Texas Department of Transportation
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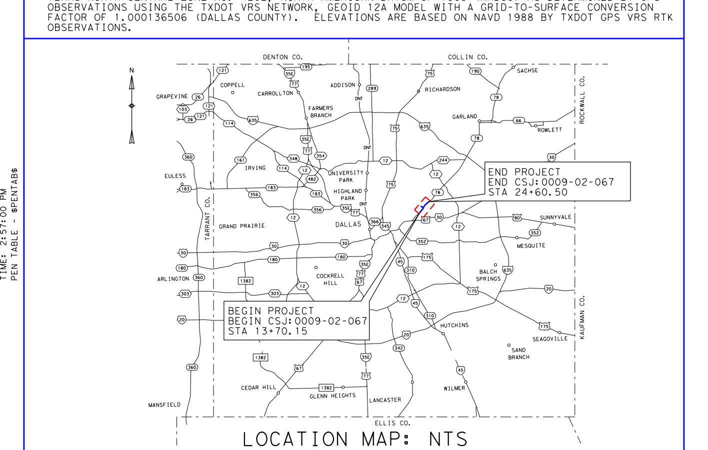
DALLAS DISTRICT
JAMES K. SELMAN, PE DISTRICT ENGINEER

SH 78 AT GASTON AVENUE DESIGN SCHEMATIC

CSJ LIMITS 0009-02-067: AT GASTON AVE.		
PROJECT LENGTH:		0.760 MILES
AVERAGE DAILY TRAFFIC:		(SEE TRAFFIC DIAGRAM)
ROADWAY	DESIGN SPEED	FUNCTIONAL CLASSIFICATION
SH 78 (E. GRAND AVE.)	30 MPH	PRINCIPAL ARTERIAL
SH 78 (GARLAND RD.)	30 MPH	PRINCIPAL ARTERIAL
GASTON AVE.	30 MPH	MINOR ARTERIAL
LA VISTA DR.	30 MPH	MAJOR COLLECTOR
WINSTEAD DR.	30 MPH	MINOR COLLECTOR
CROSS STREETS	30 MPH	URBAN LOCAL STREET

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

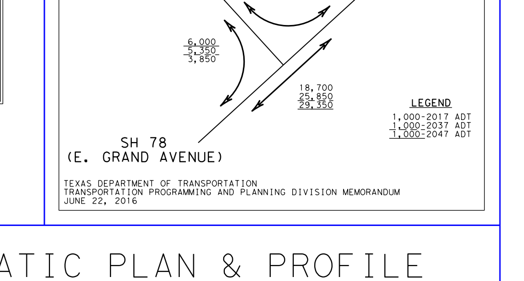
ALL COORDINATES SHOWN HEREON ARE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM OF 1983, TEXAS NORTH CENTRAL ZONE NO. 4202, NORTH AMERICAN DATUM OF 1983 (NAD83) AS DETERMINED BY GPS OBSERVATIONS USING THE TXDOT VRS NETWORK, GEOID 12A MODEL WITH A GRID-TO-SURFACE CONVERSION FACTOR OF 1.000136506 (DALLAS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



LOCATION MAP: NTS
DALLAS COUNTY

SUBMITTAL: JANUARY 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. 99177
1/17/2018



SCHEMATIC PLAN & PROFILE

SH 78 AT GASTON AVE

ROLL 1 OF 1 ROLLS

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Phone: (469)801-8500
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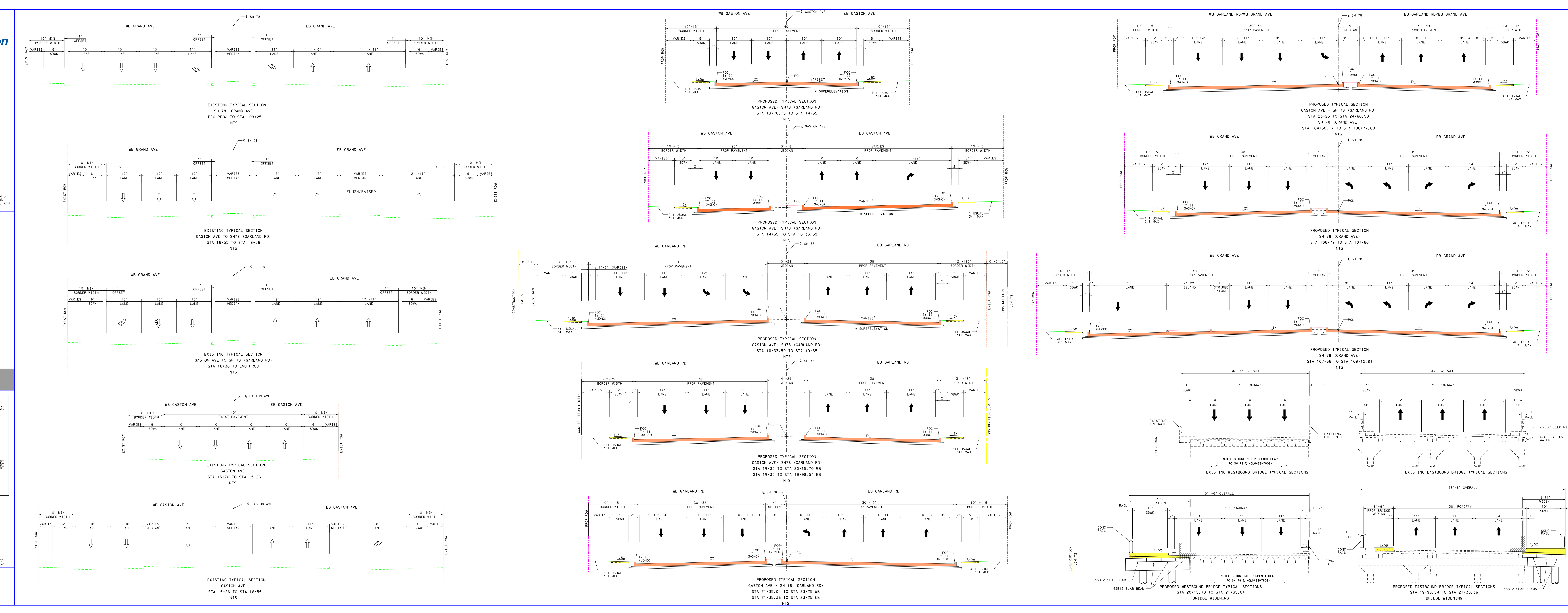
TBPE Registration No. F-2677

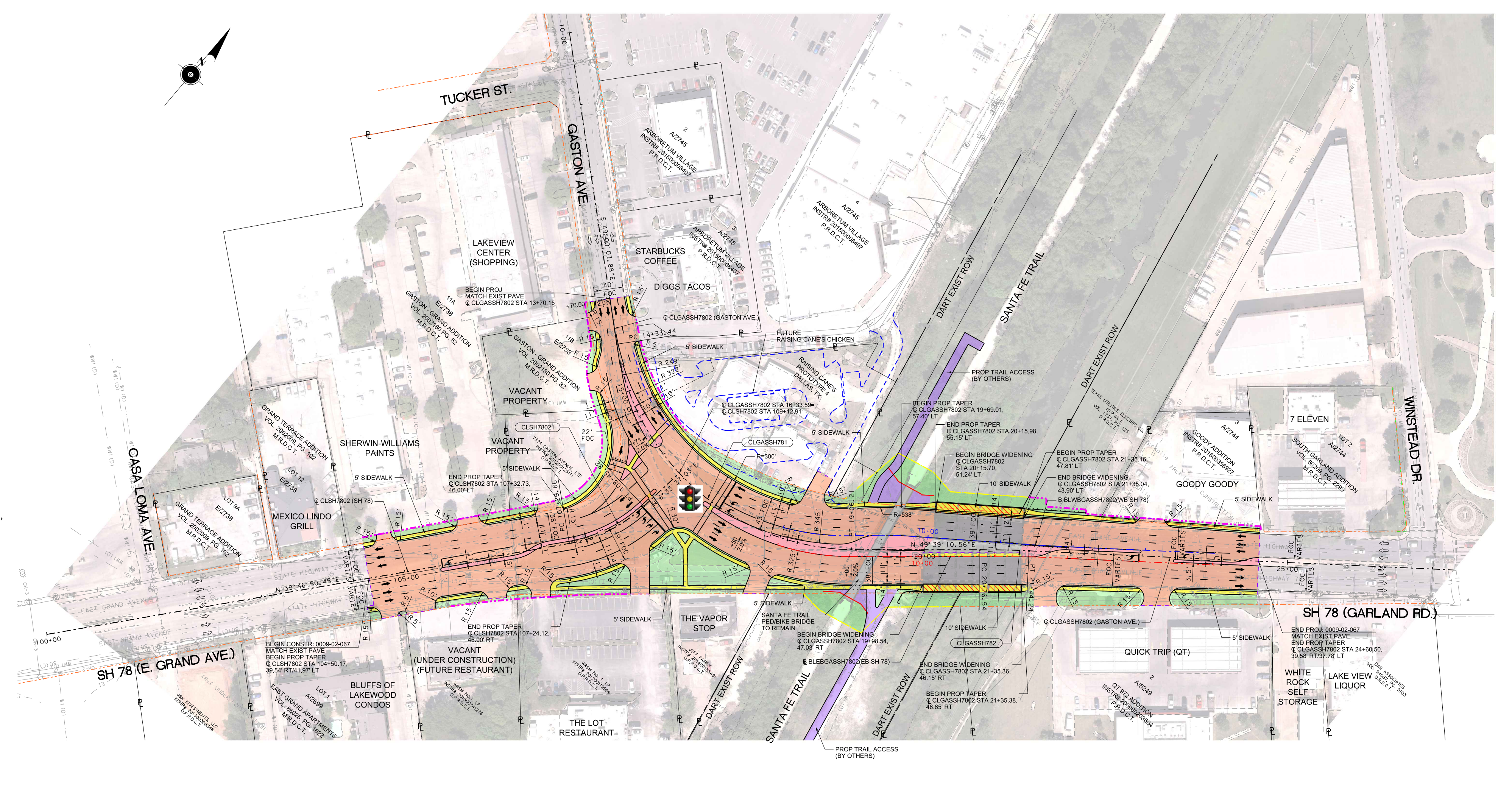


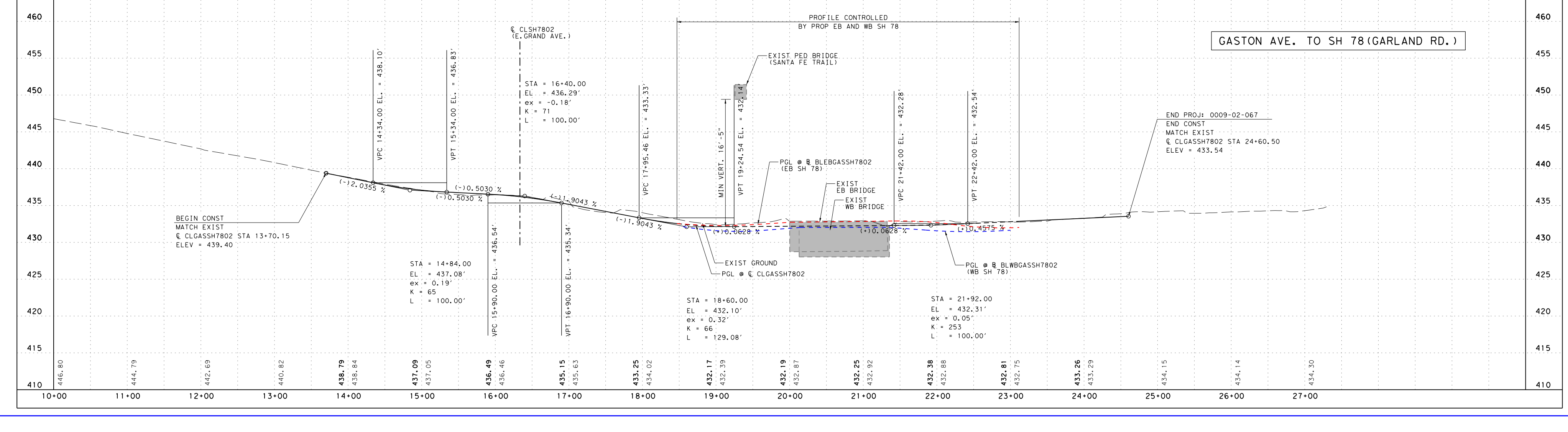
NOTES:

1. MEDIAN OPENINGS WERE DETERMINED IN COORDINATION WITH LOCAL GOVERNMENT. FINAL 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 DOCUMENTS AND ARE SHOWN FOR INFORMATION 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 AND WERE INSERTED FROM A PLAT.
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.

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
- CONSTRUCTION LIMITS
- EXIST ROW
- CURVE NUMBER
- PROP TRAFFIC FLOW
- EXIST TRAFFIC FLOW
- PROP SIGNALIZED INTERSECTION
- MBGF





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

Beginning chain CLSH7802 description

Point CLSH7802100 X 2,512,189.65 Y 6,982,875.34 Sta 100+00.00

Course from CLSH7802100 to PC CLSH78021 N 39° 46' 50.45" E Dist 729.86

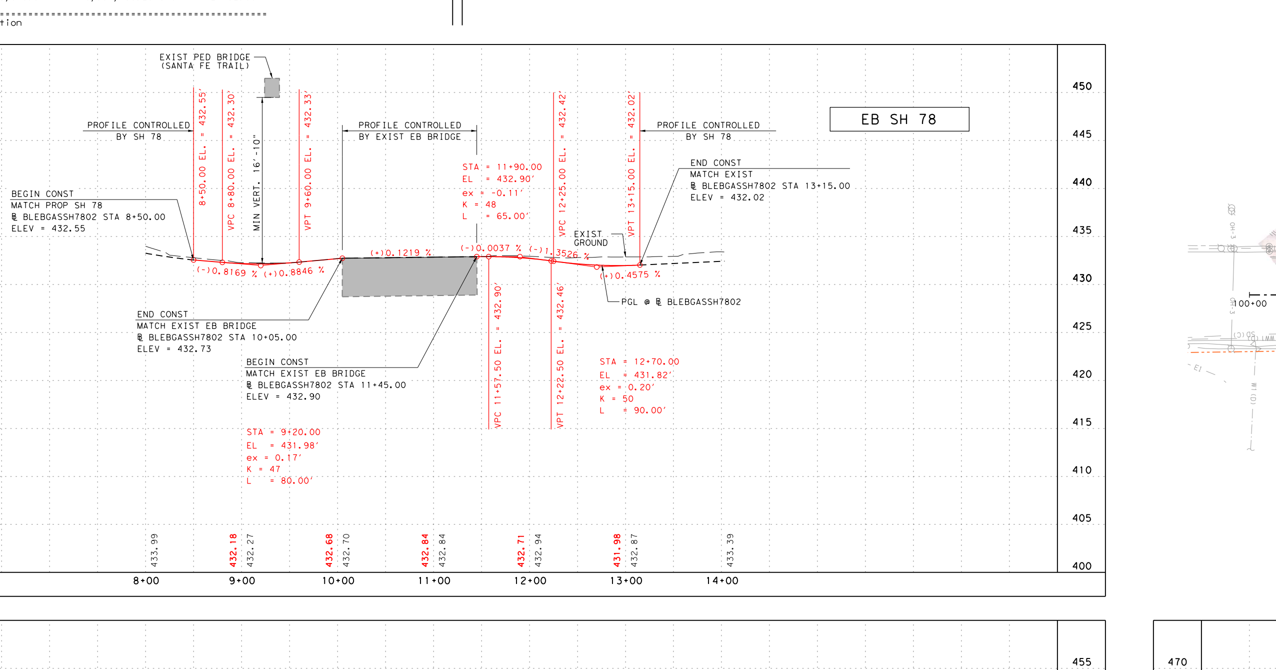
Curve Data

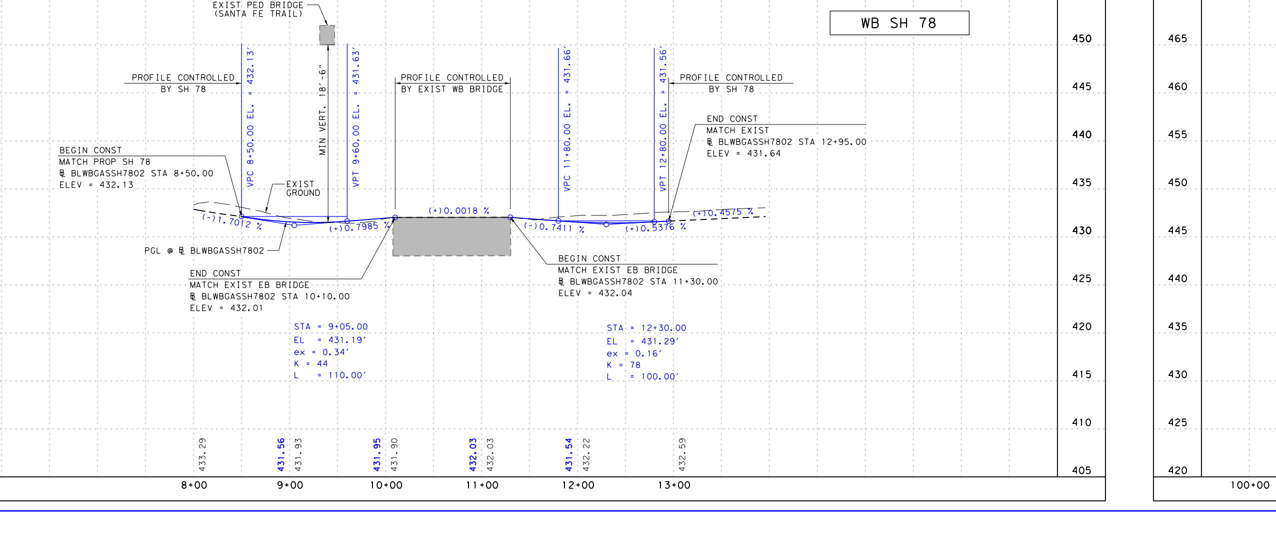
Curve CLSH78021					
P.I. Station	107+89.52	X	2,512,694.83	Y	6,983,482.09
Delta =	33° 13' 13.42" (LT)				
Degree =	28° 38' 52.40"				
Tangent =	59.66				
Length =	115.96				
Radius =	200.00				
External =	8.71				
Long Chord =	114.34				
Mid. Ord. =	8.35				
P.C. Station	107+29.86	X	2,512,656.65	Y	6,983,436.24
P.T. Station	108+45.82	X	2,512,701.64	Y	6,983,541.36
C.C.		X	2,512,502.95	Y	6,983,564.21
Back =	N 39° 46' 50.45" E				
Ahead =	N 6° 33' 37.03" E				
Chord Bear =	N 23° 10' 13.74" E				

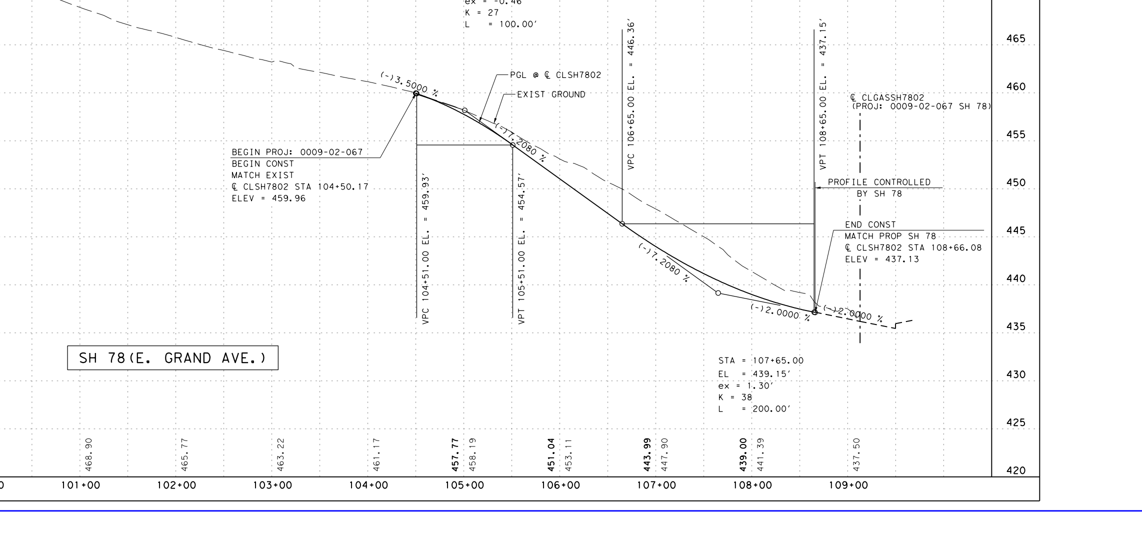
Course from PT CLSH78021 to CLSH7802101 N 6° 33' 37.03" E Dist 67.09

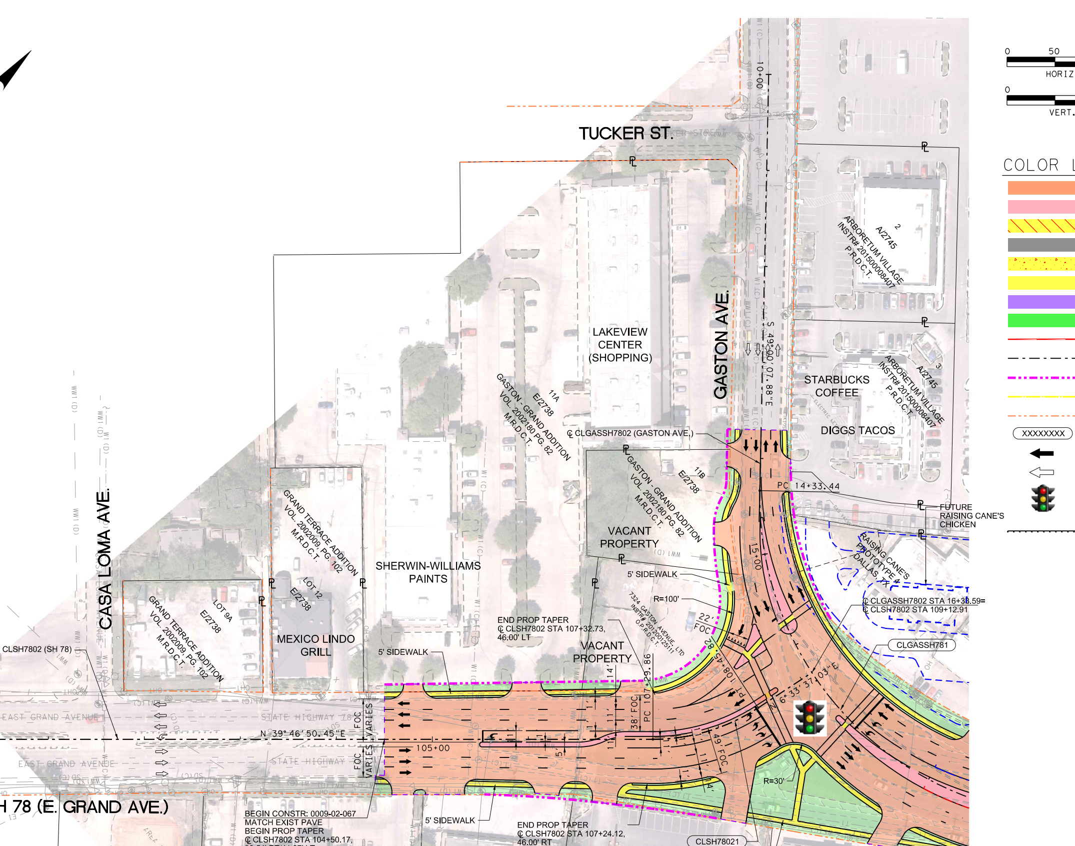
Point CLSH7802101 X 2,512,709.31 Y 6,983,608.01 Sta 109+12.91

Ending chain CLSH7802 description









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