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

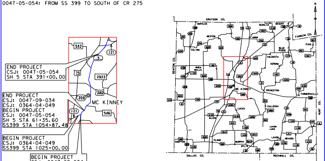
PROJECT LENGTH

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

LOCATION MAP: NTS

APRIL 3, 2020

PRELIMINARY
FOR INTERIM REVIEW ONLY.
NOT FOR PERMITTING, BIDDING,
OR CONSTRUCTION.
Prepared by or under the
Direct Supervision of
OSWALD F. GARCIA P.E. 109889
4/3/2020

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

MCi Moreno Cardenas Inc.
Leaders in Project Delivery & Performance
TBPE Firm Registration No. F-000554

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

PROFILES

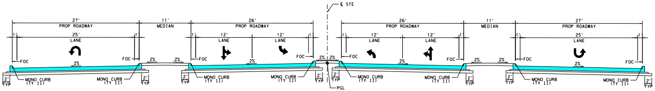
SPUR 399 & FRONTAGE ROADS

ROLL 3 OF 10 ROLLS

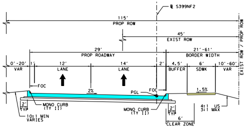
DESIGNED BY:	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		ROLL NO.
MCI	6	XX (XX) XXXX		S-003
DRAWN BY:	STATE	DIST.	COUNTY	
MCI	TEXAS	DAL	COLLIN	
CHECKED BY:	CONT	SEC	JOB	HIGHWAY NO.
MCI	0047	05	054, etc.	SH 5

TIME: 12:10:02 PM
PEN TABLE - SH5*TxDOT*McKinney*Schematic.tbl

DATE: 4/3/2020
FILE: ...\d0684835\SRPP10*S103.dgn
ROLLPLOT - V8i*BAKER*WIN*CO*PDF.pltcfg

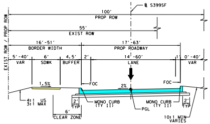

℄ STE
27′
PROP ROADWAY
25′
LANE
1′
FOC
2%
MONO CURB (TY II)
2′ TYP
11′
MEDIAN
26′
PROP ROADWAY
12′
LANE
12′
LANE
PGL
26′
PROP ROADWAY
12′
LANE
12′
LANE
11′
MEDIAN
27′
PROP ROADWAY
25′
LANE

PROPOSED TYPICAL SECTION
STEWART RD
STA 11+63.68 TO STA 13+56.18
NTS


℄ S399NF2
115′
PROP ROW
45′
EXIST ROW
29′
PROP ROADWAY
21′-61′
BORDER WIDTH
0′-20′
VAR
1′
12′
LANE
14′
LANE
2′
4.5′
BUFFER
6′
SDWK
10′-60′
VAR
EXIST ROW / PROP ROW
FOC
2%
PGL
1.5%
MONO CURB (TY II)
2′ TYP
10:1 MIN VARIES
4:1 US
3:1 MAX
6′
CLEAR ZONE

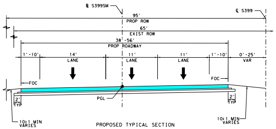
PROPOSED TYPICAL SECTION
SH 5 NF2
STA 45+00 TO STA 81+32.95
NTS

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

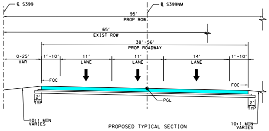

℄ S399SF
100′
PROP ROW
55′
EXIST ROW
16′-51′
BORDER WIDTH
17′-63′
PROP ROADWAY
EXIST ROW / PROP ROW
5′-40′
VAR
6′
SDWK
4.5′
BUFFER
2′
14′-60′
LANE
1′
0′-40′
VAR
1.5%
FOC
2%
4:1 US
3:1 MAX
MONO CURB (TY II)
2′ TYP
PGL
6′
CLEAR ZONE
10:1 MIN VARIES

PROPOSED TYPICAL SECTION
SH 5 SF
STA 25+00 TO STA 32+00
STA 39+00 TO STA 77+93.41
NTS

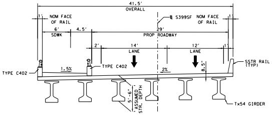
1. SEE PLAN VIEW AND TURN LANE DETAIL TABLE FOR LOCATIONS OF TURN LANES
2. CROSS SLOPES SHOWN ARE USUAL. SEE CROSS SLOPE TRANSITION TABLE FOR MORE DETAIL


℄ S399SM
℄ S399
95′
PROP ROW
65′
EXIST ROW
38′-56′
PROP ROADWAY
1′-10′
14′
LANE
11′
LANE
11′
LANE
1′-10′
0′-25′
VAR
FOC
PGL
2′ TYP
10:1 MIN VARIES

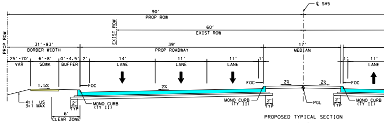
PROPOSED TYPICAL SECTION
S399 SM
STA 10+00 TO STA 42+74.61
NTS


℄ S399
℄ S399NM
95′
PROP ROW
65′
EXIST ROW
38′-56′
PROP ROADWAY
0-25′
VAR
1′-10′
11′
LANE
11′
LANE
14′
LANE
1′-10′
FOC
PGL
2′ TYP
10:1 MIN VARIES

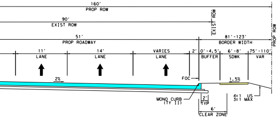
PROPOSED TYPICAL SECTION
S399 NM
STA 10+00 TO STA 42+92.81
NTS


41.5′
OVERALL
1′
NOM FACE OF RAIL
℄ S399SF
NOM FACE OF RAIL
6′
SDWK
4.5′
29′
PROP ROADWAY
2′
14′
LANE
12′
LANE
1′
TYPE C402
1.5%
TYPE C402
2%
8.5"
SSTR RAIL (TYP)
5′-6" ASSUMED STR. DEPTH
Tx54 GIRDER

PROPOSED BRIDGE TYPICAL SECTION
S399 SF
STA 32+00 TO STA 39+00
NTS


℄ SH5
90′
PROP ROW
60′
EXIST ROW
PROP ROW
EXIST ROW
31′-83′
BORDER WIDTH
39′
PROP ROADWAY
17′
MEDIAN
25′-70′
VAR
6′-8′
SDWK
0′-4.5′
BUFFER
2′
14′
LANE
11′
LANE
11′
LANE
1′
11′
LANE
1.5%
FOC
2%
4:1 US
3:1 MAX
6′
CLEAR ZONE
MONO CURB (TY II)
2′ TYP
PGL

PROPOSED TYPICAL SECTION
SH 5
STA 83+49.64 TO STA 88+25.00
STA 92+75.00 TO STA 95+00
NTS

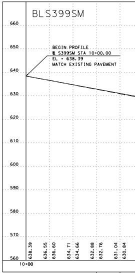

160'
PROP ROW
90'
EXIST ROW
EXIST ROW
PROP ROW
51'
PROP ROADWAY
81'-123'
BORDER WIDTH
11'
LANE
14'
LANE
VARIES
LANE
2'
0'-4.5'
BUFFER
6'-8'
SDWK
75'-110'
VAR
2%
FOC
1.5%
MONO CURB
(TY II)
2'
TYP
6'
CLEAR ZONE
4:1 US
3:1 MAX

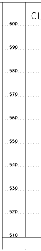
COLOR LEGEND

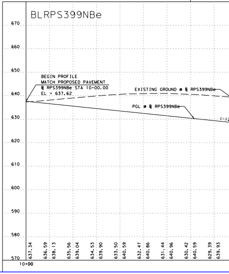
🟦	PROPOSED MAINLANES
🟧	PROPOSED BRIDGE
🟨	PROPOSED DRIVEWAY
🟪	PROPOSED CROSS STREET
🟫	PROPOSED RAMP
🟦	PROPOSED SIDEWALK AND PAVED MEDIAN
🟩	PROPOSED LANDSCAPED MEDIAN
🟧	FUTURE BY OTHERS
⬛	EXISTING BRIDGE TO REMAIN
⬜	100 YEAR FLOOD PLAIN
🟪	EXISTING PAVEMENT (BY OTHERS)
🟥	EXISTING PAVEMENT TO BE REMOVED
☒	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

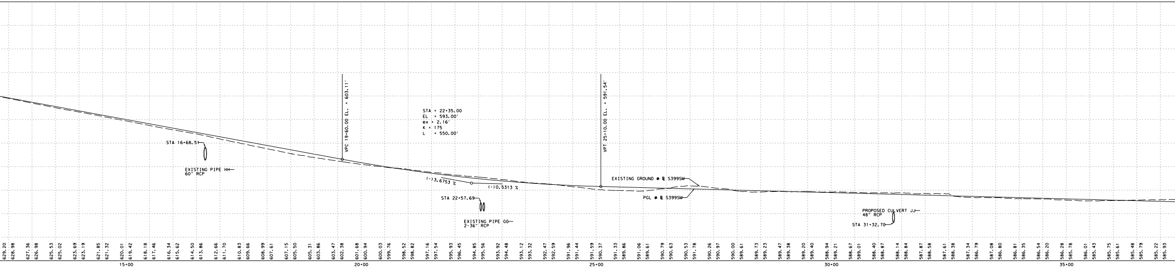
NOTES:

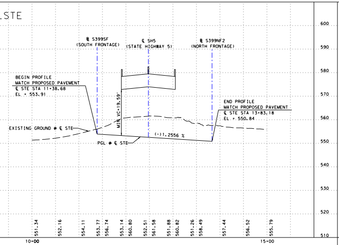
1. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT, FACE OF CURB, RAIL, UNLESS OTHERWISE NOTED.
2. MEDIAN OPENINGS WERE DETERMINED IN COORDINATION WITH LOCAL GOVERNMENT. FINAL LOCATION OF MEDIAN OPENINGS WILL BE DETERMINED IN THE PS&E DEVELOPMENT PHASE IN COORDINATION WITH THE LOCAL GOVERNMENT.
3. SUPERELEVATION 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.

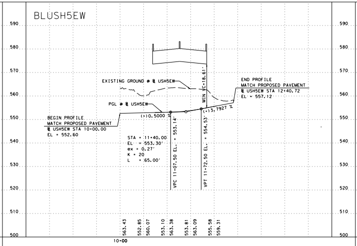


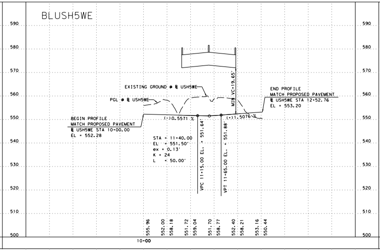


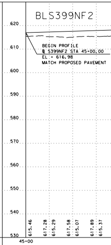


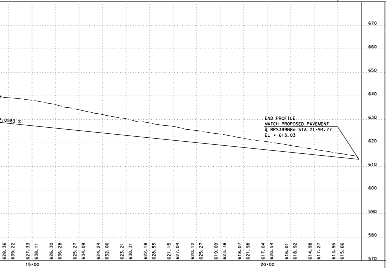

STA 16+68.51
EXISTING PIPE HH
60" RCP
VPC 19+60.00 EL. = 603.11'
STA = 22+35.00
EL = 593.00'
ex = 2.16'
K = 175
L = 550.00'
(-)3.6753 %
(-)0.5313 %
STA 22+57.69
EXISTING PIPE GG
2-36" RCP
VPT 25+10.00 EL. = 591.54'
EXISTING GROUND @ ℄ S399SM
PGL @ ℄ S399SM
PROPOSED CULVERT JJ
48" RCP
STA 31+32.70
629.20 628.98 627.36 626.98 625.53 625.02 623.69 623.19 621.85 621.32 620.01 619.42 618.18 617.46 616.34 615.62 614.50 613.86 612.66 611.70 610.83 609.66 608.99 607.61 607.15 605.50 605.31 603.86 603.47 602.38 601.68 600.94 600.03 599.76 598.52 598.82 597.16 597.54 595.93 596.45 594.85 595.56 593.92 594.48 593.12 593.32 592.47 592.59 591.96 591.44 591.59 590.37 591.33 589.86 591.06 589.61 590.79 590.63 590.53 591.78 590.26 590.97 590.00 589.61 589.73 589.23 589.47 589.38 589.20 589.40 588.94 589.21 588.67 589.01 588.40 588.87 588.14 588.84 587.87 588.58 587.61 588.38 587.34 586.79 587.08 586.80 586.81 586.35 586.54 586.20 586.28 585.78 586.01 585.43 585.75 585.61 585.48 585.79 585.22 585.93
15+00
20+00
25+00
30+00
35+00

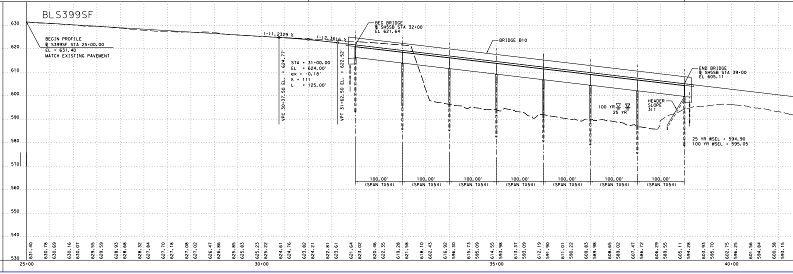

STE
℄ S399SF
(SOUTH FRONTAGE)
℄ SH5
(STATE HIGHWAY 5)
℄ S399NF2
(NORTH FRONTAGE)
BEGIN PROFILE
MATCH PROPOSED PAVEMENT
℄ STE STA 11+38.68
EL = 553.91
MIN VC=19.59'
END PROFILE
MATCH PROPOSED PAVEMENT
℄ STE STA 13+83.18
EL = 550.84
EXISTING GROUND @ ℄ STE
(-)1.2556 %
PGL @ ℄ STE
600 590 580 570 560 550 540 530 520 510
551.34 552.16 554.11 553.77 556.74 553.14 560.80 552.51 561.58 551.88 560.82 551.26 558.49 557.44 556.52 555.79
10+00
15+00

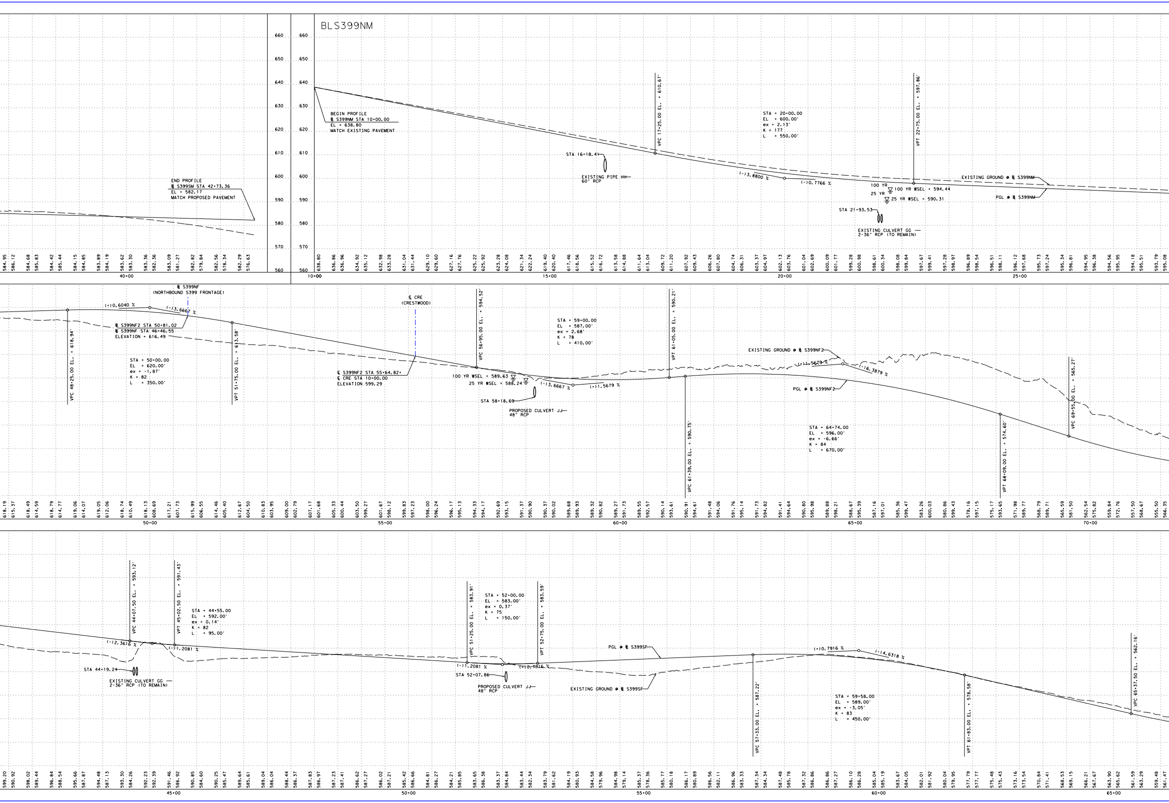

BLUSH5EW
590 580 570 560 550 540 530 520 510 500
EXISTING GROUND @ ℄ USH5EW
MIN VC=18.61'
END PROFILE
MATCH PROPOSED PAVEMENT
℄ USH5EW STA 12+40.72
EL = 557.12
PGL @ ℄ USH5EW
(+)0.5000 %
(+)3.7927 %
BEGIN PROFILE
MATCH PROPOSED PAVEMENT
℄ USH5EW STA 10+00.00
EL = 552.60
STA = 11+40.00
EL = 553.30'
ex = 0.27'
K = 20
L = 65.00'
VPC 11+07.50 EL. = 553.14'
VPT 11+72.50 EL. = 554.53'
563.43 552.85 560.07 553.10 563.38 553.81 563.09 555.58 559.31
10+00

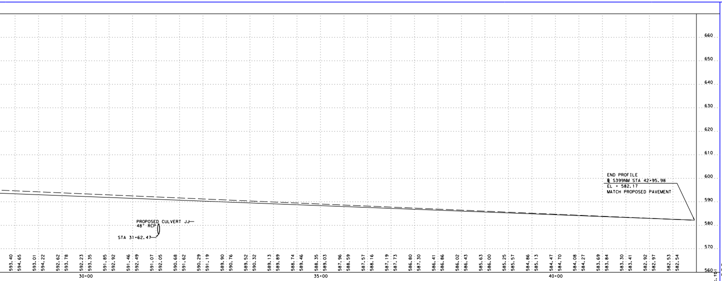

BLUSH5WE
590 580 570 560 550 540 530 520 510 500
EXISTING GROUND @ ℄ USH5WE
PGL @ ℄ USH5WE
MIN VC=19.65'
END PROFILE
MATCH PROPOSED PAVEMENT
℄ USH5WE STA 12+52.76
EL = 553.20
BEGIN PROFILE
MATCH PROPOSED PAVEMENT
℄ USH5WE STA 10+00.00
EL = 552.28
(-)0.5571 %
(+)1.5076 %
STA = 11+40.00
EL = 551.50'
ex = 0.13'
K = 24
L = 50.00'
VPC 11+15.00 EL. = 551.64'
VPT 11+65.00 EL. = 551.88'
555.96 552.00 558.18 551.72 559.04 551.70 558.77 552.40 558.21 553.16 550.44
10+00

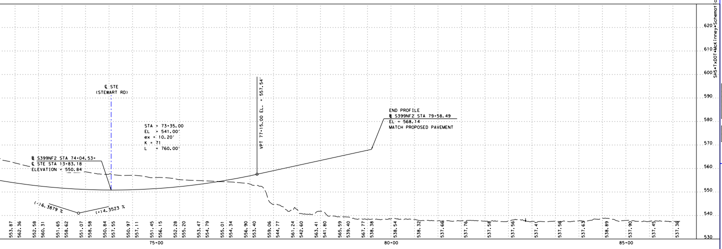

BLS399NF2
620 610 600 590 580 570 560 550 540 530
BEGIN PROFILE
℄ S399NF2 STA 45+00.00
EL = 616.98
MATCH PROPOSED PAVEMENT
615.46 617.28 615.29 617.58 615.07 617.89 615.37
45+00

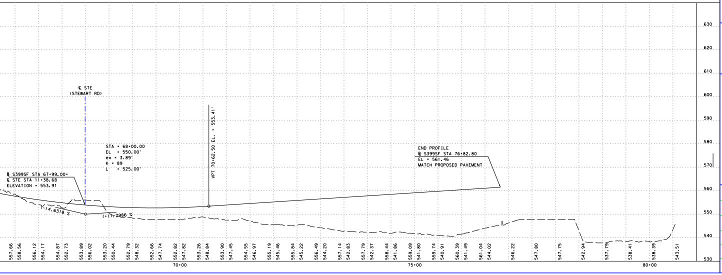

2.0583 %
END PROFILE
MATCH PROPOSED PAVEMENT
℄ RPS399NBe STA 21+94.77
EL = 613.03
670 660 650 640 630 620 610 600 590 580 570
628.36 639.22 627.33 638.11 626.30 636.28 625.27 634.09 624.24 632.06 623.21 630.31 622.18 628.55 621.15 627.04 620.12 625.27 619.09 623.78 618.07 621.98 617.04 620.54 616.01 618.92 614.98 617.27 613.95 615.66
15+00
20+00


BLS399SF
630 620 610 600 590 580 570 560 550 540 530
BEGIN PROFILE
℄ S399SF STA 25+00.00
EL = 631.40
MATCH EXISTING PAVEMENT
(-)1.2329 %
(-)2.3616 %
BEG BRIDGE
℄ SH55B STA 32+00
EL 621.64
BRIDGE B10
STA = 31+00.00
EL = 624.00'
ex = -0.18'
K = 111
L = 125.00'
VPC 30+37.50 EL. = 624.77'
VPT 31+62.50 EL. = 622.52'
END BRIDGE
℄ SH55B STA 39+00
EL 605.11
HEADER SLOPE 3:1
100 YR
25 YR
25 YR WSEL = 594.90
100 YR WSEL = 595.05
100.00'
(SPAN TX54)
100.00'
(SPAN TX54)
100.00'
(SPAN TX54)
100.00'
(SPAN TX54)
100.00'
(SPAN TX54)
100.00'
(SPAN TX54)
100.00'
(SPAN TX54)
631.40 630.78 630.69 630.16 630.07 629.55 629.59 628.93 628.68 628.32 627.84 627.70 627.18 627.08 627.02 626.47 626.86 625.85 625.83 625.23 625.22 624.61 624.76 623.82 624.21 622.81 623.61 621.64 623.02 620.46 622.35 619.28 621.58 618.10 602.43 616.92 596.30 615.73 595.09 614.55 593.98 613.37 593.09 612.19 591.90 611.01 590.22 609.83 589.98 608.65 589.02 607.47 586.12 606.29 589.55 605.11 594.28 603.93 595.70 602.75 596.25 601.56 594.84 600.38 593.15
25+00
30+00
35+00
40+00


BLS399NM
660
650
640
630
620
610
600
590
580
570
560
END PROFILE
℄ S399SM STA 42+73.36
EL = 582.17
MATCH PROPOSED PAVEMENT
BEGIN PROFILE
℄ S399NM STA 10+00.00
EL = 638.80
MATCH EXISTING PAVEMENT
VPC 17+25.00 EL. = 610.67'
STA 16+18.41
EXISTING PIPE HH
60" RCP
(-)3.8800 %
(-)0.7766 %
STA = 20+00.00
EL = 600.00'
ex = 2.13'
K = 177
L = 550.00'
VPT 22+75.00 EL. = 597.86'
100 YR
25 YR
100 YR WSEL = 594.44
25 YR WSEL = 590.31
STA 21+93.53
EXISTING CULVERT GG
2-36" RCP (TO REMAIN)
EXISTING GROUND @ ℄ S399NM
PGL @ ℄ S399NM
40+00
10+00
15+00
20+00
25+00
℄ S399NF
(NORTHBOUND S399 FRONTAGE)
(+)0.6040 %
(-)3.6667 %
℄ S399NF2 STA 50+81.02
℄ S399NF STA 46+46.55
ELEVATION = 616.49
VPC 48+25.00 EL. = 618.94'
STA = 50+00.00
EL = 620.00'
ex = -1.87'
K = 82
L = 350.00'
VPT 51+75.00 EL. = 613.58'
℄ CRE
(CRESTWOOD)
℄ S399NF2 STA 55+64.82
℄ CRE STA 10+00.00
ELEVATION 599.29
VPC 56+95.00 EL. = 594.52'
100 YR WSEL = 589.63
25 YR WSEL = 588.24
STA 58+18.69
PROPOSED CULVERT JJ
48" RCP
(-)3.6667 %
(+)1.5679 %
STA = 59+00.00
EL = 587.00'
ex = 2.68'
K = 78
L = 410.00'
VPT 61+05.00 EL. = 590.21'
VPC 61+39.00 EL. = 590.75'
EXISTING GROUND @ ℄ S399NF2
(+)1.5679 %
(-)6.3879 %
PGL @ ℄ S399NF2
STA = 64+74.00
EL = 596.00'
ex = -6.66'
K = 84
L = 670.00'
VPT 68+09.00 EL. = 574.60'
VPC 69+55.00 EL. = 565.27'
50+00
55+00
60+00
65+00
70+00
VPC 44+07.50 EL. = 593.12'
VPT 45+02.50 EL. = 591.43'
STA = 44+55.00
EL = 592.00'
ex = 0.14'
K = 82
L = 95.00'
(-)2.3618 %
(-)1.2081 %
STA 44+19.24
EXISTING CULVERT GG
2-36" RCP (TO REMAIN)
VPC 51+25.00 EL. = 583.91'
STA = 52+00.00
EL = 583.00'
ex = 0.37'
K = 75
L = 150.00'
VPT 52+75.00 EL. = 583.59'
(-)1.2081 %
(+)0.7916 %
STA 52+07.86
PROPOSED CULVERT JJ
48" RCP
PGL @ ℄ S399SF
EXISTING GROUND @ ℄ S399SF
VPC 57+33.00 EL. = 587.22'
(+)0.7916 %
(-)4.6318 %
STA = 59+58.00
EL = 589.00'
ex = -3.05'
K = 83
L = 450.00'
VPT 61+83.00 EL. = 578.58'
VPC 65+37.50 EL. = 562.16'
45+00
50+00
55+00
60+00
65+00


660
650
640
630
620
610
600
590
580
570
560
END PROFILE
℄ S399NM STA 42+95.98
EL = 582.17
MATCH PROPOSED PAVEMENT
PROPOSED CULVERT JJ
48" RCP
STA 31+62.47
593.40
594.65
593.01
594.22
592.62
593.78
592.23
593.35
591.85
592.92
591.46
592.49
591.07
592.05
590.68
591.62
590.29
591.19
589.90
590.76
589.52
590.32
589.13
589.89
588.74
589.46
588.35
589.03
587.96
588.59
587.57
588.16
587.19
587.73
586.80
587.30
586.41
586.86
586.02
586.43
585.63
586.00
585.25
585.57
584.86
585.13
584.47
584.70
584.08
584.27
583.69
583.84
583.30
583.41
582.92
582.97
582.53
582.54
30+00
35+00
40+00


620
610
600
590
580
570
560
550
540
530
℄ STE
(STEWART RD)
STA = 73+35.00
EL = 541.00'
ex = 10.20'
K = 71
L = 760.00'
VPT 77+15.00 EL. = 557.54'
END PROFILE
℄ S399NF2 STA 79+58.49
EL = 568.14
MATCH PROPOSED PAVEMENT
℄ S399NF2 STA 74+04.53=
℄ STE STA 13+83.18
ELEVATION = 550.84
(-)6.3879 %
(+)4.3523 %
553.87
562.36
552.58
560.31
551.65
558.62
551.07
558.58
550.84
557.55
550.97
557.11
551.45
556.15
552.28
555.20
553.47
554.79
555.01
554.34
556.90
553.40
559.06
544.77
561.24
542.60
563.41
541.80
565.59
539.40
567.77
538.38
538.54
538.32
537.66
537.76
537.58
537.56
537.41
537.58
537.63
538.89
537.90
537.41
537.30
75+00
80+00
85+00


630
620
610
600
590
580
570
560
550
540
530
℄ STE
(STEWART RD)
STA = 68+00.00
EL = 550.00'
ex = 3.89'
K = 89
L = 525.00'
VPT 70+62.50 EL. = 553.41'
END PROFILE
℄ S399SF STA 76+82.80
EL = 561.46
MATCH PROPOSED PAVEMENT
℄ S399SF STA 67+99.00=
℄ STE STA 11+38.68
ELEVATION = 553.91
(-)4.6318 %
(+)1.2986 %
557.66
558.56
556.12
554.17
554.87
552.73
553.89
556.02
553.20
550.44
552.79
548.32
552.66
547.74
552.82
547.82
553.26
548.84
553.90
547.45
554.55
546.97
555.19
545.46
555.84
545.22
556.49
544.20
557.14
542.83
557.79
542.37
558.44
541.86
559.09
541.80
559.74
540.91
560.39
541.49
561.04
544.02
546.22
547.80
547.75
542.94
537.79
538.41
538.39
543.51
70+00
75+00
80+00

SH5*TxDOT*McKinney*Schematic.tbl

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'

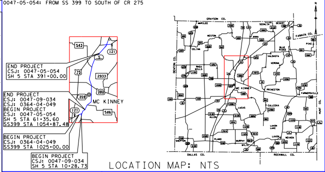
PROJECT LENGTH

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
MC KINNEY
546
GRAYSON CO.
FANNIN CO.
DENTON CO.
DALLAS CO.
ROCKWALL CO.
HUNT CO.
N

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
OSWALD F. GARCIA P.E. 109889
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

MCi Moreno Cardenas Inc.
Leaders in Project Delivery & Performance
TBPE Firm
Registration
No. F-000554

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

PROFILES

SPUR 399 & FRONTAGE ROADS

ROLL 3 OF 10 ROLLS

DESIGNED BY:	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		ROLL NO.
MCI	6	XX (XX) XXXX		S-003
DRAWN BY:	STATE	DIST.	COUNTY	
MCI	TEXAS	DAL	COLLIN	
CHECKED BY:	CONT	SEC	JOB	HIGHWAY NO.
MCI	0047	05	054, etc	SH 5

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