TEXAS DEPARTMENT OF TRANSPORTATION
FORT WORTH DISTRICT

LOYL C. BUSSELL, P.E. - DISTRICT ENGINEER

RECONSTRUCT NORTHBOUND RAMP FROM MEADOWBROOK DRIVE AND EXIT RAMP TO BRENTWOOD STAIR ROAD

NORTHBOUND ALTERNATIVE A2

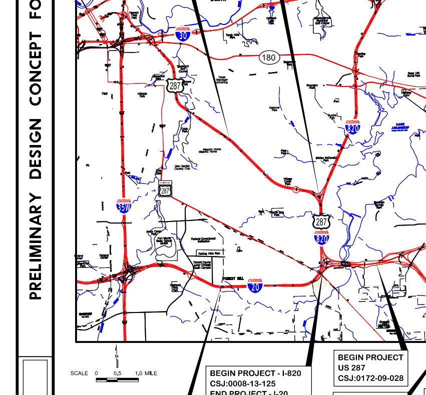
PRELIMINARY DESIGN CONCEPT
SOUTHEAST CONNECTOR

I-20
CSJ : 0008-13-206
FROM I-20/I-820 INTERCHANGE TO FOREST HILL DRIVE
CSJ : 2374-05-066
FROM I-820 TO PARK SPRINGS BLVD

I-820
CSJ : 0008-13-125
FROM I-20 TO BRENTWOOD STAIR RD

US 287
CSJ : 0172-06-080
FROM I-820/US 287 INTERCHANGE TO BISHOP ST
CSJ : 0172-09-028
FROM I-20 INTERCHANGE TO SUBLETT RD

ROADWAY TYPE	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
I-20 GENERAL PURPOSE LANES	URBAN INTERSTATE	50 MPH 70 MPH-LITTLE RD TO PARK SPRINGS
I-820 GENERAL PURPOSE LANES	URBAN INTERSTATE	60 MPH
US 287 GENERAL PURPOSE LANES	URBAN FREEWAY	60 MPH
COLLECTOR DISTRIBUTORS	URBAN INTERSTATE	50 MPH
DIRECT CONNECTORS	URBAN INTERSTAE	50 MPH
RAMPS (I-20 AND I-820)	URBAN INTERSTATE	50 MPH
RAMPS (US 287)	URBAN FREEWAY	50 MPH
FRONTAGE ROADS	URBAN COLLECTOR	40 MPH
BY-PASS FRONTAGE ROADS	URBAN COLLECTOR	40 MPH
U-TURNS	URBAN COLLECTOR	15 MPH
CONNECTIONS TO CRAIG ST	URBAN COLLECTOR	20 MPH
FOREST HILL DRIVE	URBAN ARTERIAL	40 MPH
BU 287 P (MANSFIELD HIGHWAY)	URBAN ARTERIAL	40 MPH
BOWMAN SPRINGS RD	URBAN ARTERIAL	40 MPH
LITTLE ROAD	URBAN ARTERIAL	40 MPH
GREEN OAKS BOULEVARD	URBAN ARTERIAL	40 MPH
KELLY ELLIOTT ROAD	URBAN ARTERIAL	40 MPH
MEADOWBROOK DRIVE	URBAN ARTERIAL	40 MPH
SH 180 (E LANCASTER AVENUE)	URBAN ARTERIAL	40 MPH
SPUR 303 (ROSEDALE BOULEVARD)	URBAN ARTERIAL	40 MPH
E BERRY STREET	URBAN ARTERIAL	40 MPH
MILLER AVENUE	URBAN ARTERIAL	40 MPH
HARTMAN ROAD	URBAN COLLECTOR	35 MPH
ANGLIN DRIVE	URBAN COLLECTOR	35 MPH
CRAIG STREET	URBAN COLLECTOR	35 MPH
RAMEY AVENUE	URBAN COLLECTOR	35 MPH
WILBARGER STREET	URBAN COLLECTOR	35 MPH
MARTIN STREET	URBAN COLLECTOR	35 MPH
SUNVALLEY DRIVE	URBAN COLLECTOR	35 MPH
VILLAGE CREEK	URBAN COLLECTOR	35 MPH
ERATH STREET	LOCAL ROAD	30 MPH
CAREY STREET	LOCAL ROAD	30 MPH



PROJECT LOCATION MAP/KEYMAP

Southeast CONNECTOR

Texas Department of Transportation
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NOT INTENDED FOR CONSTRUCTION, BIDDING, AND OR PERMIT PURPOSES

PREPARED BY CIVIL ASSOCIATES, INC.
TBPE REGISTRATION NO. F-006981
UNDER THE SUPERVISION OF

CHAD HENDERSON, P.E.
LICENSE NO. 97332

NASER ABUSAAD, PE, AICP
LICENSE NO. 83200

CIVIL ASSOCIATES, INC. 9330 LBJ Frwy, Ste. 1150 Dallas, Texas 75243 TBPE Firm Registration No. 6981

COUNTY: TARRANT
DATE: NOVEMBER 2018

PRELIMINARY DESIGN CONCEPT FOR SOUTHEAST CONNECTOR

ROLL 3 OF 8

0 50 100 200
GRAPHIC SCALE IN FEET

LEGEND:

- SHOULDER / TRAVEL LANE (S) / SHOULDER — GENERAL PURPOSE LANES (GP LANES)
- COLLECTOR/DISTRIBUTORS (C-D)
- FRONTAGE ROADS/U-TURNS/CITY STREETS
- RAMPS
- SIDEWALKS
- PROPOSED GORE AREA
- AS SHOWN IN PUBLIC MEETING
- PROPOSED BRIDGE
- PROPOSED RAILROAD BRIDGE
- EXISTING RIGHT-OF-WAY (R.O.W.)
- EXISTING PROPERTY LINES
- PROPOSED RIGHT-OF-WAY (R.O.W.)
- PROPOSED DENIAL-OF-ACCESS
- EXISTING DENIAL-OF-ACCESS
- CITY LIMITS
- EXISTING EASEMENTS
- POTENTIAL DISPLACEMENTS
- PARKS
- (2) XX,XXX — PROPOSED NUMBER OF LANES/DIRECTION
- EXISTING DRIVEWAYS TO BE REMOVED
- EXISTING PAVEMENT TO BE REMOVED

GENERAL NOTES:

1. VOLUMES SHOWN ARE DRAFT 2045 AVERAGE DAILY TRAFFIC OBTAINED FROM NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS
2. AERIAL IMAGES SHOWN WERE OBTAINED FROM PHOTOGRAPHY DATED SEPTEMBER 29, 2017 AND WERE PROVIDED BY TxDOT ON SEPTEMBER 10, 2018.

RECONSTRUCT NORTHBOUND RAMP FROM MEADOWBROOK DRIVE AND EXIT RAMP TO BRENTWOOD STAIR ROAD

NORTHBOUND ALTERNATIVE A2

Pros:
-Existing northbound ramps are reconstructed to allow additional mainlanes capacity

Cons:
-1345' between entrance and exit ramps does not meet minimum TxDOT or National Guidelines
-865' between exit ramp and direct connection does not meet minimum TxDOT and National Guidelines
-Traffic from the northbound I-820 on ramp from Meadowbrook Drive wanting to continue northbound on I-820 would have to weave over 2 lanes in a distance of 1330' (Approximately)
-Reduced shoulders (shoulders not wide enough for emergency use) on existing mainlanes to remain and the I-30 northbound direct connector exit ramp.

PROPERTY OWNERSHIP TABLE
Source: https://www.tad.org/data-download/
(Database last updated: May 14, 2018)
I-820 - NORTHBOUND

PARCEL NO.	OWNER
477-A	ONCOR ELECTRIC DELIVERY COMPANY, LLC
477-B	ONCOR ELECTRIC DELIVERY COMPANY, LLC
477-C	ONCOR ELECTRIC DELIVERY COMPANY, LLC
478	ONCOR ELECTRIC DELIVERY COMPANY, LLC
479	TRE REAL ESTATE PARTNERS, LLC
480	TRE REAL ESTATE PARTNERS, LLC
481	YOUGHAL CORPORATION
860	UNION PACIFIC RAILROAD COMPANY
482	ONCOR ELECTRIC DELIVERY COMPANY, LLC
483	ONCOR ELECTRIC DELIVERY COMPANY, LLC
484-A	ABDUL KHAUL WAFAYEE
484-B	ABDUL KHAUL WAFAYEE ; EDHC, INC
484-C	RACETRAC PETROLEUM, INC ; PETRA PETROLEUM MANAGEMENT, LLC
485	ONCOR ELECTRIC DELIVERY COMPANY, LLC
486	ONCOR ELECTRIC DELIVERY COMPANY, LLC
486-A	WILLIAM M. WEST
486-B	JERRY E. DEAL
486-C	WORTH OIL CO
486-D	MULLEN, ROBERT ; NVN LLC ; CASEY RAYBURN
486-E	HYDE, RICHARD J ; DAVID DAWS
486-F	TAMMY K. GILL
486-G	KARIE K. ADERHOLT ; LUNGER PROPERTIES, LLC
487	ONCOR ELECTRIC DELIVERY COMPANY, LLC
490-A	LEONARDO RIOS CASTANEDA
490-B	FORT WORTH INDEPENDENT SCHOOL DISTRICT

PROPERTY OWNERSHIP TABLE
Source: https://www.tad.org/data-download/
(Database last updated: May 14, 2018)
I-820 - NORTHBOUND

PARCEL NO.	OWNER
492	ONCOR ELECTRIC DELIVERY COMPANY, LLC
493	ONCOR ELECTRIC DELIVERY COMPANY, LLC
494	JAMES DANIEL FAUBUS
495	BORCIK NAIRN INVESTMENTS, LLC
496	NEW VICTORIOUS BAPTIST CHURCH
497	NEW VICTORIOUS BAPTIST CHURCH
498	TROY JOHNSON
499	JERRIE L. PHILLIPS
500-A	MERGE HOLDINGS, LLC
500-B	LAURIE INDUSTRIES, LLC
501	WILLIAM WAUGH HOLDINGS, LLC
502-A	DANNY REED
502-B	DANNY REED
502-C	LEONARD CRAIG BENNETT
502-D	DANNY T. REED
502-E	TERRY JAY WOLFGANG
502-F	DANNY THOMAS REED
502-G	CHIEM THI NGUYEN
503	MEADOWBROOK PARTNERS, LLC ; MIKE BASHIR
504	A-MAX INSURANCE SERVICES, INC
505	MPTF HOLDINGS, LLC ; BJ COMMUNICATION, INC

PROPERTY OWNERSHIP TABLE
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(Database last updated: May 14, 2018)
I-820 - SOUTHBOUND

PARCEL NO.	OWNER
506	POLO INDUSTRIES, LLC
507	JAMES MICHAEL SADLER ; CENTHIA MORRISON COLON ME CLEAN, LLC ; DENNIS HARRIS
508-A	VICTRON STORES, LP ; KHWICE PETROLEUM, LLC ; MYRMAC CORP
509	ONCOR ELECTRIC DELIVERY COMPANY, LLC
510	ONCOR ELECTRIC DELIVERY COMPANY, LLC
511	TACO BELL OF AMERICA, INC.
512	LASSER, INC. ; LEGACY MANAGING GENERAL AGENCY
513	ONCOR ELECTRIC DELIVERY COMPANY, LLC
514	ONCOR ELECTRIC DELIVERY COMPANY, LLC
515	JUAN ESTRADA
515-A	ISMAEL GONZALEZ-LOPEZ
515-B	RIVERA, SALVADOR
515-C	THE EDDLEMAN FAMILY TRUST
515-D	KAY, ALBERTA
515-E	OLMOS, VERONICA
515-F	HUERTA, SALVADOR
515-G	HERNANDEZ-SOTO, ANA MARIA
516	JORGE VAZQUEZ VILLA
517	AYALA, ESTEFANI
519	VENANCIO RANGEL CAMPOS
520	IGOR FRAIBERG

PROPERTY OWNERSHIP TABLE
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(Database last updated: May 14, 2018)
I-820 - SOUTHBOUND

PARCEL NO.	OWNER
521	CHRISTOPHER LEE JOHNSON
522	CONSTANTINO MUNOZ
523	REFUGIO SALAZAR
524	SEFERINO L. COVARRUBIAS
525	PEDRO CARDENAS ARELLANO
526	JERRY D. PHIPPS
527	LUIS ALBERTO MIERELS SALAS
528	GLENN RICHARD GIBSON, JR.
529	LINDA L. CRUZ
530	ALFONSO GAMERO MIJARES
531	MARTIN MUNOZ
532	RAFAEL ESPARZA
533	RICHARD ANTHONY GARCIA
534	ESTABAN SAENZ
535	ARMANDO SALAZAR
536	ERIKA MARIA DEJESUS BARBOZA
537	JOSE MARQUEZ
538	PEDRO GARCIA
539	DANIEL PALOMARES
540	VERONICA MACIAS
541	AL GUADALUPE CERON
542	PEDRO GARCIA
543	PEDRO GARCIA

PROPERTY OWNERSHIP TABLE
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(Database last updated: May 14, 2018)
I-820 - SOUTHBOUND

PARCEL NO.	OWNER
544	BOY SCOUTS OF AMERICA
545	JAMES RANDY ISHAM
546	PATRICIA G. BOYD
547	RAFAEL MONCAYO
548	K & K CAR SALES LLC
549	MARK D. SCOTT
550	MARK D. SCOTT
551	ALI SAYAH, SR. ; EAST SIDE AUTO INC
551-A	PG INC
551-B	COFFMAN, HOLLIS
551-C	COFFMAN, HOLLIS
552	FRED ROMANO
552-A	URIOSTEGUI, ENRIQUE
552-B	FLINT, DAVID J
553	JULIO ROTHSCHILD
554	ROBERT D. CUPP ; DIANA CUPP ; ALLIANCE FORENSICS LAB INC
555	ROBERT D. CUPP ; DIANA CUPP
556	ROBERT D. CUPP
557	ROBERT D. CUPP
558	TENSION INVESTMENTS, LLC ; READY METALS, INC
559	AMERCO REAL ESTATE CO OF TX, INC ; U-HAUL CO OF DALLAS FORT WORTH
560	UNION PACIFIC RR CO
561	REBEL & PARISH, LLC

PROPERTY OWNERSHIP TABLE
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(Database last updated: May 14, 2018)
I-820 - SOUTHBOUND

PARCEL NO.	OWNER
562	REBEL & PARISH, LLC
563	EAST SIDE INDUSTRIAL, LLC ; BENCHMARK TUBULAR MFG, INC
564	LAKEVIEW INDUSTRIAL PARK, LLC ; GOLF WORLD UNLTD, INC
565	B & J JOINT VENTURE ; CASH AMERICA INTERNATIONAL, INC
566	B & J JOINT VENTURE ; PATRICK GARNER
567	KHALIL ZOOM IN MARKET, INC ; ABDUL KHALIL WAFAYEE
568	CITY OF FORT WORTH
569	SAMMIE BROOKINS, JR.
570	VIRGINIA DARE PHILLIPS
571	TIMOTHY C. JOHNSON
572	VIRGINIA ANN JAMES
573	TOMMY W. DAVIS
574	AL RENARDO JONES
575	EMMA LOUISE JOHNSON
576	COURTNEY M. DARBY
577	LUIS ADRIAN SANCHEZ
578	MAYME EVELYN SPINKS
579	CRISTINA SALINAS
580	VELDA PELLUM STEWART
581	ONCOR ELECTRIC DELIVERY COMPANY, LLC
582	FRANCISCO PAZ
583	MILDRED L. MCELVY
584	HERBERT T. KIRKPATRICK

PROPERTY OWNERSHIP TABLE
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(Database last updated: May 14, 2018)
I-820 - SOUTHBOUND

PARCEL NO.	OWNER
585	CECILLE M. BROOKS RONEY
586	PAUL O. SIMS
587	MASON G. RICE , JR.
588	SYNTHIA WILLIAMS
589	MELISSA J. SHEARIN
590	AUGUSTUS JAMES MITCHELL
591	J. GUADALUPE LARA
592	TERRANCE C BEASLEY
593	JOHN NGUYEN
594	RITA L. DAVIS
594-A	JOE LOUIS CAMPBELL
595	JP MORGAN CHASE BANK NATL ASSOC; BANK ONE TEXAS
596	TARRANT COUNTY COLLEGE DISTRICT
597	HOLY TABERNACLE CHURCH OF GOD IN CHRIST, INC.
598	NWT 2850,LLC
599	PRIME CENTRAL REALTY, LLC
600	CHRIS WILSON
601	WILSON, CHRIS W.; AWARDS BY WILSON.COM OF FW DALLAS, INC ; EUGENE R. WILLIAMS
602	SUSAN ROPER KAECHELE SMITH
603	FRANK BROOKS REAL ESTATE HOLDINGS; STORM MASTER, INC
604	CHRISTOPHER M. GAROOSI ; INTERSTATE GROUP, LLC
605	FORT-ROWLETT-LAND J.V. ; NATIOWIDE HOUSING
606	FORT-ROWLETT-LAND J.V.
607	FORT-ROWLETT-LAND J.V.

PROPERTY OWNERSHIP TABLE
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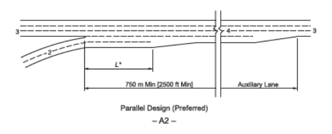
(Database last updated: May 14, 2018)
I-820 - NORTHBOUND

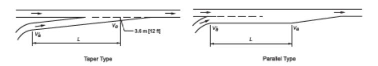
PARCEL NO.	OWNER
900	REED, DANNY
901	CANALES, DANIEL
902	FARIAS, JUAN
903	CASTILLO, PATRICIA
904	ALNA PROPERTIES II, LLC
905	HART, ROBERT
906	NGUYEN HA THANH
907	SERIES 6500 ELLIS
908	THOMPSON, JODIE R
909	PRUITT, RICHARD
910	6520 RED SIERRA, LLC
910-A	ELLER MEDIA CO
911	WILLOW LAND ASSOCIATES LP
912	FLEET. M B ETAL
913	AREFIN MD SHAMSUL
914	IRMAZA, INC
915	LEGGETT. ELSIE PATRICIA ; WILLIAMS FRIED CHICKEN, INC
916	QUIKTRIP CORPORATION
917	FLECK, JAMES K
918	BRIDGEWOOD CHURCH OF CHRIST
919	GRIEF. ROBERT S ETAL
920	TOTAL E&P USA REAL ESTATE, LLC
921	NEW BEGINNINGS INT'L CHURCH
922	ONCOR ELECTRIC DELIVERY CO, LLC

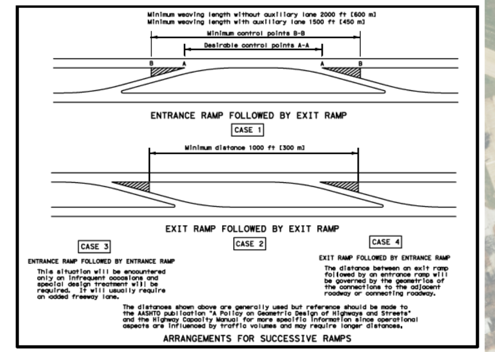


Parallel Design (Preferred)
– A2 –

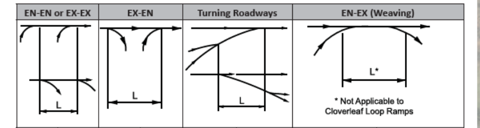
U.S. Customary										
Acceleration Length, L (ft) for Entrance Curve Design Speed (mph)										
Highway		Stop Condition	15	20	25	30	35	40	45	50
Design Speed, V (mph)	Speed Reached, V_a (mph)	and Initial Speed, V'_a (mph)								
		0	14	18	22	26	30	36	40	44
30	23	180	140	—	—	—	—	—	—	—
35	27	280	220	160	—	—	—	—	—	—
40	31	360	300	270	210	120	—	—	—	—
45	35	560	490	440	380	280	160	—	—	—
50	39	720	660	610	550	450	350	130	—	—
55	43	960	900	810	780	670	550	320	150	—
60	47	1200	1140	1100	1020	910	800	550	420	180
65	50	1410	1350	1310	1220	1120	1000	770	600	370
70	53	1620	1560	1520	1420	1350	1230	1000	820	580
75	55	1790	1730	1630	1580	1510	1420	1160	1040	780

Note: Uniform 50:1 to 70:1 tapers are recommended where lengths of acceleration lanes exceed 1,300 ft.





ARRANGEMENTS FOR SUCCESSIVE RAMPS



EN-EN or EX-EX		EX-EN		Turning Roadways		EN-EX (Weaving)			
Full Freeway	CDR or FDR	Full Freeway	CDR or FDR	System Interchange	Service Interchange	System to Service Interchange		Service to Service Interchange	
						Full Freeway	CDR or FDR	Full Freeway	CDR or FDR
Minimum Lengths Measured between Successive Ramp Terminals									
300 m (1000 ft)	240 m (800 ft)	150 m (500 ft)	120 m (400 ft)	240 m (800 ft)	180 m (600 ft)	600 m (2000 ft)	480 m (1600 ft)	480 m (1600 ft)	300 m (1000 ft)

Notes: FDR—Freeway distributor road EN—Entrance
CDR—Collector distributor road EX—Exit

Figure 10-68. Recommended Minimum Ramp Terminal Spacing