Texas Department of Transportation

US 77
CSJ: 2350-01-056,ETC.
LIMITS: FROM FM 236 TO US 59

YOAKUM DISTRICT

Paul Reitz, P.E.
YOAKUM DISTRICT ENGINEER

Jeff Virnikorn, P.E.
DIRECTOR OF TRANSPORTATION, PLANNING & DEVELOPMENT

ART US 77

DESIGN SPEED	FUNCTIONAL CLASS	FROM FM 236 TO US 59
US 77 = 60 MPH	URBAN PRINCIPAL	2018 = x,xxx
FR RD = 50 MPH	ARTERIAL	2038 = x,xxx
US 59 DC = 50 MPH		
US 77 DC = 40 MPH		

LEGEND

- PROPOSED ROW
- PROPOSED CONTROL OF ACCESS LIMITS
- EXISTING ROW
- BURIED FIBER OPTIC
- TELEPHONE
- PIPELINE
- GAS LINE
- OVERHEAD ELECTRIC
- TRAFFIC FLOW DIRECTION
- PROPOSED ULTIMATE MAINLANE
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMPS
- PROPOSED BRIDGE STRUCTURE
- EXISTING BRIDGE STRUCTURE
- PROPOSED DIRECT CONNECTOR
- PROPOSED CROSS STREET
- PROPOSED DRIVEWAY
- ROADWAY REMOVAL

PROFILE LEGEND

- PROPOSED US 77 PROFILE GRADE LINE (PGL)
- EXISTING NATURAL GROUND AT PROPOSED US 77 CENTERLINE
- CULVERT CROSSING

0 10' 20'

SCALE: PLAN 1"=200'
PROFILE 1"=20'

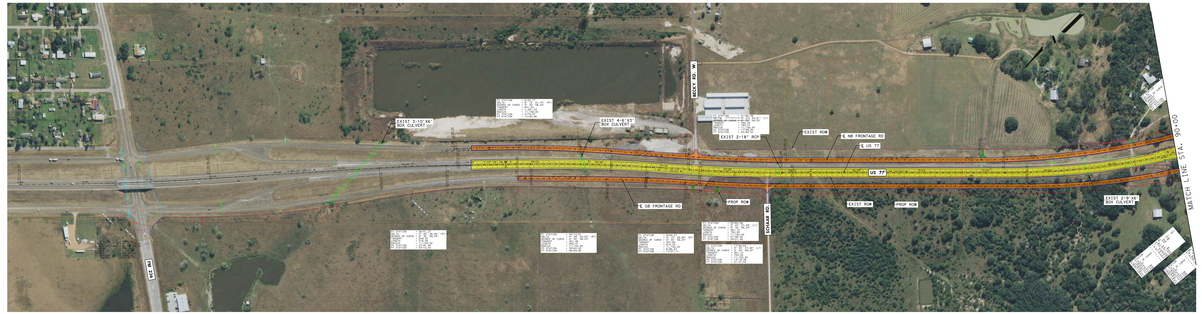
c.g.miller engineers
16400 Park Row Place
Suite 160
Houston, TX 77084
(713) 467-5600
TBPE FIRM REGISTRATION # 10

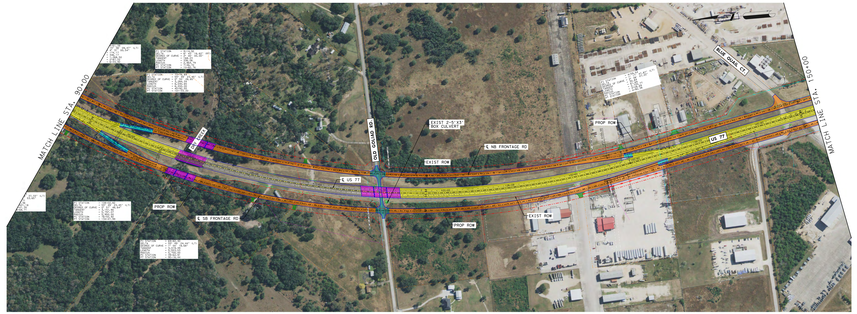
US 77
ALTERNATIVE 2
SCHEMATIC LAYOUT
SEGMENT A

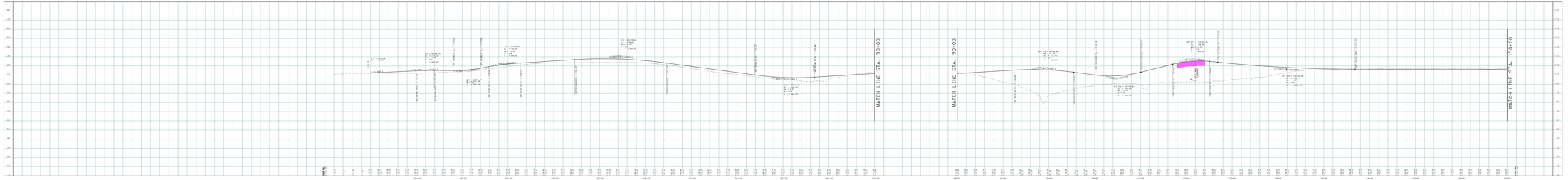
SHEET 1 OF 2

FED.RD. DIV.NO.	PROJECT NO.	SHEET NO.
6		

DES.: AF	STATE	DIST.	COUNTY	
CHK.: RG	TEXAS	YKM	VICTORIA	
DRN.: TP	CONT.	SECT.	JOB	HIGHWAY
CHK.: PR	2350	01	056,ETC	US 77







Texas Department of Transportation

US 77
CSJ: 2350-01-056,ETC.
LIMITS: FROM FM 236 TO US 59

YOAKUM DISTRICT

Paul Reitz, P.E.
YOAKUM DISTRICT ENGINEER

Jeff Virnikorn, P.E.
DIRECTOR OF TRANSPORTATION, PLANNING & DEVELOPMENT

ART US 77

DESIGN SPEED	FUNCTIONAL CLASS	FROM FM 236 TO US 59
US 77 = 60 MPH	URBAN PRINCIPAL	2018 = x,xxx
FR RD = 50 MPH	ARTERIAL	2038 = x,xxx
US 59 DC = 50 MPH		
US 77 DC = 40 MPH		

LOCATION MAP
N.T.S.

LEGEND

- PROPOSED ROW
- PROPOSED CONTROL OF ACCESS LIMITS
- EXISTING ROW
- BURIED FIBER OPTIC
- TELEPHONE
- PIPELINE
- GAS LINE
- OVERHEAD ELECTRIC
- TRAFFIC FLOW DIRECTION
- PROPOSED ULTIMATE MAINLANE
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMPS
- PROPOSED BRIDGE STRUCTURE
- EXISTING BRIDGE STRUCTURE
- PROPOSED DIRECT CONNECTOR
- PROPOSED CROSS STREET
- PROPOSED DRIVEWAY
- ROADWAY REMOVAL

PROFILE LEGEND

- PROPOSED US 77 PROFILE GRADE LINE (PGL)
- EXISTING NATURAL GROUND AT PROPOSED US 77 CENTERLINE
- CULVERT CROSSING

0 10' 20'

SCALE: PLAN 1"=200'
PROFILE 1"=20'

c.g.miller engineers
16400 Park Row Place
Suite 160
Houston, TX 77084
(713) 467-5600
TBPE FIRM REGISTRATION # 10

US 77
ALTERNATIVE 2
SCHEMATIC LAYOUT
SEGMENT A

SHEET 1 OF 2

FED.RD. DIV.NO.	PROJECT NO.	SHEET NO.
6		

DES.: AF	STATE	DIST.	COUNTY	
CHK.: RG	TEXAS	YKM	VICTORIA	
DRN.: TP	CONT.	SECT.	JOB	HIGHWAY
CHK.: PR	2350	01	056,ETC	US 77

Texas Department of Transportation

US 77
CSJ: 2350-01-056,ETC.
LIMITS: FROM FM 236 TO US 59

YOAKUM DISTRICT

Paul Reitz, P.E.
YOAKUM DISTRICT ENGINEER

Jeff Virnstrom, P.E.
DIRECTOR OF TRANSPORTATION, PLANNING & DEVELOPMENT

DESIGN SPEED	FUNCTIONAL CLASS	ADT US 77 FROM FM 236 TO US 59
US 77 = 60 MPH FR RD = 50 MPH US 59 DC = 50 MPH COUNTY RD = 50 MPH US 77 DC = 40 MPH	URBAN PRINCIPAL ARTERIAL	2018 = x,xxx 2038 = x,xxx

LOCATION MAP
N.T.S.

LEGEND

- PROPOSED ROW
- PROPOSED CONTROL OF ACCESS LIMITS
- EXISTING ROW
- BURIED FIBER OPTIC
- TELEPHONE
- PIPELINE
- GAS LINE
- OVERHEAD ELECTRIC
- TRAFFIC FLOW DIRECTION
- PROPOSED ULTIMATE MAINLANE
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMPS
- PROPOSED BRIDGE STRUCTURE
- EXISTING BRIDGE STRUCTURE
- PROPOSED DIRECT CONNECTOR
- PROPOSED CROSS STREET
- PROPOSED DRIVEWAY
- ROADWAY REMOVAL

PROFILE LEGEND

- PROPOSED US 77 PROFILE GRADE LINE (PGL)
- EXISTING NATURAL GROUND AT PROPOSED US 77 CENTERLINE
- CULVERT CROSSING

SCALES: PLAN 1"=200'
PROFILE 1"=20'

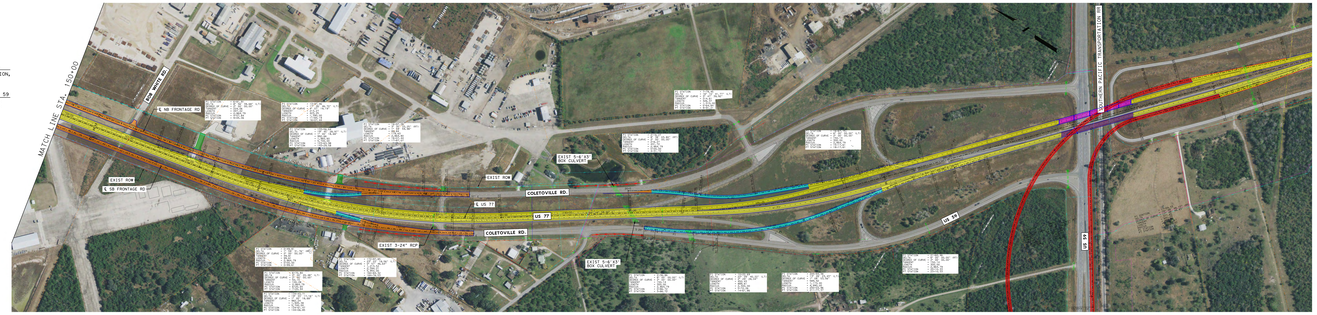
c.g.miller engineers
10440 Park Two Plaza
Suite 100
Houston, Texas 77036
(713) 667-5600
TBPE FIRM REGISTRATION # 10

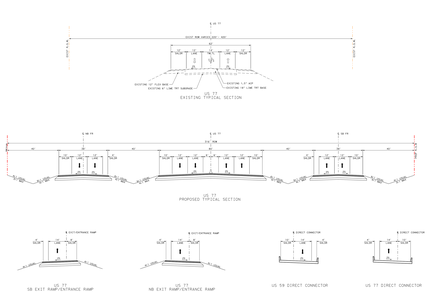
US 77
ALTERNATIVE 2
SCHEMATIC LAYOUT
SEGMENT A

SHEET 2 OF 2

FED.RD. DIV.NO.	PROJECT NO.	SHEET NO.
6		

DESIGN: AF	STATE	DIST.	COUNTY
CHK.: RG	TEXAS	YKM	VICTORIA
DRN.: TP	CONT.	SECT.	JOB	HIGHWAY
CHK.: PR	2350	01	056,ETC,US 77





SUPERELEVATION TABLE MLD,2

CURVE NO.	PRESENT	DPC	SUPERELEVATION	PROPOSED DESIGN SPEED	DESIGN SPEED (MPH)	MAXIMUM DEGREE OF CURVATURE	MINIMUM RADIUS	MAXIMUM DEGREE OF CURVATURE	MINIMUM RADIUS	SUPERELEVATION TRANSITION LENGTH	SUPERELEVATION TRANSITION LENGTH
C1	2+00.00 LT	NO	0.00%	N/A	0.00						0.00
C2	2+00.00 RT	NO	0.00%	N/A	0.00						0.00
C3	2+00.00 LT	NO	0.00%	N/A	0.00						0.00
C4	2+00.00 RT	NO	0.00%	N/A	0.00						0.00
C5	2+00.00 LT	NO	0.00%	N/A	0.00	14°00'00"	0°41'00"	140°00'00"	0°41'00"	0.00	0.00
C6	2+00.00 RT	NO	0.00%	N/A	0.00	14°00'00"	0°41'00"	140°00'00"	0°41'00"	0.00	0.00
C7	2+00.00 LT	NO	0.00%	N/A	0.00	14°00'00"	0°41'00"	140°00'00"	0°41'00"	0.00	0.00
C8	2+00.00 RT	NO	0.00%	N/A	0.00	14°00'00"	0°41'00"	140°00'00"	0°41'00"	0.00	0.00

SUPERELEVATION TABLE SBFRL,ALT2A

CURVE NO.	PRESENT	DPC	SUPERELEVATION	PROPOSED DESIGN SPEED	DESIGN SPEED (MPH)	MAXIMUM DEGREE OF CURVATURE	MINIMUM RADIUS	MAXIMUM DEGREE OF CURVATURE	MINIMUM RADIUS	SUPERELEVATION TRANSITION LENGTH	SUPERELEVATION TRANSITION LENGTH
C1	2+00.00 LT	NO	0.00%	N/A	0.00						0.00
C2	2+00.00 RT	NO	0.00%	N/A	0.00						0.00
C3	2+00.00 LT	NO	0.00%	N/A	0.00						0.00
C4	2+00.00 RT	NO	0.00%	N/A	0.00						0.00
C5	2+00.00 LT	NO	0.00%	70.0	0.00	12°00'00"	0°57'15"	172°00'15"	0°57'15"	0.00	0.00
C6	2+00.00 RT	NO	0.00%	70.0	0.00	12°00'00"	0°57'15"	172°00'15"	0°57'15"	0.00	0.00
C7	2+00.00 LT	NO	0.00%	70.0	0.00	12°00'00"	0°57'15"	172°00'15"	0°57'15"	0.00	0.00
C8	2+00.00 RT	NO	0.00%	70.0	0.00	12°00'00"	0°57'15"	172°00'15"	0°57'15"	0.00	0.00

SUPERELEVATION TABLE SBFRL,ALT2B

CURVE NO.	PRESENT	DPC	SUPERELEVATION	PROPOSED DESIGN SPEED	DESIGN SPEED (MPH)	MAXIMUM DEGREE OF CURVATURE	MINIMUM RADIUS	MAXIMUM DEGREE OF CURVATURE	MINIMUM RADIUS	SUPERELEVATION TRANSITION LENGTH	SUPERELEVATION TRANSITION LENGTH
C1	2+00.00 LT	NO	0.00%	N/A	0.00						0.00
C2	2+00.00 RT	NO	0.00%	N/A	0.00						0.00
C3	2+00.00 LT	NO	0.00%	N/A	0.00						0.00
C4	2+00.00 RT	NO	0.00%	N/A	0.00						0.00
C5	2+00.00 LT	NO	0.00%	70.0	0.00	12°00'00"	0°57'15"	172°00'15"	0°57'15"	0.00	0.00
C6	2+00.00 RT	NO	0.00%	70.0	0.00	12°00'00"	0°57'15"	172°00'15"	0°57'15"	0.00	0.00
C7	2+00.00 LT	NO	0.00%	70.0	0.00	12°00'00"	0°57'15"	172°00'15"	0°57'15"	0.00	0.00
C8	2+00.00 RT	NO	0.00%	70.0	0.00	12°00'00"	0°57'15"	172°00'15"	0°57'15"	0.00	0.00

SUPERELEVATION TABLE MBFRL,ALT2B

CURVE NO.	PRESENT	DPC	SUPERELEVATION	PROPOSED DESIGN SPEED	DESIGN SPEED (MPH)	MAXIMUM DEGREE OF CURVATURE	MINIMUM RADIUS	MAXIMUM DEGREE OF CURVATURE	MINIMUM RADIUS	SUPERELEVATION TRANSITION LENGTH	SUPERELEVATION TRANSITION LENGTH
C1	2+00.00 LT	NO	0.00%	N/A	0.00						0.00
C2	2+00.00 RT	NO	0.00%	N/A	0.00						0.00
C3	2+00.00 LT	NO	0.00%	N/A	0.00						0.00
C4	2+00.00 RT	NO	0.00%	N/A	0.00						0.00
C5	2+00.00 LT	NO	0.00%	70.0	0.00	12°00'00"	0°57'15"	172°00'15"	0°57'15"	0.00	0.00
C6	2+00.00 RT	NO	0.00%	70.0	0.00	12°00'00"	0°57'15"	172°00'15"	0°57'15"	0.00	0.00
C7	2+00.00 LT	NO	0.00%	70.0	0.00	12°00'00"	0°57'15"	172°00'15"	0°57'15"	0.00	0.00
C8	2+00.00 RT	NO	0.00%	70.0	0.00	12°00'00"	0°57'15"	172°00'15"	0°57'15"	0.00	0.00

Texas Department of Transportation

US 77
CSJ: 2350-01-056,ETC.
LIMITS: FROM FM 236 TO US 59

YOAKUM DISTRICT

Paul Reitz, P.E.
YOAKUM DISTRICT ENGINEER

Jeff Virnstrom, P.E.
DIRECTOR OF TRANSPORTATION, PLANNING & DEVELOPMENT

DESIGN SPEED	FUNCTIONAL CLASS	ADT US 77 FROM FM 236 TO US 59
US 77 = 60 MPH FR RD = 50 MPH US 59 DC = 50 MPH COUNTY RD = 50 MPH US 77 DC = 40 MPH	URBAN PRINCIPAL ARTERIAL	2018 = x,xxx 2038 = x,xxx

LOCATION MAP
N.T.S.

LEGEND

- PROPOSED ROW
- PROPOSED CONTROL OF ACCESS LIMITS
- EXISTING ROW
- BURIED FIBER OPTIC
- TELEPHONE
- PIPELINE
- GAS LINE
- OVERHEAD ELECTRIC
- TRAFFIC FLOW DIRECTION
- PROPOSED ULTIMATE MAINLANE
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMPS
- PROPOSED BRIDGE STRUCTURE
- EXISTING BRIDGE STRUCTURE
- PROPOSED DIRECT CONNECTOR
- PROPOSED CROSS STREET
- PROPOSED DRIVEWAY
- ROADWAY REMOVAL

PROFILE LEGEND

- PROPOSED US 77 PROFILE GRADE LINE (PGL)
- EXISTING NATURAL GROUND AT PROPOSED US 77 CENTERLINE
- CULVERT CROSSING

SCALES: PLAN 1"=200'
PROFILE 1"=20'

c.g.miller engineers
10440 Park Two Plaza
Suite 100
Houston, Texas 77036
(713) 667-5600
TBPE FIRM REGISTRATION # 10

US 77
ALTERNATIVE 2
SCHEMATIC LAYOUT
SEGMENT A

SHEET 2 OF 2

FED.RD. DIV.NO.	PROJECT NO.	SHEET NO.
6		

DESIGN: AF	STATE	DIST.	COUNTY
CHK.: RG	TEXAS	YKM	VICTORIA
DRN.: TP	CONT.	SECT.	JOB	HIGHWAY
CHK.: PR	2350	01	056,ETC,US 77

Texas Department of Transportation

US 77
CSJ: 2350-01-056,ETC.
LIMITS: FROM FM 236 TO US 59

YOAKUM DISTRICT

Paul Reitz, P.E.
YOAKUM DISTRICT ENGINEER

Jeff Virnkorem, P.E.
DIRECTOR OF TRANSPORTATION, PLANNING & DEVELOPMENT

ART US 77

DESIGN SPEED	FUNCTIONAL CLASS	FROM FM 236 TO US 59
US 77 = 60 MPH FR RD = 50 MPH US 59 DC = 50 MPH CROSS DC = 50 MPH US 77 DC = 40 MPH	URBAN PRINCIPAL ARTERIAL	2018 = x,xxx 2038 = x,xxx

LOCATION MAP
N.T.S

LEGEND

- PROPOSED ROW
- EXISTING ROW
- BURIED FIBER OPTIC
- TELEPHONE
- PIPELINE
- GAS LINE
- OVERHEAD ELECTRIC
- TRAFFIC FLOW DIRECTION
- PROPOSED ULTIMATE MAINLANE
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMPS
- PROPOSED BRIDGE STRUCTURE
- EXISTING BRIDGE STRUCTURE
- PROPOSED DIRECT CONNECTOR
- PROPOSED CROSS STREET
- PROPOSED DRIVEWAY
- ROADWAY REMOVAL

PROFILE LEGEND

- PROPOSED US 77 PROFILE GRADE LINE (PGL)
- EXISTING NATURAL GROUND AT PROPOSED US 77 CENTERLINE
- CULVERT CROSSING

0 100' 200'

SCALE: PLAN 1"=200'
PROFILE 1"=20'

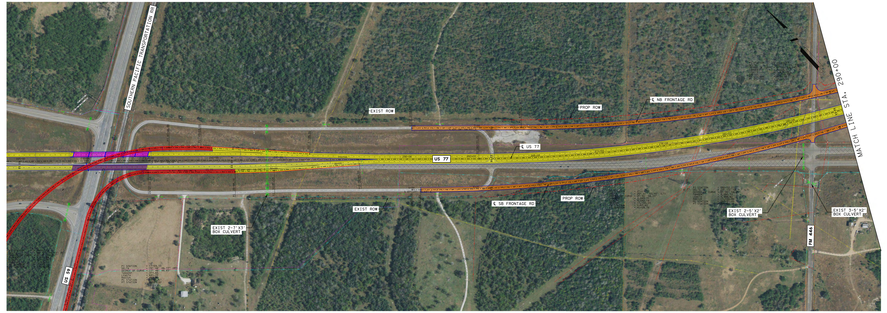
c.g. miller engineers
16400 Park Row Place
Suite 160
Houston, TX 77084
(281) 867-8888
TBPE FIRM REGISTRATION # : 451

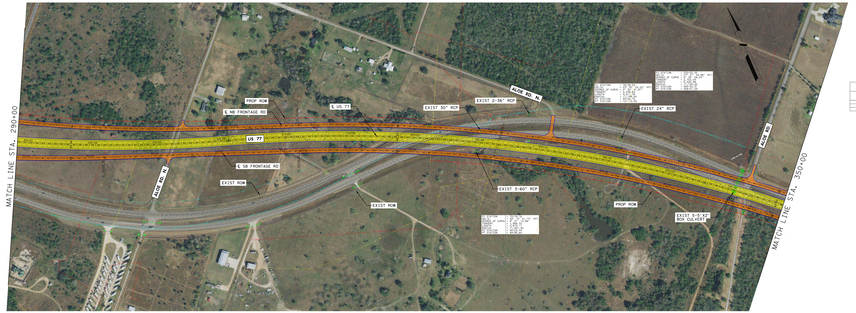
US 77
ALTERNATIVE 2
SCHEMATIC LAYOUT
SEGMENT B

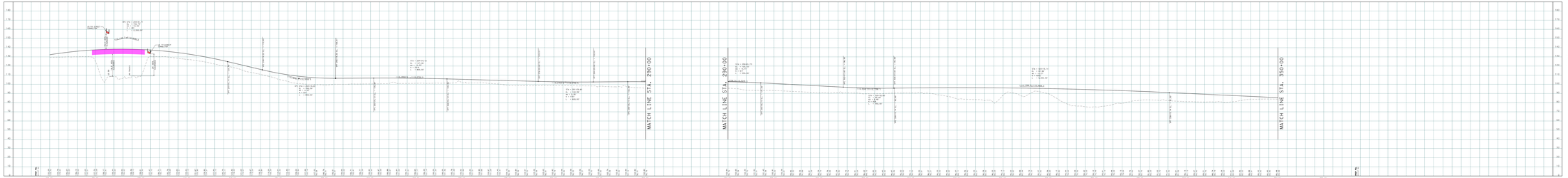
SHEET 1 OF 2

FED.RD. DIV. NO.	PROJECT NO.	SHEET NO.
6		

DESIGN: AF	STATE	DIST.	COUNTY
CHK.: RG	TEXAS	YKM	VICTORIA
DRN.: TP	CONT.	SECT.	JOB
CHK.: PR	2350	01	056,ETC,US 77







SUPERELEVATION TABLE MLCL2										
CURVE NO.	TRACK	DIR.	SUPERELEVATION RATE	TRANSITION LENGTH (NEGIN ENDING SLOPE)	NEGIN ENDING SLOPE	NEGIN ENDING STATION	END CROSS SLOPE	END CROSS SLOPE STATION	END CROSS SLOPE	END CROSS SLOPE
C01	CLOSE RD	RT	0.06	0.06	0.06					0.06
C02	CLOSE RD	RT	0.06	0.06	0.06					0.06
C03	CLOSE RD	RT	0.06	0.06	0.06	350+34.31	350+34.31	450+00.00	450+00.00	0.06

Texas Department of Transportation

US 77
CSJ: 2350-01-056,ETC.
LIMITS: FROM FM 236 TO US 59

YOAKUM DISTRICT

Paul Reitz, P.E.
YOAKUM DISTRICT ENGINEER

Jeff Virnkorem, P.E.
DIRECTOR OF TRANSPORTATION, PLANNING & DEVELOPMENT

ART US 77

DESIGN SPEED	FUNCTIONAL CLASS	FROM FM 236 TO US 59
US 77 = 60 MPH FR RD = 50 MPH US 59 DC = 50 MPH CROSS DC = 50 MPH US 77 DC = 40 MPH	URBAN PRINCIPAL ARTERIAL	2018 = x,xxx 2038 = x,xxx

LOCATION MAP
N.T.S

LEGEND

- PROPOSED ROW
- EXISTING ROW
- BURIED FIBER OPTIC
- TELEPHONE
- PIPELINE
- GAS LINE
- OVERHEAD ELECTRIC
- TRAFFIC FLOW DIRECTION
- PROPOSED ULTIMATE MAINLANE
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMPS
- PROPOSED BRIDGE STRUCTURE
- EXISTING BRIDGE STRUCTURE
- PROPOSED DIRECT CONNECTOR
- PROPOSED CROSS STREET
- PROPOSED DRIVEWAY
- ROADWAY REMOVAL

PROFILE LEGEND

- PROPOSED US 77 PROFILE GRADE LINE (PGL)
- EXISTING NATURAL GROUND AT PROPOSED US 77 CENTERLINE
- CULVERT CROSSING

0 100' 200'

SCALE: PLAN 1"=200'
PROFILE 1"=20'

c.g. miller engineers
16400 Park Row Place
Suite 160
Houston, TX 77084
(281) 867-8888
TBPE FIRM REGISTRATION # : 451

US 77
ALTERNATIVE 2
SCHEMATIC LAYOUT
SEGMENT B

SHEET 1 OF 2

FED.RD. DIV. NO.	PROJECT NO.	SHEET NO.
6		

DESIGN: AF	STATE	DIST.	COUNTY
CHK.: RG	TEXAS	YKM	VICTORIA
DRN.: TP	CONT.	SECT.	JOB
CHK.: PR	2350	01	056,ETC,US 77

Texas Department of Transportation

US 77
CSJ: 2350-01-056,ETC.
LIMITS: FROM FM 236 TO US 59

YOAKUM DISTRICT

Paul Heitz, P.E.
YOAKUM DISTRICT ENGINEER

Jeff Virnstein, P.E.
DIRECTOR OF TRANSPORTATION, PLANNING & DEVELOPMENT

DESIGN SPEED	FUNCTIONAL CLASS	ADT US 77 FROM FM 236 TO US 59
US 77 = 60 MPH	URBAN PRINCIPAL	2018 = x,xxx
FR RD = 50 MPH	ARTERIAL	2038 = x,xxx
US 59 DC = 50 MPH		
GUARD DC = 50 MPH		
US 77 DC = 40 MPH		

LOCATION MAP
N.T.S

LEGEND

- PROPOSED ROW
- EXISTING ROW
- BURIED FIBER OPTIC
- TELEPHONE
- PIPELINE
- GAS LINE
- OVERHEAD ELECTRIC
- TRAFFIC FLOW DIRECTION
- PROPOSED ULTIMATE MAINLANE
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMPS
- PROPOSED BRIDGE STRUCTURE
- EXISTING BRIDGE STRUCTURE
- PROPOSED DIRECT CONNECTOR
- PROPOSED CROSS STREET
- PROPOSED DRIVEWAY
- ROADWAY REMOVAL

PROFILE LEGEND

- PROPOSED US 77 PROFILE GRADE LINE (PGL)
- EXISTING NATURAL GROUND AT PROPOSED US 77 CENTERLINE
- CULVERT CROSSING

SCALES: PLAN 1"=200'
PROFILE 1"=20'

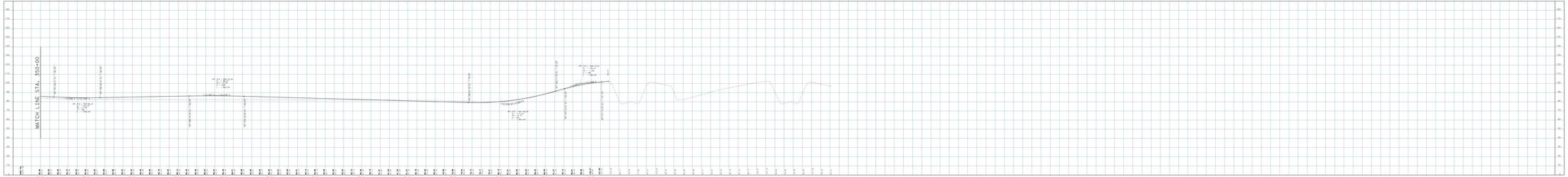
c.g. miller engineers
10440 Park Two Plaza
Suite 100
Houston, Texas 77036
(713) 667-5600
TBPE FIRM F-1182

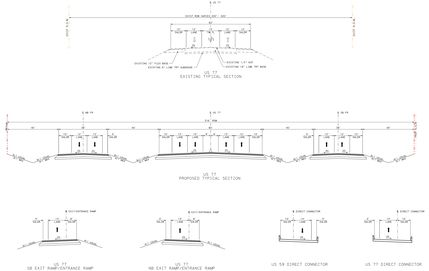
US 77
ALTERNATIVE 2
SCHEMATIC LAYOUT
SEGMENT B

SHEET 2 OF 2

FED.RD. DIV.NO.	PROJECT NO.	SHEET NO.
6		

DESIGN: AF	STATE	DIST.	COUNTY
CHK.: RG	TEXAS	YKM	VICTORIA
DRN.: TP	CONT.	SECT.	JOB	HIGHWAY
CHK.: PR	2350	01	056,ETC	US 77





Texas Department of Transportation

US 77
CSJ: 2350-01-056,ETC.
LIMITS: FROM FM 236 TO US 59

YOAKUM DISTRICT

Paul Heitz, P.E.
YOAKUM DISTRICT ENGINEER

Jeff Virnstein, P.E.
DIRECTOR OF TRANSPORTATION, PLANNING & DEVELOPMENT

DESIGN SPEED	FUNCTIONAL CLASS	ADT US 77 FROM FM 236 TO US 59
US 77 = 60 MPH	URBAN PRINCIPAL	2018 = x,xxx
FR RD = 50 MPH	ARTERIAL	2038 = x,xxx
US 59 DC = 50 MPH		
US 77 DC = 40 MPH		

LOCATION MAP
N.T.S

LEGEND

- PROPOSED ROW
- EXISTING ROW
- BURIED FIBER OPTIC
- TELEPHONE
- PIPELINE
- GAS LINE
- OVERHEAD ELECTRIC
- TRAFFIC FLOW DIRECTION
- PROPOSED ULTIMATE MAINLANE
- PROPOSED FRONTAGE ROAD
- PROPOSED RAMPS
- PROPOSED BRIDGE STRUCTURE
- EXISTING BRIDGE STRUCTURE
- PROPOSED DIRECT CONNECTOR
- PROPOSED CROSS STREET
- PROPOSED DRIVEWAY
- ROADWAY REMOVAL

PROFILE LEGEND

- PROPOSED US 77 PROFILE GRADE LINE (PGL)
- EXISTING NATURAL GROUND AT PROPOSED US 77 CENTERLINE
- CULVERT CROSSING

SCALES: PLAN 1"=200'
PROFILE 1"=20'

c.g. miller engineers
10440 Park Two Plaza
Suite 100
Houston, Texas 77036
(713) 667-5600
TBPE FIRM F-1182

US 77
ALTERNATIVE 2
SCHEMATIC LAYOUT
SEGMENT B

SHEET 2 OF 2

FED.RD. DIV.NO.	PROJECT NO.	SHEET NO.
6		

DESIGN: AF	STATE	DIST.	COUNTY
CHK.: RG	TEXAS	YKM	VICTORIA
DRN.: TP	CONT.	SECT.	JOB	HIGHWAY
CHK.: PR	2350	01	056,ETC	US 77