Texas Department of Transportation

DALLAS DISTRICT

MOHAMED K. BUR, P.E.
DISTRICT ENGINEER

DESIGN SCHEMATIC SH 5

FROM: SOUTH OF CR 275 TO: SOUTH OF MELISSA RD

COLLIN COUNTY

FUNCTIONAL CLASSIFICATIONS	
URBAN PRINCIPAL ARTERIAL	SH 121 MAINLANE, SH 5 MAINLAINE, RAMPS
URBAN COLLECTOR	CR 338(FANNIN RD)
URBAN/RURAL LOCAL	ALL OTHER STREETS

DESIGN SPEED	
45 MPH	SH 121 MAINLANE
40 MPH	SH 5 MAINLAINE, RAMPS
30 MPH	ALL OTHER STREETS

PROJECT LENGTH

2.48 MI

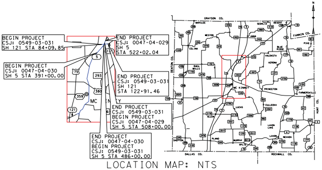
CSJ LIMITS

0047-04-030: FROM SOUTH OF CR 275 TO SOUTH OF SH 121
0549-03-031: FROM SH 5 SOUTH TO EAST OF SH 5 NORTH
0047-04-029: FROM NORTH OF SH 121 TO SOUTH OF MELISSA RD

HORIZ. SCALE IN FEET
0 50 100 150 200
0 10 20 30 40
VERT. SCALE IN FEET

BASIS OF DESIGN: TxDOT ROADWAY DESIGN MANUAL 2018
EQUATIONS: NONE
RAILROADS: NONE
DESIGN EXCEPTIONS:
DESIGN SPEED AT ONE LOCATION

TIME: 6:06:21 PM
PEN TABLE - SH5*TxDOT*McKinney*Schematic.tbl


BEGIN PROJECT
CSJ: 0549-03-031
SH 121 STA 84+09.85
END PROJECT
CSJ: 0047-04-029
SH 5
STA 522+02.04
BEGIN PROJECT
CSJ: 0047-04-030
SH 5 STA 391+00.00
END PROJECT
CSJ: 0549-03-031
SH 121
STA 122+91.46
END PROJECT
CSJ: 0549-03-031
BEGIN PROJECT
CSJ: 0047-04-029
SH 5 STA 508+00.00
END PROJECT
CSJ: 0047-04-030
BEGIN PROJECT
CSJ: 0549-03-031
SH 5 STA 486+00.00
5
75
293
380
359
121
MC KINNEY
GRAYSON CO.
FANNIN CO.
DENTON CO.
DALLAS CO.
ROCKWALL CO.
N

LOCATION MAP: NTS

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
4/20/2020

APRIL 15, 2020

INDEX OF ROLLS

- ROLL 1 OF 5 PLAN & PROFILE SH 5 STA BEG PROJ TO STA 425+00
- ROLL 2 OF 5 PLAN & PROFILE SH 5 STA 425+00 TO STA 467+00
- ROLL 3 OF 5 PLAN & PROFILE SH 5 STA 467+00 TO STA END PROJ
- ROLL 4 OF 5 PLAN & PROFILE SH 121 STA 84+09.85 TO STA 122+91.46
- ROLL 5 OF 5 PROFILE RAMPS AND CROSS STREETS

Michael Baker
INTERNATIONAL

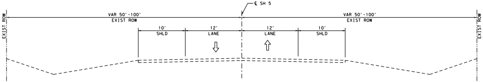
1501 LBJ Freeway,
Suite 650,
Dallas, TX 75234
TBPE Registration No. F-2677

PLAN & PROFILE
SH 5
BEGIN PROJ TO STA 425+00

ROLL 1 OF 5 ROLLS

DESIGNED BY:	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		ROLL NO.
BAKER	6	XX (XX) XXXX		S-001
DRAWN BY:	STATE	DIST.	COUNTY	
BAKER	TEXAS	DAL	COLLIN	
CHECKED BY:	CONT	SEC	JOB	HIGHWAY NO.
BAKER	0047	04	029, etc.	SH 5

DATE: 4/20/2020
FILE: ...\5RPP00*N101.dgn
ROLLPLOT - V8i*BAKER*WIN*CO*PDF.pltcfg

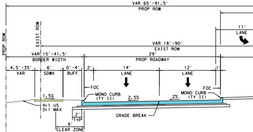

℄ SH 5
EXIST ROW
VAR 50'-100'
EXIST ROW
VAR 50'-100'
EXIST ROW
EXIST ROW
10'
SHLD
12'
LANE
12'
LANE
10'
SHLD

EXISTING TYPICAL SECTION
SH 5
STA 391+00.00 TO END
NTS

PROPERTY OWNERS

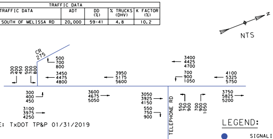
SOURCE:
COLLIN COUNTY APPRAISAL DISTRICT
JULY 2019

ID#	SITE ADDRESS	OWNER	BUSINESS NAME
247	5310 N MCDONALD ST	WOOLARD LLC - CAR LOT SERIES	BURLS USED CARS
247A	673 LACORE LN	LACORE RENTAL PROPERTIES LLC	
247B	3239 COUNTY ROAD 275	LEGENDARY LIGHTNING GROUP INC	
248	3248 COUNTY ROAD 275	DEANNE AMY ESCAMILLA	
249	N MCDONALD ST	BILLY DENSMORE	
250	5467 N MCDONALD ST	GILBERT & ALICA PADRON	
251	630 COUNTY ROAD 278	BILLY HARRIS	
252	N MCDONALD ST	BILLY DENSMORE	
253	5467 N MCDONALD ST	GILBERT & ALICA PADRON	
254	MELISSA, TX 75454	MCKINNEY PARTNERS 306 LP	
255	5523 N MCDONALD ST	CHRISTOPHER GING	
256	5550 N MCDONALD ST	413 SOVEREIGN HOMES LLC	XOOM AUTOS & A&M SERVICE TIRE SHOP
257	5559 N MCDONALD ST	LACORE RENTAL PROPERTIES LLC	
258	5604 N MCDONALD ST	C&F INVESTMENTS	5604-5610 N. MCDONALD/WAREHOUSE
259	5595 N MCDONALD ST	CHRISTOPHER YEAR-SING GING	
260	5671 N MCDONALD ST	THE DAVID & KELLIE WILLIAMS LIVING TRUST	
261	5668 N MCDONALD ST	WALTER & MARY BENNETT	
262	5728 N MCDONALD ST	MCLEMORE GARY WAYNE LIVING TRUST	
263	584 BREEZY HILL RD	LE & CORA LEE EVANS	
264	5818 N MCDONALD ST	M&M DEBRIS REMOVAL LLC	
265	651 BREEZY HILL RD	WOOLARD LLC - BREEZY HILL SERIES	
266	5849 N MCDONALD ST	5849 N MCDONALD LLC	
267	5852 N MCDONALD ST	ROBERT & KIMBERLY FARMIGONI	GREEN OAKS LANDSCAPRE & MAINTENANCE
268	5878 N MCDONALD ST	LEONEL III & MIGUEL ANGEL RUIZ & SANTIAGO RUIZ MEZA	MIKES GARAGE
269	5849 N MCDONALD ST	JOHN BASS &	
270	5906 N MCDONALD ST	CHRISTOPHER C & JULIANA J EASTERLING	N TEX ROOF SYSTEMS INC/PRISTINE AUTOMOTIVE
271	5919 N MCDONALD ST	LEONARD & ELISIA GONZALES	
272	5957 N MCDONALD ST	GENE F & MARIE C HENDRICKS	
273	5974 N MCDONALD ST	DAVIS HARRELL L & JOAN TRUSTEE	
274	5989 N MCDONALD ST	DRAFFEN PROPERTY MGMT LP	
275	6015 N MCDONALD ST	WILLIAM BURL & REBECCA S WOOLARD	
276	6084 N MCDONALD ST	SHARON MACKENZIE	
277	6029 N MCDONALD ST	TOWNSEND GROUP PROPERTIES LLC	SPORTRON
278	6126 N MCDONALD ST	HERBERT W & LOUETTA-LE DAVIS	
279	N MCDONALD ST	KSMI PROPERTIES	
280	6202 N MCDONALD ST	J B JR PLEASANT	


VAR 65'-91.5'
PROP ROW
PROP ROW
EXIST ROW
11'
LANE
VAR 18'-90'
EXIST ROW
VAR 15'-41.5'
BORDER WIDTH
29'
PROP ROADWAY
4.5'-35'
VAR
6'
SDWK
0'-4'
BUFF
2'
14'
LANE
12'
LANE
1'
FOC
FOC
MONO CURB
(TY II)
MONO CURB
(TY II)
1.5%
2.5%
2%
4:1 US
3:1 MAX
2'
TYP
6'
CLEAR ZONE
GRADE BREAK

1. SEE PLAN VIEW AND TURN LANE DETAIL TABLE FOR LOCATIONS OF TURN LANES
2. CROSS SLOPES SHOWN ARE USUAL. SEE CROSS SLOPE TRANSITION TABLE FOR MORE DETAIL.

TRAFFIC DATA				
TRAFFIC DATA	ADT	DD (%)	% TRUCKS (DHV)	K FACTOR (%)
US 380 TO SOUTH OF MELISSA RD	20,000	59-41	4.8	10.2


N
NTS
CR 275
500
700
800
300
400
450
500
700
800
3450
4475
4800
3950
5175
5600
3400
4425
4700
700
900
1050
4100
5325
5750
300
400
450
3100
3975
4250
3600
4675
5050
3050
3925
4150
550
750
900
TELEPHONE RD
550
750
900
700
900
1050
3750
5825
5200

SOURCE: TxDOT TP&P 01/31/2019

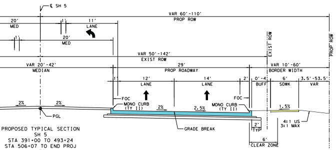
LEGEND:

- ● SIGNALIZED INTERSECTION
- XXX 2025 ADT
- XXX 2045 ADT
- XXX 2055 ADT

CHAIN NAME	CURVE NAME	P.I. STATION
℄ SH5	CLSH5-25	394+70.86
℄ SH5	CLSH5-26	415+77.89
℄ CR275	CLCR275-1	12+47.11

COLOR LEGEND

🟦	PROPOSED MAINLANES
🟧	PROPOSED BRIDGE
🟨	PROPOSED DRIVEWAY
🟪	PROPOSED CROSS STREET
🟫	PROPOSED RAMP
🟦	PROPOSED SIDEWALK AND PAVED MEDIAN
🟩	PROPOSED LANDSCAPED MEDIAN
🟧	FUTURE BY OTHERS
⬛	EXISTING BRIDGE TO REMAIN
⬜	100 YEAR FLOOD PLAIN
🟪	EXISTING PAVEMENT (BY OTHERS)
▨	EXISTING PAVEMENT TO BE REMOVED
⊠	POTENTIAL STRUCTURE DISPLACEMENT
—·—·—	CENTERLINE/BASELINE (CROSS STREETS)
—·—·—	CENTERLINE (MAINLANE)
—·—·—	PROPOSED ROW
—·—·—	CITY LIMITS
—·—·—	EXISTING ROW
———	PROPERTY LINES
—‖—	CONTROL OF ACCESS
┴┴┴┴	PROPOSED RETAINING WALL
—═—	PROPOSED SSCB
- - - -	PROPOSED COMBINATION RAIL
←	PROPOSED TRAFFIC FLOW
⇦	EXISTING TRAFFIC FLOW
←	WATER FLOW
XXXXX-XX	HORIZONTAL CURVE NAME
XXX	PROPERTY ID NUMBER
⊟	EXISTING DRAINAGE STRUCTURES
⊟	PROPOSED DRAINAGE STRUCTURES
	PROPOSED SIGNALIZED INTERSECTION


℄ SH 5
VAR 60'-110'
PROP ROW
20'
MED
1'
11'
LANE
1'
20'
MED
VAR 50'-142'
EXIST ROW
EXIST ROW
PROP ROW
VAR 20'-42'
MEDIAN
29'
PROP ROADWAY
VAR 10'-60'
BORDER WIDTH
1'
12'
LANE
14'
LANE
2'
0'-4'
BUFF
6'
SDWK
3.5'-53.5'
VAR
FOC
FOC
2%
2%
MONO CURB
(TY II)
2%
2.5%
MONO CURB
(TY II)
1.5%
PGL
GRADE BREAK
2'
TYP
4:1 US
3:1 MAX
6'
CLEAR ZONE

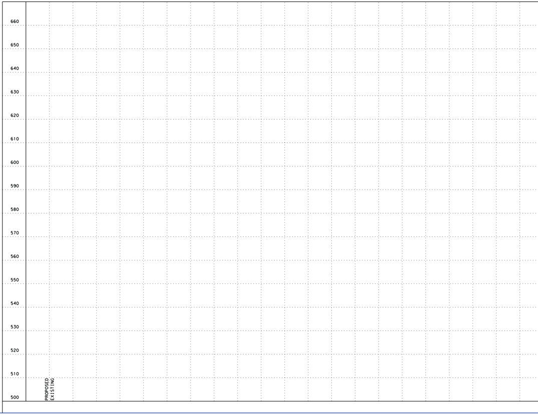
PROPOSED TYPICAL SECTION
SH 5
STA 391+00 TO 493+24
STA 506+07 TO END PROJ
NTS

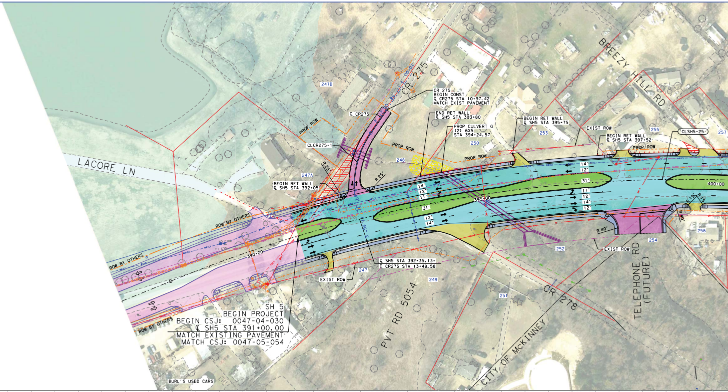
NOTES:

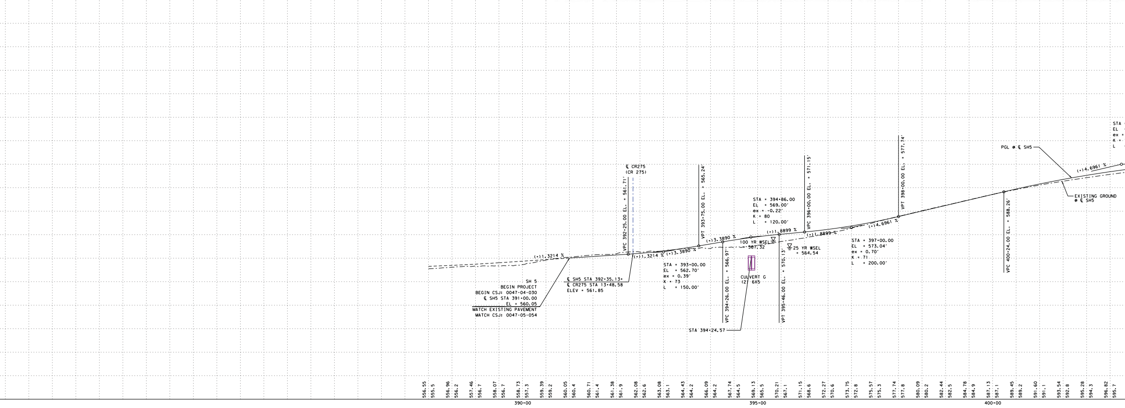
1. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT, FACE OF CURB, RAIL, UNLESS OTHERWISE NOTED.
2. MEDIAN OPENINGS WERE DETERMINED IN COORDINATION WITH LOCAL GOVERNMENT. FINAL LOCATION OF MEDIAN OPENINGS WILL BE DETERMINED IN THE PS&E DEVELOPMENT PHASE IN COORDINATION WITH THE LOCAL GOVERNMENT.
3. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL UNLESS OTHERWISE NOTED.
4. APPROXIMATE 100 YEAR FLOODPLAIN LIMITS ARE BASED UPON FEMA FLOOD INSURANCE RATE MAP 48085C020J (REV JUNE 7, 2017) AND 48085C0290J (REV JUNE 2, 20009) FOR WILSON CREEK, 48085C0165J (REV JUNE 2, 2009) AND 48085C0280J (REV JUNE 2, 2009) FOR EAST FORK TRINITY RIVER.
5. OWNERSHIP INFORMATION SHOWN ON SCHEMATIC OBTAINED FROM COLLIN COUNTY APPRAISAL DISTRICT OCTOBER 2017.
6. EXISTING CULVERT LOCATION, SIZE, AND ELEVATIONS OBTAINED FROM RECORD DOCUMENTS OR TOPOGRAPHIC SURVEY AND ARE SHOWN FOR INFORMATION PURPOSES ONLY.
7. ADA RAMPS ARE NOT DEPICTED IN THE PLAN.
8. FINAL DRIVEWAY LOCATIONS SHALL BE DETERMINED DURING DETAILED DESIGN IN COORDINATION WITH THE CITY OF McKINNEY.
9. ALL PRIVATE DRIVEWAYS HAVE CURB RADII OF 15FT, UNLESS OTHERWISE NOTED.
10. EXIST TOPO AND AERIAL PHOTOS PROVIDED BY TxDOT.
11. EXIST ROW SHOWN PROVIDED BY TxDOT.
12. PARCEL BOUNDARY LOCATIONS ARE APPROXIMATE AND SUBJECT TO CHANGE.
13. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE.
14. CURBS ON MAINLANES, FRONTAGE ROADS AND CROSS STREETS ARE TYPE II (MONO), UNLESS OTHERWISE SHOWN.
15. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
16. ALL HORIZONTAL COORDINATES ARE REFERENCED TO THE TEXAS COORDINATE SYSTEM, NORTH CENTRAL ZONE (4202), NORTH AMERICAN DATUM OF 1983 (NAD 83), 2011 ADJUSTMENT, 2010.00 EPOCH. SURFACE DISTANCES AND COORDINATES MAY BE CONVERTED TO GRID BY DIVIDING BY A COMBINED ADJUSTMENT FACTOR OF 1.000152710.
17. ALL COORDINATES AND ELEVATIONS ARE IN U.S. SURVEY FEET.
18. VERTICAL VALUES WERE DETERMINED BY THE TxDOT REAL TIME GPS NETWORK (RTN) (NAD 83 (2011, MA11, PA11) EPOCH 2010.00) WITH THE GEOID12A APPLIED.
19. DRIVEWAYS ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND ARE SUBJECT TO REVIEW, ADJUSTMENT AND/OR CONSOLIDATION BASED ON CORRIDOR ACCESS MANAGEMENT.

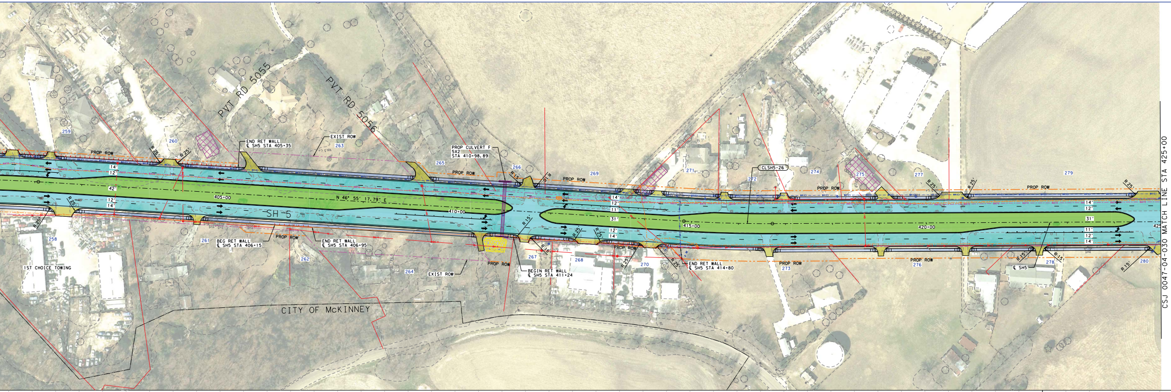
HORIZONTAL ALIGNMENT DATA

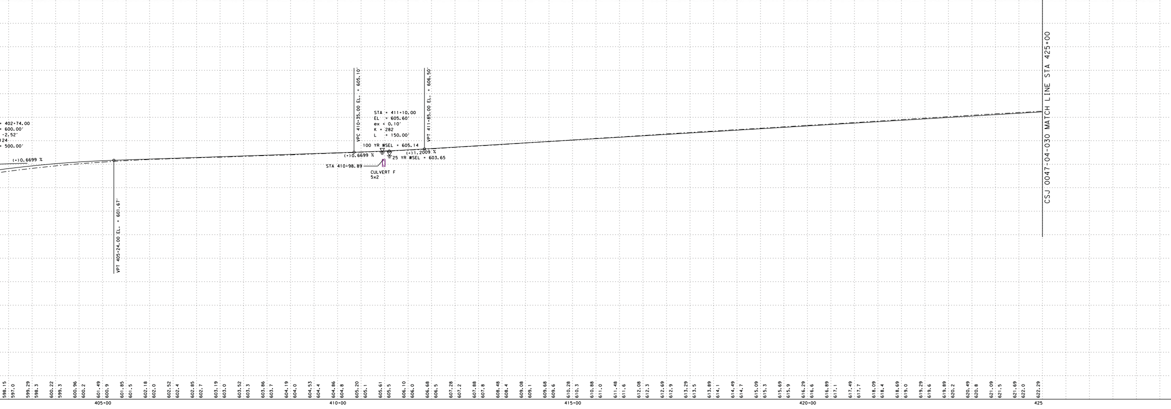
P.I. EASTING	P.I. NORTHING	RADIUS	DELTA	LENGTH	TANGENT	P.C. STATION	P.T. STATION
2,548,574.90	7,145,252.37	2,864.79'	25° 54' 29.14" RT	1,295.40'	658.97'	388+11.89	401+07.29
2,550,130.38	7,146,706.86	2,864.79'	3° 46' 19.01" LT	188.60'	94.33'	414+83.56	416+72.16
2,548,421.11	7,145,075.00	200.00'	48° 33' 09.59" LT	169.48'	90.20'	11+56.91	13+26.39




LACORE LN
BREEZY HILL RD
CR 275
247B
℄ CR275
CR 275
BEGIN CONST
℄ CR275 STA 10+97.42
MATCH EXIST PAVEMENT
END RET WALL
℄ SH5 STA 393+80
PROP CULVERT G
(2) 6X5
STA 394+24.57
BEGIN RET WALL
℄ SH5 STA 395+75
EXIST ROW
BEGIN RET WALL
℄ SH5 STA 397+52
CLSH5-25
PROP ROW
253
255
257
250
248
PROP ROW
CLCR275-1
R 25'
247A
R 25'
BEGIN RET WALL
℄ SH5 STA 392+05
14'
12'
11'
31'
12'
14'
395+00
14'
12'
31'
11'
12'
14'
12'
400+00
R 15'
R 15'
R 40'
R 40'
256
254
252
EXIST ROW
ROW BY OTHERS
ROW BY OTHERS
390+00
℄ SH5 STA 392+35.13=
℄ CR275 STA 13+48.58
EXIST ROW
247
249
251
TELEPHONE RD
(FUTURE)
CR 278
PVT RD 5054
CITY OF McKINNEY
ROW BY OTHERS
SH 5
BEGIN PROJECT
BEGIN CSJ: 0047-04-030
℄ SH5 STA 391+00.00
MATCH EXISTING PAVEMENT
MATCH CSJ: 0047-05-054
BURL'S USED CARS


℄ CR275
(CR 275)
VPC 392+25.00 EL. = 561.71'
VPT 393+75.00 EL. = 565.24'
STA = 394+86.00
EL = 569.00'
ex = -0.22'
K = 80
L = 120.00'
VPC 396+00.00 EL. = 571.15'
VPT 398+00.00 EL. = 577.74'
PGL @ ℄ SH5
STA
EL
ex
K
L
(+)4.6961 %
EXISTING GROUND
@ ℄ SH5
(+)1.3214 %
(+)1.3214 %
(+)3.3890 %
(+)3.3890 %
(+)1.8899 %
(+)1.8899 %
(+)4.6961 %
100 YR WSEL
= 567.32
25 YR WSEL
= 564.54
STA = 397+00.00
EL = 573.04'
ex = 0.70'
K = 71
L = 200.00'
VPC 400+24.00 EL. = 588.26'
SH 5
BEGIN PROJECT
BEGIN CSJ: 0047-04-030
℄ SH5 STA 391+00.00
EL = 560.05
MATCH EXISTING PAVEMENT
MATCH CSJ: 0047-05-054
℄ SH5 STA 392+35.13=
℄ CR275 STA 13+48.58
ELEV = 561.85
STA = 393+00.00
EL = 562.70'
ex = 0.39'
K = 73
L = 150.00'
VPC 394+26.00 EL. = 566.97'
CULVERT G
(2) 6X5
VPT 395+46.00 EL. = 570.13'
STA 394+24.57
556.55
555.5
556.96
556.2
557.46
556.7
558.07
556.7
558.73
557.3
559.39
559.2
560.05
560.4
560.71
561.4
561.38
561.9
562.08
562.6
563.08
563.1
564.43
564.2
566.09
564.2
567.74
564.5
569.13
565.5
570.21
567.1
571.15
568.6
572.27
570.6
573.75
572.8
575.57
575.3
577.74
577.8
580.09
580.2
582.44
582.5
584.78
584.9
587.13
587.1
589.45
589.2
591.60
591.1
593.54
592.8
595.28
594.3
596.82
595.7
390+00
395+00
400+00


PVT RD 5055
PVT RD 5056
259
260
EXIST ROW
263
END RET WALL
℄ SH5 STA 405+35
PROP CULVERT F
5X2
STA 410+98.89
PROP ROW
265
266
269
271
272
274
275
277
279
CLSH5-26
R 25'
R 15'
R 10'
14'
12'
42'
11'
31'
405+00
N 46° 55' 17.79" E
SH 5
410+00
415+00
420+00
425
258
261
BEG RET WALL
℄ SH5 STA 406+15
END RET WALL
℄ SH5 STA 406+95
262
264
EXIST ROW
PROP ROW
267
268
BEGIN RET WALL
℄ SH5 STA 411+24
270
END RET WALL
℄ SH5 STA 414+80
273
276
278
280
℄ SH5
1ST CHOICE TOWING
CITY OF McKINNEY
CSJ 0047-04-030 MATCH LINE STA 425+00


= 402+74.00
= 600.00'
-2.52'
124
= 500.00'
(+)0.6699 %
VPT 405+24.00 EL. = 601.67'
VPC 410+35.00 EL. = 605.10'
VPT 411+85.00 EL. = 606.50'
STA = 411+10.00
EL = 605.60'
ex = 0.10'
K = 282
L = 150.00'
100 YR WSEL = 605.14
(+)0.6699 %
(+)1.2009 %
25 YR WSEL = 603.65
STA 410+98.89
CULVERT F
5x2
CSJ 0047-04-030 MATCH LINE STA 425+00
598.15
597.0
599.29
598.3
600.22
599.3
600.96
600.2
601.49
600.9
601.85
601.5
602.18
602.0
602.52
602.4
602.85
602.7
603.19
603.0
603.52
603.3
603.86
603.7
604.19
604.0
604.53
604.4
604.86
604.8
605.20
605.1
605.61
605.5
606.10
606.0
606.68
606.5
607.28
607.2
607.88
607.8
608.48
608.4
609.08
609.1
609.68
609.6
610.28
610.3
610.88
611.0
611.48
611.6
612.08
612.3
612.69
612.9
613.29
613.5
613.89
614.1
614.49
614.7
615.09
615.3
615.69
615.9
616.29
616.6
616.89
617.1
617.49
617.7
618.09
618.4
618.69
619.0
619.29
619.6
619.89
620.2
620.49
620.8
621.09
621.5
621.69
622.0
622.29
405+00
410+00
415+00
420+00
425

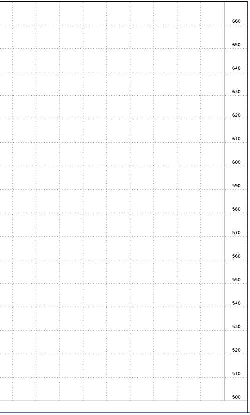
UTILITY LEGEND

WATER	W1	CITY OF MCKINNEY WATER
WATER	W1 (C)	CITY OF MCKINNEY WATER
WATER	W1 (D)	CITY OF MCKINNEY WATER
WATER	W2 (C)	NORTH TEXAS MUNICIPAL WATER DISTRICT
WATER	W3 (D)	CITY OF IRVING WATER
WATER	W4	NORTH COLLINS WATER SUPPLY
WATER	W4 (C)	NORTH COLLINS WATER SUPPLY
WATER	W4 (D)	NORTH COLLINS WATER SUPPLY
WASTE WATER	WW1	CITY OF MCKINNEY WASTE WATER
WASTE WATER	WW1 (C)	CITY OF MCKINNEY WASTE WATER
WASTE WATER	WW1 (D)	CITY OF MCKINNEY WASTER WATER
STORM DRAIN	SD	CITY OF MCKINNEY STORM
STORM DRAIN	SD (C)	CITY OF MCKINNEY STORM
STORM DRAIN	SD(D)	CITY OF MCKINNEY STORM
ELECTRIC BURIED	E1	ONCOR
OVERHEAD ELECTRIC	OH	ONCOR
OVERHEAD ELECTRIC,TELEPHONE	OH-T	ONCOR, AT&T
OVERHEAD ELECTRIC,COAX	OH1	ONCOR, TIME WARNER CABLE
OVERHEAD ELECTRIC,FIBER,COAX	OH2	ONCOR, AT&T, TIME WARNER CABLE
OH ELECTRIC,FIBER,TELEPHONE,COAX	OH3	ONCOR, AT&T, TIME WARNER CABLE
OVERHEAD ELECTRIC,FIBER	OH4	ONCOR, AT&T
OVERHEAD TELEPHONE, COAX	OH5	AT&T,TIME WARNER CABLE
ELECTRIC BURIED	———	TRAFFIC SIGNAL TXDOT
TELEPHONE	T1	AT&T
TELEPHONE	T1 (D)	AT&T
OVERHEAD TELEPHONE	T1 OH	AT&T
TELEPHONE DUCT	T-DUCT1	AT&T
SUPPORT STRAND	———	AT&T
GAS	G1	ATMOS
GAS	G1 (C)	ATMOS
GAS	G1 (D)	ATMOS
FIBER	FOC1	AT&T
FIBER	FOC1 (D)	AT&T
FIBER DUCT	DUCT2	AT&T
FIBER	FOC3	ZAYO
FIBER	FOC4	CITY OF IRVING COMMUNICATIONS
CABLE	CATV	TIME WARNER CABLE

* LINE SIZES ARE FROM BEST AVAIABLE RECORDS

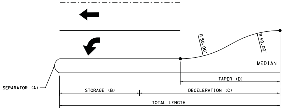
UTILITY LEGEND

○	POWER POLE
○	POLE RISER
EJ	ELECTRIC JUNCTION BOX
■	ELECTRIC PULL BOX
EM	ELECTRIC METER
■	ELECTRIC PED
T	TELEPHONE MANHOLE
☒	TELEPHONE PED
JB	TELEPHONE JUNCTION BOX
HH	TELEPHONE HAND HOLE
GV	GAS VALVE
GM	GAS METER
WW	WASTE WATER MANHOLE
W	WATER MANHOLE
WM	WATER METER
⋈	WATER VALVE
T	WATER CAP
○	FIRE HYDRANT
SD	STORM MANHOLE
▭	STORM INLET
FH	FIBER OPTICS HAND HOLE
▥	STORM GRATE INLET
◁	HEAD WALL



COLOR LEGEND

🟦	PROPOSED MAINLANES
🟧	PROPOSED BRIDGE
🟨	PROPOSED DRIVEWAY
🟪	PROPOSED CROSS STREET
🟫	PROPOSED RAMP
🟦	PROPOSED SIDEWALK AND PAVED MEDIAN
🟩	PROPOSED LANDSCAPED MEDIAN
🟧	FUTURE BY OTHERS
⬛	EXISTING BRIDGE TO REMAIN
🟦	100 YEAR FLOOD PLAIN
🟪	EXISTING PAVEMENT (BY OTHERS)
▨	EXISTING PAVEMENT TO BE REMOVED
☒	POTENTIAL STRUCTURE DISPLACEMENT
— · — ·	CENTERLINE/BASELINE (CROSS STREETS)
— · — ·	CENTERLINE (MAINLANE)
— —	PROPOSED ROW
———	CITY LIMITS
— —	EXISTING ROW
———	PROPERTY LINES
—ıı—	CONTROL OF ACCESS
┴┴┴	PROPOSED RETAINING WALL
———	PROPOSED SSCB
- - -	PROPOSED COMBINATION RAIL
←	PROPOSED TRAFFIC FLOW
⇦	EXISTING TRAFFIC FLOW
←	WATER FLOW
(XXXXX-XX)	HORIZONTAL CURVE NAME
XXX	PROPERTY ID NUMBER
▭	EXISTING DRAINAGE STRUCTURES
▭	PROPOSED DRAINAGE STRUCTURES
	PROPOSED SIGNALIZED INTERSECTION


R 50.00'
R 50.00'
MEDIAN
SEPARATOR (A)
TAPER (D)
STORAGE (B)
DECELERATION (C)
TOTAL LENGTH

TURN LANE DETAIL

TURN LANE DETAIL TABLE

CROSS STREET	MEDIAN NOSE STA @ SH 5	MEDIAN NOSE RADIUS (FT)	STORAGE (FT)	DECELERATION (FT)	TAPER (FT)	TOTAL LENGTH (FT)	L/R	SB/NB
		(A)	(B)	(C)	(D)			
CNTY RD 275	391+95.82	4	100	275	100	275	L	NB
CNTY RD 275	392+64.68	4	100	275	100	375	L	SB
TELEPHONE RD	N/A	N/A	100	275	100	375	R	NB
PRIVATE DRIVEWAY	397+77.74	4	100	275	100	375	L	NB
TELEPHONE RD	398+93.75	4	100	275	100	375	L	SB
PRIVATE DRIVEWAY	411+17.26	4	100	275	100	375	L	NB
PRIVATE DRIVEWAY	411+77.26	4	100	275	100	375	L	SB
PRIVATE DRIVEWAY	424+42.01	4	100	275	100	375	L	NB

Texas Department of Transportation

DALLAS DISTRICT

MOHAMED K. BUR, P.E.
DISTRICT ENGINEER

DESIGN SCHEMATIC SH 5

FROM: SOUTH OF CR 275 TO: SOUTH OF MELISSA RD

COLLIN COUNTY

FUNCTIONAL CLASSIFICATIONS	
URBAN PRINCIPAL ARTERIAL	SH 121 MAINLANE, SH 5 MAINLAINE, RAMPS
URBAN COLLECTOR	CR 338 (FANNIN RD)
URBAN/RURAL LOCAL	ALL OTHER STREETS

DESIGN SPEED	
45 MPH	SH 121 MAINLANE
40 MPH	SH 5 MAINLAINE, RAMPS
30 MPH	ALL OTHER STREETS

PROJECT LENGTH

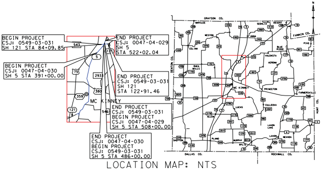
2.48 MI

CSJ LIMITS

0047-04-030: FROM SOUTH OF CR 275 TO SOUTH OF SH 121
0549-03-031: FROM SH 5 SOUTH TO EAST OF SH 5 NORTH
0047-04-029: FROM NORTH OF SH 121 TO SOUTH OF MELISSA RD

HORIZ. SCALE IN FEET: 1" = 100'
0 50 100 150 200
0 10 20 30 40
VERT. SCALE IN FEET: 1" = 20'

BASIS OF DESIGN: TxDOT ROADWAY DESIGN MANUAL 2018
EQUATIONS: NONE
RAILROADS: NONE
DESIGN EXCEPTIONS:
DESIGN SPEED AT ONE LOCATION


BEGIN PROJECT
CSJ: 0549-03-031
SH 121 STA 84+09.85
END PROJECT
CSJ: 0047-04-029
SH 5
STA 522+02.04
BEGIN PROJECT
CSJ: 0047-04-030
SH 5 STA 391+00.00
END PROJECT
CSJ: 0549-03-031
SH 121
STA 122+91.46
MC KINNEY
END PROJECT
CSJ: 0549-03-031
BEGIN PROJECT
CSJ: 0047-04-029
SH 5 STA 508+00.00
END PROJECT
CSJ: 0047-04-030
BEGIN PROJECT
CSJ: 0549-03-031
SH 5 STA 486+00.00
543
5
121
75
2933
380
359
546
N
GRAYSON CO.
FANNIN CO.
DENTON CO.
DALLAS CO.
ROCKWALL CO.
CELINA
WESTON
ANNA
PLANO
MURPHY
WYLIE
LAVON
NEVADA
SHEPTON

LOCATION MAP: NTS

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
4/20/2020

APRIL 15, 2020

INDEX OF ROLLS

ROLL 1 OF 5 PLAN & PROFILE SH 5 STA BEG PROJ TO STA 425+00
ROLL 2 OF 5 PLAN & PROFILE SH 5 STA 425+00 TO STA 467+00
ROLL 3 OF 5 PLAN & PROFILE SH 5 STA 467+00 TO STA END PROJ
ROLL 4 OF 5 PLAN & PROFILE SH 121 STA 84+09.85 TO STA 122+91.46
ROLL 5 OF 5 PROFILE RAMPS AND CROSS STREETS

Michael Baker
INTERNATIONAL
1501 LBJ Freeway,
Suite 650,
Dallas, TX 75234
TBPE Registration No. F-2677

PLAN & PROFILE

SH 5

BEGIN PROJ TO STA 425+00

ROLL 1 OF 5 ROLLS

DESIGNED BY:	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		ROLL NO.
BAKER	6	XX (XX) XXXX		S-001
DRAWN BY:	STATE	DIST.	COUNTY	
BAKER	TEXAS	DAL	COLLIN	
CHECKED BY:	CONT	SEC	JOB	HIGHWAY NO.
BAKER	0047	04	029, etc	SH 5

FILE: ...\SRPP00*N101.dgn

Texas Department of Transportation

DALLAS DISTRICT

MOHAMED K. BUR, P.E.
DISTRICT ENGINEER

DESIGN SCHEMATIC SH 5

FROM: SOUTH OF CR 275 TO: SOUTH OF MELISSA RD

COLLIN COUNTY

FUNCTIONAL CLASSIFICATIONS	
URBAN PRINCIPAL ARTERIAL	SH 121 MAINLANE, SH 5 MAINLAINE, RAMPS
URBAN COLLECTOR	CR 338(FANNIN RD)
URBAN/RURAL LOCAL	ALL OTHER STREETS

DESIGN SPEED	
45 MPH	SH 121 MAINLANE
40 MPH	SH 5 MAINLAINE, RAMPS
30 MPH	ALL OTHER STREETS

PROJECT LENGTH

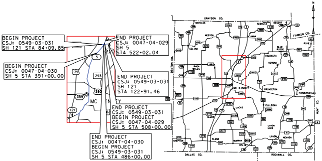
2.48 MI

CSJ LIMITS

0047-04-030: FROM SOUTH OF CR 275 TO SOUTH OF SH 121
0549-03-031: FROM SH 5 SOUTH TO EAST OF SH 5 NORTH
0047-04-029: FROM NORTH OF SH 121 TO SOUTH OF MELISSA RD

HORIZ. SCALE IN FEET 0 50 100 150 200
VERT. SCALE IN FEET 0 10 20 30 40

BASIS OF DESIGN: TxDOT ROADWAY DESIGN MANUAL 2018
EQUATIONS: NONE
RAILROADS: NONE
DESIGN EXCEPTIONS:
DESIGN SPEED AT ONE LOCATION


BEGIN PROJECT
CSJ: 0549-03-031
SH 121 STA 84+09.85
BEGIN PROJECT
CSJ: 0047-04-030
SH 5 STA 391+00.00
END PROJECT
CSJ: 0047-04-029
SH 5
STA 522+02.04
END PROJECT
CSJ: 0549-03-031
SH 121
STA 122+91.46
END PROJECT
CSJ: 0549-03-031
BEGIN PROJECT
CSJ: 0047-04-029
SH 5 STA 508+00.00
END PROJECT
CSJ: 0047-04-030
BEGIN PROJECT
CSJ: 0549-03-031
SH 5 STA 486+00.00
GRAYSON CO.
FANNIN CO.
DENTON CO.
HUNT CO.
DALLAS CO.
ROCKWALL CO.
MC KINNEY
N

LOCATION MAP: NTS

APRIL 15, 2020

PRELIMINARY
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4/20/2020

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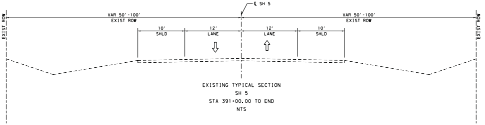
- ROLL 1 OF 5 PLAN & PROFILE SH 5 STA BEG PROJ TO STA 425+00
- ROLL 2 OF 5 PLAN & PROFILE SH 5 STA 425+00 TO STA 467+00
- ROLL 3 OF 5 PLAN & PROFILE SH 5 STA 467+00 TO STA END PROJ
- ROLL 4 OF 5 PLAN & PROFILE SH 121 STA 84+09.85 TO STA 122+91.46
- ROLL 5 OF 5 PROFILE RAMPS AND CROSS STREETS

Michael Baker INTERNATIONAL
1501 LBJ Freeway,
Suite 650,
Dallas, TX 75234
TBPE Registration No. F-2677

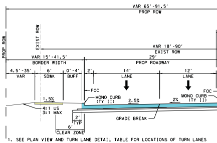
PLAN & PROFILE
SH 5
STA 425+00 TO STA 467+00

ROLL 2 OF 5 ROLLS

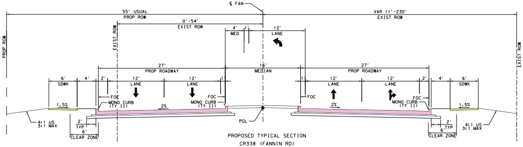
DESIGNED BY:	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		ROLL NO.
BAKER	6	XX (XX) XXXX		S-002
DRAWN BY:	STATE	DIST.	COUNTY	
BAKER	TEXAS	DAL	COLLIN	
CHECKED BY:	CONT	SEC	JOB	HIGHWAY NO.
BAKER	0047	04	029, etc.	SH 5


℄ SH 5
VAR 50'-100'
EXIST ROW
VAR 50'-100'
EXIST ROW
EXIST ROW
EXIST ROW
10'
SHLD
12'
LANE
12'
LANE
10'
SHLD

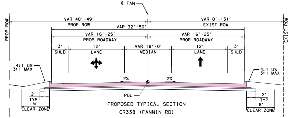
EXISTING TYPICAL SECTION
SH 5
STA 391+00.00 TO END
NTS


VAR 65'-91.5'
PROP ROW
EXIST ROW
PROP ROW
EXIST ROW
VAR 18'-90'
EXIST ROW
VAR 15'-41.5'
BORDER WIDTH
29'
PROP ROADWAY
4.5'-35'
VAR
6'
SDWK
0'-4'
BUFF
2'
14'
LANE
12'
LANE
FOC
FOC
MONO CURB (TY II)
MONO CURB (TY II)
1.5%
2.5%
2%
4:1 US
3:1 MAX
GRADE BREAK
2'
TYP
6'
CLEAR ZONE

1. SEE PLAN VIEW AND TURN LANE DETAIL TABLE FOR LOCATIONS OF TURN LANES
2. CROSS SLOPES SHOWN ARE USUAL. SEE CROSS SLOPE TRANSITION TABLE FOR MORE

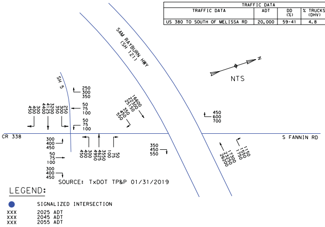

℄ FAN
55' USUAL
PROP ROW
0'-54'
EXIST ROW
VAR 11'-230'
EXIST ROW
PROP ROW
EXIST ROW
EXIST ROW
4'
MED
12'
LANE
27'
PROP ROADWAY
16'
MEDIAN
27'
PROP ROADWAY
6'
SDWK
4'
2'
12'
LANE
12'
LANE
1'
1'
12'
LANE
12'
LANE
2'
4'
6'
SDWK
FOC
MONO CURB (TY II)
FOC
MONO CURB (TY II)
FOC
FOC
MONO CURB (TY II)
1.5%
2%
2%
1.5%
PGL
4:1 US
3:1 MAX
2'
TYP
6'
CLEAR ZONE
2'
TYP
6'
CLEAR ZONE
4:1 US
3:1 MAX

PROPOSED TYPICAL SECTION
CR338 (FANNIN RD)
STA 13+21 TO STA 17+73
NTS


℄ FAN
VAR 40'-49'
PROP ROW
VAR 32'-50'
VAR 0'-131'
EXIST ROW
PROP ROW
EXIST ROW
VAR 16'-25'
PROP ROADWAY
VAR 16'-25'
PROP ROADWAY
3'
SHLD
12'
LANE
VAR 18'-0'
MEDIAN
12'
LANE
3'
SHLD
4:1 US
3:1 MAX
4:1 US
3:1 MAX
2%
2%
PGL
2'
TYP
6'
CLEAR ZONE
2'
TYP
6'
CLEAR ZONE

PROPOSED TYPICAL SECTION
CR338 (FANNIN RD)
STA 18+75 TO STA 21+55
NTS

TRAFFIC DATA				
TRAFFIC DATA	ADT	DD (%)	% TRUCKS (DHV)	K FACTOR (%)
US 380 TO SOUTH OF MELISSA RD	20,000	59-41	4.8	10.2


SAM RAYBURN HWY
(SH 121)
SH 5
CR 338
S FANNIN RD
NTS
N
250
300
350
50
75
100
50
75
100
450
400
300
4400
4125
3200
350
300
250
16600
22300
25150
350
450
550
450
600
700
300
400
450
50
75
100
300
400
450
450
400
300
4950
4625
3550
100
75
50
350
450
550
17300
23250
26200
1150
1550
1750

SOURCE: TxDOT TP&P 01/31/2019

LEGEND:

● SIGNALIZED INTERSECTION
XXX 2025 ADT
XXX 2045 ADT
XXX 2055 ADT

PROPERTY OWNERS

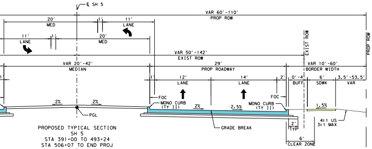
ID#	SITE ADDRESS	OWNER
281	6218 N MCDONALD ST	J B ET UX PLEASANT
282	6274 N MCDONALD ST	JOHNNIE B JR PLEASANT
283	6315 N MCDONALD ST	MELISSA STORAGE LP
284	6322 N MCDONALD ST	STEPHEN H & VALERIE LOGSDON
285	6348 N MCDONALD ST	STEVE & JUDY FURLONG
286	6376 N MCDONALD ST	STEVE & JUDY FURLONG
287	6403 N MCDONALD ST	REA CAPITAL LP
288	6444 N MCDONALD ST	THOMAS RANDALL & BURNS
288A		SANDRA MELISSA & SMITH
288B	6527 N MCDONALD ST	SANDRA MELISSA & SMITH
288C	6407 N MCDONALD ST	REA CAPITAL LP
289	6465 N MCDONALD ST	ENVIRO-LOGIX INDUSTRIES LLC
290	N MCDONALD ST	INNOUT INVESTMENTS LLC
291	6573 N MCDONALD ST	KARL & MELISSA MCALLISTER
292	SAM RAYBURN HWY	YONGSHIK KIM
293		ELITE FOUR INVESTMENTS LLC
294	STATE HWY 5	MELISSA 121-5 PARTNERSHIP
295	COUNTY ROAD 338	MELISSA 121-5 PARTNERSHIP
296	COUNTY ROAD 338	MESQUITE CREEK DEVELOPMENT INC
297	1100 SAM RAYBURN HWY	MESQUITE CREEK DEVELOPMENT INC
298	1111 SAM RAYBURN HWY	JESSH ENTERPRISES INC
299	SAM RAYBURN HWY	JESSH ENTERPRISES INC
300	900 FANNIN RD	BEWLEY GIRLS LLC
301	FANNIN RD	TOMMY LYNDE MILLER
302	1218 SAM RAYBURN HWY	FIRST NATIONAL BANK OF TRENTON

HORIZONTAL ALIGNMENT DATA

CHAIN NAME	CURVE NAME	P.I. STATION	P.I. EASTING	P.I. NORTHING	RADIUS	DELTA
℄ SH5	CLSH5-27	455+07.64	2,552,818.00	7,149,573.93	1,400.00'	41° 32' 42.97" RT
℄ FAN	CLFAN-1	19+79.80	2,553,618.21	7,149,493.54	400.00'	16° 18' 48.70" RT
℄ FAN	CLFAN-2	20+85.35	2,553,581.99	7,149,393.57	400.00'	13° 57' 57.07" LT

TIME: 6:07:21 PM
PEN TABLE - SH5•TxDOT•McKinney•Schematic.tbl

DATE: 4/20/2020
FILE: ...\SRPPOO•NI02.dgn
ROLLPLOT - V8i•BAKER•WIN•CO•PDF.pltcfg


℄ SH 5
VAR 60'-110'
PROP ROW
20'
MED
1'
11'
LANE
11'
LANE
1'
20'
MED
VAR 50'-142'
EXIST ROW
EXIST ROW
PROP ROW
VAR 20'-42'
MEDIAN
29'
PROP ROADWAY
VAR 10'-60'
BORDER WIDTH
1'
1'
12'
LANE
14'
LANE
2'
0'-4'
BUFF
6'
SDWK
3.5'-53.5'
VAR
FOC
MONO CURB
(TY II)
FOC
MONO CURB
(TY II)
2%
2%
2%
2.5%
1.5%
PGL
GRADE BREAK
2'
TYP
4:1 US
3:1 MAX
6'
CLEAR ZONE

PROPOSED TYPICAL SECTION
SH 5
STA 391+00 TO 493+24
STA 506+07 TO END PROJ
NTS

DETAIL.

SOURCE:
COLLIN COUNTY APPRAISAL DISTRICT
JULY 2019

BUSINESS NAME
STOR-ALL SELF STORAGE
ARTIC CAT
VACANT
FIRST NATIONAL BANK OF TRENTON

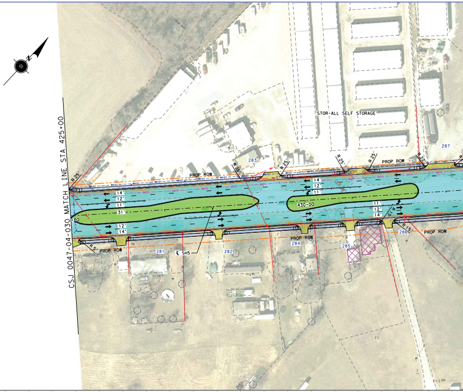
LENGTH	TANGENT	P.C. STATION	P.T. STATION
1,015.14'	531.05'	449+76.59	459+91.73
113.89'	57.33'	19+22.47	20+36.35
97.50'	48.99'	20+36.35	21+33.85

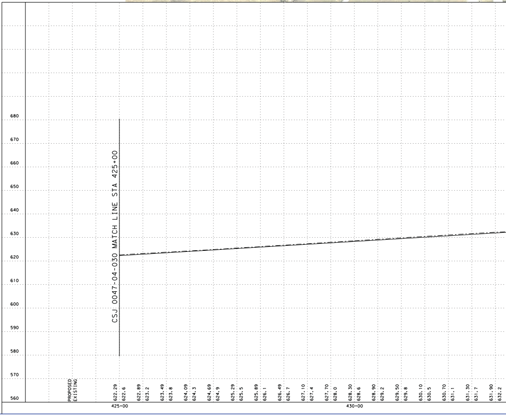
COLOR LEGEND

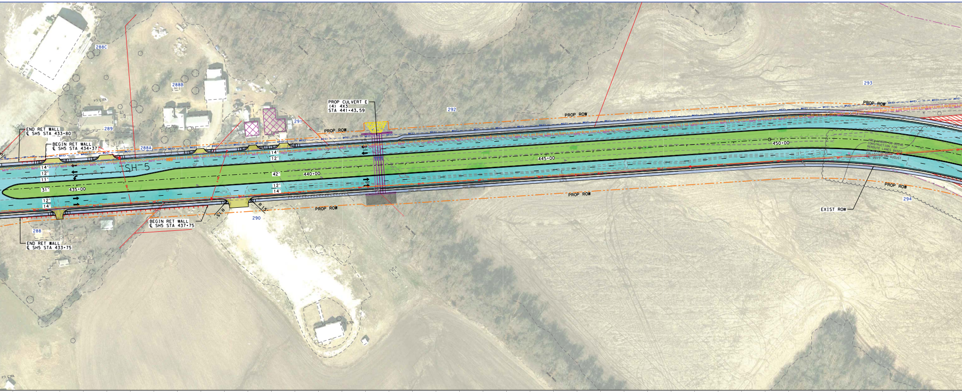
🟦	PROPOSED MAINLANES
🟧	PROPOSED BRIDGE
🟨	PROPOSED DRIVEWAY
🟪	PROPOSED CROSS STREET
🟫	PROPOSED RAMP
🟦	PROPOSED SIDEWALK AND PAVED MEDIAN
🟩	PROPOSED LANDSCAPED MEDIAN
🟧	FUTURE BY OTHERS
⬛	EXISTING BRIDGE TO REMAIN
🟦	100 YEAR FLOOD PLAIN
🟪	EXISTING PAVEMENT (BY OTHERS)
▨	EXISTING PAVEMENT TO BE REMOVED
▨	POTENTIAL STRUCTURE DISPLACEMENT
— · —	CENTERLINE/BASELINE (CROSS STREETS)
— · —	CENTERLINE (MAINLANE)
— · —	PROPOSED ROW
— · —	CITY LIMITS
— · —	EXISTING ROW
—	PROPERTY LINES
—‖—	CONTROL OF ACCESS
┴┴┴	PROPOSED RETAINING WALL
—	PROPOSED SSCB
—	PROPOSED COMBINATION RAIL
←	PROPOSED TRAFFIC FLOW
⇦	EXISTING TRAFFIC FLOW
←	WATER FLOW
(XXXXX-XX)	HORIZONTAL CURVE NAME
XXX	PROPERTY ID NUMBER
╪	EXISTING DRAINAGE STRUCTURES
╪	PROPOSED DRAINAGE STRUCTURES
	PROPOSED SIGNALIZED INTERSECTION

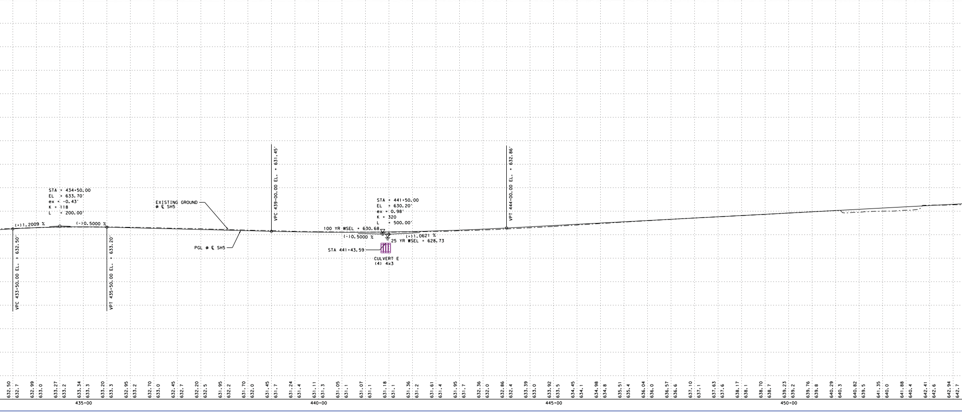
NOTES:

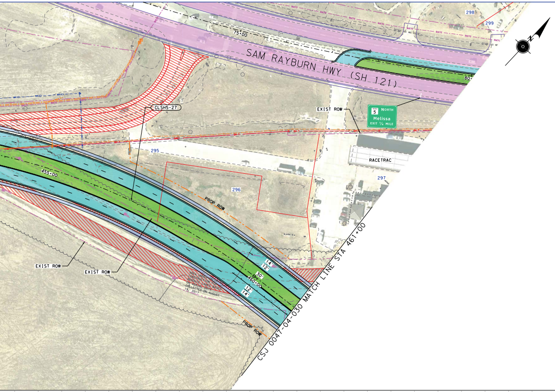
1. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT, FACE OF CURB, RAIL, UNLESS OTHERWISE NOTED.
2. MEDIAN OPENINGS WERE DETERMINED IN COORDINATION WITH LOCAL GOVERNMENT. FINAL LOCATION OF MEDIAN OPENINGS WILL BE DETERMINED IN THE PS&E DEVELOPMENT PHASE IN COORDINATION WITH THE LOCAL GOVERNMENT.
3. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL UNLESS OTHERWISE NOTED.
4. APPROXIMATE 100 YEAR FLOODPLAIN LIMITS ARE BASED UPON FEMA FLOOD INSURANCE RATE MAP 48085C020J (REV JUNE 7, 2017) AND 48085C0290J (REV JUNE 2, 20009) FOR WILSON CREEK, 48085C0165J (REV JUNE 2, 2009) AND 48085C0280J (REV JUNE 2, 2009) FOR EAST FORK TRINITY RIVER.
5. OWNERSHIP INFORMATION SHOWN ON SCHEMATIC OBTAINED FROM COLLIN COUNTY APPRAISAL DISTRICT OCTOBER 2017.
6. EXISTING CULVERT LOCATION, SIZE, AND ELEVATIONS OBTAINED FROM RECORD DOCUMENTS OR TOPOGRAPHIC SURVEY AND ARE SHOWN FOR INFORMATION PURPOSES ONLY.
7. ADA RAMPS ARE NOT DEPICTED IN THE PLAN.
8. FINAL DRIVEWAY LOCATIONS SHALL BE DETERMINED DURING DETAILED DESIGN IN COORDINATION WITH THE CITY OF McKINNEY.
9. ALL PRIVATE DRIVEWAYS HAVE CURB RADII OF 15FT, UNLESS OTHERWISE NOTED.
10. EXIST TOPO AND AERIAL PHOTOS PROVIDED BY TxDOT.
11. EXIST ROW SHOWN PROVIDED BY TxDOT.
12. PARCEL BOUNDARY LOCATIONS ARE APPROXIMATE AND SUBJECT TO CHANGE.
13. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE.
14. CURBS ON MAINLANES, FRONTAGE ROADS AND CROSS STREETS ARE TYPE II (MONO), UNLESS OTHERWISE SHOWN.
15. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
16. ALL HORIZONTAL COORDINATES ARE REFERENCED TO THE TEXAS COORDINATE SYSTEM, NORTH CENTRAL ZONE (4202), NORTH AMERICAN DATUM OF 1983 (NAD 83), 2011 ADJUSTMENT, 2010.00 EPOCH. SURFACE DISTANCES AND COORDINATES MAY BE CONVERTED TO GRID BY DIVIDING BY A COMBINED ADJUSTMENT FACTOR OF 1.000152710.
17. ALL COORDINATES AND ELEVATIONS ARE IN U.S. SURVEY FEET.
18. VERTICAL VALUES WERE DETERMINED BY THE TxDOT REAL TIME GPS NETWORK (RTN) (NAD 83 (2011, MA11, PA11) EPOCH 2010.00) WITH THE GEOID12A APPLIED.
19. DRIVEWAYS ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND ARE SUBJECT TO REVIEW, ADJUSTMENT AND/OR CONSOLIDATION BASED ON CORRIDOR ACCESS MANAGEMENT.

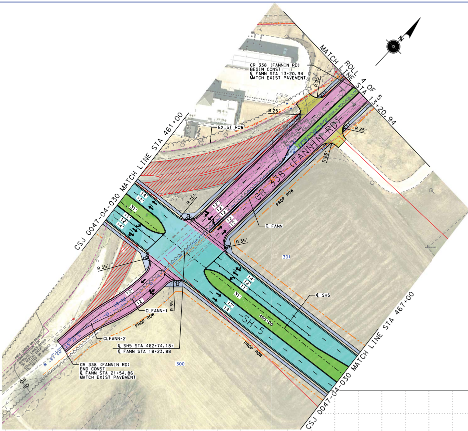

N
CSJ 0047-04-030 MATCH LINE STA 425+00
STOR-ALL SELF STORAGE
287
283
R 25'
R 25'
R 25'
R 25'
R 25'
R 22'
PROP ROW
PROP ROW
PROP ROW
PROP ROW
PROP ROW
14'
12'
11'
31'
12'
14'
14'
12'
11'
11'
12'
14'
430+00
R 15'
R 15'
R 5'
281
℄ SH5
282
284
285
286

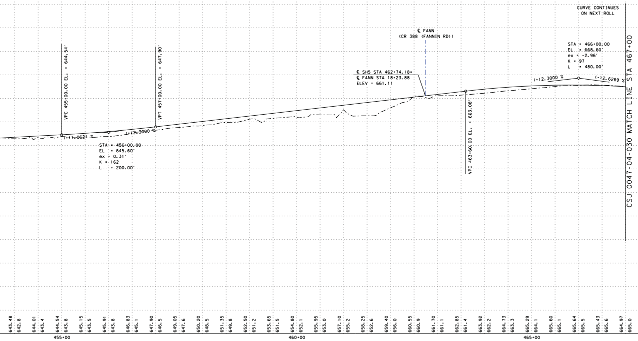



288C
288B
289
288A
291
292
293
294
288
290
END RET WALL
℄ SH5 STA 433+80
BEGIN RET WALL
℄ SH5 STA 434+37
END RET WALL
℄ SH5 STA 433+75
BEGIN RET WALL
℄ SH5 STA 437+75
PROP CULVERT E
(4) 4X3
STA 441+43.59
PROP ROW
EXIST ROW
SH 5
14'
12'
11'
31'
42'
435+00
440+00
445+00
450+00
R 15'
AREA UNDER ON-GOING CONSTRUCTION FOR REROUTE LANES BASED ON AERIAL DATA COLLECTED ON AUGUST 9, 2017


STA = 434+50.00
EL = 633.70'
ex = -0.43'
K = 118
L = 200.00'
(+)1.2009 %
(-)0.5000 %
VPC 433+50.00 EL. = 632.50'
VPT 435+50.00 EL. = 633.20'
EXISTING GROUND
@ ℄ SH5
PGL @ ℄ SH5
VPC 439+00.00 EL. = 631.45'
STA = 441+50.00
EL = 630.20'
ex = 0.98'
K = 320
L = 500.00'
100 YR WSEL = 630.68
(-)0.5000 %
(+)1.0621 %
25 YR WSEL = 628.73
STA 441+43.59
CULVERT E
(4) 4x3
VPT 444+00.00 EL. = 632.86'
632.50 632.7
632.99 633.0
633.27 633.2
633.34 633.3
633.20 633.3
632.95 633.2
632.70 633.0
632.45 632.7
632.20 632.5
631.95 632.2
631.70 632.0
631.45 631.7
631.24 631.4
631.11 631.3
631.05 631.1
631.07 631.1
631.18 631.1
631.36 631.2
631.61 631.4
631.95 631.7
632.36 632.0
632.86 632.4
633.39 633.0
633.92 633.5
634.45 634.1
634.98 634.8
635.51 635.4
636.04 636.0
636.57 636.6
637.10 637.1
637.63 637.6
638.17 638.1
638.70 638.7
639.23 639.2
639.76 639.8
640.29 640.3
640.82 639.5
641.35 640.0
641.88 640.4
642.41 642.6
642.94 642.7
435+00
440+00
445+00
450+00


SAM RAYBURN HWY (SH 121)
75+00
298
299
80+
CLSH5-27
EXIST ROW
5 NORTH
Melissa
EXIT 1/4 MILE
RACETRAC
295
296
297
455+00
PROP ROW
14'
12'
30'
460+00
12'
14'
EXIST ROW
EXIST ROW
PROP ROW
CSJ 0047-04-030 MATCH LINE STA 461+00


MATCH LINE STA 13+20.94
ROLL 4 OF 5
CR 338 (FANNIN RD)
BEGIN CONST
℄ FANN STA 13+20.94
MATCH EXIST PAVEMENT
R 25'
R 25'
R 25'
R 25'
EXIST ROW
CSJ 0047-04-030 MATCH LINE STA 461+00
CR 338 (FANNIN RD)
PROP ROW
14'
12'
31'
11'
12'
14'
R 35'
12'
12'
12'
12'
12'
℄ FANN
R 35'
301
R 35'
14'
12'
11'
31'
12'
14'
℄ SH5
12'
12'
CLFANN-1
R 35'
PROP ROW
CLFANN-2
-SH-5
465+00
PROP ROW
℄ SH5 STA 462+74.18=
℄ FANN STA 18+23.88
CR 338 (FANNIN RD)
END CONST
℄ FANN STA 21+54.86
MATCH EXIST PAVEMENT
300
CSJ 0047-04-030 MATCH LINE STA 467+00



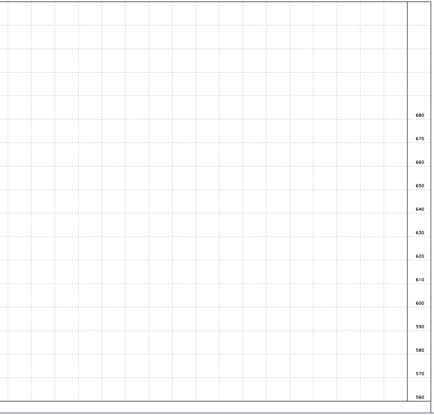
UTILITY LEGEND

WATER	—W1—·—W1—·—W1—·—	CITY OF MCKINNEY WATER
WATER	—·—·—W1 (C)—·—·—	CITY OF MCKINNEY WATER
WATER	—·—·— W1 (D) —·—·—	CITY OF MCKINNEY WATER
WATER	—·—·—W2 (C)—·—·—	NORTH TEXAS MUNICIPAL WATER DISTRICT
WATER	—·—·—W3 (D)—·—·—	CITY OF IRVING WATER
WATER	—W4—·—W4—·—W4—·—	NORTH COLLINS WATER SUPPLY
WATER	—·—·— W4 (C) —·—·—	NORTH COLLINS WATER SUPPLY
WATER	—·—·—W4 (D)—·—·—	NORTH COLLINS WATER SUPPLY
WASTE WATER	—— WW1 —— ——	CITY OF MCKINNEY WASTE WATER
WASTE WATER	——WW1 (C)—— ——	CITY OF MCKINNEY WASTE WATER
WASTE WATER	—— WW1 (D) —— ——	CITY OF MCKINNEY WASTER WATER
STORM DRAIN	—— SD —— ——	CITY OF MCKINNEY STORM
STORM DRAIN	—— SD (C) —— ——	CITY OF MCKINNEY STORM
STORM DRAIN	—— SD(D) —— ——	CITY OF MCKINNEY STORM
ELECTRIC BURIED	— — — — E1 — —	ONCOR
OVERHEAD ELECTRIC	— — — — OH — —	ONCOR
OVERHEAD ELECTRIC,TELEPHONE	———— OH-T -	ONCOR, AT&T
OVERHEAD ELECTRIC,COAX	— — — — OH1 —	ONCOR, TIME WARNER CABLE
OVERHEAD ELECTRIC,FIBER,COAX	— — — — OH2 —	ONCOR, AT&T, TIME WARNER CABLE
OH ELECTRIC,FIBER,TELEPHONE,COAX	— — — — OH3 —	ONCOR, AT&T, TIME WARNER CABLE
OVERHEAD ELECTRIC,FIBER	— — — — OH4 —	ONCOR, AT&T
OVERHEAD TELEPHONE, COAX	— — — — OH5 —	AT&T,TIME WARNER CABLE
ELECTRIC BURIED	————	TRAFFIC SIGNAL TXDOT
TELEPHONE	— - — - —T1— - —	AT&T
TELEPHONE	— - — - —T1 (D)— -	AT&T
OVERHEAD TELEPHONE	— - — - — T1 OH —	AT&T
TELEPHONE DUCT	— - — - —T-DUCT1—	AT&T
SUPPORT STRAND	————	AT&T
GAS	—G1—··—G1—··—G1—	ATMOS
GAS	— ·· — ·· —G1 (C)—	ATMOS
GAS	— ·· — ·· — G1 (D) —	ATMOS
FIBER	— - — - — FOC1 —	AT&T
FIBER	— - — - —FOC1 (D)—	AT&T
FIBER DUCT	— - — - — DUCT2 —	AT&T
FIBER	— - — - — FOC3 —	ZAYO
FIBER	— - — - — FOC4 —	CITY OF IRVING COMMUNICATIONS
CABLE	— — — — CATV —	TIME WARNER CABLE

* LINE SIZES ARE FROM BEST AVAIABLE RECORDS

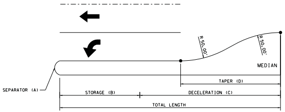
UTILITY LEGEND

⌖	POWER POLE
⌖	POLE RISER
EJ	ELECTRIC JUNCTION BOX
▣	ELECTRIC PULL BOX
EM	ELECTRIC METER
▣	ELECTRIC PED
Ⓣ	TELEPHONE MANHOLE
☒	TELEPHONE PED
JB	TELEPHONE JUNCTION BOX
HH	TELEPHONE HAND HOLE
GV	GAS VALVE
GM	GAS METER
WW	WASTE WATER MANHOLE
Ⓦ	WATER MANHOLE
WM	WATER METER
⋈	WATER VALVE
⊤	WATER CAP
⌖	FIRE HYDRANT
SD	STORM MANHOLE
▭	STORM INLET
FH	FIBER OPTICS HAND HOLE
▥	STORM GRATE INLET
◁	HEAD WALL



COLOR LEGEND

🟦	PROPOSED MAINLANES
🟧	PROPOSED BRIDGE
🟨	PROPOSED DRIVEWAY
🟪	PROPOSED CROSS STREET
🟫	PROPOSED RAMP
🟦	PROPOSED SIDEWALK AND PAVED MEDIAN
🟩	PROPOSED LANDSCAPED MEDIAN
🟧	FUTURE BY OTHERS
⬛	EXISTING BRIDGE TO REMAIN
🟦	100 YEAR FLOOD PLAIN
🟪	EXISTING PAVEMENT (BY OTHERS)
▨	EXISTING PAVEMENT TO BE REMOVED
☒	POTENTIAL STRUCTURE DISPLACEMENT
—·—·—·—	CENTERLINE/BASELINE (CROSS STREETS)
—·—·—·—	CENTERLINE (MAINLANE)
— - — -	PROPOSED ROW
——-·——	CITY LIMITS
— - — -	EXISTING ROW
————	PROPERTY LINES
——⫲——	CONTROL OF ACCESS
┴┴┴┴┴	PROPOSED RETAINING WALL
——═——	PROPOSED SSCB
- - - - -	PROPOSED COMBINATION RAIL
←	PROPOSED TRAFFIC FLOW
⇦	EXISTING TRAFFIC FLOW
←	WATER FLOW
XXXXX-XX	HORIZONTAL CURVE NAME
XXX	PROPERTY ID NUMBER
╪	EXISTING DRAINAGE STRUCTURES
╪	PROPOSED DRAINAGE STRUCTURES
	PROPOSED SIGNALIZED INTERSECTION


R 50.00'
R 50.00'
MEDIAN
SEPARATOR (A)
TAPER (D)
STORAGE (B)
DECELERATION (C)
TOTAL LENGTH

TURN LANE DETAIL

TURN LANE DETAIL TABLE

CROSS STREET	MEDIAN NOSE STA @ SH 5	MEDIAN NOSE RADIUS (FT)	STORAGE (FT)	DECELERATION (FT)	TAPER (FT)	TOTAL LENGTH (FT)	L/R	SB/NB
		(A)	(B)	(C)	(D)			
PRIVATE DRIVEWAY	425+02.01	4	100	160	100	260	L	SB
PRIVATE DRIVEWAY	429+01.12	4	100	160	100	260	L	NB
PRIVATE DRIVEWAY	429+61.12	15.5	100	160	100	260	L	SB
PRIVATE DRIVEWAY	432+41.10	15.5	100	160	100	260	L	NB
PRIVATE DRIVEWAY	433+41.10	4	100	275	100	375	L	SB
FANNIN RD	462+16.38	4	100	280	100	380	L	NB
FANNIN RD	463+32.00	4	100	280	100	380	L	SB

Texas Department of Transportation

DALLAS DISTRICT

MOHAMED K. BUR, P.E.
DISTRICT ENGINEER

DESIGN SCHEMATIC SH 5

FROM: SOUTH OF CR 275 TO: SOUTH OF MELISSA RD

COLLIN COUNTY

FUNCTIONAL CLASSIFICATIONS	
URBAN PRINCIPAL ARTERIAL	SH 121 MAINLANE, SH 5 MAINLAINE, RAMPS
URBAN COLLECTOR	CR 338(FANNIN RD)
URBAN/RURAL LOCAL	ALL OTHER STREETS

DESIGN SPEED	
45 MPH	SH 121 MAINLANE
40 MPH	SH 5 MAINLAINE, RAMPS
30 MPH	ALL OTHER STREETS

PROJECT LENGTH

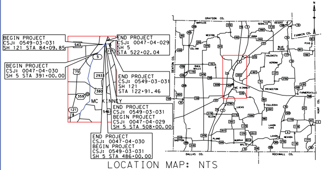
2.48 MI

CSJ LIMITS

0047-04-030: FROM SOUTH OF CR 275 TO SOUTH OF SH 121
0549-03-031: FROM SH 5 SOUTH TO EAST OF SH 5 NORTH
0047-04-029: FROM NORTH OF SH 121 TO SOUTH OF MELISSA RD

HORIZ. SCALE IN FEET: 1" = 100'
0 50 100 150 200
0 10 20 30 40
VERT. SCALE IN FEET: 1" = 20'

BASIS OF DESIGN: TxDOT ROADWAY DESIGN MANUAL 2018
EQUATIONS: NONE
RAILROADS: NONE
DESIGN EXCEPTIONS:
DESIGN SPEED AT ONE LOCATION


GRAYSON CO.
FANNIN CO.
DENTON CO.
DALLAS CO.
ROCKWALL CO.
MC KINNEY
CELINA
WESTON
ANNA
PLANO
MURPHY
WYLIE
LAVON
NEVADA
SHEPTON
N
543
5
75
293
380
359
121
546

BEGIN PROJECT
CSJ: 0549-03-031
SH 121 STA 84+09.85

BEGIN PROJECT
CSJ: 0047-04-030
SH 5 STA 391+00.00

END PROJECT
CSJ: 0047-04-029
SH 5
STA 522+02.04

END PROJECT
CSJ: 0549-03-031
SH 121
STA 122+91.46

END PROJECT
CSJ: 0549-03-031
BEGIN PROJECT
CSJ: 0047-04-029
SH 5 STA 508+00.00

END PROJECT
CSJ: 0047-04-030
BEGIN PROJECT
CSJ: 0549-03-031
SH 5 STA 486+00.00

LOCATION MAP: NTS

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
4/20/2020

APRIL 15, 2020

INDEX OF ROLLS

ROLL 1 OF 5 PLAN & PROFILE SH 5 STA BEG PROJ TO STA 425+00
ROLL 2 OF 5 PLAN & PROFILE SH 5 STA 425+00 TO STA 467+00
ROLL 3 OF 5 PLAN & PROFILE SH 5 STA 467+00 TO STA END PROJ
ROLL 4 OF 5 PLAN & PROFILE SH 121 STA 84+09.85 TO STA 122+91.46
ROLL 5 OF 5 PROFILE RAMPS AND CROSS STREETS

Michael Baker
INTERNATIONAL

1501 LBJ Freeway,
Suite 650,
Dallas, TX 75234
TBPE Registration No. F-2677

PLAN & PROFILE

SH 5

STA 425+00 TO STA 467+00

ROLL 2 OF 5 ROLLS

DESIGNED BY:	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		ROLL NO.
BAKER	6	XX (XX) XXXX		S-002
DRAWN BY:	STATE	DIST.	COUNTY	
BAKER	TEXAS	DAL	COLLIN	
CHECKED BY:	CONT	SEC	JOB	HIGHWAY NO.
BAKER	0047	04	029, etc	SH 5

FILE: ...\SRPP00-N102.dgn

Texas Department of Transportation

DALLAS DISTRICT

MOHAMED K. BUR, P.E.
DISTRICT ENGINEER

DESIGN SCHEMATIC SH 5

FROM: SOUTH OF CR 275 TO: SOUTH OF MELISSA RD

COLLIN COUNTY

FUNCTIONAL CLASSIFICATIONS	
URBAN PRINCIPAL ARTERIAL	SH 121 MAINLANE, SH 5 MAINLAINE, RAMPS
URBAN COLLECTOR	CR 338(FANNIN RD)
URBAN/RURAL LOCAL	ALL OTHER STREETS

DESIGN SPEED	
45 MPH	SH 121 MAINLANE
40 MPH	SH 5 MAINLAINE, RAMPS
30 MPH	ALL OTHER STREETS

PROJECT LENGTH

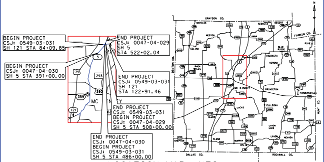
2.48 MI

CSJ LIMITS

0047-04-030: FROM SOUTH OF CR 275 TO SOUTH OF SH 121
0549-03-031: FROM SH 5 SOUTH TO EAST OF SH 5 NORTH
0047-04-029: FROM NORTH OF SH 121 TO SOUTH OF MELISSA RD

HORIZ. SCALE IN FEET: 0 50 100 150 200
VERT. SCALE IN FEET: 0 10 20 30 40

BASIS OF DESIGN: TxDOT ROADWAY DESIGN MANUAL 2018
EQUATIONS: NONE
RAILROADS: NONE
DESIGN EXCEPTIONS:
DESIGN SPEED AT ONE LOCATION


BEGIN PROJECT
CSJ: 0549-03-031
SH 121 STA 84+09.85
BEGIN PROJECT
CSJ: 0047-04-030
SH 5 STA 391+00.00
END PROJECT
CSJ: 0047-04-029
SH 5
STA 522+02.04
END PROJECT
CSJ: 0549-03-031
SH 121
STA 122+91.46
END PROJECT
CSJ: 0549-03-031
BEGIN PROJECT
CSJ: 0047-04-029
SH 5 STA 508+00.00
END PROJECT
CSJ: 0047-04-030
BEGIN PROJECT
CSJ: 0549-03-031
SH 5 STA 486+00.00
MC
GRAYSON CO.
FANNIN CO.
DALLAS CO.
ROCKWALL CO.
HUNT CO.
DENTON CO.
PLANO
MURPHY
WYLIE
LAVON
NEVADA
N

LOCATION MAP: NTS

APRIL 15, 2020

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CAREN D. CHAMBERS P.E. 99772
4/20/2020

INDEX OF ROLLS

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- ROLL 2 OF 5 PLAN & PROFILE SH 5 STA 425+00 TO STA 467+00
- ROLL 3 OF 5 PLAN & PROFILE SH 5 STA 467+00 TO STA END PROJ
- ROLL 4 OF 5 PLAN & PROFILE SH 121 STA 84+09.85 TO STA 122+91.46
- ROLL 5 OF 5 PROFILE RAMPS AND CROSS STREETS

Michael Baker
INTERNATIONAL
1501 LBJ Freeway,
Suite 650,
Dallas, TX 75234
TBPE Registration No. F-2677

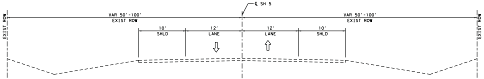
PLAN & PROFILE

SH 5

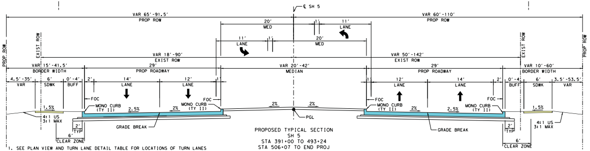
STA 467+00 TO END PROJ

ROLL 3 OF 5 ROLLS

DESIGNED BY:	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		ROLL NO.
BAKER	6	XX (XX) XXXX		S-003
DRAWN BY:	STATE	DIST.	COUNTY	
BAKER	TEXAS	DAL	COLLIN	
CHECKED BY:	CONT	SEC	JOB	HIGHWAY NO.
BAKER	0047	04	029, etc.	SH 5

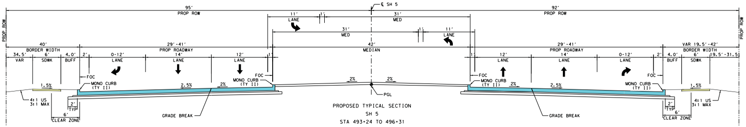

℄ SH 5
VAR 50'-100'
EXIST ROW
VAR 50'-100'
EXIST ROW
EXIST ROW
EXIST ROW
10'
SHLD
12'
LANE
12'
LANE
10'
SHLD

EXISTING TYPICAL SECTION
SH 5
STA 391+00.00 TO END
NTS


℄ SH 5
VAR 65'-91.5'
PROP ROW
VAR 60'-110'
PROP ROW
20'
MED
1'
11'
LANE
11'
LANE
1'
20'
MED
PROP ROW
EXIST ROW
VAR 18'-90'
EXIST ROW
VAR 50'-142'
EXIST ROW
EXIST ROW
PROP ROW
VAR 15'-41.5'
BORDER WIDTH
29'
PROP ROADWAY
VAR 20'-42'
MEDIAN
29'
PROP ROADWAY
VAR 10'-60'
BORDER WIDTH
4.5'-35'
VAR
6'
SDWK
0'-4'
BUFF
2'
14'
LANE
12'
LANE
1'
1'
12'
LANE
14'
LANE
2'
0'-4'
BUFF
6'
SDWK
3.5'-53.5'
VAR
FOC
FOC
FOC
FOC
1.5%
MONO CURB
(TY II)
2.5%
2%
MONO CURB
(TY II)
2%
2%
PGL
MONO CURB
(TY II)
2%
2.5%
MONO CURB
(TY II)
1.5%
4:1 US
3:1 MAX
2'
TYP
6'
CLEAR ZONE
GRADE BREAK
GRADE BREAK
2'
TYP
6'
CLEAR ZONE
4:1 US
3:1 MAX

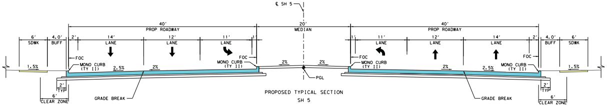
PROPOSED TYPICAL SECTION
SH 5
STA 391+00 TO 493+24
STA 506+07 TO END PROJ
NTS

1. SEE PLAN VIEW AND TURN LANE DETAIL TABLE FOR LOCATIONS OF TURN LANES
2. CROSS SLOPES SHOWN ARE USUAL. SEE CROSS SLOPE TRANSITION TABLE FOR MORE DETAIL.


℄ SH 5
95'
PROP ROW
92'
PROP ROW
11'
LANE
1'
31'
MED
31'
MED
1'
11'
LANE
PROP ROW
PROP ROW
40'
BORDER WIDTH
29'-41'
PROP ROADWAY
42'
MEDIAN
29'-41'
PROP ROADWAY
VAR 19.5'-42'
BORDER WIDTH
34.5'
VAR
6'
SDWK
4.0'
BUFF
2'
0-12'
LANE
14'
LANE
12'
LANE
1'
1'
12'
LANE
14'
LANE
0-12'
LANE
2'
4.0'
BUFF
6'
SDWK
19.5'-31.5
FOC
FOC
FOC
FOC
1.5%
MONO CURB
(TY II)
2.5%
2%
MONO CURB
(TY II)
2%
2%
PGL
MONO CURB
(TY II)
2%
2.5%
MONO CURB
(TY II)
1.5%
4:1 US
3:1 MAX
2'
TYP
6'
CLEAR ZONE
GRADE BREAK
GRADE BREAK
2'
TYP
6'
CLEAR ZONE
4:1 US
3:1 MAX

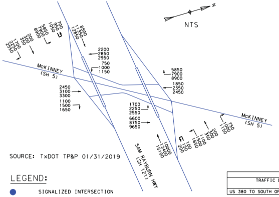
PROPOSED TYPICAL SECTION
SH 5
STA 493+24 TO 496+31
STA 502+09 TO 506+07
NTS

1. SEE PLAN VIEW AND TURN LANE DETAIL TABLE FOR LOCATIONS OF TURN LANES
2. CROSS SLOPES SHOWN ARE USUAL. SEE CROSS SLOPE TRANSITION TABLE FOR MORE DETAIL.


℄ SH 5
40'
PROP ROADWAY
20'
MEDIAN
40'
PROP ROADWAY
6'
SDWK
4.0'
BUFF
2'
14'
LANE
12'
LANE
11'
LANE
1'
1'
11'
LANE
12'
LANE
14'
LANE
2'
4.0'
BUFF
6'
SDWK
FOC
FOC
FOC
FOC
1.5%
MONO CURB
(TY II)
2.5%
2%
MONO CURB
(TY II)
2%
2%
PGL
MONO CURB
(TY II)
2%
2.5%
MONO CURB
(TY II)
1.5%
2'
TYP
6'
CLEAR ZONE
GRADE BREAK
GRADE BREAK
2'
TYP
6'
CLEAR ZONE

PROPOSED TYPICAL SECTION
SH 5
STA 496+31 TO STA 502+09
NTS

1. SEE PLAN VIEW AND TURN LANE DETAIL TABLE FOR LOCATIONS OF TURN LANES
2. CROSS SLOPES SHOWN ARE USUAL. SEE CROSS SLOPE TRANSITION TABLE FOR MORE DETAIL.


N
NTS
McKINNEY
(SH 5)
McKINNEY
(SH 5)
SAM RAYBURN HWY
(SH 121)
1700
2250
2550
200
300
350
5850
7900
8900
700
950
1050
8500
11350
12850
2200
2850
2950
750
1000
1150
2450
3100
3300
1100
1500
1650
5850
7900
8900
1850
2350
2450
1700
2250
2550
6600
8750
9650
10000
13400
15100
100
150
200
1100
1500
1650
200
300
350
750
1000
1150

SOURCE: TxDOT TP&P 01/31/2019

LEGEND:

● SIGNALIZED INTERSECTION
XXX 2025 ADT
XXX 2045 ADT
XXX 2055 ADT

TRAFFIC DATA				
TRAFFIC DATA	ADT	DD (%)	% TRUCKS (DHV)	K FACTOR (%)
US 380 TO SOUTH OF MELISSA RD	20,000	59-41	4.8	10.2

CHAIN NAME	CURVE NAME	P.I. STATION	P.I. EAST
℄ SH5	CLSH5-28	480+02.74	2,555,349.
℄ SH5	CLSH5-29	506+88.95	2,555,377.

TIME: 6:08:09 PM
PEN TABLE - SH5•TxDOT•McKinney•Schematic.tbl
DATE: 4/20/2020
FILE: ...\5RPP00•N103.dgn
ROLLPLOT - V8i•BAKER•WIN•CO•PDF.pltcfg

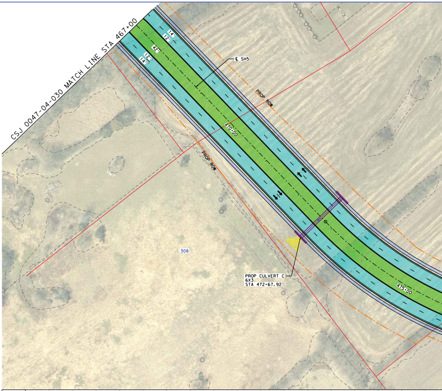
PROPERTY OWNERS

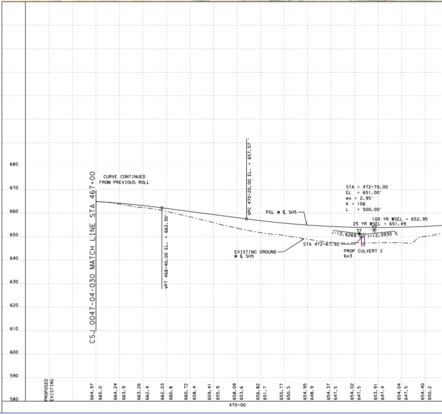
SOURCE:
COLLIN COUNTY APPRAISAL DISTRICT
JULY 2019

ID#	SITE ADDRESS	OWNER	BUSINESS NAME
306	SAM RAYBURN HWY	CRAFT LIVING TRUST	
307	SAM RAYBURN HWY	NNRM LLC	
308	COUNTY ROAD 339	JOJO'S RUN LLC- MILLER BEVERAGE SERIES	
309	1421 MCKINNEY ST	INDEP ADMIN EST OF RONALD CHARLES MEDCALF & MARY ANN-LE MEDCALF	
310	1521 MCKINNEY ST	TALLENT PROPERTIES LLC-MELISSA STRIP CENTER SERIES	TALLENT STRIP CENTER
311	1717 MCKINNEY ST	MELISSA ASSOCIATES LLC	ABC SUPPLY CO
312	1705 MCKINNEY ST	CCCC PARTNERS LTD	
313	MELISSA, TX 75454	EINOLLAH ETAL KHODABAKSH	
314	MELISSA, TX 75454	MICHAEL E MCGUIRE-LE & LISA-LE PRESCOTT	
315	2025 MCKINNEY ST	MELISSA 121/5 PARTNERS LTD	MONDON APPALOOSAS
316	MELISSA, TX 75454	KC MELISSA REALTY LTD	
317	SAM RAYBURN HWY	RANDY MILLER	
318	1610 SAM RAYBURN HWY	MJDJ FAMILY TRUST	

COLOR LEGEND

🟦	PROPOSED MAINLANES
🟧	PROPOSED BRIDGE
🟨	PROPOSED DRIVEWAY
🟪	PROPOSED CROSS STREET
🟫	PROPOSED RAMP
🟦	PROPOSED SIDEWALK AND PAVED MEDIAN
🟩	PROPOSED LANDSCAPED MEDIAN
🟧	FUTURE BY OTHERS
⬛	EXISTING BRIDGE TO REMAIN
🟦	100 YEAR FLOOD PLAIN
🟪	EXISTING PAVEMENT (BY OTHERS)
▨	EXISTING PAVEMENT TO BE REMOVED
☒	POTENTIAL STRUCTURE DISPLACEMENT
— · —	CENTERLINE/BASELINE (CROSS STREETS)
— · —	CENTERLINE (MAINLANE)
— · —	PROPOSED ROW
——	CITY LIMITS
— · —	EXISTING ROW
——	PROPERTY LINES
—‖—	CONTROL OF ACCESS
┴┴┴	PROPOSED RETAINING WALL
——	PROPOSED SSCB
- - -	PROPOSED COMBINATION RAIL
←	PROPOSED TRAFFIC FLOW
⇦	EXISTING TRAFFIC FLOW
←	WATER FLOW
(XXXXX-XX)	HORIZONTAL CURVE NAME
XXX	PROPERTY ID NUMBER
	EXISTING DRAINAGE STRUCTURES
	PROPOSED DRAINAGE STRUCTURES
	PROPOSED SIGNALIZED INTERSECTION


CSJ 0047-04-030 MATCH LINE STA 467+00
14'
12'
42'
12'
14'
℄ SH5
PROP ROW
PROP ROW
470+00
475+00
308
PROP CULVERT C
6X3
STA 472+67.92



NOTES:

1. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT, FACE OF CURB, RAIL, UNLESS OTHERWISE NOTED.

2. 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 GOVERNMENT.

3. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL UNLESS OTHERWISE NOTED.

4. APPROXIMATE 100 YEAR FLOODPLAIN LIMITS ARE BASED UPON FEMA FLOOD INSURANCE RATE MAP 48085C020J (REV JUNE 7, 2017) AND 48085C0290J (REV JUNE 2, 20009) FOR WILSON CREEK, 48085C0165J (REV JUNE 2, 2009) AND 48085C0280J (REV JUNE 2, 2009) FOR EAST FORK TRINITY RIVER.

5. OWNERSHIP INFORMATION SHOWN ON SCHEMATIC OBTAINED FROM COLLIN COUNTY APPRAISAL DISTRICT OCTOBER 2017.

6. EXISTING CULVERT LOCATION, SIZE, AND ELEVATIONS OBTAINED FROM RECORD DOCUMENTS OR TOPOGRAPHIC SURVEY AND ARE SHOWN FOR INFORMATION PURPOSES ONLY.

7. ADA RAMPS ARE NOT DEPICTED IN THE PLAN.

8. FINAL DRIVEWAY LOCATIONS SHALL BE DETERMINED DURING DETAILED DESIGN IN COORDINATION WITH THE CITY OF McKINNEY.

9. ALL PRIVATE DRIVEWAYS HAVE CURB RADII OF 15FT, UNLESS OTHERWISE NOTED.

10. EXIST TOPO AND AERIAL PHOTOS PROVIDED BY TxDOT.

11. EXIST ROW SHOWN PROVIDED BY TxDOT.

12. PARCEL BOUNDARY LOCATIONS ARE APPROXIMATE AND SUBJECT TO CHANGE.

13. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE.

14. CURBS ON MAINLANES, FRONTAGE ROADS AND CROSS STREETS ARE TYPE II (MONO), UNLESS OTHERWISE SHOWN.

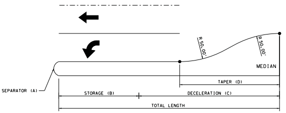
15. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.

16. ALL HORIZONTAL COORDINATES ARE REFERENCED TO THE TEXAS COORDINATE SYSTEM, NORTH CENTRAL ZONE (4202), NORTH AMERICAN DATUM OF 1983 (NAD 83), 2011 ADJUSTMENT, 2010.00 EPOCH. SURFACE DISTANCES AND COORDINATES MAY BE CONVERTED TO GRID BY DIVIDING BY A COMBINED ADJUSTMENT FACTOR OF 1.000152710.

17. ALL COORDINATES AND ELEVATIONS ARE IN U.S. SURVEY FEET.

18. VERTICAL VALUES WERE DETERMINED BY THE TxDOT REAL TIME GPS NETWORK (RTN) (NAD 83 (2011, MA11, PA11) EPOCH 2010.00) WITH THE GEOID12A APPLIED.

19. DRIVEWAYS ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND ARE SUBJECT TO REVIEW, ADJUSTMENT AND/OR CONSOLIDATION BASED ON CORRIDOR ACCESS MANAGEMENT.


R 50.00'
R 50.00'
MEDIAN
TAPER (D)
SEPARATOR (A)
STORAGE (B)
DECELERATION (C)
TOTAL LENGTH

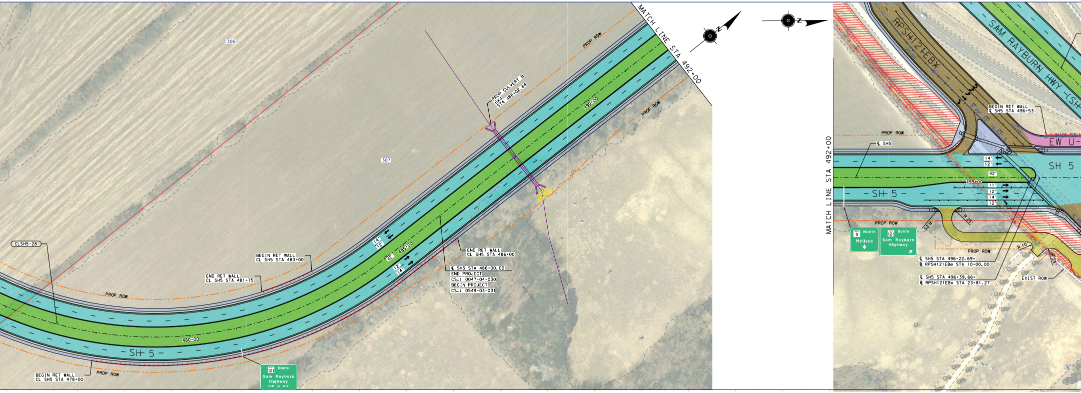
TURN LANE DETAIL

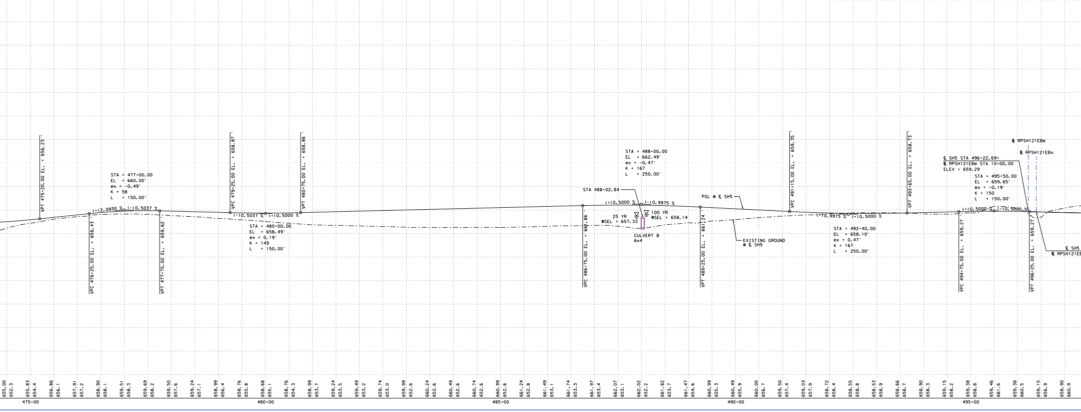
TURN LANE DATA TABLE

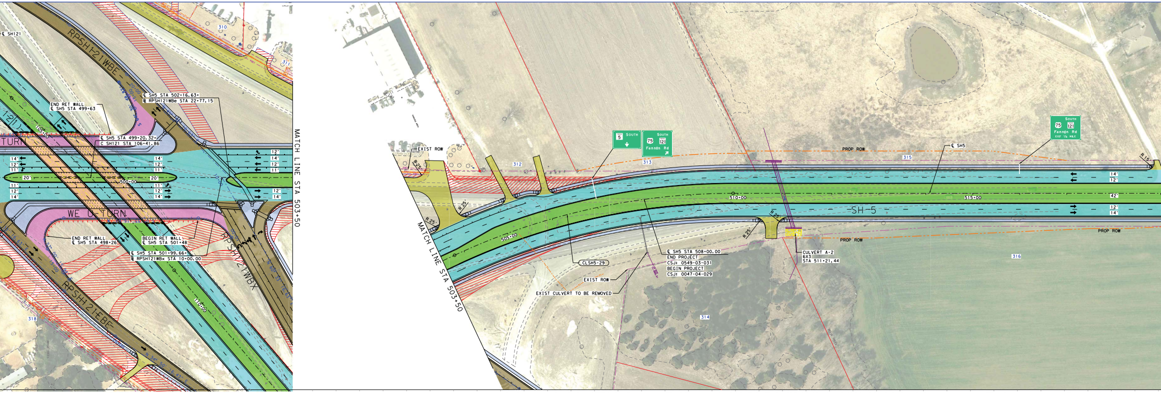
CROSS STREET	MEDIAN NOSE STA @ SH 5	MEDIAN NOSE RADIUS (FT)	STORAGE (FT)	DECELERATION (FT)	TAPER (FT)	TOTAL LENGTH (FT)	L/R	SB/NB
		(A)	(B)	(C)	(D)			
SH 121 EB ENTRANCE RAMP	496+29.85	15.5	100	160	100	260	L	NB
SH 121 EB ENTRANCE RAMP	N/A	N/A	100	225	50	325	R	NB
SH 121 EB ENTRANCE RAMP	497+36.75	15.5	100	260	N/A	360	L	SB
SH 121 WB ENTRANCE RAMP	501+02.58	15.5	100	260	N/A	360	L	NB
SH 121 WB ENTRANCE RAMP	502+09.27	15.5	100	165	100	265	L	SB
SH 121 WB ENTRANCE RAMP	N/A	N/A	150	275	50	425	R	SB

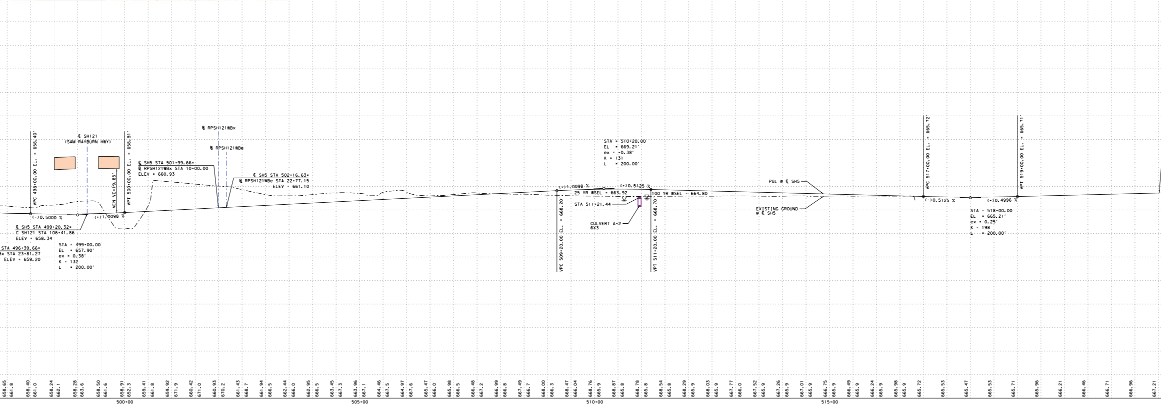
HORIZONTAL ALIGNMENT DATA

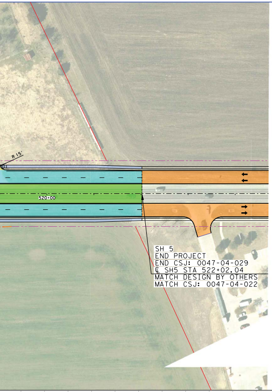
ING	P.I. NORTHING	RADIUS	DELTA	LENGTH	TANGENT	P.C. STATION	P.T. STATION
16	7,149,808.97	800.00'	84° 08' 25.13" LT	1,174.82'	722.10'	472+80.64	484+55.46
77	7,152,764.41	1,400.00'	25° 02' 49.59" RT	612.02'	310.98'	503+77.97	509+89.99

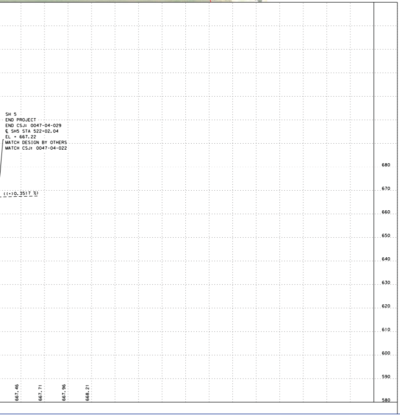

306
307
PROP ROW
PROP ROW
MATCH LINE STA 492+00
PROP CULVERT B
6X4
STA 488+02.84
490+00
CLSH5-28
BEGIN RET WALL
CL SH5 STA 483+00
END RET WALL
CL SH5 STA 481+75
END RET WALL
CL SH5 STA 486+00
℄ SH5 STA 486+00.00
END PROJECT
CSJ: 0047-04-030
BEGIN PROJECT
CSJ: 0549-03-031
14'
12'
42'
485+00
12'
14'
480+00
SH 5
PROP ROW
BEGIN RET WALL
CL SH5 STA 478+00
PROP ROW
121 NORTH
Sam Rayburn Highway
EXIT 1/4 MILE
N
N
MATCH LINE STA 492+00
RPSH121EBx
SAM RAYBURN HWY (SH
BEGIN RET WALL
℄ SH5 STA 496+53
N 45° 33' 16.63" E
10+00
EW U-
PROP ROW
℄ SH5
SH 5
14'
12'
42'
495+00
11'
12'
14'
12'
SH 5
PROP ROW
R 25'
R 25'
5 NORTH
Melissa
121 NORTH
Sam Rayburn Highway
PROP ROW
R 10'
R 25'
℄ SH5 STA 496+22.69=
℄ RPSH121EBe STA 10+00.00
℄ SH5 STA 496+39.66=
℄ RPSH121EBx STA 23+81.27
EXIST ROW




℄ SH121
RPSH121WBE
310
311
END RET WALL
℄ SH5 STA 499+63
℄ SH5 STA 502+16.63=
℞ RPSH121WBe STA 22+77.15
℄ SH5 STA 499+20.32=
C SH121 STA 106+41.86
105+00
TURN
14'
12'
11'
20'
500+00
WE U-TURN
END RET WALL
℄ SH5 STA 498+26
BEGIN RET WALL
℄ SH5 STA 501+48
℄ SH5 STA 501+99.66=
℞ RPSH121WBx STA 10+00.00
RPSH121WBX
RPSH121EBE
110+00
318
MATCH LINE STA 503+50
EXIST ROW
R 25'
312
5 SOUTH
SOUTH 75 121 Fannin Rd
313
PROP ROW
315
℄ SH5
SOUTH 75 121 Fannin Rd EXIT 1/4 MILE
R 15'
505+00
510+00
515+00
SH-5
42'
CLSH5-29
℄ SH5 STA 508+00.00
END PROJECT
CSJ: 0549-03-031
BEGIN PROJECT
CSJ: 0047-04-029
EXIST ROW
EXIST CULVERT TO BE REMOVED
CULVERT A-2
6X3
STA 511+21.44
316
314


℄ SH121
(SAM RAYBURN HWY)
VPC 498+00.00 EL. = 658.40'
VPT 500+00.00 EL. = 658.91'
MIN VC=19.85'
(-)0.5000 %
(+)1.0098 %
℄ SH5 STA 499+20.32=
C SH121 STA 106+41.86
ELEV = 658.34
STA 496+39.66=
x STA 23+81.27
ELEV = 659.20
STA = 499+00.00
EL = 657.90'
ex = 0.38'
K = 132
L = 200.00'
℞ RPSH121WBx
℞ RPSH121WBe
℄ SH5 STA 501+99.66=
℞ RPSH121WBx STA 10+00.00
ELEV = 660.93
℄ SH5 STA 502+16.63=
℞ RPSH121WBe STA 22+77.15
ELEV = 661.10
STA = 510+20.00
EL = 669.21'
ex = -0.38'
K = 131
L = 200.00'
(+)1.0098 %
(-)0.5125 %
25 YR WSEL = 663.92
100 YR WSEL = 664.80
STA 511+21.44
CULVERT A-2
6X3
VPC 509+20.00 EL. = 668.20'
VPT 511+20.00 EL. = 668.70'
PGL @ ℄ SH5
EXISTING GROUND
@ ℄ SH5
VPC 517+00.00 EL. = 665.72'
VPT 519+00.00 EL. = 665.71'
(-)0.5125 %
(+)0.4996 %
STA = 518+00.00
EL = 665.21'
ex = 0.25'
K = 198
L = 200.00'
658.65 661.8
658.40 661.0
658.24 662.1
658.28 663.6
658.50 661.6
658.91 652.3
659.41 661.8
659.92 671.9
660.42 671.0
660.93 670.2
661.43 668.7
661.94 666.5
662.44 666.0
662.95 666.5
663.45 667.3
663.96 667.1
664.46 667.5
664.97 667.6
665.47 666.0
665.98 666.5
666.48 667.2
666.99 666.8
667.49 666.7
668.00 666.3
668.47 666.04
668.76 665.9
668.87 665.8
668.78 665.8
668.54 665.8
668.29 665.9
668.03 665.9
667.77 666.0
667.52 665.9
667.26 665.9
667.01 665.9
666.75 665.9
666.49 665.9
666.24 665.9
665.98 665.9
665.72
665.53
665.47
665.53
665.71
665.96
666.21
666.46
666.71
666.96
667.21
500+00
505+00
510+00
515+00


R 15'
520+00
SH 5
END PROJECT
END CSJ: 0047-04-029
℄ SH5 STA 522+02.04
MATCH DESIGN BY OTHERS
MATCH CSJ: 0047-04-022



UTILITY LEGEND

WATER	—W1— · —W1— · —W1—	CITY OF MCKINNEY WATER
WATER	— · — · —W1 (C)— · — · —	CITY OF MCKINNEY WATER
WATER	— · — · — W1 (D) — · — · —	CITY OF MCKINNEY WATER
WATER	— · — · —W2 (C)— · — · —	NORTH TEXAS MUNICIPAL WATER DISTRICT
WATER	— · — · —W3 (D)— · — · —	CITY OF IRVING WATER
WATER	—W4— · —W4— · —W4—	NORTH COLLINS WATER SUPPLY
WATER	— · — · — W4 (C) — · — · —	NORTH COLLINS WATER SUPPLY
WATER	— · — · —W4 (D)— · — · —	NORTH COLLINS WATER SUPPLY
WASTE WATER	— WW1 — —	CITY OF MCKINNEY WASTE WATER
WASTE WATER	— WW1 (C) — —	CITY OF MCKINNEY WASTE WATER
WASTE WATER	— WW1 (D) — —	CITY OF MCKINNEY WASTER WATER
STORM DRAIN	— SD — —	CITY OF MCKINNEY STORM
STORM DRAIN	— SD (C) — —	CITY OF MCKINNEY STORM
STORM DRAIN	— SD(D) — —	CITY OF MCKINNEY STORM
ELECTRIC BURIED	— — — — E1 — —	ONCOR
OVERHEAD ELECTRIC	— — — — OH — —	ONCOR
OVERHEAD ELECTRIC,TELEPHONE	——— OH-T -	ONCOR, AT&T
OVERHEAD ELECTRIC,COAX	— — — — OH1 —	ONCOR, TIME WARNER CABLE
OVERHEAD ELECTRIC,FIBER,COAX	— — — — OH2 —	ONCOR, AT&T, TIME WARNER CABLE
OH ELECTRIC,FIBER,TELEPHONE,COAX	— — — — OH3 —	ONCOR, AT&T, TIME WARNER CABLE
OVERHEAD ELECTRIC,FIBER	— — — — OH4 —	ONCOR, AT&T
OVERHEAD TELEPHONE, COAX	— — — — OH5 —	AT&T,TIME WARNER CABLE
ELECTRIC BURIED	———	TRAFFIC SIGNAL TXDOT
TELEPHONE	— - — - —T1— - —	AT&T
TELEPHONE	— - — - —T1 (D)— -	AT&T
OVERHEAD TELEPHONE	— - — - — T1 OH —	AT&T
TELEPHONE DUCT	— - — - —T-DUCT1—	AT&T
SUPPORT STRAND	———	AT&T
GAS	—G1— ·· —G1— ·· —G1—	ATMOS
GAS	— ·· — ·· —G1 (C)—	ATMOS
GAS	— ·· — ·· — G1 (D) —	ATMOS
FIBER	— - — - — FOC1 —	AT&T
FIBER	— - — - —FOC1 (D)—	AT&T
FIBER DUCT	— - — - — DUCT2 —	AT&T
FIBER	— - — - — FOC3 —	ZAYO
FIBER	— - — - — FOC4 —	CITY OF IRVING COMMUNICATIONS
CABLE	— — — — CATV —	TIME WARNER CABLE

* LINE SIZES ARE FROM BEST AVAIABLE RECORDS

UTILITY LEGEND

⌖	POWER POLE
⌖	POLE RISER
J	ELECTRIC JUNCTION BOX
▣	ELECTRIC PULL BOX
▣	ELECTRIC METER
▢	ELECTRIC PED
Ⓣ	TELEPHONE MANHOLE
⊘	TELEPHONE PED
JB	TELEPHONE JUNCTION BOX
HH	TELEPHONE HAND HOLE
GV	GAS VALVE
GM	GAS METER
WW	WASTE WATER MANHOLE
Ⓦ	WATER MANHOLE
WM	WATER METER
⋈	WATER VALVE
T	WATER CAP
⌖	FIRE HYDRANT
SD	STORM MANHOLE
▭	STORM INLET
FH	FIBER OPTICS HAND HOLE
▥	STORM GRATE INLET
◁	HEAD WALL

COLOR LEGEND

🟦	PROPOSED MAINLANES
🟧	PROPOSED BRIDGE
🟨	PROPOSED DRIVEWAY
🟪	PROPOSED CROSS STREET
🟫	PROPOSED RAMP
⬜	PROPOSED SIDEWALK AND PAVED MEDIAN
🟩	PROPOSED LANDSCAPED MEDIAN
🟧	FUTURE BY OTHERS
⬛	EXISTING BRIDGE TO REMAIN
⬜	100 YEAR FLOOD PLAIN
🟪	EXISTING PAVEMENT (BY OTHERS)
▨	EXISTING PAVEMENT TO BE REMOVED
▨	POTENTIAL STRUCTURE DISPLACEMENT
— · —	CENTERLINE/BASELINE (CROSS STREETS)
— · —	CENTERLINE (MAINLANE)
— · —	PROPOSED ROW
— —	CITY LIMITS
— · —	EXISTING ROW
——	PROPERTY LINES
—||—	CONTROL OF ACCESS
┴┴┴┴	PROPOSED RETAINING WALL
═	PROPOSED SSCB
——	PROPOSED COMBINATION RAIL
←	PROPOSED TRAFFIC FLOW
⇦	EXISTING TRAFFIC FLOW
←	WATER FLOW
(XXXXX-XX)	HORIZONTAL CURVE NAME
XXX	PROPERTY ID NUMBER
▯	EXISTING DRAINAGE STRUCTURES
▯	PROPOSED DRAINAGE STRUCTURES
	PROPOSED SIGNALIZED INTERSECTION

Texas Department of Transportation

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DALLAS DISTRICT

MOHAMED K. BUR, P.E.
DISTRICT ENGINEER

DESIGN SCHEMATIC SH 5

FROM: SOUTH OF CR 275 TO: SOUTH OF MELISSA RD

COLLIN COUNTY

FUNCTIONAL CLASSIFICATIONS	
URBAN PRINCIPAL ARTERIAL	SH 121 MAINLANE, SH 5 MAINLAINE, RAMPS
URBAN COLLECTOR	CR 338 (FANNIN RD)
URBAN/RURAL LOCAL	ALL OTHER STREETS

DESIGN SPEED	
45 MPH	SH 121 MAINLANE
40 MPH	SH 5 MAINLAINE, RAMPS
30 MPH	ALL OTHER STREETS

PROJECT LENGTH

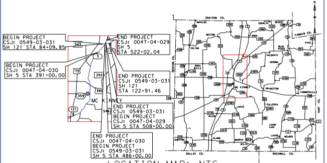
2.48 MI

CSJ LIMITS

0047-04-030: FROM SOUTH OF CR 275 TO SOUTH OF SH 121
0549-03-031: FROM SH 5 SOUTH TO EAST OF SH 5 NORTH
0047-04-029: FROM NORTH OF SH 121 TO SOUTH OF MELISSA RD

HORIZ. SCALE IN FEET: 1" = 100'
0 50 100 150 200
0 10 20 30 40
VERT. SCALE IN FEET: 1" = 20'

BASIS OF DESIGN: TxDOT ROADWAY DESIGN MANUAL 2018
EQUATIONS: NONE
RAILROADS: NONE
DESIGN EXCEPTIONS:
DESIGN SPEED AT ONE LOCATION


BEGIN PROJECT
CSJ: 0549-03-031
SH 121 STA 84+09.85
END PROJECT
CSJ: 0047-04-029
SH 5
STA 522+02.04
BEGIN PROJECT
CSJ: 0047-04-030
SH 5 STA 391+00.00
END PROJECT
CSJ: 0549-03-031
SH 121
STA 122+91.46
END PROJECT
CSJ: 0549-03-031
BEGIN PROJECT
CSJ: 0047-04-029
SH 5 STA 508+00.00
END PROJECT
CSJ: 0047-04-030
BEGIN PROJECT
CSJ: 0549-03-031
SH 5 STA 486+00.00
MC KINNEY
543
5
121
75
293
380
359
546
GRAYSON CO.
FANNIN CO.
DENTON CO.
HUNT CO.
DALLAS CO.
ROCKWALL CO.
N

LOCATION MAP: NTS

APRIL 15, 2020

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
4/20/2020

INDEX OF ROLLS
ROLL 1 OF 5 PLAN & PROFILE SH 5 STA BEG PROJ TO STA 425+00
ROLL 2 OF 5 PLAN & PROFILE SH 5 STA 425+00 TO STA 467+00
ROLL 3 OF 5 PLAN & PROFILE SH 5 STA 467+00 TO STA END PROJ
ROLL 4 OF 5 PLAN & PROFILE SH 121 STA 84+09.85 TO STA 122+91.46
ROLL 5 OF 5 PROFILE RAMPS AND CROSS STREETS

Michael Baker
INTERNATIONAL

1501 LBJ Freeway,
Suite 650,
Dallas, TX 75234
TBPE Registration No. F-2677

PLAN & PROFILE

SH 5

STA 467+00 TO END PROJ

ROLL 3 OF 5 ROLLS

DESIGNED BY:	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.			ROLL NO.
BAKER	6	XX (XX) XXXX			S-003
DRAWN BY:	STATE	DIST.	COUNTY		
BAKER	TEXAS	DAL	COLLIN		
CHECKED BY:	CONT	SEC	JOB		HIGHWAY NO.
BAKER	0047	04	029, etc		SH 5

FILE: ...\5RPP00+N103.dgn

Texas Department of Transportation

DALLAS DISTRICT

MOHAMED K. BUR, P.E.
DISTRICT ENGINEER

DESIGN SCHEMATIC SH 5

FROM: SOUTH OF CR 275 TO: SOUTH OF MELISSA RD

COLLIN COUNTY

FUNCTIONAL CLASSIFICATIONS	
URBAN PRINCIPAL ARTERIAL	SH 121 MAINLANE, SH 5 MAINLAINE, RAMPS
URBAN COLLECTOR	CR 338(FANNIN RD)
URBAN/RURAL LOCAL	ALL OTHER STREETS

DESIGN SPEED	
45 MPH	SH 121 MAINLANE
40 MPH	SH 5 MAINLAINE, RAMPS
30 MPH	ALL OTHER STREETS

PROJECT LENGTH

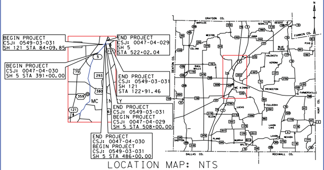
2.48 MI

CSJ LIMITS

0047-04-030: FROM SOUTH OF CR 275 TO SOUTH OF SH 121
0549-03-031: FROM SH 5 SOUTH TO EAST OF SH 5 NORTH
0047-04-029: FROM NORTH OF SH 121 TO SOUTH OF MELISSA RD

HORIZ. SCALE IN FEET 0 50 100 150 200
0 10 20 30 40 VERT. SCALE IN FEET

BASIS OF DESIGN: TxDOT ROADWAY DESIGN MANUAL 2018
EQUATIONS: NONE
RAILROADS: NONE
DESIGN EXCEPTIONS:
DESIGN SPEED AT ONE LOCATION


BEGIN PROJECT
CSJ: 0549-03-031
SH 121 STA 84+09.85
BEGIN PROJECT
CSJ: 0047-04-030
SH 5 STA 391+00.00
END PROJECT
CSJ: 0047-04-029
SH 5
STA 522+02.04
END PROJECT
CSJ: 0549-03-031
SH 121
STA 122+91.46
END PROJECT
CSJ: 0549-03-031
BEGIN PROJECT
CSJ: 0047-04-029
SH 5 STA 508+00.00
END PROJECT
CSJ: 0047-04-030
BEGIN PROJECT
CSJ: 0549-03-031
SH 5 STA 486+00.00
GRAYSON CO.
FANNIN CO.
DALLAS CO.
ROCKWALL CO.
MARILEE
WESTON
CELINA
ANNA
MC KINNEY
PRINCETON
FARMERSVILLE
LUCAS
ALLEN
PLANO
MURPHY
WYLIE
LAVON
NEVADA
SHEPTON
BLUE RIDGE
N

LOCATION MAP: NTS

APRIL 15, 2020

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CAREN D. CHAMBERS P.E. 99772
4/20/2020

INDEX OF ROLLS

ROLL 1 OF 5 PLAN & PROFILE SH 5 STA BEG PROJ TO STA 425+00
ROLL 2 OF 5 PLAN & PROFILE SH 5 STA 425+00 TO STA 467+00
ROLL 3 OF 5 PLAN & PROFILE SH 5 STA 467+00 TO STA END PROJ
ROLL 4 OF 5 PLAN & PROFILE SH 121 STA 84+09.85 TO STA 122+91.46
ROLL 5 OF 5 PROFILE RAMPS AND CROSS STREETS

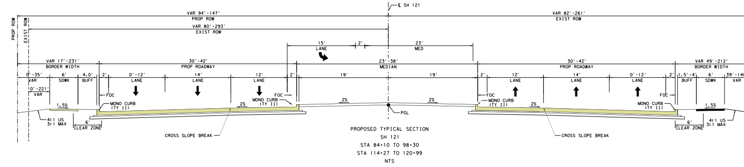
Michael Baker
INTERNATIONAL
1501 LBJ Freeway,
Suite 650,
Dallas, TX 75234
TBPE Registration No. F-2677

PLAN & PROFILE
SH 121
STA 75+00 TO STA 122+91

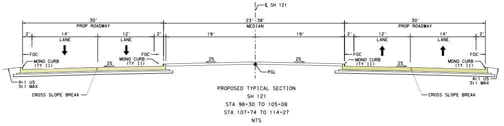
ROLL 4 OF 5 ROLLS

DESIGNED BY:	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		ROLL NO.
BAKER	6	XX (XX) XXXX		S-004
DRAWN BY:	STATE	DIST.	COUNTY	
BAKER	TEXAS	DAL	COLLIN	
CHECKED BY:	CONT	SEC	JOB	HIGHWAY NO.
BAKER	0047	04	029, etc.	SH 5

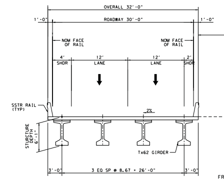
DATE: 4/20/2020
FILE: ...\5RPP00+N104+SH121.dgn
ROLLPLOT - V8i+BAKER+WIN+CO+PDF.pltcfg
TIME: 6:09:08 PM
PEN TABLE - SH5+TxDOT+McKinney+Schematic.tbl

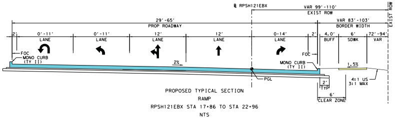

℄ SH 121
PROP ROW
EXIST ROW
VAR 94'-147' PROP ROW
VAR 80'-293' EXIST ROW
VAR 82'-261' EXIST ROW
15' LANE
2'
23' MED
VAR 17'-231' BORDER WIDTH
30'-42' PROP ROADWAY
23'-38' MEDIAN
30'-42' PROP ROADWAY
VAR 49'-212' BORDER WIDTH
0'-35' VAR
0'-221' VAR
6' SDWK
4.0' BUFF
2'
0'-12' LANE
14' LANE
12' LANE
19'
19'
12' LANE
14' LANE
0'-12' LANE
1.5'-4' BUFF
6' SDWK
39'-140' VAR
FOC
MONO CURB (TY II)
1.5%
2%
4:1 US
3:1 MAX
6' CLEAR ZONE
CROSS SLOPE BREAK
PGL

PROPOSED TYPICAL SECTION
SH 121
STA 84+10 TO 98+30
STA 114+27 TO 120+99
NTS

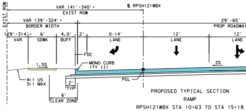

℄ SH 121
30' PROP ROADWAY
23'-38' MEDIAN
30' PROP ROADWAY
2'
14' LANE
12' LANE
19'
19'
12' LANE
14' LANE
FOC
MONO CURB (TY II)
2%
4:1 US
3:1 MAX
CROSS SLOPE BREAK
PGL

PROPOSED TYPICAL SECTION
SH 121
STA 98+30 TO 105+08
STA 107+74 TO 114+27
NTS

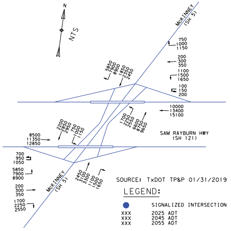

OVERALL 32'-0"
ROADWAY 30'-0"
1'-0"
1'-0"
NOM FACE OF RAIL
4' SHDR
12' LANE
12' LANE
2' SHDR
SSTR RAIL (TYP)
2%
STRUCTURE DEPTH 6'-1"
Tx62 GIRDER
3'-0"
3 EQ SP @ 8.67 = 26'-0"
3'-0"
FR


℄ RPSH121EBX
VAR 99'-110' EXIST ROW
EXIST ROW
29'-65' PROP ROADWAY
VAR 83'-103' BORDER WIDTH
2'
0'-11' LANE
0'-11' LANE
12' LANE
12' LANE
0-14' LANE
4.0' BUFF
6' SDWK
72'-94' VAR
FOC
MONO CURB (TY II)
2%
1.5%
PGL
2' TYP
4:1 US
3:1 MAX
6' CLEAR ZONE

PROPOSED TYPICAL SECTION
RAMP
RPSH121EBX STA 17+86 TO STA 22+96
NTS


EXIST ROW
℄ RPSH121WBX
VAR 141'-340'+ EXIST ROW
VAR 139'-324'+ BORDER WIDTH
29'-65' PROP ROADWAY
129'-314'+ VAR
6' SDWK
4.0' BUFF
2'
0-14' LANE
12' LANE
12' LANE
FOC
MONO CURB (TY II)
1.5%
2%
PGL
4:1 US
3:1 MAX
2' TYP
6' CLEAR ZONE

PROPOSED TYPICAL SECTION
RAMP
RPSH121WBX STA 10+63 TO 15+18
NTS


N
NTS
McKINNEY (SH 5)
750
1000
1150
200
300
350
1100
1500
1650
100
150
200
10000
13400
15100
5850
7900
8800
1850
2350
2450
SAM RAYBURN HWY (SH 121)
8500
11350
12850
2200
2850
2950
750
1000
1150
1700
2250
2550
6600
8750
9850
700
950
1050
5850
7900
8900
200
300
350
1700
2250
2550
2450
3100
3300
1100
1500
1650
McKINNEY (SH 5)

SOURCE: TxDOT TP&P 01/31/2019

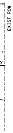
LEGEND:

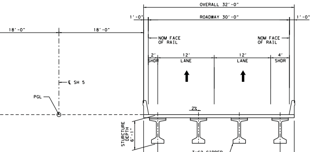
● SIGNALIZED INTERSECTION
XXX 2025 ADT
XXX 2045 ADT
XXX 2055 ADT

TRAFFIC DATA				
TRAFFIC DATA	ADT	DD (%)	% TRUCKS (DHV)	K FACTOR (%)
US 380 TO SOUTH OF MELISSA RD	20,000	59-41	4.8	10.2

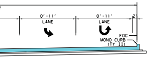
HORIZONTAL ALIGN

CHAIN NAME	CURVE NAME	P.I. STATION	P.I. EASTING	P.I. NORTHING	RADIUS
℄ SH121	CLSH121-1	71+14.04	2,552,653.56	7,149,659.95	3,818.59'
℄ SH121	CLSH121-2	94+46.22	2,554,530.14	7,151,143.79	6,000.00'
℄ SH121	CLSH121-3	106+55.55	2,555,375.89	7,152,009.66	5,000.00'
℄ SH121	CLSH121-4	121+36.13	2,556,512.12	7,152,959.59	5,000.00'
℄ RPSH121EBe	BLRPSH121EBe-1	14+14.18	2,555,663.14	7,151,988.23	1,210.00'
℄ RPSH121EBe	BLRPSH121EBe-2	20+06.12	2,556,013.21	7,152,465.57	1,500.00'
℄ RPSH121EBx	BLRPSH121EBx-1	11+87.95	2,554,419.91	7,150,997.53	3,800.00'
℄ RPSH121EBx	BLRPSH121EBx-2	19+40.69	2,555,052.48	7,151,406.09	1,200.00'
℄ RPSH121WBe	BLRPSH121WBe-1	12+19.37	2,554,749.19	7,151,444.61	1,500.00'
℄ RPSH121WBe	BLRPSH121WBe-2	17+38.74	2,555,006.64	7,151,899.14	1,135.15'
℄ RPSH121WBe	BLRPSH121WBe-3	18+86.03	2,555,093.77	7,152,018.05	1,110.00'
℄ RPSH121WBx	BLRPSH121WBx-1	18+24.24	2,556,090.80	7,152,680.35	5,730.00'
℄ USH5EW	BLUSH5EW-1	10+33.97	2,555,280.91	7,151,694.57	82.00'
℄ USH5EW	BLUSH5EW-2	14+55.89	2,555,285.03	7,152,120.00	42.00'
℄ USH5EW	BLUSH5EW-3	15+20.73	2,555,181.83	7,152,070.81	102.00'
℄ USH5WE	BLUSH5WE-1	10+47.34	2,555,459.50	7,152,271.14	82.00'
℄ USH5WE	BLUSH5WE-2	14+50.13	2,555,455.52	7,151,859.56	42.00'
℄ USH5WE	BLUSH5WE-3	15+32.92	2,555,580.25	7,151,940.55	102.00'



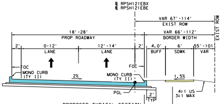

OVERALL 32'-0"
ROADWAY 30'-0"
1'-0"
1'-0"
18'-0"
18'-0"
NOM FACE OF RAIL
NOM FACE OF RAIL
2' SHDR
12' LANE
12' LANE
4' SHDR
℄ SH 5
PGL
2%
STURCTURE DEPTH 6'-1"
Tx62 GIRDER
3'-0"
3 EQ SP @ 8.67 = 26'-0"
3'-0"

PROPOSED TYPICAL SECTION
SH 121
OM STA 105+07.86 TO STA 107+73.86
NTS

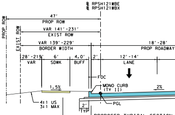

0'-11'
LANE
0'-11'
LANE
2'
FOC
MONO CURB (TY II)

COLOR LEGEND

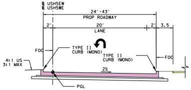
🟦	PROPOSED MAINLANES
🟧	PROPOSED BRIDGE
🟨	PROPOSED DRIVEWAY
🟪	PROPOSED CROSS STREET
🟫	PROPOSED RAMP
🟦	PROPOSED SIDEWALK AND PAVED MEDIAN
🟩	PROPOSED LANDSCAPED MEDIAN
🟧	FUTURE BY OTHERS
⬛	EXISTING BRIDGE TO REMAIN
⬜	100 YEAR FLOOD PLAIN
🟪	EXISTING PAVEMENT (BY OTHERS)
▨	EXISTING PAVEMENT TO BE REMOVED
☒	POTENTIAL STRUCTURE DISPLACEMENT
—·—·—	CENTERLINE/BASELINE (CROSS STREETS)
—·—·—	CENTERLINE (MAINLANE)
—·—·—	PROPOSED ROW
—··—	CITY LIMITS
—·—·—	EXISTING ROW
——	PROPERTY LINES
—╫—	CONTROL OF ACCESS
┴┴┴┴	PROPOSED RETAINING WALL
—▭—	PROPOSED SSCB
----	PROPOSED COMBINATION RAIL
←	PROPOSED TRAFFIC FLOW
⇦	EXISTING TRAFFIC FLOW
←	WATER FLOW
(XXXXX-XX)	HORIZONTAL CURVE NAME
XXX	PROPERTY ID NUMBER
▯	EXISTING DRAINAGE STRUCTURES
▯	PROPOSED DRAINAGE STRUCTURES
	PROPOSED SIGNALIZED INTERSECTION


℄ RPSH121EBX
℄ RPSH121EBE
VAR 67'-114'
EXIST ROW
EXIST ROW
18'-28'
PROP ROADWAY
VAR 66'-112'
BORDER WIDTH
2'
0-12'
LANE
12'-14'
LANE
2'
4.0'
BUFF
6'
SDWK
55'-101'
VAR
FOC
MONO CURB (TY II)
2%
MONO CURB (TY II)
FOC
1.5%
PGL
2'
TYP
6'
CLEAR ZONE
4:1 US
3:1 MAX

PROPOSED TYPICAL SECTION
RAMP
RPSH121EBX STA 13+26 TO 17+86
RPSH121EBE STA 11+45 TO 19+97
NTS


℄ RPSH121WBE
℄ RPSH121WBX
PROP ROW
47'
PROP ROW
EXIST ROW
VAR 141'-231'
EXIST ROW
VAR 139'-229'
BORDER WIDTH
18'-28'
PROP ROADWAY
28'-219'
VAR
6'
SDWK
4.0'
BUFF
2'
12'-14'
LANE
FOC
MONO CURB (TY II)
1.5%
2%
4:1 US
3:1 MAX
2'
TYP
PGL
6'
CLEAR ZONE

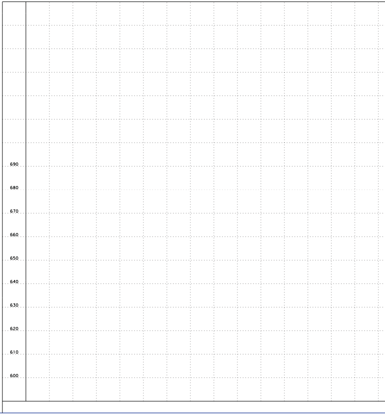
PROPOSED TYPICAL SECTION
RAMP
RPSH121WBE STA 12+23 TO 21+
RPSH121WBX STA 15+18 TO 18+
NTS


℄ USH5EW
℄ USH5WE
24'-43'
PROP ROADWAY
2'
20'
LANE
2'
3.5
FOC
TYPE II CURB (MONO)
TYPE II CURB (MONO)
FOC
4:1 US
3:1 MAX
2%
PGL

PROPOSED TYPICAL SECTION
U-TURN
NTS

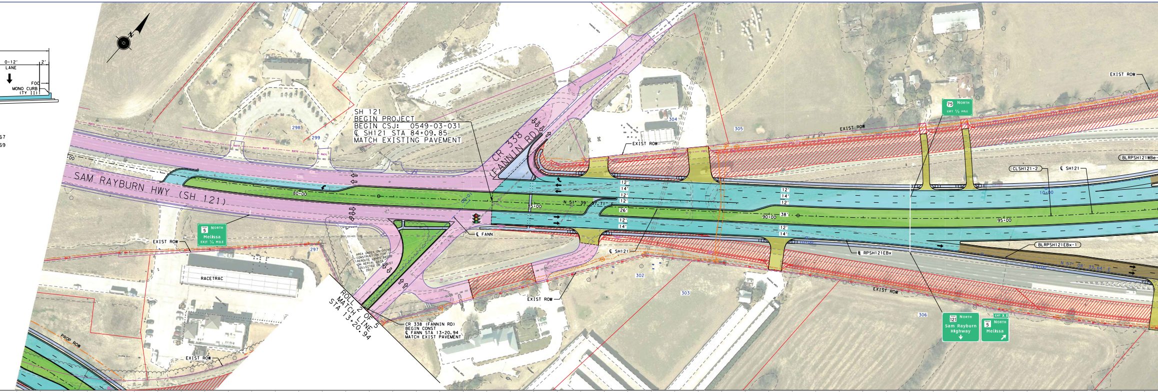
NOTES:

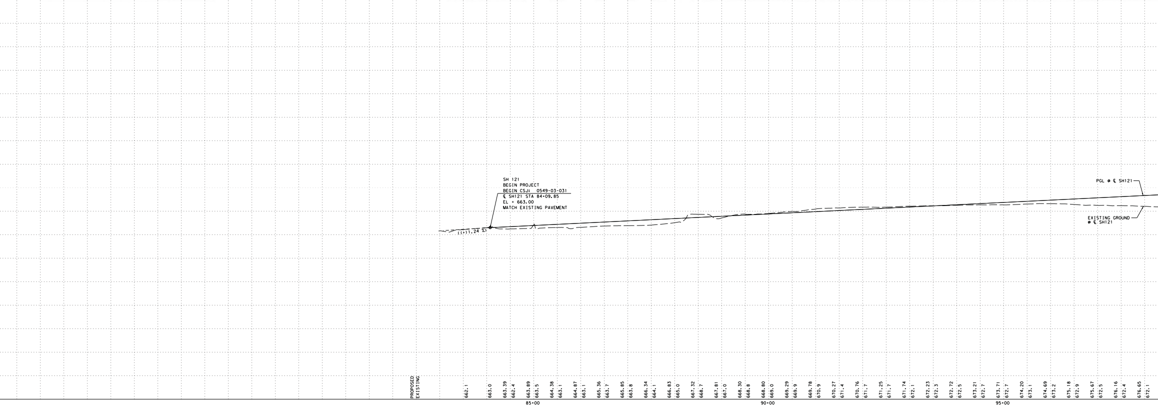
1. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT, FACE OF CURB, RAIL, UNLESS OTHERWISE NOTED.
2. MEDIAN OPENINGS WERE DETERMINED IN COORDINATION WITH LOCAL GOVERNMENT. FINAL LOCATION OF MEDIAN OPENINGS WILL BE DETERMINED IN THE PS&E DEVELOPMENT PHASE IN COORDINATION WITH THE LOCAL GOVERNMENT.
3. SUPERELEVATION AXIS OF ROTATION IS ABOUT THE PGL UNLESS OTHERWISE NOTED.
4. APPROXIMATE 100 YEAR FLOODPLAIN LIMITS ARE BASED UPON FEMA FLOOD INSURANCE RATE MAP 48085C020J (REV JUNE 7, 2017) AND 48085C0290J (REV JUNE 2, 20009) FOR WILSON CREEK, 48085C0165J (REV JUNE 2, 2009) AND 48085C0280J (REV JUNE 2, 2009) FOR EAST FORK TRINITY RIVER.
5. OWNERSHIP INFORMATION SHOWN ON SCHEMATIC OBTAINED FROM COLLIN COUNTY APPRAISAL DISTRICT OCTOBER 2017.
6. EXISTING CULVERT LOCATION, SIZE, AND ELEVATIONS OBTAINED FROM RECORD DOCUMENTS OR TOPOGRAPHIC SURVEY AND ARE SHOWN FOR INFORMATION PURPOSES ONLY.
7. ADA RAMPS ARE NOT DEPICTED IN THE PLAN.
8. FINAL DRIVEWAY LOCATIONS SHALL BE DETERMINED DURING DETAILED DESIGN IN COORDINATION WITH THE CITY OF McKINNEY.
9. ALL PRIVATE DRIVEWAYS HAVE CURB RADII OF 15FT, UNLESS OTHERWISE NOTED.
10. EXIST TOPO AND AERIAL PHOTOS PROVIDED BY TxDOT.
11. EXIST ROW SHOWN PROVIDED BY TxDOT.
12. PARCEL BOUNDARY LOCATIONS ARE APPROXIMATE AND SUBJECT TO CHANGE.
13. BUILDINGS ARE SHOWN AS POTENTIAL DISPLACEMENT IF THE PROPOSED ROW PHYSICALLY INTERSECTS THE EXISTING BUILDING STRUCTURE.
14. CURBS ON MAINLANES, FRONTAGE ROADS AND CROSS STREETS ARE TYPE II (MONO), UNLESS OTHERWISE SHOWN.
15. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING THE PS&E PHASE OF THE PROJECT.
16. ALL HORIZONTAL COORDINATES ARE REFERENCED TO THE TEXAS COORDINATE SYSTEM, NORTH CENTRAL ZONE (4202), NORTH AMERICAN DATUM OF 1983 (NAD 83), 2011 ADJUSTMENT, 2010.00 EPOCH. SURFACE DISTANCES AND COORDINATES MAY BE CONVERTED TO GRID BY DIVIDING BY A COMBINED ADJUSTMENT FACTOR OF 1.000152710.
17. ALL COORDINATES AND ELEVATIONS ARE IN U.S. SURVEY FEET.
18. VERTICAL VALUES WERE DETERMINED BY THE TxDOT REAL TIME GPS NETWORK (RTN) (NAD 83 (2011, MA11, PA11) EPOCH 2010.00) WITH THE GEOID12A APPLIED.
19. DRIVEWAYS ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND ARE SUBJECT TO REVIEW, ADJUSTMENT AND/OR CONSOLIDATION BASED ON CORRIDOR ACCESS MANAGEMENT.

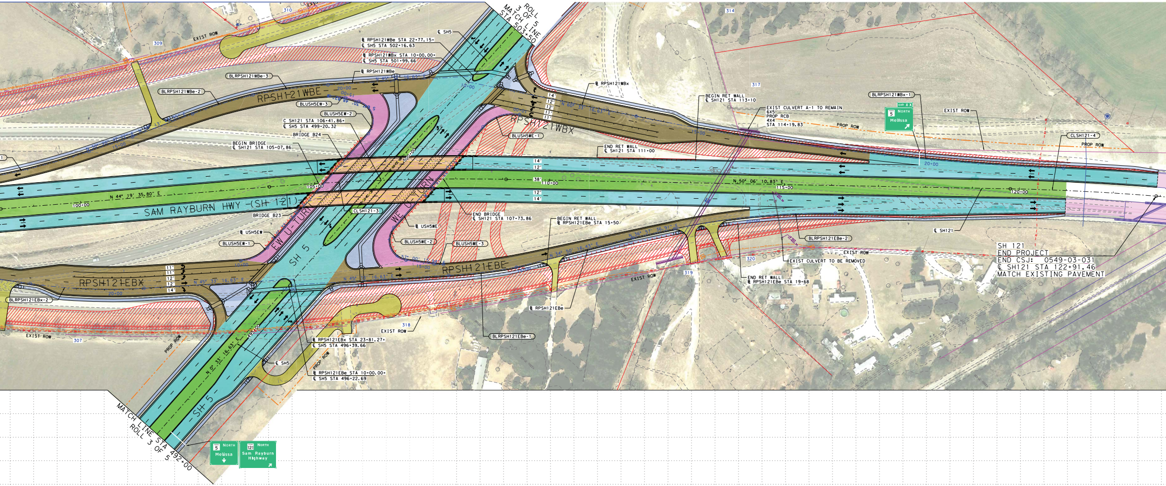


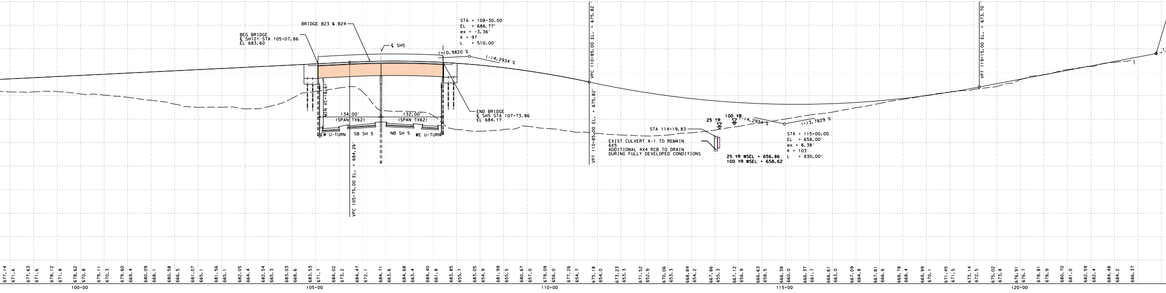
MENT DATA

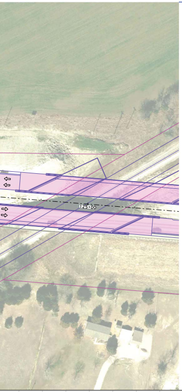
DELTA	LENGTH	TANGENT	P.C. STATION	P.T. STATION
32° 31' 42.01" LT	2,167.92'	1,114.04'	60+00.00	81+67.92
7° 20' 21.91" LT	768.58'	384.82'	90+61.41	98+29.99
5° 46' 35.03" RT	504.09'	252.26'	104+03.29	109+07.38
3° 33' 39.92" RT	310.76'	155.43'	119+80.70	122+91.46
6° 52' 55.95" LT	145.34'	72.76'	13+41.42	14+86.76
13° 08' 33.93" RT	344.08'	172.80'	18+33.32	21+77.40
5° 39' 47.20" RT	375.59'	187.95'	10+00.00	13+75.59
11° 35' 17.01" LT	242.70'	121.77'	18+18.92	20+61.62
16° 38' 27.17" LT	435.66'	219.37'	10+00.00	14+35.66
6° 42' 45.58" RT	132.99'	66.57'	16+72.17	18+05.16
8° 20' 02.15" RT	161.45'	80.87'	18+05.16	19+66.62
9° 10' 22.22" LT	917.35'	459.66'	13+64.58	22+81.93
45° 00' 00.00" LT	64.40'	33.97'	10+00.00	10+64.40
116° 02' 27.80" LT	85.06'	67.27'	13+88.62	14+73.68
18° 57' 32.20" LT	33.75'	17.03'	15+03.70	15+37.45
60° 00' 00.00" LT	85.87'	47.34'	10+00.00	10+85.87
123° 33' 00.69" LT	90.57'	78.25'	13+71.88	14+62.45
11° 26' 59.31" LT	20.38'	10.23'	15+22.70	15+43.08

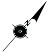

0-12'
LANE
2'
FOC
MONO CURB
(TY II)
67
69
SH 121
BEGIN PROJECT
BEGIN CSJ: 0549-03-031
℄ SH121 STA 84+09.85
MATCH EXISTING PAVEMENT
CR 338
(FANNIN RD)
SAM RAYBURN HWY (SH 121)
80+00
85+00
90+00
95+00
10+00
15+00
N 51° 39' 37.71" E
N 57° 08' 33.64" E
12'
14'
12'
12'
26'
12'
14'
12'
14'
12'
38'
12'
14'
298
299
297
302
303
304
305
306
EXIST ROW
EXIST ROW
EXIST ROW
EXIST ROW
EXIST ROW
EXIST ROW
PROP ROW
RACETRAC
5 NORTH Melissa EXIT 1/4 MILE
75 NORTH EXIT 1/2 MILE
121 NORTH Sam Rayburn Highway
EXIT X X
5 NORTH Melissa
℄ FANN
℄ SH121
℄ SH121
℄ RPSH121EBx
CLSH121-2
BLRPSH121WBe-
BLRPSH121EBx-1
AREA UNDER ON-GOING CONSTRUCTION FOR REROUTE LANES BASED ON AERIAL DATA COLLECTED ON AUGUST 15, 2017
ROLL 2 OF 5
MATCH LINE
STA 13+20.94
CR 338 (FANNIN RD)
BEGIN CONST
℄ FANN STA 13+20.94
MATCH EXIST PAVEMENT


SH 121
BEGIN PROJECT
BEGIN CSJ: 0549-03-031
℄ SH121 STA 84+09.85
EL = 663.00
MATCH EXISTING PAVEMENT
((+)1.24 %)
PGL @ ℄ SH121
EXISTING GROUND @ ℄ SH121
PROPOSED
EXISTING
662.1
663.0
663.39
662.4
663.89
663.5
664.38
663.1
664.87
663.1
665.36
663.7
665.85
663.8
666.34
664.1
666.83
665.0
667.32
668.7
667.81
667.0
668.30
668.8
668.80
669.0
669.29
669.9
669.78
670.9
670.27
671.4
670.76
671.7
671.25
671.7
671.74
672.1
672.23
672.3
672.72
672.5
673.21
672.7
673.71
672.7
674.20
673.1
674.69
673.2
675.18
672.9
675.67
672.5
676.16
672.4
676.65
672.1
85+00
90+00
95+00


MATCH LINE STA 503+50 ROLL 3 OF 5
MATCH LINE STA 492+00 ROLL 3 OF 5
EXIST ROW
PROP ROW
℄ SH5
℄ RPSH121WBe STA 22+77.15=
℄ SH5 STA 502+16.63
℄ RPSH121WBx STA 10+00.00=
℄ SH5 STA 501+99.66
℄ RPSH121WBe
BLRPSH121WBe-3
BLRPSH121WBe-2
RPSH121WBE
BLUSH5EW-3
BLUSH5EW-2
C SH121 STA 106+41.86=
℄ SH5 STA 499+20.32
BRIDGE B24
BEGIN BRIDGE
℄ SH121 STA 105+07.86
℄ RPSH121WBx
RPSH121WBX
BLUSH5WE-1
BEGIN RET WALL
℄ SH121 STA 113+10
EXIST CULVERT A-1 TO REMAIN
6X5
PROP RCB
4X4
STA 114+19.83
BLRPSH121WBx-1
EXIT X X
5 NORTH
Melissa
CLSH121-4
END RET WALL
℄ SH121 STA 111+00
N 60° 53' 16.63" E
N 44° 19' 35.80" E
N 50° 06' 10.83" E
SAM RAYBURN HWY (SH 121)
BRIDGE B23
CLSH121-3
END BRIDGE
℄ SH121 STA 107+73.86
BEGIN RET WALL
℄ RPSH121EBe STA 15+50
N 36° 57' 36.91" E
N 34° 50' 16.45" E
EW U-TURN
WE U-TURN
SH 5
℄ USH5EW
BLUSH5EW-1
℄ USH5WE
BLUSH5WE-2
BLUSH5WE-3
RPSH121EBE
RPSH121EBX
BLRPSH121EBe-2
EXIST CULVERT TO BE REMOVED
END RET WALL
℄ RPSH121EBe STA 19+68
℄ SH121
SH 121
END PROJECT
END CSJ: 0549-03-031
℄ SH121 STA 122+91.46
MATCH EXISTING PAVEMENT
BLRPSH121EBx-2
N 45° 33' 16.63" E
℄ RPSH121EBe
BLRPSH121EBe-1
℄ RPSH121EBx STA 23+81.27=
℄ SH5 STA 496+39.66
℄ RPSH121EBe STA 10+00.00=
℄ SH5 STA 496+22.69
N 0° 53' 16.63" E
14' 12' 38' 12' 14'
14' 12' 12' 11' 11'
11' 11' 12' 12' 14'
100+00
105+00
110+00
115+00
120+00
307 309 310 314 317 318 319 320
5 NORTH Melissa
121 NORTH Sam Rayburn Highway


BRIDGE B23 & B24
BEG BRIDGE
℄ SH121 STA 105+07.86
EL 683.60
℄ SH5
STA = 108+30.00
EL = 686.77'
ex = -3.36'
K = 97
L = 510.00'
(+)0.9820 %
(-)4.2934 %
VPC 110+85.00 EL. = 675.82'
VPT 110+85.00 EL. = 675.82'
VPT 119+15.00 EL. = 673.70
MIN VC=18.161'
134.00' (SPAN TX62)
132.00' (SPAN TX62)
EW U-TURN
SB SH 5
NB SH 5
WE U-TURN
END BRIDGE
℄ SH5 STA 107+73.86
EL 684.17
VPC 105+75.00 EL. = 684.26'
STA 114+19.83
EXIST CULVERT A-1 TO REMAIN
6X5
ADDITIONAL 4X4 RCB TO DRAIN
DURING FULLY DEVELOPED CONDITIONS
25 YR
100 YR
(-)4.2934 %
(+)3.7829 %
25 YR WSEL = 656.86
100 YR WSEL = 658.62
STA = 115+00.00
EL = 658.00'
ex = 8.38'
K = 103
L = 830.00'
677.14 671.6
671.63 671.6
678.12 671.8
678.62 670.8
679.11 670.3
679.60 669.4
680.09 668.1
680.58 666.5
681.07 665.1
681.56 665.1
682.05 664.4
682.54 665.3
683.03 668.6
683.53 671.7
684.02 673.2
684.47 672.1
684.71 663.6
684.68 663.4
684.40 661.8
683.85 655.7
683.05 654.9
681.99 655.5
680.67 657.0
679.09 656.0
677.26 654.7
675.18 654.0
673.23 653.3
671.52 652.9
670.06 653.3
668.84 654.2
667.86 655.3
667.12 656.9
666.63 658.5
666.38 660.0
666.37 661.7
666.61 663.0
667.09 664.8
667.81 666.6
668.78 668.4
669.99 670.1
671.45 671.5
673.14 672.5
675.02 673.8
676.91 676.7
678.81 678.9
680.70 681.0
682.59 682.4
684.48 684.2
686.37
100+00
105+00
110+00
115+00
120+00





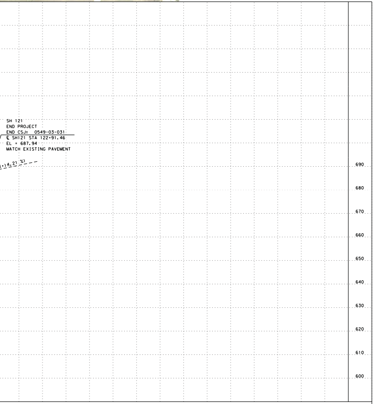
UTILITY LEGEND

WATER	W1	CITY OF MCKINNEY WATER
WATER	W1 (C)	CITY OF MCKINNEY WATER
WATER	W1 (D)	CITY OF MCKINNEY WATER
WATER	W2 (C)	NORTH TEXAS MUNICIPAL WATER DISTRICT
WATER	W3 (D)	CITY OF IRVING WATER
WATER	W4	NORTH COLLINS WATER SUPPLY
WATER	W4 (C)	NORTH COLLINS WATER SUPPLY
WATER	W4 (D)	NORTH COLLINS WATER SUPPLY
WASTE WATER	WW1	CITY OF MCKINNEY WASTE WATER
WASTE WATER	WW1 (C)	CITY OF MCKINNEY WASTE WATER
WASTE WATER	WW1 (D)	CITY OF MCKINNEY WASTER WATER
STORM DRAIN	SD	CITY OF MCKINNEY STORM
STORM DRAIN	SD (C)	CITY OF MCKINNEY STORM
STORM DRAIN	SD(D)	CITY OF MCKINNEY STORM
ELECTRIC BURIED	E1	ONCOR
OVERHEAD ELECTRIC	OH	ONCOR
OVERHEAD ELECTRIC,TELEPHONE	OH-T	ONCOR, AT&T
OVERHEAD ELECTRIC,COAX	OH1	ONCOR, TIME WARNER CABLE
OVERHEAD ELECTRIC,FIBER,COAX	OH2	ONCOR, AT&T, TIME WARNER CABLE
OH ELECTRIC,FIBER,TELEPHONE,COAX	OH3	ONCOR, AT&T, TIME WARNER CABLE
OVERHEAD ELECTRIC,FIBER	OH4	ONCOR, AT&T
OVERHEAD TELEPHONE, COAX	OH5	AT&T,TIME WARNER CABLE
ELECTRIC BURIED		TRAFFIC SIGNAL TXDOT
TELEPHONE	T1	AT&T
TELEPHONE	T1 (D)	AT&T
OVERHEAD TELEPHONE	T1 OH	AT&T
TELEPHONE DUCT	T-DUCT1	AT&T
SUPPORT STRAND		AT&T
GAS	G1	ATMOS
GAS	G1 (C)	ATMOS
GAS	G1 (D)	ATMOS
FIBER	FOC1	AT&T
FIBER	FOC1 (D)	AT&T
FIBER DUCT	DUCT2	AT&T
FIBER	FOC3	ZAYO
FIBER	FOC4	CITY OF IRVING COMMUNICATIONS
CABLE	CATV	TIME WARNER CABLE

* LINE SIZES ARE FROM BEST AVAIABLE RECORDS

UTILITY LEGEND

○	POWER POLE
○	POLE RISER
▣	ELECTRIC JUNCTION BOX
▣	ELECTRIC PULL BOX
M	ELECTRIC METER
☐	ELECTRIC PED
T	TELEPHONE MANHOLE
☐	TELEPHONE PED
B	TELEPHONE JUNCTION BOX
HH	TELEPHONE HAND HOLE
GV	GAS VALVE
GM	GAS METER
WW	WASTE WATER MANHOLE
W	WATER MANHOLE
WM	WATER METER
⋈	WATER VALVE
T	WATER CAP
○	FIRE HYDRANT
SD	STORM MANHOLE
☐	STORM INLET
FH	FIBER OPTICS HAND HOLE
▥	STORM GRATE INLET
◁	HEAD WALL


690
680
670
660
650
640
630
620
610
600
(+)4.21 %)

SH 121
END PROJECT
END CSJ: 0549-03-031
℄ SH121 STA 122+91.46
EL = 687.94
MATCH EXISTING PAVEMENT

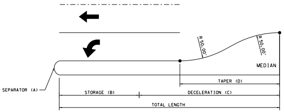
COLOR LEGEND

🟦	PROPOSED MAINLANES
🟧	PROPOSED BRIDGE
🟨	PROPOSED DRIVEWAY
🟪	PROPOSED CROSS STREET
🟫	PROPOSED RAMP
🟦	PROPOSED SIDEWALK AND PAVED MEDIAN
🟩	PROPOSED LANDSCAPED MEDIAN
🟧	FUTURE BY OTHERS
⬛	EXISTING BRIDGE TO REMAIN
⬜	100 YEAR FLOOD PLAIN
🟪	EXISTING PAVEMENT (BY OTHERS)
▨	EXISTING PAVEMENT TO BE REMOVED
▨	POTENTIAL STRUCTURE DISPLACEMENT
-·-·-	CENTERLINE/BASELINE (CROSS STREETS)
-·-·-	CENTERLINE (MAINLANE)
-·-·-	PROPOSED ROW
—-—-	CITY LIMITS
-·-·-	EXISTING ROW
——	PROPERTY LINES
—‖—	CONTROL OF ACCESS
┴┴┴	PROPOSED RETAINING WALL
—═—	PROPOSED SSCB
- - - -	PROPOSED COMBINATION RAIL
←	PROPOSED TRAFFIC FLOW
⇦	EXISTING TRAFFIC FLOW
←	WATER FLOW
XXXXX-XX	HORIZONTAL CURVE NAME
XXX	PROPERTY ID NUMBER
⊟	EXISTING DRAINAGE STRUCTURES
⊟	PROPOSED DRAINAGE STRUCTURES
	PROPOSED SIGNALIZED INTERSECTION

PROPERTY OWNERS

SOURCE:
COLLIN COUNTY APPRAISAL DISTRICT
JULY 2019

ID#	SITE ADDRESS	OWNER	BUSINESS NAME
297	1100 SAM RAYBURN HWY	MESQUITE CREEK DEVELOPMENT INC	
298	1111 SAM RAYBURN HWY	JESSH ENTERPRISES INC	ARTIC CAT
299	SAM RAYBURN HWY	JESSH ENTERPRISES INC	VACANT
303		JONATHAN E BENTLEY	
304	1221 SAM RAYBURN HWY	JOJO'S RUN LLC- MILLER BEVERAGE SERIES	VALERO/THE BEVERAGE STORE
305	1325 SAM RAYBURN HWY	JOJO'S RUN LLC- MILLER BEVERAGE SERIES	
319	1606 SAM RAYBURN HWY	DARREN K & MILLENDER	
320	840 BARTLETT RD	EDWARD E BARTLETT	


R 50.00'
R 50.00'
MEDIAN
TAPER (D)
SEPARATOR (A)
STORAGE (B)
DECELERATION (C)
TOTAL LENGTH

TURN LANE DETAIL

TURN LANE DATA TABLE

CROSS STREET	MEDIAN NOSE STA @ SH 121	MEDIAN NOSE RADIUS (FT) (A)	STORAGE (FT) (B)	DECELERATION (FT) (C)	TAPER (FT) (D)	TOTAL LENGTH (FT)	L/R	EB/WB
PRIVATE DRIVEWAY	77+53.30	1	100	275	60	375	L	WB
PRIVATE DRIVEWAY	86+40.15	1	100	275	60	375	L	WB
CROSS STREET	MEDIAN NOSE STA @ RPSH121EBx	MEDIAN NOSE RADIUS (FT) (A)	STORAGE (FT) (B)	DECELERATION (FT) (C)	TAPER (FT) (D)	TOTAL LENGTH (FT)	L/R	EB/WB
SH 5	N/A	N/A	260	275	100	535	L	EB
SH 5	N/A	N/A	100	275	60	375	R	EB
CROSS STREET	MEDIAN NOSE STA @ RPSH121WBx	MEDIAN NOSE RADIUS (FT) (A)	STORAGE (FT) (B)	DECELERATION (FT) (C)	TAPER (FT) (D)	TOTAL LENGTH (FT)	L/R	EB/WB
SH 5	N/A	N/A	180	275	100	455	L	WB
SH 5	N/A	N/A	100	275	60	375	R	WB

Texas Department of Transportation

DALLAS DISTRICT

MOHAMED K. BUR, P.E.
DISTRICT ENGINEER

DESIGN SCHEMATIC SH 5

FROM: SOUTH OF CR 275 TO: SOUTH OF MELISSA RD

COLLIN COUNTY

FUNCTIONAL CLASSIFICATIONS	
URBAN PRINCIPAL ARTERIAL	SH 121 MAINLANE, SH 5 MAINLAINE, RAMPS
URBAN COLLECTOR	CR 338(FANNIN RD)
URBAN/RURAL LOCAL	ALL OTHER STREETS

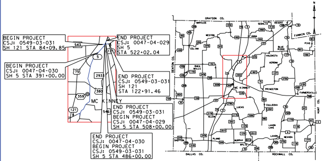
DESIGN SPEED	
45 MPH	SH 121 MAINLANE
40 MPH	SH 5 MAINLAINE, RAMPS
30 MPH	ALL OTHER STREETS

PROJECT LENGTH
2.48 MI

CSJ LIMITS
0047-04-030: FROM SOUTH OF CR 275 TO SOUTH OF SH 121
0549-03-031: FROM SH 5 SOUTH TO EAST OF SH 5 NORTH
0047-04-029: FROM NORTH OF SH 121 TO SOUTH OF MELISSA RD

HORIZ. SCALE IN FEET: 1" = 100'
0 50 100 150 200
0 10 20 30 40
VERT. SCALE IN FEET: 1" = 20'

BASIS OF DESIGN: TxDOT ROADWAY DESIGN MANUAL 2018
EQUATIONS: NONE
RAILROADS: NONE
DESIGN EXCEPTIONS:
DESIGN SPEED AT ONE LOCATION


N
GRAYSON CO.
FANNIN CO.
DENTON CO.
HUNT CO.
DALLAS CO.
ROCKWALL CO.
MC KINNEY
543
5
121
75
293
380
359
546

BEGIN PROJECT
CSJ: 0549-03-031
SH 121 STA 84+09.85

END PROJECT
CSJ: 0047-04-029
SH 5
STA 522+02.04

BEGIN PROJECT
CSJ: 0047-04-030
SH 5 STA 391+00.00

END PROJECT
CSJ: 0549-03-031
SH 121
STA 122+91.46

END PROJECT
CSJ: 0549-03-031
BEGIN PROJECT
CSJ: 0047-04-029
SH 5 STA 508+00.00

END PROJECT
CSJ: 0047-04-030
BEGIN PROJECT
CSJ: 0549-03-031
SH 5 STA 486+00.00

LOCATION MAP: NTS

APRIL 15, 2020

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
4/20/2020

INDEX OF ROLLS
ROLL 1 OF 5 PLAN & PROFILE SH 5 STA BEG PROJ TO STA 425+00
ROLL 2 OF 5 PLAN & PROFILE SH 5 STA 425+00 TO STA 467+00
ROLL 3 OF 5 PLAN & PROFILE SH 5 STA 467+00 TO STA END PROJ
ROLL 4 OF 5 PLAN & PROFILE SH 121 STA 84+09.85 TO STA 122+91.46
ROLL 5 OF 5 PROFILE RAMPS AND CROSS STREETS

Michael Baker
INTERNATIONAL
1501 LBJ Freeway,
Suite 650,
Dallas, TX 75234
TBPE Registration No. F-2677

PLAN & PROFILE

SH 121

STA 75+00 TO STA 122+91

ROLL 4 OF 5 ROLLS

DESIGNED BY:	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		ROLL NO.
BAKER	6	XX (XX) XXXX		S-004
DRAWN BY:	STATE	DIST.	COUNTY	
BAKER	TEXAS	DAL	COLLIN	
CHECKED BY:	CONT	SEC	JOB	HIGHWAY NO.
BAKER	0047	04	029, etc	SH 5

FILE: ...\5RPP00+N104+SH121.dgn

Texas Department of Transportation

DALLAS DISTRICT

MOHAMED K. BUR, P.E.
DISTRICT ENGINEER

DESIGN SCHEMATIC SH 5

FROM: SOUTH OF CR 275 TO: SOUTH OF MELISSA RD

COLLIN COUNTY

FUNCTIONAL CLASSIFICATIONS	
URBAN PRINCIPAL ARTERIAL	SH 121 MAINLANE, SH 5 MAINLAINE, RAMPS
URBAN COLLECTOR	CR 338(FANNIN RD)
URBAN/RURAL LOCAL	ALL OTHER STREETS

DESIGN SPEED	
45 MPH	SH 121 MAINLANE
40 MPH	SH 5 MAINLAINE, RAMPS
30 MPH	ALL OTHER STREETS

TRAFFIC DATA	ADT	DD (%)	% TRUCKS (DHV)	K FACTOR (%)
US 380 TO SOUTH OF MELISSA RD	20,000	59-41	4.8	10.2

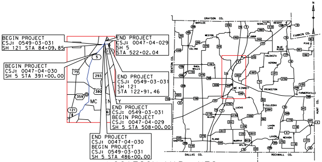
PROJECT LENGTH

2.48 MI

CSJ LIMITS

0047-04-030: FROM SOUTH OF CR 275 TO SOUTH OF SH 121
0549-03-031: FROM SH 5 SOUTH TO EAST OF SH 5 NORTH
0047-04-029: FROM NORTH OF SH 121 TO SOUTH OF MELISSA RD

BASIS OF DESIGN: TxDOT ROADWAY DESIGN MANUAL 2018
EQUATIONS: NONE
RAILROADS: NONE
DESIGN EXCEPTIONS:
DESIGN SPEED AT ONE LOCATION


BEGIN PROJECT
CSJ: 0549-03-031
SH 121 STA 84+09.85
BEGIN PROJECT
CSJ: 0047-04-030
SH 5 STA 391+00.00
END PROJECT
CSJ: 0047-04-029
SH 5
STA 522+02.04
END PROJECT
CSJ: 0549-03-031
SH 121
STA 122+91.46
END PROJECT
CSJ: 0549-03-031
BEGIN PROJECT
CSJ: 0047-04-029
SH 5 STA 508+00.00
END PROJECT
CSJ: 0047-04-030
BEGIN PROJECT
CSJ: 0549-03-031
SH 5 STA 486+00.00
MC
GRAYSON CO.
FANNIN CO.
DENTON CO.
DALLAS CO.
ROCKWALL CO.
HUNT CO.
N

LOCATION MAP: NTS

APRIL 15, 2020

INDEX OF ROLLS

ROLL 1 OF 5 PLAN & PROFILE SH 5 STA BEG PROJ TO STA 425+00
ROLL 2 OF 5 PLAN & PROFILE SH 5 STA 425+00 TO STA 467+00
ROLL 3 OF 5 PLAN & PROFILE SH 5 STA 467+00 TO STA END PROJ
ROLL 4 OF 5 PLAN & PROFILE SH 121 STA 84+09.85 TO STA 122+91.46
ROLL 5 OF 5 PROFILE RAMPS AND CROSS STREETS

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
4/20/2020

HORIZ. SCALE IN FEET
0 50 100 150 200
0 10 20 30 40
VERT. SCALE IN FEET

Michael Baker
INTERNATIONAL
1501 LBJ Freeway,
Suite 650,
Dallas, TX 75234
TBPE Registration No. F-2677

PROFILE

RAMPS AND CROSS STREETS

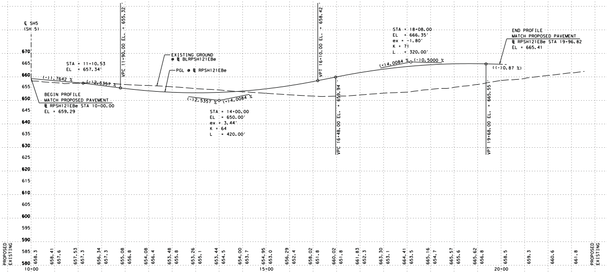
ROLL 5 OF 5 ROLLS

DESIGNED BY:	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		ROLL NO.
BAKER	6	XX (XX) XXXX		S-005
DRAWN BY:	STATE	DIST.	COUNTY	
BAKER	TEXAS	DAL	COLLIN	
CHECKED BY:	CONT	SEC	JOB	HIGHWAY NO.
BAKER	0047	04	029, etc.	SH 5

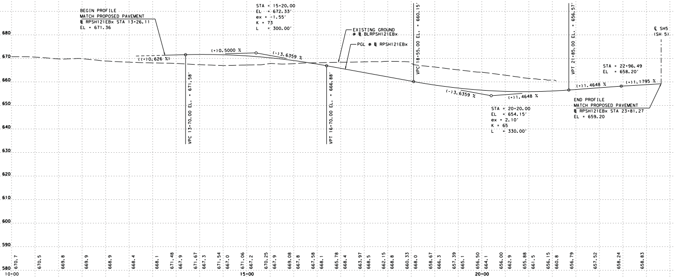
TIME: 6:09:55 PM
PEN TABLE - SH5*TxDOT*McKinney*Schematic.tbl

DATE: 4/20/2020
FILE: ...\SRPP00*N105.dgn
ROLLPLOT - V8i*BAKER*WIN*CO*PDF.pltcfg

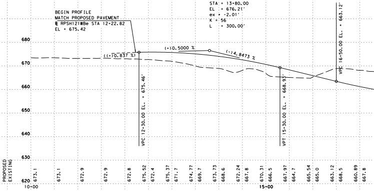
℄ RPSH121EBe-RPSH121EBE


℄ SH5
(SH 5)
STA = 11+10.53
EL = 657.34'
VPC 11+90.00 EL. = 655.32'
EXISTING GROUND
@ ℄ BLRPSH121EBe
PGL @ ℄ RPSH121EBe
(+)1.7642 %
(-)2.5357 %
BEGIN PROFILE
MATCH PROPOSED PAVEMENT
℄ RPSH121EBe STA 10+00.00
EL = 659.29
(-)2.5357 %
(+)4.0084 %
STA = 14+00.00
EL = 650.00'
ex = 3.44'
K = 64
L = 420.00'
VPT 16+10.00 EL. = 658.42'
VPC 16+48.00 EL. = 659.94'
STA = 18+08.00
EL = 666.35'
ex = -1.80'
K = 71
L = 320.00'
(+)4.0084 %
(-)0.5000 %
VPT 19+68.00 EL. = 665.55'
END PROFILE
MATCH PROPOSED PAVEMENT
℄ RPSH121EBe STA 19+96.82
EL = 665.41
((-)0.87 %)
670
665
660
655
650
645
640
635
630
625
620
615
610
605
600
595
590
585
580
PROPOSED
EXISTING
658.3
658.41 657.6
657.53 657.3
656.34 657.3
655.08 656.8
654.08 656.4
653.48 655.8
653.26 655.1
653.44 654.5
654.00 653.7
654.95 653.0
656.29 652.4
658.02 651.8
660.02 651.8
661.83 652.3
663.30 653.1
664.41 653.5
665.16 654.7
665.57 655.6
665.62 656.8
658.5
659.3
660.6
661.8
10+00
15+00
20+00
PROPOSED
EXISTING

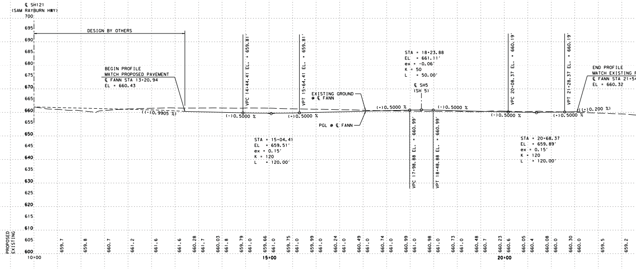
BL RPSH121EBx-RPSH121EBX

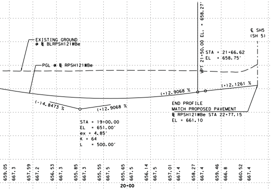

BEGIN PROFILE
MATCH PROPOSED PAVEMENT
BL RPSH121EBx STA 13+26.11
EL = 671.36
STA = 15+20.00
EL = 672.33'
ex = -1.55'
K = 73
L = 300.00'
EXISTING GROUND
@ BL BLRPSH121EBx
PGL @ BL RPSH121EBx
℄ SH5
(SH 5)
((+)0.626 %)
(+)0.5000 %
(-)3.6359 %
(-)3.6359 %
(+)1.4648 %
(+)1.4648 %
(+)1.1795 %
VPC 13+70.00 EL. = 671.58'
VPT 16+70.00 EL. = 666.88'
VPC 18+55.00 EL. = 660.15'
VPT 21+85.00 EL. = 656.57'
STA = 22+96.49
EL = 658.20'
STA = 20+20.00
EL = 654.15'
ex = 2.10'
K = 65
L = 330.00'
END PROFILE
MATCH PROPOSED PAVEMENT
BL RPSH121EBx STA 23+81.27
EL = 659.20
680
670
660
650
640
630
620
610
600
590
580
670.7
670.5
669.8
669.9
668.9
668.4
668.1
671.48
667.9
671.67
667.3
671.54
667.0
671.06
667.2
670.25
667.9
669.08
667.8
667.58
668.1
665.78
668.4
663.97
668.5
662.15
668.8
660.33
668.0
658.67
666.3
657.39
665.1
656.50
664.1
656.00
662.9
655.88
661.5
656.15
660.8
656.79
657.52
658.24
658.83
10+00
15+00
20+00

BL RPSH121WBe-RPSH121WBE

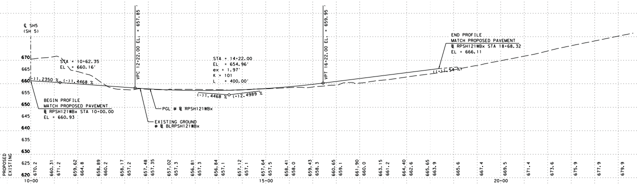

BEGIN PROFILE
MATCH PROPOSED PAVEMENT
BL RPSH121WBe STA 12+22.82
EL = 675.42
STA = 13+80.00
EL = 676.21'
ex = -2.01'
K = 56
L = 300.00'
((+)0.837 %)
(+)0.5000 %
(-)4.8473 %
VPC 12+30.00 EL. = 675.46'
VPT 15+30.00 EL. = 668.93'
VPC 16+50.00 EL. = 663.12'
680
670
660
650
640
630
620
PROPOSED
EXISTING
673.1
673.1
672.9
672.9
672.8
675.52
672.4
675.37
671.7
674.77
669.7
673.73
668.6
672.24
667.8
670.31
666.5
667.97
664.7
665.54
665.0
663.12
668.5
660.89
667.8
10+00
15+00

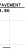
℄ FANN-CR 338 (FANNIN RD)


℄ SH121
(SAM RAYBURN HWY)
DESIGN BY OTHERS
BEGIN PROFILE
MATCH PROPOSED PAVEMENT
℄ FANN STA 13+20.94
EL = 660.43
((-)0.9905 %)
(-)0.5000 %
(+)0.5000 %
VPC 14+44.41 EL. = 659.81'
VPT 15+64.41 EL. = 659.81'
STA = 15+04.41
EL = 659.51'
ex = 0.15'
K = 120
L = 120.00'
EXISTING GROUND
@ ℄ FANN
PGL @ ℄ FANN
(+)0.5000 %
STA = 18+23.88
EL = 661.11'
ex = -0.06'
K = 50
L = 50.00'
℄ SH5
(SH 5)
(-)0.5000 %
VPC 17+98.88 EL. = 660.99'
VPT 18+48.88 EL. = 660.99'
VPC 20+08.37 EL. = 660.19'
VPT 21+28.37 EL. = 660.19'
(-)0.5000 %
(+)0.5000 %
((+)0.200 %)
STA = 20+68.37
EL = 659.89'
ex = 0.15'
K = 120
L = 120.00'
END PROFILE
MATCH EXISTING
℄ FANN STA 21+5
EL = 660.32
700
695
690
685
680
675
670
665
660
655
650
645
640
635
630
625
620
615
610
605
600
PROPOSED
EXISTING
659.7
659.8
660.7
661.2
661.6
661.6
660.28
661.7
660.03
661.8
659.79
661.0
659.66
661.0
659.75
661.0
659.99
661.0
660.24
661.0
660.49
661.0
660.74
661.0
660.99
661.0
660.98
661.0
660.73
661.0
660.48
660.7
660.23
660.6
660.05
660.4
660.08
660.0
660.30
660.0
659.5
659.2
10+00
15+00
20+00

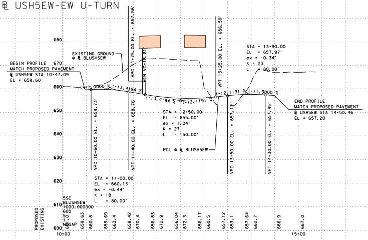

EXISTING GROUND
@ ℄ BLRPSH121WBe
PGL @ ℄ RPSH121WBe
VPT 21+50.00 EL. = 658.27'
STA = 21+66.62
EL = 658.75'
℄ SH5
(SH 5)
(+)2.9068 %
(+)2.1261 %
(-)4.8473 %
(+)2.9068 %
END PROFILE
MATCH PROPOSED PAVEMENT
℄ RPSH121WBe STA 22+77.15
EL = 661.10
STA = 19+00.00
EL = 651.00'
ex = 4.85'
K = 64
L = 500.00'
659.05 667.3
657.59 667.2
656.53 667.3
655.85 667.3
655.55 667.5
655.65 667.5
656.14 667.5
657.01 667.4
658.27 667.4
659.46 666.8
660.52 667.4
20+00

℄ RPSH121WBx-RPSH121WBX

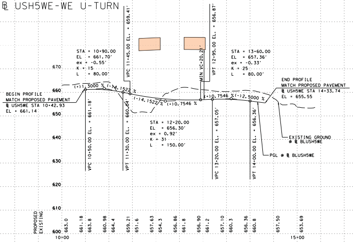

℄ SH5
(SH 5)
670
665
660
655
650
645
640
635
630
625
620
STA = 10+62.35
EL = 660.16'
(-)1.2350 %
(-)1.4468 %
BEGIN PROFILE
MATCH PROPOSED PAVEMENT
℄ RPSH121WBx STA 10+00.00
EL = 660.93
VPC 12+22.00 EL. = 657.85'
STA = 14+22.00
EL = 654.96'
ex = 1.97'
K = 101
L = 400.00'
(-)1.4468 %
(+)2.4989 %
PGL @ ℄ RPSH121WBx
EXISTING GROUND
@ ℄ BLRPSH121WBx
VPT 16+22.00 EL. = 659.95'
END PROFILE
MATCH PROPOSED PAVEMENT
℄ RPSH121WBx STA 18+68.32
EL = 666.11
(+)1.54 %
PROPOSED
EXISTING
670.2
660.31 671.2
659.62 664.8
658.89 660.2
658.17 657.2
657.48 657.35
657.02 657.3
656.81 657.3
656.84 657.1
657.12 657.1
657.64 657.5
658.41 658.0
659.43 658.3
660.65 659.1
661.90 660.0
663.15 661.2
664.40 662.6
665.65 663.9
665.6
667.4
669.5
671.4
673.6
675.9
677.9
679.9
10+00
15+00
20+00


PAVEMENT
.86

℄ USH5EW-EW U-TURN


680
670
660
650
640
630
620
610
600
EXISTING GROUND
@ ℄ BLUSH5EW
BEGIN PROFILE
MATCH PROPOSED PAVEMENT
℄ USH5EW STA 10+47.09
EL = 659.60
VPC 11+75.00 EL. = 657.56'
MIN VC=18.61'
VPT 13+25.00 EL. = 656.59'
STA = 13+90.00
EL = 657.97'
ex = -0.34'
K = 23
L = 80.00'
(+)1.0000 %
(-)3.4194 %
(-)3.4194 %
(+)2.1191 %
(+)2.1191 %
(-)1.3000 %
END PROFILE
MATCH PROPOSED PAVEMENT
℄ USH5EW STA 14+50.46
EL = 657.20
STA = 12+50.00
EL = 655.00'
ex = 1.04'
K = 27
L = 150.00'
PGL @ ℄ BLUSH5EW
VPC 10+60.00 EL. = 659.73'
VPT 11+40.00 EL. = 658.76'
VPC 13+50.00 EL. = 657.12'
VPT 14+30.00 EL. = 657.45'
STA = 11+00.00
EL = 660.13'
ex = -0.44'
K = 18
L = 80.00'
SSC
BLUSH5EW
1000.000000
600
NGAP
PROPOSED
EXISTING
659.63 660.8
659.69 663.4
658.42 670.4
656.83 672.9
656.04 672.3
656.17 660.5
657.12 653.1
657.64 662.7
666.9
667.0
658.2
10+00
15+00

℄ USH5WE-WE U-TURN


670
660
650
640
630
620
610
600
STA = 10+90.00
EL = 661.70'
ex = -0.55'
K = 15
L = 80.00'
VPC 11+45.00 EL. = 659.41'
MIN VC=20.22'
VPT 12+95.00 EL. = 656.87'
STA = 13+60.00
EL = 657.36'
ex = -0.33'
K = 25
L = 80.00'
END PROFILE
MATCH PROPOSED PAVEMENT
℄ USH5WE STA 14+33.74
EL = 655.55
BEGIN PROFILE
MATCH PROPOSED PAVEMENT
℄ USH5WE STA 10+42.93
EL = 661.14
(+)1.3000 %
(-)4.1522 %
(-)4.1522 %
(+)0.7546 %
(+)0.7546 %
(-)2.5000 %
STA = 12+20.00
EL = 656.30'
ex = 0.92'
K = 31
L = 150.00'
VPC 10+50.00 EL. = 661.18'
VPT 11+30.00 EL. = 660.64'
VPC 13+20.00 EL. = 657.05'
VPT 14+00.00 EL. = 656.36'
EXISTING GROUND
@ ℄ BLUSH5WE
PGL @ ℄ BLUSH5WE
PROPOSED
EXISTING
663.0
661.18 663.8
660.98 664.4
659.21 651.6
657.63 654.3
656.86 661.8
656.90 661.2
657.10 660.3
656.36 660.8
657.50
653.69
10+00
15+00

Texas Department of Transportation

DALLAS DISTRICT

MOHAMED K. BUR, P.E.
DISTRICT ENGINEER

DESIGN SCHEMATIC SH 5

FROM: SOUTH OF CR 275 TO: SOUTH OF MELISSA RD

COLLIN COUNTY

FUNCTIONAL CLASSIFICATIONS	
URBAN PRINCIPAL ARTERIAL	SH 121 MAINLANE, SH 5 MAINLAINE, RAMPS
URBAN COLLECTOR	CR 338(FANNIN RD)
URBAN/RURAL LOCAL	ALL OTHER STREETS

DESIGN SPEED	
45 MPH	SH 121 MAINLANE
40 MPH	SH 5 MAINLAINE, RAMPS
30 MPH	ALL OTHER STREETS

TRAFFIC DATA	ADT	DD (%)	% TRUCKS (DHV)	K FACTOR (%)
US 380 TO SOUTH OF MELISSA RD	20,000	59-41	4.8	10.2

PROJECT LENGTH

2.48 MI

CSJ LIMITS

0047-04-030: FROM SOUTH OF CR 275 TO SOUTH OF SH 121
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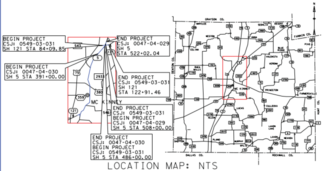
0047-04-029: FROM NORTH OF SH 121 TO SOUTH OF MELISSA RD

BASIS OF DESIGN: TxDOT ROADWAY DESIGN MANUAL 2018
EQUATIONS: NONE
RAILROADS: NONE
DESIGN EXCEPTIONS:
DESIGN SPEED AT ONE LOCATION


BEGIN PROJECT
CSJ: 0549-03-031
SH 121 STA 84+09.85
END PROJECT
CSJ: 0047-04-029
SH 5
STA 522+02.04
BEGIN PROJECT
CSJ: 0047-04-030
SH 5 STA 391+00.00
END PROJECT
CSJ: 0549-03-031
SH 121
STA 122+91.46
END PROJECT
CSJ: 0549-03-031
BEGIN PROJECT
CSJ: 0047-04-029
SH 5 STA 508+00.00
END PROJECT
CSJ: 0047-04-030
BEGIN PROJECT
CSJ: 0549-03-031
SH 5 STA 486+00.00
543
5
121
75
2933
380
359
546
MC KINNEY
N
GRAYSON CO.
FANNIN CO.
DENTON CO.
HUNT CO.
DALLAS CO.
ROCKWALL CO.
CELINA
WESTON
ANNA
MC KINNEY
PRINCETON
FARMERSVILLE
PLANO
MURPHY
WYLIE
LAVON
NEVADA

LOCATION MAP: NTS

APRIL 15, 2020

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
4/20/2020

INDEX OF ROLLS

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- ROLL 2 OF 5 PLAN & PROFILE SH 5 STA 425+00 TO STA 467+00
- ROLL 3 OF 5 PLAN & PROFILE SH 5 STA 467+00 TO STA END PROJ
- ROLL 4 OF 5 PLAN & PROFILE SH 121 STA 84+09.85 TO STA 122+91.46
- ROLL 5 OF 5 PROFILE RAMPS AND CROSS STREETS

HORIZ. SCALE IN FEET
0 50 100 150 200
0 10 20 30 40
VERT. SCALE IN FEET

Michael Baker
INTERNATIONAL

1501 LBJ Freeway,
Suite 650,
Dallas, TX 75234
TBPE Registration No. F-2677

PROFILE

RAMPS AND CROSS STREETS

ROLL 5 OF 5 ROLLS

DESIGNED BY:	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.			ROLL NO.
BAKER	6	XX (XX) XXXX			S-005
DRAWN BY:	STATE		DIST.	COUNTY	
BAKER	TEXAS		DAL	COLLIN	
CHECKED BY:	CONT		SEC	JOB	HIGHWAY NO.
BAKER	0047		04	029, etc	SH 5

FILE: ...\5RPP00+N105.dgn