Texas Department of Transportation

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DALLAS DISTRICT

MOHAMED K. BUR, P.E.
DISTRICT ENGINEER

DESIGN SCHEMATIC SH 5

FROM: SOUTH OF FM 1378 TO: SOUTH OF CR 275

COLLIN COUNTY

FUNCTIONAL CLASSIFICATIONS	
URBAN PRINCIPAL ARTERIAL	SS 399 MAINLANE, SH 5 MAINLAINE, US 380 (W UNIVERSITY DR), RAMPS
URBAN MINOR ARTERIAL	FM 1378(COUNTRY CLUB RD), FM 546(HARRY MCKILLOP BLVD), ELDORADO PKWY/INDUSTRIAL BLVD
URBAN COLLECTOR	FRISCO RD, STEWART RD, SS 399 FRONTAGE ROAD, SH 5 FRONTAGE ROAD, E VIRGINIA ST, E LOUISIANA ST, TENNESSEE ST, N CHURCH ST, WILMETH RD
RURAL MAJOR COLLECTOR	SS 195 (WESTON RD)
URBAN/RURAL LOCAL	ALL OTHER STREETS

DESIGN SPEED	
60 MPH	SS 399 MAINLANE
40 MPH	SH 5 MAINLAINE, RAMPS, FM 1378 (COUNTRY CLUB RD), SPUR 399 FRONTAGE ROAD, SH 5 FRONTAGE ROAD, FM 546 (HARRY MCKILLOP BLVD), ELDORADO PKWY/INDUSTRIAL BLVD, US 380 (W UNIVERSITY DR), SS 195 (WESTON RD)
30 MPH	ALL OTHER STREETS

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

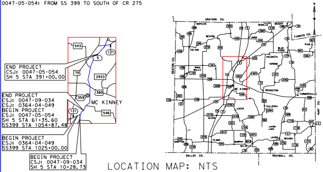
PROJECT LENGTH

7.21 MI

CSJ LIMITS

0047-09-034: FROM SOUTH OF FM 1378 TO SS 399
0364-04-049: SS 399 AT SH 5
0047-05-054: FROM SS 399 TO SOUTH OF CR 275

BASIS OF DESIGN: TxDOT ROADWAY DESIGN MANUAL 2018
EQUATIONS: NONE
RAILROADS: NONE
DESIGN EXCEPTIONS:
DESIGN SPEED AT TWO LOCATIONS


END PROJECT
CSJ: 0047-05-054
SH 5 STA 391+00.00
END PROJECT
CSJ: 0047-09-034
CSJ: 0364-04-049
BEGIN PROJECT
CSJ: 0047-05-054
SH 5 STA 61+35.60
SS399 STA 1054+87.48
BEGIN PROJECT
CSJ: 0364-04-049
SS399 STA 1025+00.00
BEGIN PROJECT
CSJ: 0047-09-034
SH 5 STA 10+28.73
MC KINNEY
543
121
5
75
2933
380
359
546
GRAYSON CO.
FANNIN CO.
DENTON CO.
DALLAS CO.
ROCKWALL CO.
HUNT 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
4/3/2020

APRIL 3, 2020

INDEX OF ROLLS

- ROLL 1 OF 10 PLAN & PROFILE SH 5 STA 10+28.73 TO STA 45+00 & STA 70+33.69 TO STA 95+00
- ROLL 2 OF 10 PLAN & PROFILE SH 5 STA 45+00 TO STA 70+33.69
- ROLL 3 OF 10 PLAN & PROFILE SH 5 & SPUR 399 FRONTAGE ROADS
- ROLL 4 OF 10 PLAN & PROFILE SH 5 STA 95+00 TO STA 150+00
- ROLL 5 OF 10 PLAN & PROFILE SH 5 STA 150+00 TO STA 205+00
- ROLL 6 OF 10 PLAN & PROFILE SH 5 STA 205+00 TO STA 260+00
- ROLL 7 OF 10 PLAN & PROFILE SH 5 STA 260+00 TO STA 316+00
- ROLL 8 OF 10 PLAN & PROFILE SH 5 STA 316+00 TO STA 369+00
- ROLL 9 OF 10 PLAN & PROFILE SH 5 STA 369+00 TO STA END PROJ
- ROLL 10 OF 10 PROFILE CROSS STREETS

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

PLAN & PROFILE

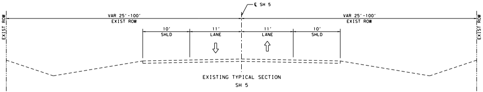
SH 5

STA 369+00 TO END PROJ

ROLL 9 OF 10 ROLLS

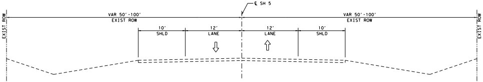
DESIGNED BY:	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		ROLL NO.
BAKER	6	XX (XX) XXXX		S-009
DRAWN BY:	STATE	DIST.	COUNTY	
BAKER	TEXAS	DAL	COLLIN	
CHECKED BY:	CONT	SEC	JOB	HIGHWAY NO.
BAKER	0047	05	054, etc.	SH 5

DATE: 4/3/2020
FILE: ...\5RPP00•S109.dgn
ROLLPLOT - V8i•BAKER•WIN•CO•PDF.pltcfg
TIME: 11:44:20 PM
PEN TABLE - SH5•TxDOT•McKinney•Schematic.tbl

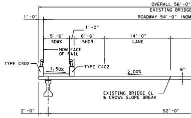

℄ SH 5
EXIST ROW
VAR 25'-100'
EXIST ROW
10'
SHLD
11'
LANE
11'
LANE
10'
SHLD
VAR 25'-100'
EXIST ROW
EXIST ROW

EXISTING TYPICAL SECTION
SH 5

STA 360+19.35 TO 370+04.35
NTS


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

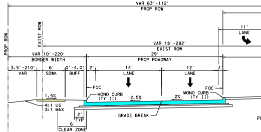
EXISTING TYPICAL SECTION
SH 5
STA 372+44.35 TO END
NTS


OVERALL 56'-0"
EXISTING BRIDGE
ROADWAY 54'-0" (NOM
1'-0"
1'-0"
5'-6"
SDWK
6'-6"
SHDR
14'-0"
LANE
NOM FACE
OF RAIL
TYPE C402
1.50%
TYPE C402
2.00%
8"
EXISTING BRIDGE CL
& CROSS SLOPE BREAK
2'-0"
52'-0"

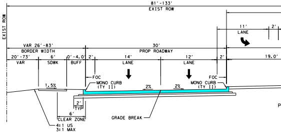
PROPERTY OWNERS

SOURCE:
COLLIN COUNTY APPRAISAL DISTRICT
JULY 2019

ID#	SITE ADDRESS	OWNER	BUSINESS NAME
243A	STATE HWY 5	WILLOW WOOD MCKINNEY HOMEOWNERS' ASSOCIATION INC	
244	WILLOW WOOD BLVD	MCKINNEY PARTNERS 306 LP	
245	WILLOW WOOD BLVD	MCKINNEY PARTNERS 306 LP	
246	787 PRIVATE ROAD 5053	KENNETH D PILKINTON	
247	5310 N MCDONALD ST	WOOLARD LLC - CAR LOT SERIES	BURLS USED CARS
247A	673 LACORE LN	LACORE RENTAL PROPERTIES LLC	

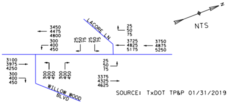

VAR 63'-112'
PROP ROW
PROP ROW
EXIST ROW
11'
LANE
VAR 18'-282'
EXIST ROW
VAR 10'-220'
BORDER WIDTH
29'
PROP ROADWAY
3.5'-210'
VAR
6'
SDWK
0'-4.0'
BUFF
2'
14'
LANE
12'
LANE
1'
FOC
MONO CURB
(TY II)
FOC
MONO CURB
(TY II)
1.5%
2.5%
2%
4:1 US
3:1 MAX
2'
TYP
6'
CLEAR ZONE
GRADE BREAK
P

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.


81'-133'
EXIST ROW
EXIST ROW
11'
LANE
2'
VAR 26'-83'
BORDER WIDTH
30'
PROP ROADWAY
20'-73'
VAR
6'
SDWK
0'-4.0'
BUFF
2'
14'
LANE
12'
LANE
2'
19.0'
FOC
MONO CURB
(TY II)
FOC
MONO CURB
(TY II)
1.5%
2%
2%
2'
TYP
6'
CLEAR ZONE
GRADE BREAK
4:1 US
3:1 MAX
P

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 (%)
FM 1378 TO SS 399	14,000	59-41	5.7	10.2
SS 399 TO ELDORADO PKWY	47,950	59-41	3.4	10.2
ELDORADO PKWY TO US 380	31,100	59-41	4.0	10.2
US 380 TO SOUTH OF CR 275	20,000	59-41	4.8	10.2

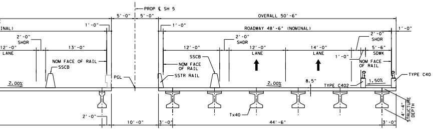

LACORE LN
3450
4475
4800
300
400
450
25
50
75
3725
4825
5175
3750
4875
5250
3100
3975
4250
300
400
450
25
50
75
3375
4325
4625
WILLOW WOOD BLVD
NTS
N

SOURCE: TxDOT TP&P 01/31/2019

LEGEND:

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

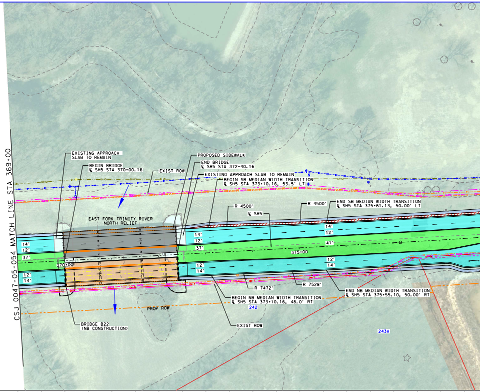
CHAIN NAME	CURVE NAME	P.I. STATION
℄ SH5	CLSH5-24	382+64.29
℄ SH5	CLSH5-25	394+70.86
℄ LAC	CLLAC-1	13+25.10

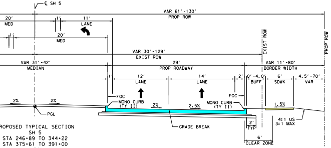

PROP ℄ SH 5
5'-0"
5'-0"
OVERALL 50'-6"
INAL)
1'-0"
1'-0"
ROADWAY 48'-6" (NOMINAL)
1'-0"
2'-0"
SHDR
12'-0"
LANE
13'-0"
NOM FACE OF RAIL
SSCB
2.00%
PGL
12'-0"
2'-0"
SHDR
SSCB
NOM FACE
OF RAIL
SSTR RAIL
12'-0"
LANE
14'-0"
LANE
2.00%
8.5"
1'-0"
2'-0"
SHDR
5'-6"
SDWK
NOM FACE
OF RAIL
TYPE C402
1.50%
TYPE C40
Tx40
2'-0"
10'-0"
3'-0"
44'-6"
3'-0"
4'-4"
STRUCTURE
DEPTH

PROPOSED TYPICAL SECTION
SH 5
FROM STA 347+41 TO 350+01
FROM STA 355+13 TO 360+15
FROM STA 370+00 TO 372+40

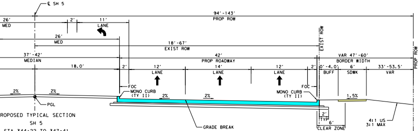
COLOR LEGEND

🟦	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 0047-05-054 MATCH LINE STA 369+00
EXISTING APPROACH
SLAB TO REMAIN
BEGIN BRIDGE
℄ SH5 STA 370+00.16
EXIST ROW
PROPOSED SIDEWALK
END BRIDGE
℄ SH5 STA 372+40.16
EXISTING APPROACH SLAB TO REMAIN
BEGIN SB MEDIAN WIDTH TRANSITION
℄ SH5 STA 373+10.16, 53.5' LT
R 4500'
R 4500'
END SB MEDIAN WIDTH TRANSITION
℄ SH5 STA 375+61.13, 50.00' LT
℄ SH5
EAST FORK TRINITY RIVER
NORTH RELIEF
14'
12'
37'
370+00
12'
14'
14'
12'
37'
41'
375+00
12'
14'
12'
14'
R 7472'
R 7528'
BEGIN NB MEDIAN WIDTH TRANSITION
℄ SH5 STA 373+10.16, 48.0' RT
END NB MEDIAN WIDTH TRANSITION
℄ SH5 STA 375+55.10, 50.00' RT
242
PROP ROW
BRIDGE B22
(NB CONSTRUCTION)
EXIST ROW
243A


℄ SH 5
VAR 61'-130'
PROP ROW
20'
MED
1'
11'
LANE
1'
20'
MED
EXIST ROW
PROP ROW
VAR 30'-129'
EXIST ROW
VAR 31'-42'
MEDIAN
29'
PROP ROADWAY
VAR 11'-80'
BORDER WIDTH
1'
12'
LANE
14'
LANE
2'
0'-4.0'
BUFF
6'
SDWK
4.5'-70'
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

ROPOSED TYPICAL SECTION
SH 5
STA 246+89 TO 344+22
STA 375+61 TO 391+00
NTS


℄ SH 5
94'-143'
PROP ROW
26'
MED
2'
11'
LANE
26'
MED
18'-67'
EXIST ROW
EXIST ROW
PROP ROW
37'-42'
MEDIAN
42'
PROP ROADWAY
VAR 47'-60'
BORDER WIDTH
18.0'
2'
12'
LANE
14'
LANE
12'
LANE
2'
0'-4.0'
BUFF
6'
SDWK
33'-53.5'
VAR
FOC
FOC
2%
2%
MONO CURB
(TY II)
2%
2%
MONO CURB
(TY II)
1.5%
PGL
GRADE BREAK
2'
TYP
6'
CLEAR ZONE
4:1 US
3:1 MAX

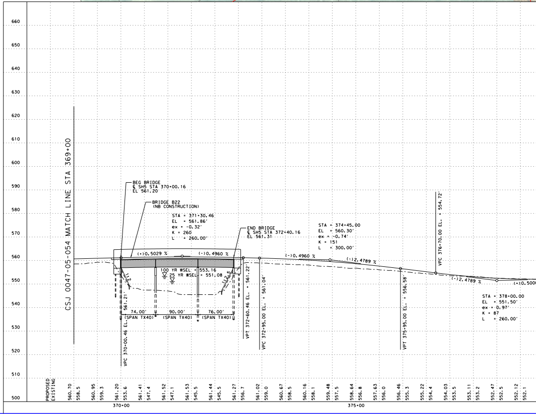
ROPOSED TYPICAL SECTION
SH 5
STA 344+22 TO 347+41
STA 350+01 TO 355+13
STA 360+15 TO 370+00
STA 372+40 TO 375+61
NTS

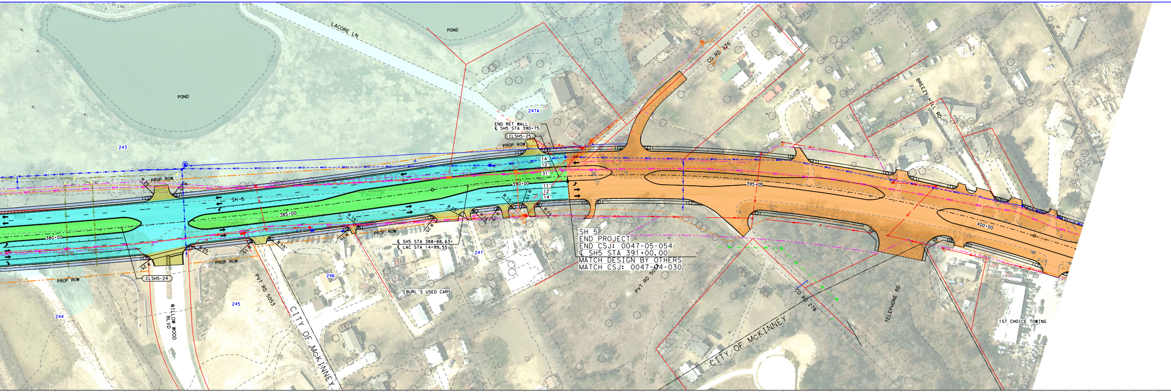
HORIZONTAL ALIGNMENT DATA

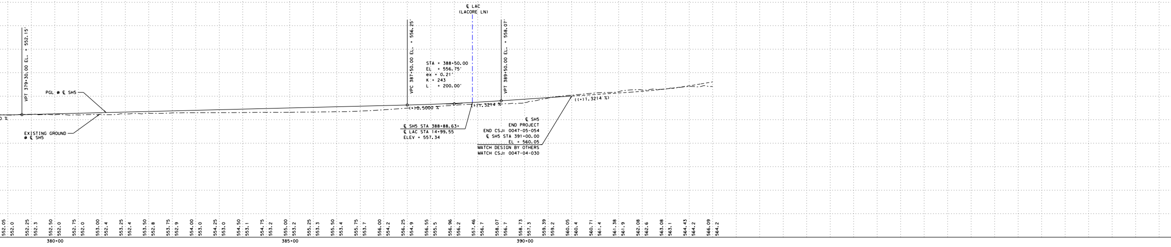
P.I. EASTING	P.I. NORTHING	RADIUS	DELTA	LENGTH	TANGENT	P.C. STATION	P.T. STATION
2,548,141.94	7,144,125.26	11,460.00'	5° 28' 47.16" LT	1,096.03'	548.44'	377+15.86	388+11.89
2,548,574.90	7,145,252.37	2,864.79'	25° 54' 29.14" RT	1,295.40'	658.97'	388+11.89	401+07.29
2,548,177.90	7,144,787.03	300.00'	58° 54' 14.01" RT	308.42'	169.40'	11+55.70	14+64.12

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.




POND
POND
LACORE LN
243
244
245
246
247
247A
END RET WALL
℄ SH5 STA 390+75
CLSH5-25
CLSH5-24
PROP ROW
PROP ROW
PROP ROW
PROP ROW
PROP ROW
SH 5
380+00
385+00
390+00
395+00
400+00
14'
12'
31'
11'
12'
14'
R 25'
R 15'
℄ SH5 STA 388+88.63=
℄ LAC STA 14+99.55
SH 5
END PROJECT
END CSJ: 0047-05-054
℄ SH5 STA 391+00.00
MATCH DESIGN BY OTHERS
MATCH CSJ: 0047-04-030
CO RD 275
BREEZY HILL RD
WILLOW WOOD BLVD
PVT RD 5053
PVT RD 5054
CITY OF McKINNEY
CITY OF McKINNEY
BURL'S USED CARS
CO RD 278
TELEPHONE RD
1ST CHOICE TOWING


℄ LAC
(LACORE LN)
VPT 379+30.00 EL. = 552.15'
VPC 387+50.00 EL. = 556.25'
VPT 389+50.00 EL. = 558.07'
STA = 388+50.00
EL = 556.75'
ex = 0.21'
K = 243
L = 200.00'
PGL @ ℄ SH5
EXISTING GROUND
@ ℄ SH5
0.%
(+)0.5000 %
(+)1.3214 %
((+)1.3214 %)
℄ SH5 STA 388+88.63=
℄ LAC STA 14+99.55
ELEV = 557.34
℄ SH5
END PROJECT
END CSJ: 0047-05-054
℄ SH5 STA 391+00.00
EL = 560.05
MATCH DESIGN BY OTHERS
MATCH CSJ: 0047-04-030
552.05
552.0
552.25
552.3
552.50
552.0
552.75
552.0
553.00
552.4
553.25
552.4
553.50
552.8
553.75
552.9
554.00
553.0
554.25
553.0
554.50
553.1
554.75
553.2
555.00
553.2
555.25
553.3
555.50
553.4
555.75
553.7
556.00
554.2
556.25
554.9
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
380+00
385+00
390+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

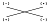
○	POWER POLE
○	POLE RISER
EJ	ELECTRIC JUNCTION BOX
▣	ELECTRIC PULL BOX
EM	ELECTRIC METER
▣	ELECTRIC PED
T	TELEPHONE MANHOLE
▨	TELEPHONE PED
JB	TELEPHONE JUNCTION BOX
HH	TELEPHONE HAND HOLE
GV	GAS VALVE
GM	GAS METER
WW	WASTE WATER MANHOLE
W	WATER MANHOLE
WM	WATER METER
⋈	WATER VALVE
T	WATER CAP
○	FIRE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

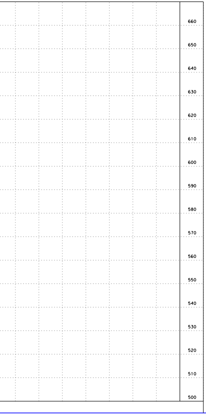
CROSS SLOPE TRANSITION DATA

ALIGNMENT	STA	SB OUTSIDE LANE	SB INSIDE LANE	NB OUTSIDE LANE
SH5		SLOPE	SLOPE	SLOPE
END TRANSITION	372+85.00	2.5%	N/A	-2.5%
END TRANSITION	374+35.00	N/A	2.0%	N/A

NOTES: SB OUTSIDE AND INSIDE LANES ROTATE ABOUT SB GRADE BREAK POINT
NB OUTSIDE LANE ROTATES ABOUT NB GRADE BREAK POINT

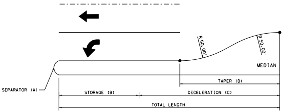
CROSS SLOPE SIGN INDICATION





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
TAPER (D)
SEPARATOR (A)
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)			
WILLOW WOOD BLVD	N/A	N/A	100	275	50	375	R	NB
WILLOW WOOD BLVD	381+87.56	4	100	275	100	375	L	NB
WILLOW WOOD BLVD	382+87.53	4	100	275	100	375	L	SB

Texas Department of Transportation

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DALLAS DISTRICT

MOHAMED K. BUR, P.E.
DISTRICT ENGINEER

DESIGN SCHEMATIC SH 5

FROM: SOUTH OF FM 1378 TO: SOUTH OF CR 275

COLLIN COUNTY

FUNCTIONAL CLASSIFICATIONS	
URBAN PRINCIPAL ARTERIAL	SS 399 MAINLANE, SH 5 MAINLAINE, US 380 (W UNIVERSITY DR), RAMPS
URBAN MINOR ARTERIAL	FM 1378(COUNTRY CLUB RD), FM 546(HARRY MCKILLOP BLVD), ELDORADO PKWY/INDUSTRIAL BLVD
URBAN COLLECTOR	FRISCO RD, STEWART RD, SS 399 FRONTAGE ROAD, SH 5 FRONTAGE ROAD, E VIRGINIA ST, E LOUISIANA ST, TENNESSEE ST, N CHURCH ST, WILMETH RD
RURAL MAJOR COLLECTOR	SS 195 (WESTON RD)
URBAN/RURAL LOCAL	ALL OTHER STREETS

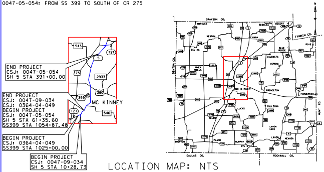
DESIGN SPEED	
60 MPH	SS 399 MAINLANE
40 MPH	SH 5 MAINLAINE, RAMPS, FM 1378 (COUNTRY CLUB RD), SPUR 399 FRONTAGE ROAD, SH 5 FRONTAGE ROAD, FM 546 (HARRY MCKILLOP BLVD), ELDORADO PKWY/INDUSTRIAL BLVD, US 380 (W UNIVERSITY DR), SS 195 (WESTON RD)
30 MPH	ALL OTHER STREETS

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

PROJECT LENGTH
7.21 MI

CSJ LIMITS
0047-09-034: FROM SOUTH OF FM 1378 TO SS 399
0364-04-049: SS 399 AT SH 5
0047-05-054: FROM SS 399 TO SOUTH OF CR 275

BASIS OF DESIGN: TxDOT ROADWAY DESIGN MANUAL 2018
EQUATIONS: NONE
RAILROADS: NONE
DESIGN EXCEPTIONS:
DESIGN SPEED AT TWO LOCATIONS


543
121
5
75
2933
380
359
121
546
MC KINNEY
N
GRAYSON CO.
DALLAS CO.
ROCKWALL CO.
FANNIN CO.
DENTON CO.
HUNT CO.

END PROJECT
CSJ: 0047-05-054
SH 5 STA 391+00.00

END PROJECT
CSJ: 0047-09-034
CSJ: 0364-04-049
BEGIN PROJECT
CSJ: 0047-05-054
SH 5 STA 61+35.60
SS399 STA 1054+87.48

BEGIN PROJECT
CSJ: 0364-04-049
SS399 STA 1025+00.00

BEGIN PROJECT
CSJ: 0047-09-034
SH 5 STA 10+28.73

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
4/3/2020

APRIL 3, 2020

INDEX OF ROLLS
- ROLL 1 OF 10 PLAN & PROFILE SH 5 STA 10+28.73 TO STA 45+00 & STA 70+33.69 TO STA 95+00
- ROLL 2 OF 10 PLAN & PROFILE SH 5 STA 45+00 TO STA 70+33.69
- ROLL 3 OF 10 PLAN & PROFILE SH 5 & SPUR 399 FRONTAGE ROADS
- ROLL 4 OF 10 PLAN & PROFILE SH 5 STA 95+00 TO STA 150+00
- ROLL 5 OF 10 PLAN & PROFILE SH 5 STA 150+00 TO STA 205+00
- ROLL 6 OF 10 PLAN & PROFILE SH 5 STA 205+00 TO STA 260+00
- ROLL 7 OF 10 PLAN & PROFILE SH 5 STA 260+00 TO STA 316+00
- ROLL 8 OF 10 PLAN & PROFILE SH 5 STA 316+00 TO STA 369+00
- ROLL 9 OF 10 PLAN & PROFILE SH 5 STA 369+00 TO STA END PROJ
- ROLL 10 OF 10 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 369+00 TO END PROJ

ROLL 9 OF 10 ROLLS

DESIGNED BY:	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		ROLL NO.
BAKER	6	XX (XX) XXXX		S-009
DRAWN BY:	STATE	DIST.	COUNTY	
BAKER	TEXAS	DAL	COLLIN	
CHECKED BY:	CONT	SEC	JOB	HIGHWAY NO.
BAKER	0047	05	054, etc	SH 5

FILE: ...\SRPP00*S109.dgn