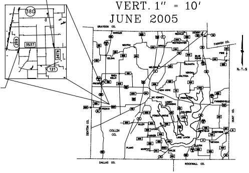
TEXAS DEPT. OF TRANSPORTATION
DALLAS DISTRICT
WILLIAM L. HALE, P.E., DISTRICT ENGINEER

DESIGN SCHEMATIC
F.M. 3537
FROM: S.H. 289
TO: F.M. 2478
COLLIN COUNTY
URBAN COLLECTOR
CSJ: 0135-12-025
PROJECT LENGTH = 4.09 MI.
DESIGN SPEED: 45 MPH
SCALE: HORIZ. 1" = 100'
VERT. 1" = 10'
JUNE 2005

END PROJECT STA 334+75



380
289
3537
2478
121
GRAYSON CO.
FANNIN CO.
DENTON CO.
COLLIN CO.
HUNT CO.
DALLAS CO.
ROCKWALL CO.
CELINA
PROSPER
FRISCO
MCKINNEY
ALLEN
PLANO
MURPHY
WYLIE
PARKER
LUCAS
PRINCETON
FARMERSVILLE
NEVADA
LAVON
N.T.S

BEGIN PROJECT STA 120+40

NOT A BIDDING DOCUMENT	ENGINEER: JOE CARTER P.E. NUMBER: 64008 DATE: JUNE 8, 2005

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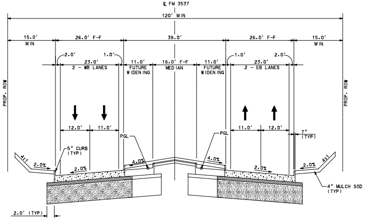
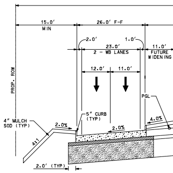


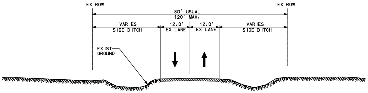
℄ FM 3537
120' MIN
15.0' MIN
26.0' F-F
38.0'
26.0' F-F
15.0' MIN
2.0'
1.0'
23.0'
2 - WB LANES
11.0'
FUTURE WIDENING
16.0' F-F
MEDIAN
11.0'
FUTURE WIDENING
1.0'
23.0'
2 - EB LANES
2.0'
PROP. ROW
PROP. ROW
12.0'
11.0'
11.0'
12.0'
7" (TYP)
PGL
PGL
5" CURB (TYP)
4:1
2.0%
2.0%
4.0%
4.0%
2.0%
2.0%
4:1
4" MULCH SOD (TYP)
2.0' (TYP)

FM 3537 TYPICAL SECTION
(NTS)



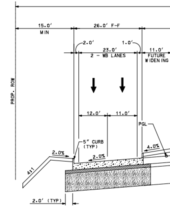
15.0' MIN
26.0' F-F
2.0'
1.0'
23.0'
2 - WB LANES
11.0'
FUTURE WIDENING
PROP. ROW
12.0'
11.0'
PGL
4" MULCH SOD (TYP)
5" CURB (TYP)
2.0%
2.0%
4.0%
4:1
2.0' (TYP)

FM 3537 TYPICAL SE



EX ROW
EX ROW
80' USUAL
120' MAX.
VARIES SIDE DITCH
12.0' EX LANE
12.0' EX LANE
VARIES SIDE DITCH
EXIST GROUND

FM 3537 EXISTING TYPICAL SECTION
(NTS)



15.0' MIN
26.0' F-F
2.0'
1.0'
23.0'
2 - WB LANES
11.0'
FUTURE WIDENING
PROP. ROW
12.0'
11.0'
PGL
5" CURB (TYP)
2.0%
2.0%
4.0%
4:1
2.0' (TYP)

FM 3537 TYPICAL SEC
AND ONE

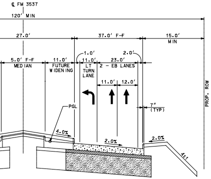
LEGEND

EDGE OF PROP PAVEMENT	―
EXIST ROW	―
PROP ROW	―
PROP CENTERLINE	―
FUTURE CITY STREET EXPANSION	―
DRAINAGE EASEMENT	―
ASPHALT TRANSITION	■

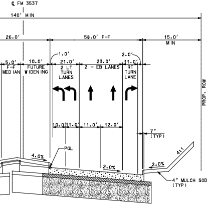
SCALE 1:100

12400 – 2001 ADT
21200 – 2021 ADT

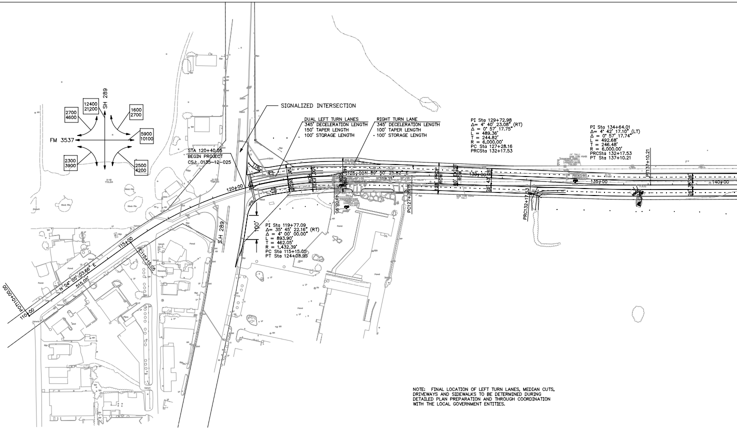
NOTE: SOURCE OF TRAFFIC DATA TRANSPORTATION PLANNING AND PROGRAMMING DIVISION.


℄ FM 3537
120' MIN
27.0'
37.0' F-F
15.0' MIN
5.0' F-F MEDIAN
11.0' FUTURE WIDENING
1.0'
11.0' LT TURN LANE
2.0'
23.0' 2 - EB LANES
11.0'
12.0'
PGL
7" (TYP)
PROP. ROW
4.0%
2.0%
2.0%
4:1

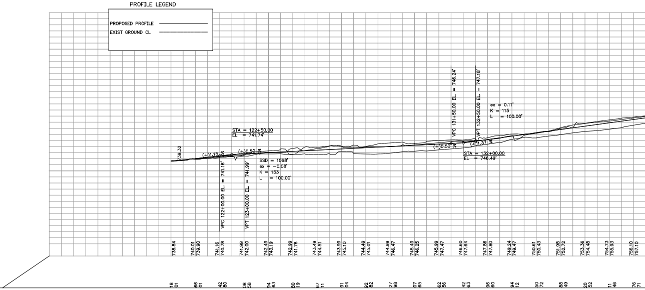
CTION WITH ONE LEFT TURN LANE
(NTS)

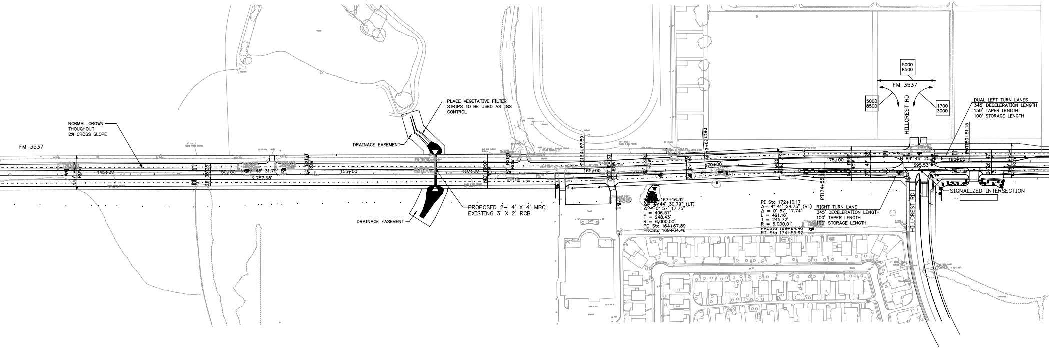

℄ FM 3537
140' MIN
26.0'
58.0' F-F
15.0' MIN
5.0' F-F MEDIAN
10.0' FUTURE WIDENING
1.0'
21.0' 2 LT TURN LANES
23.0' 2 - EB LANES
2.0'
11.0' RT TURN LANE
10.0'
11.0'
11.0'
12.0'
PGL
7" (TYP)
PROP. ROW
4.0%
2.0%
2.0%
4:1
4" MULCH SOD (TYP)

TION WITH TWO LEFT TURN LANES
E RIGHT TURN LANE
(NTS)

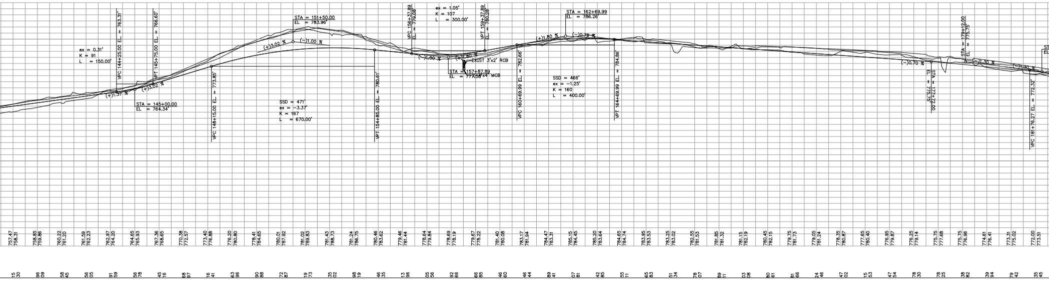

SH 289
FM 3537
12400
21200
1600
2700
2700
4600
5900
10100
2300
3900
2500
4200
SIGNALIZED INTERSECTION
DUAL LEFT TURN LANES
345' DECELERATION LENGTH
150' TAPER LENGTH
100' STORAGE LENGTH
RIGHT TURN LANE
345' DECELERATION LENGTH
100' TAPER LENGTH
100' STORAGE LENGTH
PI Sta 129+72.98
Δ= 4° 40' 23.08" (RT)
Δ = 0° 57' 17.75"
L = 489.36'
T = 244.82'
R = 6,000.00'
PC Sta 127+28.16
PRCSta 132+17.53
PI Sta 134+64.01
Δ= 4° 42' 17.10" (LT)
Δ = 0° 57' 17.74"
L = 492.68'
T = 246.48'
R = 6,000.00'
PRCSta 132+17.53
PT Sta 137+10.21
STA 120+40.05
BEGIN PROJECT
CSJ: 0135-12-025
PI Sta 119+77.09
Δ= 35° 45' 22.16" (RT)
Δ = 4° 00' 00.00"
L = 893.90'
T = 462.05'
R = 1,432.39'
PC Sta 115+15.05
PT Sta 124+08.95
N 54° 05' 03.66" E
515.05'
N 89° 50' 25.82" E
POT110+00.00
110+00
115+00
120+00
125+00
130+00
135+00
140+00
PC115+15.05
PC127+28.16
PRC132+17.53
PT137+10.21
S.H 289
100'
100' EXIST ROW
140' PROP ROW
120' PROP ROW
80' EXIST ROW
26'
43'
26'
38'

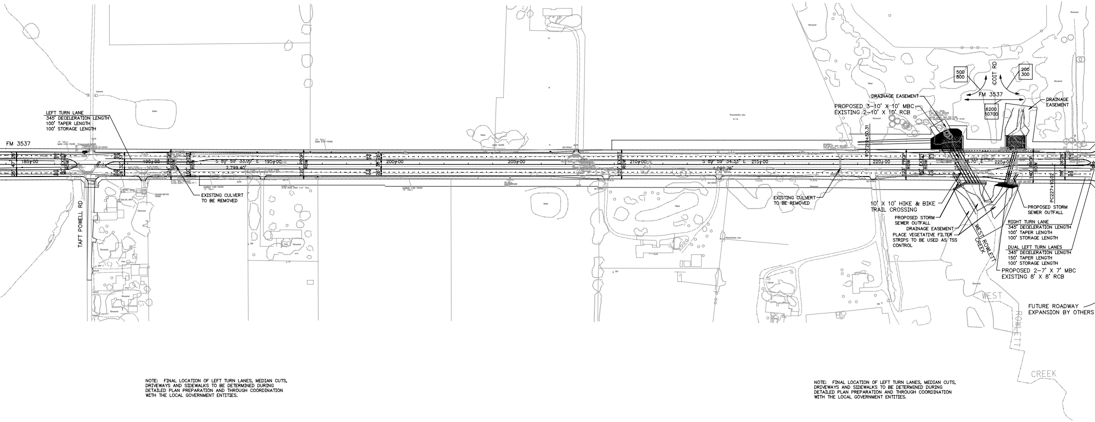
NOTE: FINAL LOCATION OF LEFT TURN LANES, MEDIAN CUTS, DRIVEWAYS AND SIDEWALKS TO BE DETERMINED DURING DETAILED PLAN PREPARATION AND THROUGH COORDINATION WITH THE LOCAL GOVERNMENT ENTITIES.




FM 3537
NORMAL CROWN THOUGHOUT 2% CROSS SLOPE
PLACE VEGETATIVE FILTER STRIPS TO BE USED AS TSS CONTROL
DRAINAGE EASEMENT
DRAINAGE EASEMENT
PROPOSED 2- 4' X 4' MBC
EXISTING 3' X 2' RCB
145+00
150+00
155+00
160+00
165+00
170+00
175+00
180+00
N 89° 48' 31.78" E
2,757.68'
595.53'
140' PROP ROW
80' EXIST ROW
PI 167+16.32
Δ= 4° 44' 30.79" (LT)
Δ = 0° 57' 17.75"
L = 496.57'
T = 248.43'
R = 6,000.00'
PC Sta 164+67.89
PRCSta 169+64.46
PI Sta 172+10.17
Δ= 4° 41' 24.75" (RT)
Δ = 0° 57' 17.74"
L = 491.16'
T = 245.72'
R = 6,000.01'
PRCSta 169+64.46
PT Sta 174+55.62
RIGHT TURN LANE
345' DECELERATION LENGTH
100' TAPER LENGTH
100' STORAGE LENGTH
PT174+55.62
PC164+67.89
PRC169+64.46
POT180+51.15
5000
8500
FM 3537
5000
8500
1700
3000
HILLCREST RD
HILLCREST RD
DUAL LEFT TURN LANES
345' DECELERATION LENGTH
150' TAPER LENGTH
100' STORAGE LENGTH
SIGNALIZED INTERSECTION

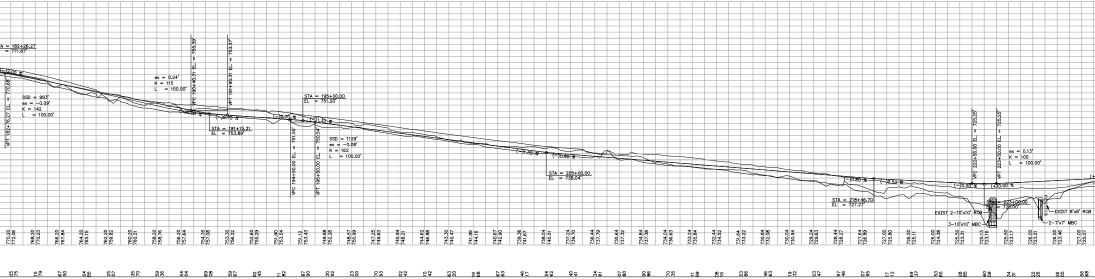
NOTE: FINAL LOCATION OF LEFT TURN LANES, MEDIAN CUTS, DRIVEWAYS AND SIDEWALKS TO BE DETERMINED DURING DETAILED PLAN PREPARATION AND THROUGH COORDINATION WITH THE LOCAL GOVERNMENT ENTITIES.

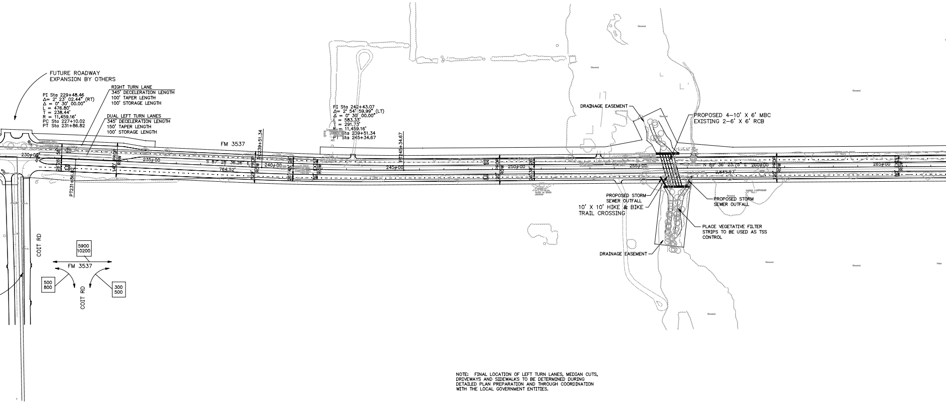

ex = 0.31'
K = 91
L = 150.00'
VPC 144+25.00 EL. = 763.31'
VPT 145+75.00 EL. = 766.60'
(+)1.37 %
(+)3.02 %
STA = 145+00.00
EL = 764.34'
VPC 148+15.00 EL. = 773.85'
SSD = 471'
ex = -3.37'
K = 167
L = 670.00'
STA = 151+50.00
EL = 783.96'
(+)3.02 %
(-)1.00 %
VPT 154+85.00 EL. = 780.61'
VPC 156+37.89 EL. = 779.08'
ex = 1.05'
K = 107
L = 300.00'
VPT 159+37.89 EL. = 780.28'
(-)1.00 %
(+)1.80 %
EXIST 3'x2' RCB
STA = 157+87.89
EL = 777.58'
2-4'x4' MCB
VPC 160+69.99 EL. = 782.66'
SSD = 466'
ex = -1.25'
K = 160
L = 400.00'
STA = 162+69.99
EL = 786.26'
(+)1.80 %
(-)0.76 %
VPT 164+69.99 EL. = 784.86'
(-)0.70 %
STA = 177+72.00
EL = 775.75'
STA = 179+12.00
EL = 775.75'
(-)1.30 %
(-)1.30 %
VPC 181+76.27 EL. = 772.32'


FM 3537
LEFT TURN LANE
345' DECELERATION LENGTH
100' TAPER LENGTH
100' STORAGE LENGTH
TAFT POWELL RD
EXISTING CULVERT TO BE REMOVED
S 89° 59' 33.09" E
2,799.40'
S 89° 59' 34.33" E
185+00
190+00
195+00
200+00
205+00
210+00
215+00
220+00
225+00
EXISTING CULVERT TO BE REMOVED
PROPOSED 3-10' X 10' MBC
EXISTING 2-10' X 10' RCB
DRAINAGE EASEMENT
COIT RD
FM 3537
500
800
200
300
6200
10700
DRAINAGE EASEMENT
10' X 10' HIKE & BIKE TRAIL CROSSING
PROPOSED STORM SEWER OUTFALL
DRAINAGE EASEMENT
PLACE VEGETATIVE FILTER STRIPS TO BE USED AS TSS CONTROL
PROPOSED STORM SEWER OUTFALL
RIGHT TURN LANE
345' DECELERATION LENGTH
100' TAPER LENGTH
100' STORAGE LENGTH
DUAL LEFT TURN LANES
345' DECELERATION LENGTH
150' TAPER LENGTH
100' STORAGE LENGTH
PROPOSED 2-7' X 7' MBC
EXISTING 8' X 8' RCB
WEST ROWLETT CREEK
WEST ROWLETT CREEK
FUTURE ROADWAY EXPANSION BY OTHERS
PC227+10.02

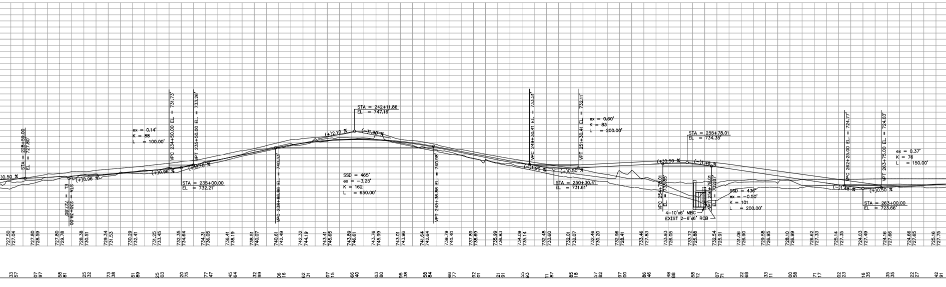
NOTE: FINAL LOCATION OF LEFT TURN LANES, MEDIAN CUTS, DRIVEWAYS AND SIDEWALKS TO BE DETERMINED DURING DETAILED PLAN PREPARATION AND THROUGH COORDINATION WITH THE LOCAL GOVERNMENT ENTITIES.

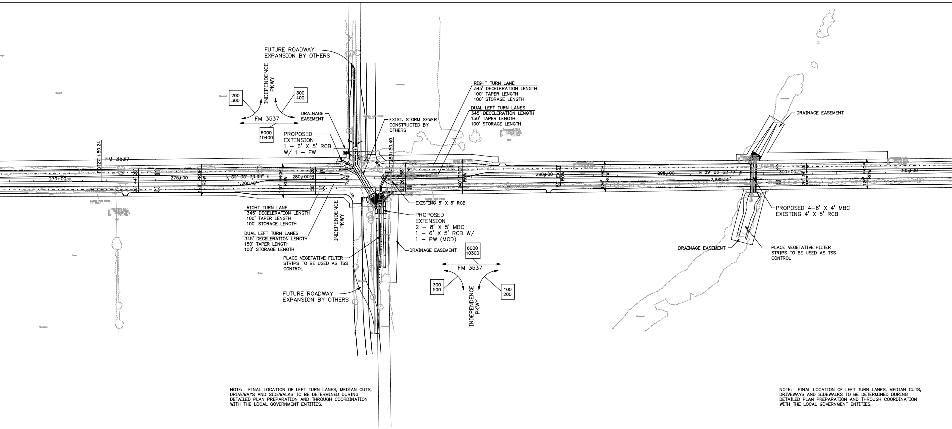
NOTE: FINAL LOCATION OF LEFT TURN LANES, MEDIAN CUTS, DRIVEWAYS AND SIDEWALKS TO BE DETERMINED DURING DETAILED PLAN PREPARATION AND THROUGH COORDINATION WITH THE LOCAL GOVERNMENT ENTITIES.




FUTURE ROADWAY
EXPANSION BY OTHERS
PI Sta 229+48.46
Δ= 2° 23' 02.44" (RT)
Δ = 0° 30' 00.00"
L = 476.80'
T = 238.44'
R = 11,459.16'
PC Sta 227+10.02
PT Sta 231+86.82
RIGHT TURN LANE
345' DECELERATION LENGTH
100' TAPER LENGTH
100' STORAGE LENGTH
DUAL LEFT TURN LANES
345' DECELERATION LENGTH
150' TAPER LENGTH
100' STORAGE LENGTH
FM 3537
PI Sta 242+43.07
Δ= 2° 54' 59.99" (LT)
Δ = 0° 30' 00.00"
L = 583.33'
T = 291.73'
R = 11,459.16'
PC Sta 239+51.34
PT Sta 245+34.67
PC 239+51.34
PT 245+34.67
S 87° 28' 36.26"
764.52'
N 89° 36' 23.75" E
2,645.57'
230+00
235+00
240+00
245+00
250+00
255+00
260+00
265+00
PT 231+86.82
PROP ROW
EXIST ROW
DRAINAGE EASEMENT
PROPOSED 4-10' X 6' MBC
EXISTING 2-6' X 6' RCB
PROPOSED STORM SEWER OUTFALL
10' X 10' HIKE & BIKE TRAIL CROSSING
PROPOSED STORM SEWER OUTFALL
PLACE VEGETATIVE FILTER STRIPS TO BE USED AS TSS CONTROL
DRAINAGE EASEMENT
COIT RD
5900
10200
FM 3537
500
800
COIT RD
300
500

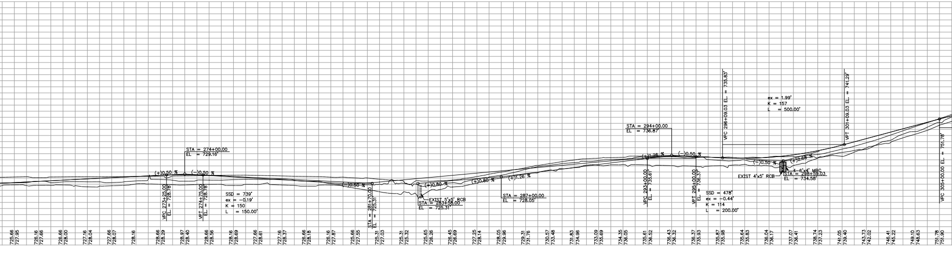
NOTE: FINAL LOCATION OF LEFT TURN LANES, MEDIAN CUTS, DRIVEWAYS AND SIDEWALKS TO BE DETERMINED DURING DETAILED PLAN PREPARATION AND THROUGH COORDINATION WITH THE LOCAL GOVERNMENT ENTITIES.

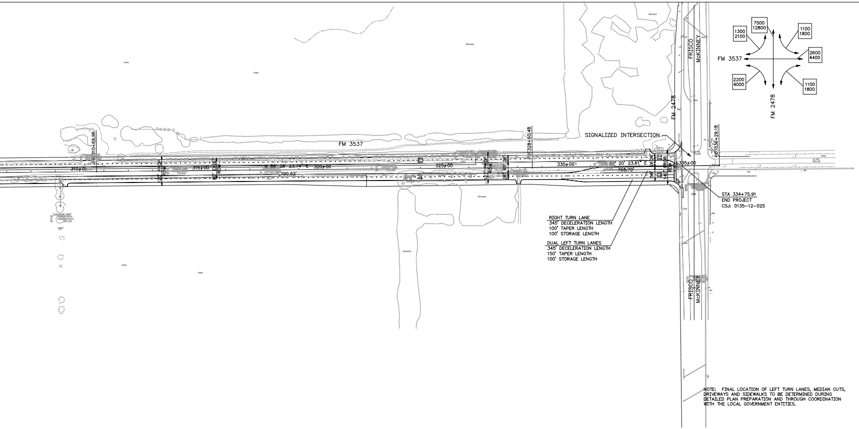



FUTURE ROADWAY EXPANSION BY OTHERS
INDEPENDENCE PKWY
200
300
300
400
FM 3537
6000
10400
DRAINAGE EASEMENT
PROPOSED EXTENSION
1 – 6' X 5' RCB
W/ 1 – FW
EXIST. STORM SEWER CONSTRUCTED BY OTHERS
RIGHT TURN LANE
345' DECELERATION LENGTH
100' TAPER LENGTH
100' STORAGE LENGTH
DUAL LEFT TURN LANES
345' DECELERATION LENGTH
150' TAPER LENGTH
100' STORAGE LENGTH
FM 3537
PC 271+80.24
270+00
275+00
N 89° 30' 39.99" E
1,200.16'
280+00
128' PROP ROW
140' PROP ROW
PC 283+30.40
285+00
290+00
80' EXIST ROW
126' PROP ROW
295+00
N 89° 23' 23.79" E
2,680.56'
300+00
120' PROP ROW
305+00
DRAINAGE EASEMENT
PROPOSED 4–6' X 4' MBC
EXISTING 4' X 5' RCB
DRAINAGE EASEMENT
PLACE VEGETATIVE FILTER STRIPS TO BE USED AS TSS CONTROL
RIGHT TURN LANE
345' DECELERATION LENGTH
100' TAPER LENGTH
100' STORAGE LENGTH
DUAL LEFT TURN LANES
345' DECELERATION LENGTH
150' TAPER LENGTH
100' STORAGE LENGTH
INDEPENDENCE PKWY
EXISTING 5' X 5' RCB
PROPOSED EXTENSION
2 – 8' X 5' MBC
1 – 6' X 5' RCB W/
1 – PW (MOD)
PLACE VEGETATIVE FILTER STRIPS TO BE USED AS TSS CONTROL
DRAINAGE EASEMENT
6000
10300
FM 3537
300
500
100
200
INDEPENDENCE PKWY
FUTURE ROADWAY EXPANSION BY OTHERS

NOTE: FINAL LOCATION OF LEFT TURN LANES, MEDIAN CUTS, DRIVEWAYS AND SIDEWALKS TO BE DETERMINED DURING DETAILED PLAN PREPARATION AND THROUGH COORDINATION WITH THE LOCAL GOVERNMENT ENTITIES.

NOTE: FINAL LOCATION OF LEFT TURN LANES, MEDIAN CUTS, DRIVEWAYS AND SIDEWALKS TO BE DETERMINED DURING DETAILED PLAN PREPARATION AND THROUGH COORDINATION WITH THE LOCAL GOVERNMENT ENTITIES.


STA = 274+00.00
EL = 729.16'
(+)0.50 %
(−)0.50 %
VPC 273+25.00 EL. = 728.78'
VPT 274+75.00 EL. = 728.78'
SSD = 739'
ex = −0.19'
K = 150
L = 150.00'
(−)0.50 %
STA = 281+70.00 EL = 725.31'
(+)0.80 %
EXIST 5'x5' RCB
STA = 283+58.00
EL = 725.31'
(+)0.80 %
(+)1.26 %
STA = 287+00.00
EL = 728.05'
STA = 294+00.00
EL = 736.87'
(+)1.26 %
(−)0.50 %
VPC 293+00.00 EL. = 735.61'
VPT 295+00.00 EL. = 736.37'
SSD = 478'
ex = −0.44'
K = 114
L = 200.00'
VPC 296+09.03 EL. = 735.83'
ex = 1.99'
K = 157
L = 500.00'
VPT 301+09.03 EL. = 741.29'
(−)0.50 %
(+)2.68 %
4–6'x4' MBC
EXIST 4'x5' RCB
STA = 298+59.03
EL = 734.58'
VPC 305+00.00 EL. = 751.78'
725.66 727.95
726.16 727.66
726.66 728.00
727.16 728.04
727.66 728.07
728.16
728.66 728.29
728.97 728.40
728.66 728.56
728.16 728.69
727.66 728.61
727.16 728.37
726.66 728.18
726.16 727.87
725.66 727.55
725.31 727.03
725.31 725.32
725.65 726.26
726.45 726.69
727.25 728.14
728.05 729.96
729.31 731.76
730.57 733.48
731.83 734.96
733.09 735.69
734.35 736.05
735.61 736.52
736.43 736.32
736.37 735.93
735.87 735.98
735.64 735.83
736.04 736.17
737.07 736.41
738.74 737.23
741.05 739.40
743.73 742.02
746.41 745.22
749.10 748.63
751.78 751.90


FM 3537
310+00
315+00
320+00
325+00
330+00
335+00
N 89° 28' 23.74" E
700.92'
20' 23.61" E
768.70'
PC 310+69.96
PC 328+60.48
PC 336+29.18
PROP ROW
EXIST ROW
FM 2478
FRISCO
McKINNEY
SIGNALIZED INTERSECTION
FM 3537
FM 2478
7500
12800
1300
2100
1100
1800
2600
4400
2200
4000
1100
1800

RIGHT TURN LANE
345' DECELERATION LENGTH
100' TAPER LENGTH
100' STORAGE LENGTH

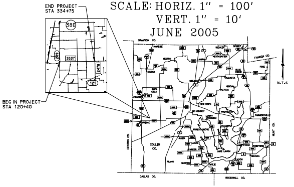
DUAL LEFT TURN LANES
345' DECELERATION LENGTH
150' TAPER LENGTH
100' STORAGE LENGTH

STA 334+75.91
END PROJECT
CSJ: 0135-12-025

NOTE: FINAL LOCATION OF LEFT TURN LANES, MEDIAN CUTS, DRIVEWAYS AND SIDEWALKS TO BE DETERMINED DURING DETAILED PLAN PREPARATION AND THROUGH COORDINATION WITH THE LOCAL GOVERNMENT ENTITIES.

TEXAS DEPT. OF TRANSPORTATION
DALLAS DISTRICT
WILLIAM L. HALE, P.E., DISTRICT ENGINEER

DESIGN SCHEMATIC
F.M. 3537
FROM: S.H. 289
TO: F.M. 2478
COLLIN COUNTY
URBAN COLLECTOR
CSJ: 0135-12-025
PROJECT LENGTH = 4.09 MI.
DESIGN SPEED: 45 MPH
SCALE: HORIZ. 1" = 100'
VERT. 1" = 10'
JUNE 2005


END PROJECT
STA 334+75
BEGIN PROJECT
STA 120+40
380
289
3537
2478
121
GRAYSON CO.
FANNIN CO.
COLLIN CO.
DENTON CO.
HUNT CO.
DALLAS CO.
ROCKWALL CO.
PLANO
MURPHY
PARKER
LAKE LAVON
NEVADA
N.T.S

NOT A BIDDING DOCUMENT	ENGINEER: JOE CARTER P.E. NUMBER: 64008 DATE: JUNE 8, 2005

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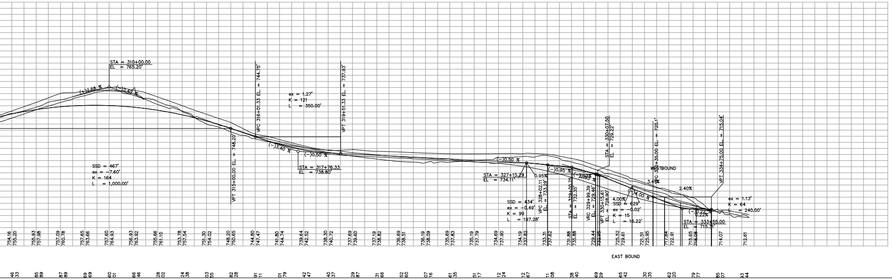
STA = 310+00.00
EL = 765.20'
(+)2.68 %
(−)3.40 %
SSD = 467'
ex = −7.60'
K = 164
L = 1,000.00'
VPT 315+00.00 EL. = 748.20'
VPC 316+01.33 EL. = 744.75'
ex = 1.27'
K = 121
L = 350.00'
VPT 319+51.33 EL. = 737.93'
(−)3.40 %
(−)0.50 %
STA = 317+76.33
EL = 738.80'
(−)0.50 %
STA = 327+15.29
EL = 734.11'
0.95%
(−)0.95 %
SSD = 434'
ex = −0.49'
K = 99
L = 197.28'
VPC 328+02.11
EL. = 733.29'
STA = 329+00.75
EL = 732.35'
VRC 329+99.39
EL. = 729.46'
VPT 330+15.61
EL. = 728.90'
STA = 330+07.50
EL = 729.22'
4.00%
SSD = 629'
ex = −0.02'
K = 15
L = 16.22'
(−)4.00 %
VPC 332+35.00 EL. = 720.1'
WESTBOUND
3.41%
2.40%
VPT 334+75.00 EL. = 715.04'
STA = 333+55.00
EL = 715.31'
(−)0.22 %
0.22%
ex = 1.13'
K = 64
L = 240.00'
754.16
755.20
755.93
757.98
757.09
760.78
757.65
763.66
757.60
764.93
756.93
763.92
755.66
761.10
753.78
757.54
751.30
754.02
748.20
750.65
744.80
747.47
741.80
744.74
739.64
742.52
738.30
740.72
737.69
739.60
737.19
738.82
736.69
738.51
736.19
738.09
735.69
737.83
735.19
737.79
734.69
737.90
734.19
737.82
733.31
737.62
731.88
735.88
729.44
732.95
725.52
729.61
721.51
725.95
717.84
722.91
715.65
718.08
714.07
712.61
EAST BOUND

LEGEND

EDGE OF PROP PAVEMENT	—
EXIST ROW	—
PROP ROW	—
PROP CENTERLINE	—
FUTURE CITY STREET EXPANSION	—
DRAINAGE EASEMENT	—
ASPHALT TRANSITION	■

12400 – 2001 ADT
21200 – 2021 ADT

NOTE: SOURCE OF TRAFFIC DATA TRANSPORTATION PLANNING AND PROGRAMMING DIVISION.