BLEBGASSH7802 STA 8+50.00
ELEV = 432.55
=CLGASSH7802 STA 18+48.45
10.37' RT
(-)0.8169 %
(+)0.8846 %
(+)0.1219 %
(+)0.0155 %
(-)1.3526 %
EXIST
GROUND
(+)0.4575 %
END CONST
MATCH EXIST EB BRIDGE
℄ BLEBGASSH7802 STA 10+05.00
ELEV = 432.73
=CLGASSH7802 STA 20+01.73
9.54' RT
BEGIN CONST
MATCH EXIST EB BRIDGE
℄ BLEBGASSH7802 STA 11+36.88
ELEV = 432.89
=CLGASSH7802 STA 21+33.95
8.67' RT
VPC 11+55.00 EL. = 432.89'
VPT 12+25.00 EL. = 432.42'
PGL @ ℄ BLEBGASSH7802
STA = 12+70.00
EL = 431.82'
ex = 0.20'
K = 50
L = 90.00'
STA = 9+20.00
EL = 431.98'
ex = 0.19'
K = 53
L = 90.00'
433.99
432.20
432.27
432.68
432.70
432.84
432.84
432.70
432.94
431.98
432.87
433.39
450
445
440
435
430
425
420
415
410
405
400
8+00
9+00
10+00
11+00
12+00
13+00
14+00


GASTON AVE. TO SH 78(GARLAND RD.)
PROFILE
78
VPC 21+42.00 EL. = 432.28'
VPT 22+42.00 EL. = 432.54'
END PROJ: 0009-02-067
END CONST
MATCH EXIST
℄ CLGASSH7802 STA 24+60.50
ELEV = 433.54
28 %
(+)0.4575 %
PGL @ ℄ BLWBGASSH7802
(WB SH 78)
STA = 21+92.00
EL = 432.31'
ex = 0.05'
K = 253
L = 100.00'
432.38
432.88
432.81
432.75
433.26
433.29
434.15
434.14
434.30
460
455
450
445
440
435
430
425
420
415
410
22+00
23+00
24+00
25+00
26+00
27+00


WB SH 78
PROFILE
EXIST PED BRIDGE
(SANTA FE TRAIL)
PROFILE CONTROLLED
BY SH 78
VPC 8+50.00 EL. = 432.13'
MIN VERT. 18'-1"
VPT 9+60.00 EL. = 431.63'
PROFILE CONTROLLED
BY EXIST WB BRIDGE
VPC 11+80.00 EL. = 431.66'
VPT 12+80.00 EL. = 431.56'
PROFILE CONTROLLED
BY SH 78
END CONST
MATCH EXIST
℄ BLWBGASSH7802 STA 12+95.00
ELEV = 431.64
=CLGASSH7802 STA 22+99.50
8.00' LT
BEGIN CONST
MATCH PROP SH 78
℄ BLWBGASSH7802 STA 8+50.00
ELEV = 432.13
=CLGASSH7802 STA 18+52.41
17.10' LT
EXIST
GROUND
(-)1.7012 %
(+)0.7985 %
(+)0.0018 %
(-)0.7411 %
(+)0.5376 %
(+)0.4575 %
PGL @ ℄ BLWBGASSH7802
END CONST
MATCH EXIST EB BRIDGE
℄ BLWBGASSH7802 STA 10+10.00
ELEV = 432.01
=CLGASSH7802 STA 20+15.19
16.19' LT
STA = 9+05.00
EL = 431.19'
ex = 0.34'
K = 44
L = 110.00'
BEGIN CONST
MATCH EXIST EB BRIDGE
℄ BLWBGASSH7802 STA 11+30.00
ELEV = 432.04
=CLGASSH7802 STA 21+34.56
8.89' LT
STA = 12+30.00
EL = 431.29'
ex = 0.16'
K = 78
L = 100.00'
433.29
431.56
431.93
431.95
431.90
432.03
432.03
431.54
432.22
432.59
455
450
445
440
435
430
425
420
415
410
405
8+00
9+00
10+00
11+00
12+00
13+00



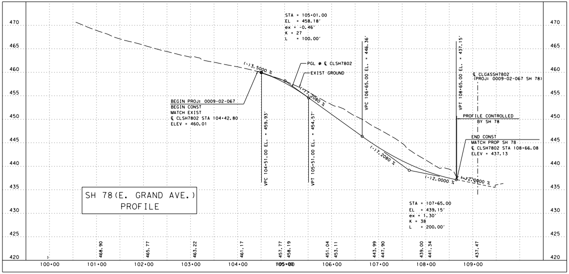
SH 78 (E. GRAND AVE.)
PLAN VIEW
TUCKER ST.
GASTON AVE.
CASA LOMA AVE.
SH 78 (E. GRAND AVE.)
EAST GRAND AVENUE
STATE HIGHWAY 78
100+00
105+00
15+00
LAKEVIEW CENTER (SHOPPING)
STARBUCKS COFFEE
DIGGS TACOS
SHERWIN-WILLIAMS PAINTS
MEXICO LINDO GRILL
VACANT PROPERTY
VACANT (UNDER CONSTRUCTION) (FUTURE RESTAURANT)
BLUFFS OF LAKEWOOD CONDOS
THE VAPOR STOP
THE LOT RESTAURANT
FUTURE RAISING CANE'S CHICKEN
RAISING CANE'S PROTOTYPE DALLAS, TX
SEE GASTON AVE. TO SH 78(GARLAND RD.) PLAN VIEW THIS SHEET FOR MORE INFO
GASTON - GRAND ADDITION VOL. 2002180 PG. 82 M.R.D.C.T.
GRAND TERRACE ADDITION VOL. 2002009, PG. 102 M.R.D.C.T.
EAST GRAND APARTMENTS VOL. 86025, PG. 1622 M.R.D.C.T.
ARBORETUM VILLAGE INSTR# 201500008407 P.R.D.C.T.
LOT 9A
LOT 12
LOT 1
11A
11B
E/2738
A/2699
A2745
℄ CLSH7802 (SH 78)
℄ CLGASSH7802 (GASTON AVE.)
℄ CLGASSH7802 STA 16+33.59=
℄ CLSH7802 STA 109+10.69
CLSH78021
CLGASSH781
BEGIN CONSTR: 0009-02-067
MATCH EXIST PAVE
BEGIN PROP TAPER
℄ CLSH7802 STA 104+42.80,
39.42'RT/41.87'LT
END PROP TAPER
℄ CLSH7802 STA 105+42.80,
46.00'LT
END PROP TAPER
℄ CLSH7802
STA 105+42.80,
46.00' RT
BEGIN PROP TAPER
℄ CLSH7802
STA 106+51.80,
3.00' RT
END PROP TAPER
℄ CLSH7802 STA 107+00.67,
8.00' LT
BEGIN PROP TAPER
℄ CLSH7802
STA 106+53.30,
8.00' RT
END PROP TAPER
℄ CLSH7802
STA 107+01.91,
3.00' LT
5' SIDEWALK
R=55'
R=30'
R 15'
R 10'
R 6'
R 60'
FOC VARIES
38' FOC
49' FOC
2.0%

COLOR LEGEND

🟧	PROP PAVEMENT
🟥	PROP RAISED MEDIAN
▨	PROP BRIDGE WIDENING (W/SIDEWALK)
⬜	EXIST BRIDGE TO REMAIN
▨	PROP BRIDGE MEDIAN
🟨	PROP SIDEWALK
▨	PROP TRAIL ACCESS (BY OTHERS)
🟩	BORDER AREA
—	PROP RETAINING WALL
— · —	CENTERLINE OR BASELINE
— · · —	PROP ROW
— · —	TEMPORARY CONSTRUCTION EASEMENT LIMITS
— · —	EXIST ROW
XXXXXXXX	CURVE NUMBER
←	PROP TRAFFIC FLOW
⇦	EXIST TRAFFIC FLOW
🚦	PROP SIGNALIZED INTERSECTION
········	MBGF

0 50 100 150 200
HORIZ. SCALE IN FEET

0 10 20
VERT. SCALE IN FEET



Texas Department of Transportation

© 2018

DALLAS DISTRICT

DESIGN SCHEMATIC

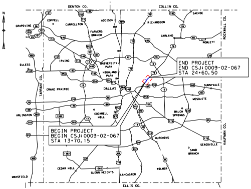
MOHAMED K. BUR, PE DISTRICT ENGINEER

SH 78 AT GASTON AVENUE

CSJ LIMITS 0009-02-067: AT GASTON AVE.		
PROJECT LENGTH:		0.207 MILES
AVERAGE DAILY TRAFFIC:		(SEE TRAFFIC DIAGRAM)
ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
SH 78 (E. GRAND AVE.)	30 MPH	URBAN PRINCIPAL ARTERIAL
SH 78 (GARLAND RD.)	30 MPH	URBAN PRINCIPAL ARTERIAL
GASTON AVE.	30 MPH	URBAN MINOR ARTERIAL
LA VISTA DR.	30 MPH	URBAN MAJOR COLLECTOR
WINSTED DR.	30 MPH	URBAN MINOR COLLECTOR
CROSS STREETS	30 MPH	URBAN LOCAL STREET

BASIS OF DESIGN: TxDOT ROADWAY DESIGN MANUAL 2014
EQUATIONS: NONE RAILROADS: NONE DESIGN EXCEPTIONS: YES

ALL COORDINATES SHOWN HEREON ARE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM OF 1983, TEXAS NORTH CENTRAL ZONE NO. 4202, NORTH AMERICAN DATUM OF 1983 (NAD83) AS DETERMINED BY GPS OBSERVATIONS USING THE TXDOT VRS NETWORK, GEOID 12A MODEL WITH A GRID-TO-SURFACE CONVERSION FACTOR OF 1.000136506 (DALLAS COUNTY). ELEVATIONS ARE BASED ON NAVD 1988 BY TXDOT GPS VRS RTK OBSERVATIONS.

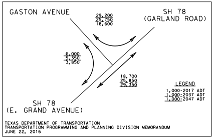


DENTON CO.
COLLIN CO.
ROCKWALL CO.
KAUFMAN CO.
TARRANT CO.
ELLIS CO.
N
GRAPEVINE
COPPELL
CARROLLTON
ADDISON
RICHARDSON
SACHSE
FARMERS BRANCH
GARLAND
ROWLETT
IRVING
UNIVERSITY PARK
HIGHLAND PARK
EULESS
DALLAS
GRAND PRAIRIE
SUNNYVALE
MESQUITE
ARLINGTON
COCKRELL HILL
BALCH SPRINGS
HUTCHINS
SEAGOVILLE
SAND BRANCH
CEDAR HILL
GLENN HEIGHTS
LANCASTER
WILMER
MANSFIELD
END PROJECT
END CSJ: 0009-02-067
STA 24+60.50
BEGIN PROJECT
BEGIN CSJ: 0009-02-067
STA 13+70.15

LOCATION MAP: NTS
DALLAS COUNTY

SUBMITTAL: AUGUST 2018

PRELIMINARY
FOR INTERIM REVIEW ONLY.
NOT FOR PERMITTING, BIDDING,
OR CONSTRUCTION.
Prepared by or under the
Direct Supervision of
CAREN D. CHAMBERS P.E. 99772
9/27/2018



GASTON AVENUE
SH 78
(GARLAND ROAD)
SH 78
(E. GRAND AVENUE)
29,200
25,750
18,600
6,000
5,350
3,850
18,700
25,850
29,350
LEGEND
1,000-2017 ADT
1,000-2037 ADT
1,000-2047 ADT

TEXAS DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROGRAMMING AND PLANNING DIVISION MEMORANDUM
JUNE 22, 2016

SCHEMATIC PLAN & PROFILE

SH 78 AT GASTON AVE

ROLL 1 OF 1 ROLLS

Michael Baker
INTERNATIONAL

1501 LBJ Freeway, Suite 650,
Dallas, TX 75234
Phone: (469)801-8500
MBAKERINTL.COM
TBPE Registration No. F-2677

...\78PP-SCHEMATIC-02-01.dgn