



3803 Parkwood Blvd., Ste 800
 Frisco, Texas 75034
 (214) 618-4570
 Fax (214) 618-4574

ADDITIONS									
ITEM NO.	DESC.	SP	ITEM DESCRIPTION	PREVIOUS QUANTITY	REVISION	REVISED QUANTITY	UNIT	CONTRACT CHANGE	
								UNIT BID PRICE	SUBTOTAL BID COST
1	100		PREPARING ROW	324	6	330	STA	\$ 2,000.00	\$ 12,000.00
2	104		REMOVING CONC (PAV)	12,115	220	12,335	SY	\$ 6.00	\$ 1,320.00
3	105		REMOV STAB BASE AND ASPH PAV (3"-9")	13,898	244	14,142	SY	\$ 4.00	\$ 976.00
6	132	002	EMBANKMENT (FINAL)(DENS CONT)(TYC)	128,335	2582	130,917	CY	\$ 2.00	\$ 5,164.30
14	341	001	D-GR HMA TY-B PG64-22	488	700	1,188	TN	\$ 91.05	\$ 63,735.00
16	360		CURB (TYPE II)	64,732	689	65,421	LF	\$ 1.00	\$ 689.00
17	360		CONC PAV (JOINT REINF) (9")	8,995	4595	13,590	SY	\$ 63.00	\$ 289,485.00
18	402		TRENCH EXCAVATION PROTECTION	18,872	1501	20,373	LF	\$ 1.00	\$ 1,501.00
21	416		DRILL SHAFT (TRF SIG POLE) (48 IN)	242	22	264	LF	\$ 340.00	\$ 7,480.00
27	432		RIPRAP (CONC)(6 IN)	50	16	66	CY	\$ 520.00	\$ 8,320.00
30	432		RIPRAP (STONE PROTECTION)(15 IN)	1,397	31	1,428	CY	\$ 124.00	\$ 3,844.00
39	462		CONC BOX CULV (6 FT X 4 FT)	2,341	47	2,388	LF	\$ 317.00	\$ 14,899.00
48	464		RC PIPE (CL III)(24 IN)	1,557	57	1,614	LF	\$ 60.00	\$ 3,420.00
50	464		RC PIPE (CL III)(30 IN)	1,321	32	1,353	LF	\$ 75.00	\$ 2,400.00
58	465		INLET (COMPL)(PAZD)(RC)(4FTX4FT)	6	1	7	EA	\$ 4,000.00	\$ 4,000.00
59	465		INLET (COMPL)(REC)(10')	71	2	73	EA	\$ 5,000.00	\$ 10,000.00
60	465		INLET (COMPL)(TYH)(MOD)	5	1	6	EA	\$ 4,000.00	\$ 4,000.00
86	496		REMOV STR (PIPE)	914	15	929	LF	\$ 18.00	\$ 270.00
95	506		TEMP SEDMT CONT FENCE (INSTALL)	30,395	723	31,118	LF	\$ 1.15	\$ 831.45
96	506		TEMP SEDMT CONT FENCE (REMOVE)	30,395	723	31,118	LF	\$ 0.05	\$ 36.15
110	618		CONDT (PVC) (SCH 40) (4") (BORE)	1,430	154	1,584	LF	\$ 20.00	\$ 3,080.00
112	620		ELEC CONDR (NO.12) INSULATED	1,184	86	1,270	LF	\$ 0.70	\$ 60.20
113	620		ELEC CONDR (NO.8) INSULATED	8,932	1098	10,030	LF	\$ 0.95	\$ 1,043.10
123	644		IN SM RD SN SUP&AM TY10BWG(1)SA(T)	13	1	14	EA	\$ 607.00	\$ 607.00
126	644		IN SM RD SN SUP&AM TYTWT(1)UA(P)	23	2	25	EA	\$ 385.00	\$ 770.00
141	666	007	REFL PAV MRK TY I (W)4"(DOT)(100ML)	115	3	118	LF	\$ 2.00	\$ 6.00
142	666	007	REFL PAV MRK TY I (W)4"(SLD)(100ML)	6,695	1368	8,063	LF	\$ 0.55	\$ 752.40
143	666	007	REFL PAV MRK TY I (W)8"(DOT)(100ML)	235	68	303	LF	\$ 2.20	\$ 149.60
144	666	007	REFL PAV MRK TY I (W)8"(SLD)(100ML)	6,188	1274	7,462	LF	\$ 1.45	\$ 1,847.30
145	666	007	REFL PAV MRK TY I (W)12"(SLD)(100ML)	1,038	892	1,930	LF	\$ 3.25	\$ 2,899.00
146	666	007	REFL PAV MRK TY I (W)(ARROW)(100ML)	62	12	74	EA	\$ 125.00	\$ 1,500.00
148	666	007	REFL PAV MRK TY I (W)(WORD)(100ML)	47	10	57	EA	\$ 165.00	\$ 1,650.00
149	666	007	REFL PAV MRK TY I (Y)4"(SLD)(100ML)	13,608	877	14,485	LF	\$ 0.55	\$ 482.35
153	672		REFL PAV MRKR TY II-C-R	2,057	63	2,120	EA	\$ 5.75	\$ 362.25
160	678		PAV SURF PREP FOR MRK (4")	37,649	2222	39,871	LF	\$ 0.12	\$ 266.64
161	678		PAV SURF PREP FOR MRK (8")	6,127	1636	7,763	LF	\$ 0.21	\$ 343.56
162	678		PAV SURF PREP FOR MRK (12")	4,673	1183	5,856	LF	\$ 0.65	\$ 768.95
163	678		PAV SURF PREP FOR MRK (24")	817	75	892	LF	\$ 1.00	\$ 75.00
164	678		PAV SURF PREP FOR MRK (ARROW)	61	13	74	EA	\$ 24.00	\$ 312.00
166	678		PAV SURF PREP FOR MRK (WORD)	46	11	57	EA	\$ 55.00	\$ 605.00
169	682		VEH SIG SEC (12")LED(GRN)	41	3	44	EA	\$ 230.00	\$ 690.00
171	682		VEH SIG SEC (12")LED(YEL)	41	3	44	EA	\$ 230.00	\$ 690.00
173	682		VEH SIG SEC (12")LED(RED)	41	3	44	EA	\$ 230.00	\$ 690.00
175	682		BACK PLATE (12")(3 SEC)	41	3	44	EA	\$ 140.00	\$ 420.00
179	684		TRF SIG CBL (TY A)(14 AWG)(20 CONDR)	3,267	443	3,710	LF	\$ 4.50	\$ 1,993.50
184	856		MOSTURE TREATED SUBGRADE	74,735	3829	78,564	CY	\$ 1.25	\$ 4,786.25
201	686		INS TRF SIG PL AM(S)1 ARM(60')LUM&ILSN	2	1	3	EA	\$ 20,200.00	\$ 20,200.00
206	110		EXCAVATION (ROADWAY)	102,449	3743	106,192	CY	\$ 5.30	\$ 19,835.62
207	247		FLEX BASE TYPE D GRADE 1 OR 2 WITH 8 MIL	123,782	6353	130,135	SY	\$ 7.35	\$ 46,694.55
210	666		REFL PAV MRK TY I (W)24"(SLD)(100ML)	783	75	858	LF	\$ 7.00	\$ 525.00
TOTAL ADDITIONS:									\$ 548,476.17



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ITEM NO.	DESC.	SP	NEW ITEMS ITEM DESCRIPTION	PREVIOUS QUANTITY	REVISION	REVISED QUANTITY	UNIT	CONTRACT CHANGE	
								ESTIMATED UNIT BID PRICE	SUBTOTAL COST
								208	466
209	467		SET (MOD)(TY I)(S= 6 FT)(HW= 6 FT)(FW=4.5 FT)(4:1) (P)	0	2	2	EA	\$ 9,750.00	\$ 19,500.00
220			CONNECT TO EXISTING 6'X4' RCB	0	2	2	EA	\$ 4,500.00	\$ 9,000.00
211			6'X4' CAP (RCB)	0	2	2	EA	\$ 1,500.00	\$ 3,000.00
212			REMOVE INLET	0	3	3	EA	\$ 1,500.00	\$ 4,500.00
213			CONNECT TO EXISTING RCP	0	4	4	EA	\$ 2,750.00	\$ 11,000.00
214			ADDITIONAL TRAFFIC CONTROL (6.5%)	0	1	1	LS	\$ 7,500.00	\$ 7,500.00
215			TYPE III BARRICADE	0	60	60	LF	\$ 45.00	\$ 2,700.00
216			BOND INCREASE (1%)	0	1	1	LS	\$ 6,750.00	\$ 6,750.00
217			SURVEY (3%)	0	1	1	LS	\$ 15,000.00	\$ 15,000.00
88			MOBILIZATION	0	1	1	LS	\$ 45,000.00	\$ 45,000.00
219			CULVERT CLEANING	0	1	1	LS	\$ 15,000.00	\$ 15,000.00
TOTAL NEW ITEMS:									\$ 158,450.00
NET INCREASE / (DECREASE) THIS CHANGE ORDER									\$ 666,418.47
CHANGE ORDER #2									\$ 427,382.00
TOTAL W/ CHANGE ORDER #2									\$1,093,800.47

These changes are based on the proposed changes to First Street based on the Town of Prosper's request.

The attached revised sheets (7, 62, 71, 78, 106A, 106B, 114A, 114B, 122, 221, 250A, 250B, 250C, 288, 289, 290, 291, 299, 302, 303, 337) for the First Street Improvements at the SBFR should be issued with this change order #4.

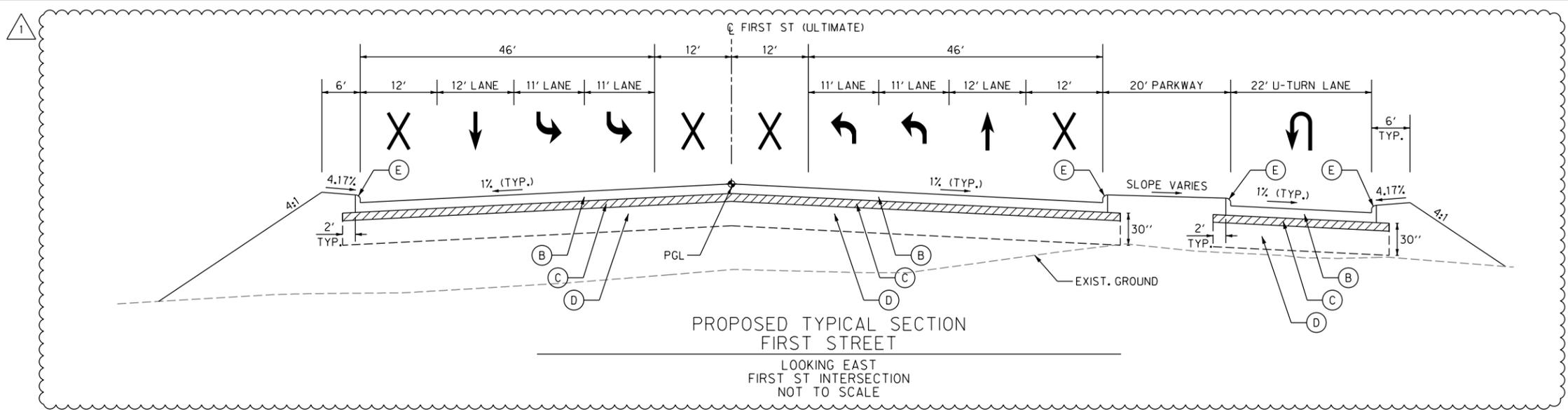
The net increase (decrease) to the Dallas North Tollway Southbound Frontage Road project cost by this Change Order is **\$666,418.47**.

The previous Change Order #2 for the RCBC work totaled \$427,382.00. Adding the amount for this Change Order #4 results in a total Town participation amount of **\$1,093,800.47**.

Should you have any questions or require any additional information, do not hesitate to contact me.

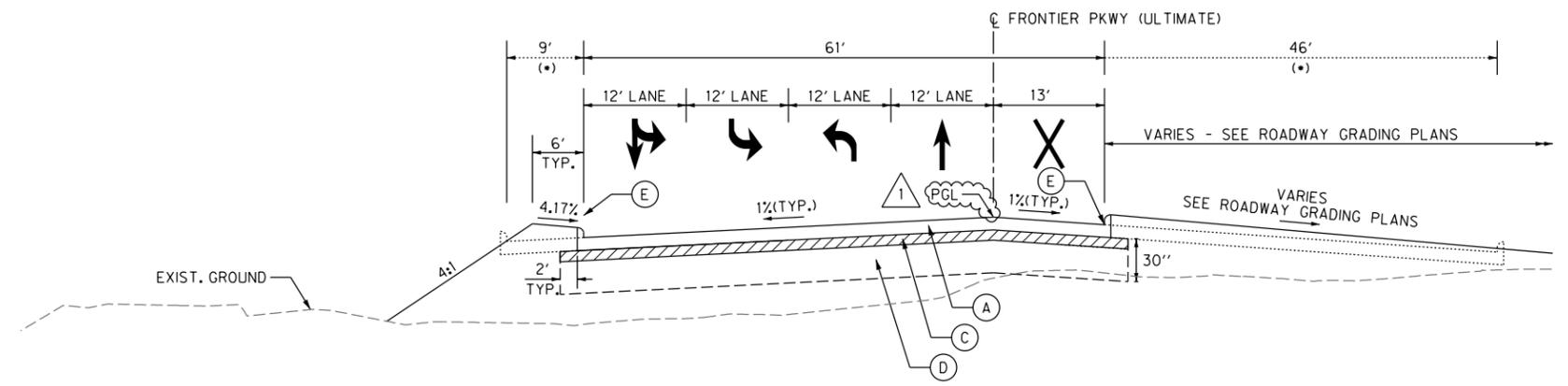
Sincerely,
 HALFF ASSOCIATES, INC.

Dennis Satre, P.E.
 Vice President

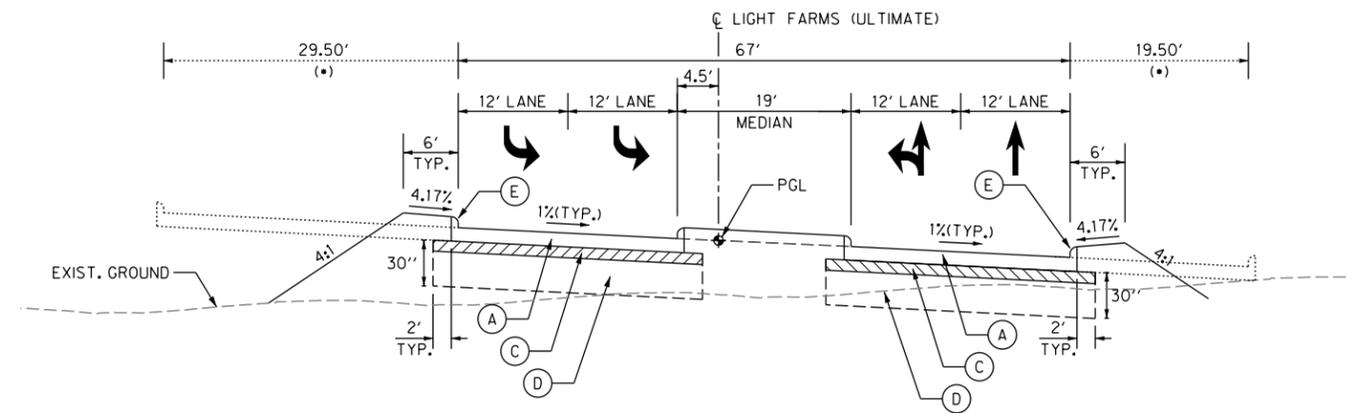


- LEGEND**
- (A) PROPOSED 9" CRCP
 - (B) PROPOSED 9" JRPC
 - (C) PROPOSED 8" LIME TREATED SUBGRADE
 - (D) PROPOSED 30" MOISTURE TREATED SUBGRADE
 - (E) PROPOSED TYPE II MONLITHIC CURB
 - (W) EXISTING 8" REINFORCED CONCRETE PAVEMENT
 - (X) EXISTING 8" LIME TREATED SUBGRADE

- NOTES:**
1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS STATED OTHERWISE.
 2. REFER TO ROADWAY GRADING PLANS FOR PAVEMENT CROSS SLOPE TRANSITION STATION LIMITS.
 3. REFER TO THE SBFR ROADSIDE PARAMETERS TABLE ON SHEET 5 OF THE TYPICAL SECTIONS FOR SBFR SIDE SLOPES, PARKWAY SLOPES, AND PARKWAY WIDTHS THROUGHOUT THE CORRIDOR.
 4. SEE CROSS STREET PAVING PLANS FOR ADDITIONAL LANE POSITION AND ALIGNMENT INFORMATION.



(* ULTIMATE LIMIT OF CROSS STREET PAVEMENT SECTION PER NTTA SCHEMATIC



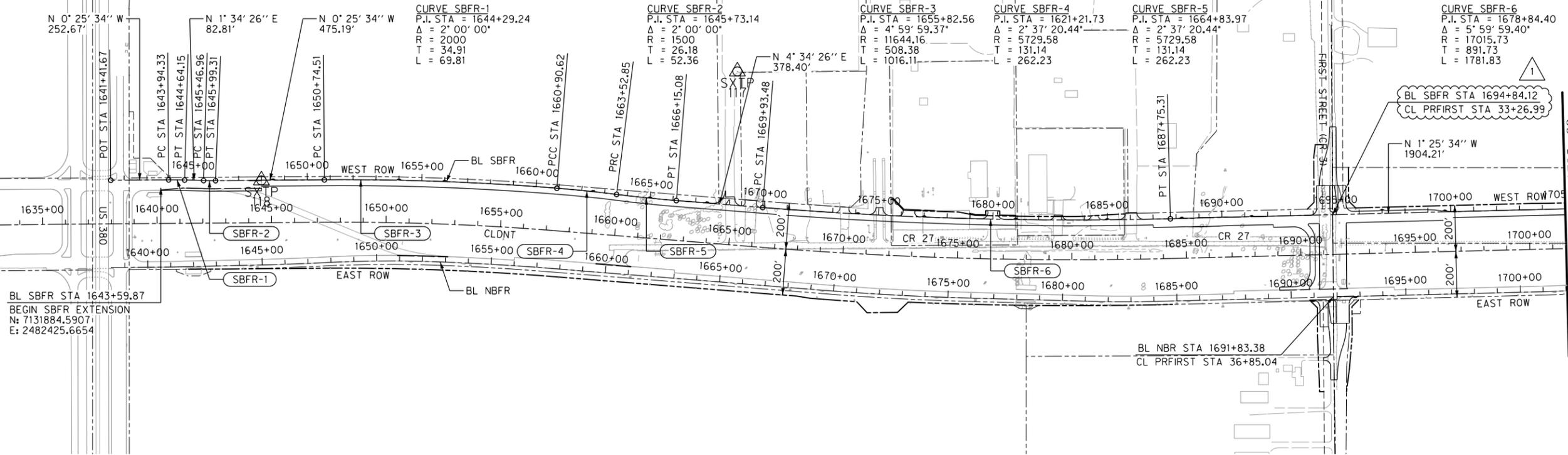
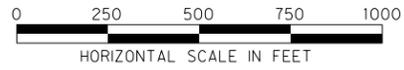
(* ULTIMATE LIMIT OF CROSS STREET PAVEMENT SECTION PER NTTA SCHEMATIC

The seal appearing on this document was authorized by Michael Miller Lesh, PE #83317 on 03-27-19. Alteration of a sealed document without proper notification to the responsible engineer is an offense under the Texas Engineering Practice Act.

Michael M. Lesh

1	3/27/2019	First St Revisions	MML
NO.	DATE	REVISION	APPROV.
DALLAS NORTH TOLLWAY SBFR			
PROPOSED TYPICAL SECTIONS			
4 OF 5			
HALFF			
<small>3803 PARKWOOD BLVD, SUITE 800 FRISCO, TEXAS 75034-8641 TEL (214) 618-4570 FAX (214) 618-4574 FIRM REGISTRATION NO. 312</small>			
DRAWN	MML	DATE 7/13/2016	DESIGNED EEM DATE 7/13/2016
CHECKED	MML	DATE 4/10/2018	SCALE NTS
CONTRACT NO. 03787-DNT-03-CN-PM SHEET 7 OF 343			

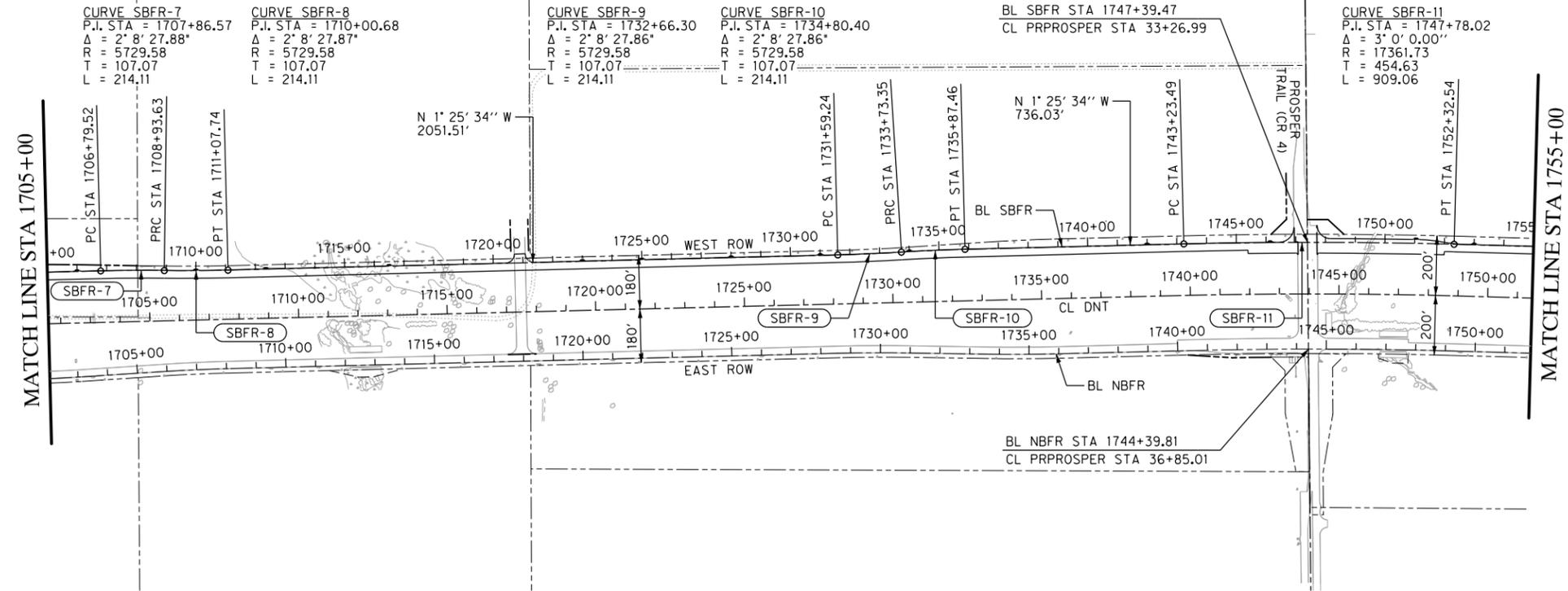
USER: ah1115
 OFFICE: FRC
 PROJECT # 31595
 FILE: 31595-GEOM01.dgn
 TIME: 7:58:38 AM
 DATE: 3/28/2019



NOTE:
 COORDINATE VALUES ARE NAD83-TEXAS
 NORTH CENTRAL ZONE 4202, SURFACE
 COORDINATES SHOWN WERE CALCULATED
 FROM GRID VALUES USING SCALE FACTOR
 OF 1.000152710 (COLLIN COUNTY)

CURVE	PI COORDINATES	
	NORTHING	EASTING
SBFR-1	7131953.7078	2482390.6504
SBFR-2	7132097.5558	2482394.6028
SBFR-3	7133107.2787	2482387.0954
SBFR-4	7133744.7591	2482438.0927
SBFR-5	7134004.9735	2482470.9478
SBFR-6	7135401.7781	2482582.6899
SBFR-7	7138303.8847	2482510.4463
SBFR-8	7138518.0005	2482513.1187
SBFR-9	7140782.9394	2482456.7364
SBFR-10	7140996.6568	2482443.4138
SBFR-11	7142293.9820	2482411.1188

SURVEY CONTROL TABLE				
POINT NO.	NORTHING	EASTING	ELEV.	DESC.
100	7163612.2253	2484285.5433	651.33	FXTF
117	7134402.4124	2481918.6371	625.00	SXTP
118	7132323.9303	2482393.2201	627.12	FXTF
120	7147600.3340	2482330.7055	619.40	SIRTP4
991014	7151181.9205	2482699.2387	627.08	FIRTP4
991018	7155745.0207	2483720.9140	621.59	FIRTP4
91020	7157973.0411	2483662.7399	632.37	FIRTP4



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Michael M. Lesh

NO.	DATE	REVISION	APPROV.
1	3/27/2019	First St Revisions	MML

DALLAS NORTH TOLLWAY SBFR



GEOMETRIC LAYOUT

10F 3

HALFF
 3803 PARKWOOD BLVD, SUITE 800
 FORT WORTH, TEXAS 76104-8641
 TEL (214) 618-4570
 FAX (214) 618-4574
 FIRM REGISTRATION NO. 312

DRAWN	MML	DATE	4/1/2016	DESIGNED	MML	DATE	4/1/2016
CHECKED	MML	DATE	4/10/2018	SCALE	1"=500'		

CONTRACT NO. 03787-DNT-03-CN-PM SHEET 62 OF 343

USER: ah1115

OFFICE: FRC

PROJECT # 31595

FILE: 31595-ALIGN07.dgn

TIME: 7:58:39 AM

DATE: 3/28/2019

Curve Data

Curve CLDNT-6
P.I. Station = 1809+95.04 N 7,148,855.2872 E 2,482,601.7101
Delta = 29° 15' 29.00" (RT)
Degree = 2° 45' 00.00"
Tangent = 543.8339
Length = 1,063.9293
Radius = 2,083.4829
External = 69.8068
Long Chord = 1,052.4072
Mid. Ord. = 67.5437
P.C. Station = 1804+51.21 N 7,148,311.4997 E 2,482,608.8143
P.T. Station = 1815+15.14 N 7,149,333.1744 E 2,482,861.2850
C.C. = N 7,148,338.7167 E 2,484,692.1194
Back = N 0° 44' 54.56" W
Ahead = N 28° 30' 34.44" E
Chord Bear = N 13° 52' 49.94" E

Course from PT CLDNT-6 to PC CLDNT-7 N 28° 30' 34.44" E Dist 3,554.3768

Curve Data

Curve CLDNT-7
P.I. Station = 1860+31.30 N 7,153,301.6986 E 2,485,016.8758
Delta = 37° 07' 00.00" (LT)
Degree = 2° 00' 00.00"
Tangent = 961.7893
Length = 1,855.8333
Radius = 2,864.7890
External = 157.1400
Long Chord = 1,823.5527
Mid. Ord. = 148.9687
P.C. Station = 1850+69.51 N 7,152,456.5384 E 2,484,557.8085
P.T. Station = 1869+25.35 N 7,154,252.6560 E 2,484,872.9365
C.C. = N 7,153,823.9178 E 2,482,040.4112
Back = N 28° 30' 34.44" E
Ahead = N 8° 36' 25.56" W
Chord Bear = N 9° 57' 04.44" E

Course from PT CLDNT-7 to PC CLDNT-8 N 8° 36' 25.56" W Dist 5,220.6610

Curve Data

Curve CLDNT-8
P.I. Station = 1927+63.56 N 7,160,025.1159 E 2,483,999.2023
Delta = 12° 18' 12.59" (RT)
Degree = 1° 00' 00.00"
Tangent = 617.5497
Length = 1,230.3497
Radius = 5,729.5780
External = 33.1845
Long Chord = 1,227.9872
Mid. Ord. = 32.9934
P.C. Station = 1921+46.01 N 7,159,414.5211 E 2,484,091.6235
P.T. Station = 1933+76.36 N 7,160,641.3809 E 2,484,039.0155
C.C. = N 7,160,271.9975 E 2,489,756.6740
Back = N 8° 36' 25.56" W
Ahead = N 3° 41' 47.03" E
Chord Bear = N 2° 27' 19.26" W

Course from PT CLDNT-8 to PC CLDNT-9 N 3° 41' 47.03" E Dist 1,279.7282

Curve Data

Curve CLDNT-9
P.I. Station = 1950+49.26 N 7,162,310.8009 E 2,484,146.8666
Delta = 3° 55' 48.64" (LT)
Degree = 0° 30' 00.00"
Tangent = 393.1719
Length = 786.0355
Radius = 11,459.1559
External = 6.7430
Long Chord = 785.8814
Mid. Ord. = 6.7391
P.C. Station = 1946+56.09 N 7,161,918.4469 E 2,484,121.5190
P.T. Station = 1954+42.12 N 7,162,703.9696 E 2,484,145.2624
C.C. = N 7,162,657.2137 E 2,472,686.2019
Back = N 3° 41' 47.03" E
Ahead = N 0° 14' 01.61" W
Chord Bear = N 1° 43' 52.71" E

Course from PT CLDNT-9 to 1301 N 0° 14' 01.61" W Dist 4,542.2851

Point 1301 N 7,167,246.2168 E 2,484,126.7288 Sta 1999+84.41
=====

Ending chain CLDNT description



Chain PRFIRST contains:

2110 2111 2112 2113

Beginning chain PRFIRST description

Point 2110 N 7,136,995.32 E 2,481,715.90 Sta 25+00.00
Course from 2110 to 2111 N 89° 33' 00.72" E Dist 1,356.72
Point 2111 N 7,137,005.98 E 2,483,072.58 Sta 38+56.72
Course from 2111 to 2112 N 89° 09' 29.83" E Dist 585.01
Point 2112 N 7,137,014.57 E 2,483,657.52 Sta 44+41.73
Course from 2112 to 2113 N 89° 26' 34.76" E Dist 1,558.27
Point 2113 N 7,137,029.72 E 2,485,215.72 Sta 60+00.00

Ending chain PRFIRST description

Chain PRPROSPER contains:

2120 2121

Beginning chain PRPROSPER description

Point 2120 N 7,142,233.3069 E 2,480,090.1749 Sta 10+00.00
Course from 2120 to 2121 N 89° 27' 19.00" E Dist 5,000.0000
Point 2121 N 7,142,280.8422 E 2,485,089.9489 Sta 60+00.00

Ending chain PRPROSPER description

Chain PRFRONTIER contains:

2130 2131 2132 2133 2134

Beginning chain PRFRONTIER description

Point 2130 N 7,147,517.8641 E 2,480,118.9775 Sta 10+00.00
Course from 2130 to 2131 N 89° 23' 52.86" E Dist 2,500.0000
Point 2131 N 7,147,544.1300 E 2,482,618.8395 Sta 35+00.00
Course from 2131 to 2132 N 89° 23' 52.86" E Dist 297.0411
Point 2132 N 7,147,547.2509 E 2,482,915.8642 Sta 37+97.04
Course from 2132 to 2133 N 89° 13' 14.00" E Dist 853.2539
Point 2133 N 7,147,558.8581 E 2,483,769.0392 Sta 46+50.30
Course from 2133 to 2134 N 89° 26' 30.64" E Dist 4,754.2456
Point 2134 N 7,147,605.1716 E 2,488,523.0591 Sta 94+04.54

Ending chain PRFRONTIER description

HALFF ASSOCIATES, INC.
ENGINEERS • SURVEYORS • SCIENTISTS
TBPE #F-312

PRELIMINARY - FOR INTERIM REVIEW ONLY

These documents are for Interim Review and not intended for Construction, Bidding, or Permit Purposes. They were prepared by, or under the supervision of:

MICHAEL M. LESH 83317 3/26/2019
PE# Date

1	8/27/2019	First St Revisions	MML
NO.	DATE	REVISION	APPROV.

DALLAS NORTH TOLLWAY SBFR



HORIZONTAL ALIGNMENT DATA

7 OF 8

HALFF 3803 PARKWOOD BLVD, SUITE 800
FRIESC, TEXAS 75034-8641
TEL (214) 618-4570
FAX (214) 618-4574
FIRM REGISTRATION NO. 312

DRAWN	EEM	DATE	5/1/2017	DESIGNED	MML	DATE	5/1/2017
CHECKED	MML	DATE	4/10/2018	SCALE	NTS		

CONTRACT NO. 03787-DNT-03-CN-PM SHEET 71 OF 343

USER: ah1115

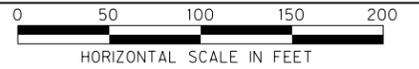
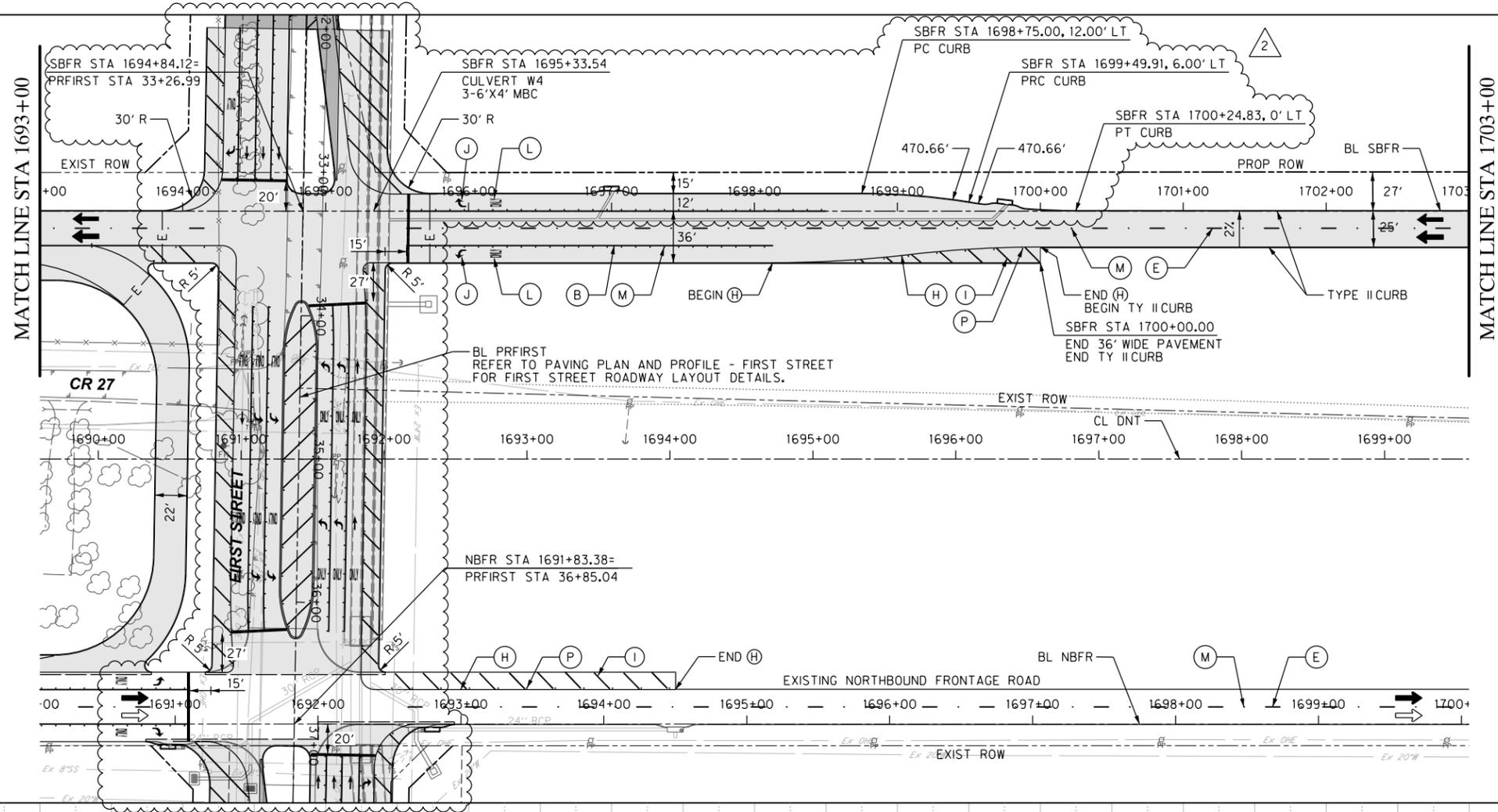
OFFICE: FRC

PROJECT # 31595

FILE: 31595-PAVE06.dgn

TIME: 7:58:42 AM

DATE: 3/28/2019



LEGEND

- CRCP OR JRCP PAVEMENT
- ASPHALT PAVEMENT
- CONC. DRIVEWAY APPROACH
- 12" CRUSHED GRAVEL DRIVEWAY APPROACH
- EXISTING TRAFFIC FLOW
- PROPOSED TRAFFIC FLOW
- EXPANSION JOINT
- SOIL BORING
- (A) REFL PAV MRK TY I(W) 4" (SLD)(100MIL)
- (B) REFL PAV MRK TY I(W) 8" (SLD)(100MIL)
- (C) REFL PAV MRK TY I(W) 12"(SLD)(100MIL)
- (D) REFL PAV MRK TY I(W) 24"(SLD)(100MIL)
- (E) REFL PAV MRK TY I(W) 4" (BRK)(100MIL)
- (F) REFL PAV MRK TY I(W) 4" (DOT)(100MIL)
- (G) REFL PAV MRK TY I(W) 8" (DOT)(100MIL)
- (H) REFL PAV MRK TY I(Y) 4" (SLD)(100MIL)
- (I) REFL PAV MRK TY I(Y) 12" (SLD)(100MIL)
- (J) REFL PAV MRK TY I(W) (ARROW)(100MIL)
- (K) REFL PAV MRK TY I(W)(DBL ARROW)(100MIL)
- (L) REFL PAV MRK TY I(W) (WORD)(100MIL)
- (M) REFL PAV MRKR TY II-C-R
- (N) REFL PAV MRKR TY II-A-A
- (O) REFL PAV MRKR TY I-C
- (P) REFL PAV MRKR TY I-A

NOTES:

1. EXISTING UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL CONFIRM PRESENCE AND LOCATION OF ALL UTILITIES PRIOR TO WORK.
2. SEE GEOMETRIC LAYOUT & SURVEY CONTROL DATA FOR HORIZONTAL DATUM & BENCHMARK INFORMATION.
3. SEE DRAINAGE PLAN FOR CURB INLET LOCATIONS.
4. SEE TYPICAL SECTIONS FOR ROADWAY PAVING DETAILS.
5. SEE ROADWAY GRADING PLANS FOR PAVEMENT CROSS SLOPE TRANSITION INFORMATION.

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Michael M. Lesh

NO.	DATE	REVISION	APPROV.
1	3/27/2019	First St Revisions	MML
1	2/9/2019	First St Right Turn Lane	MML

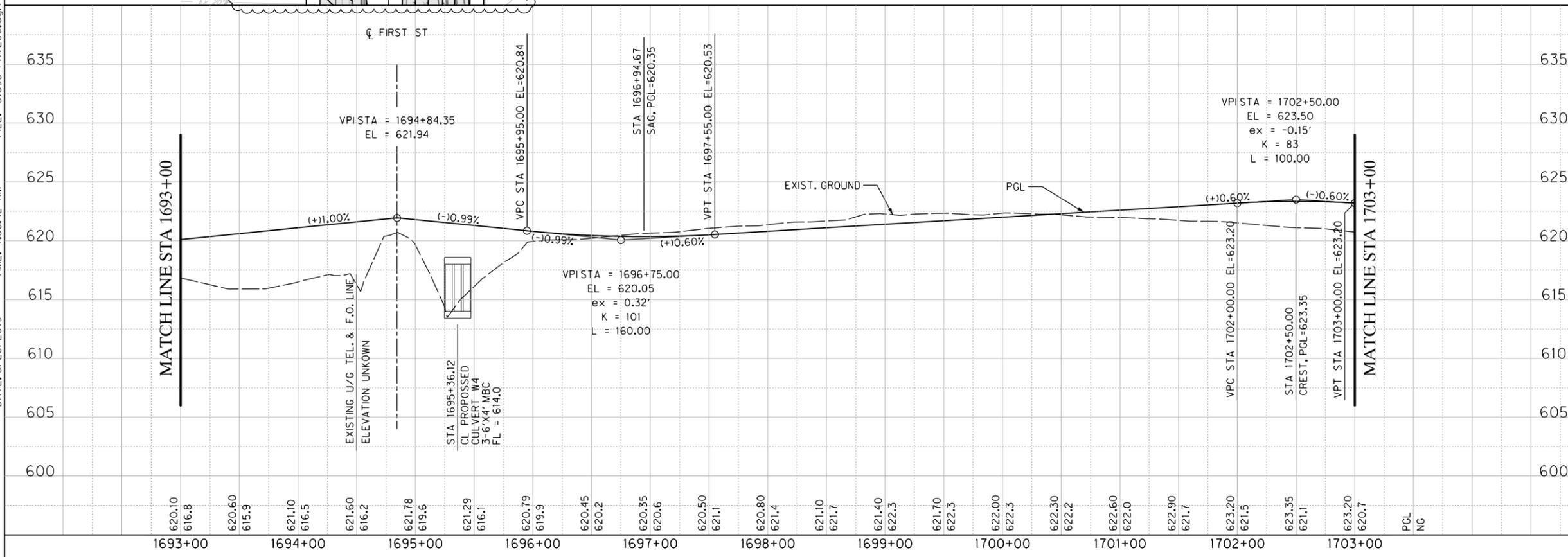
DALLAS NORTH TOLLWAY SBFR

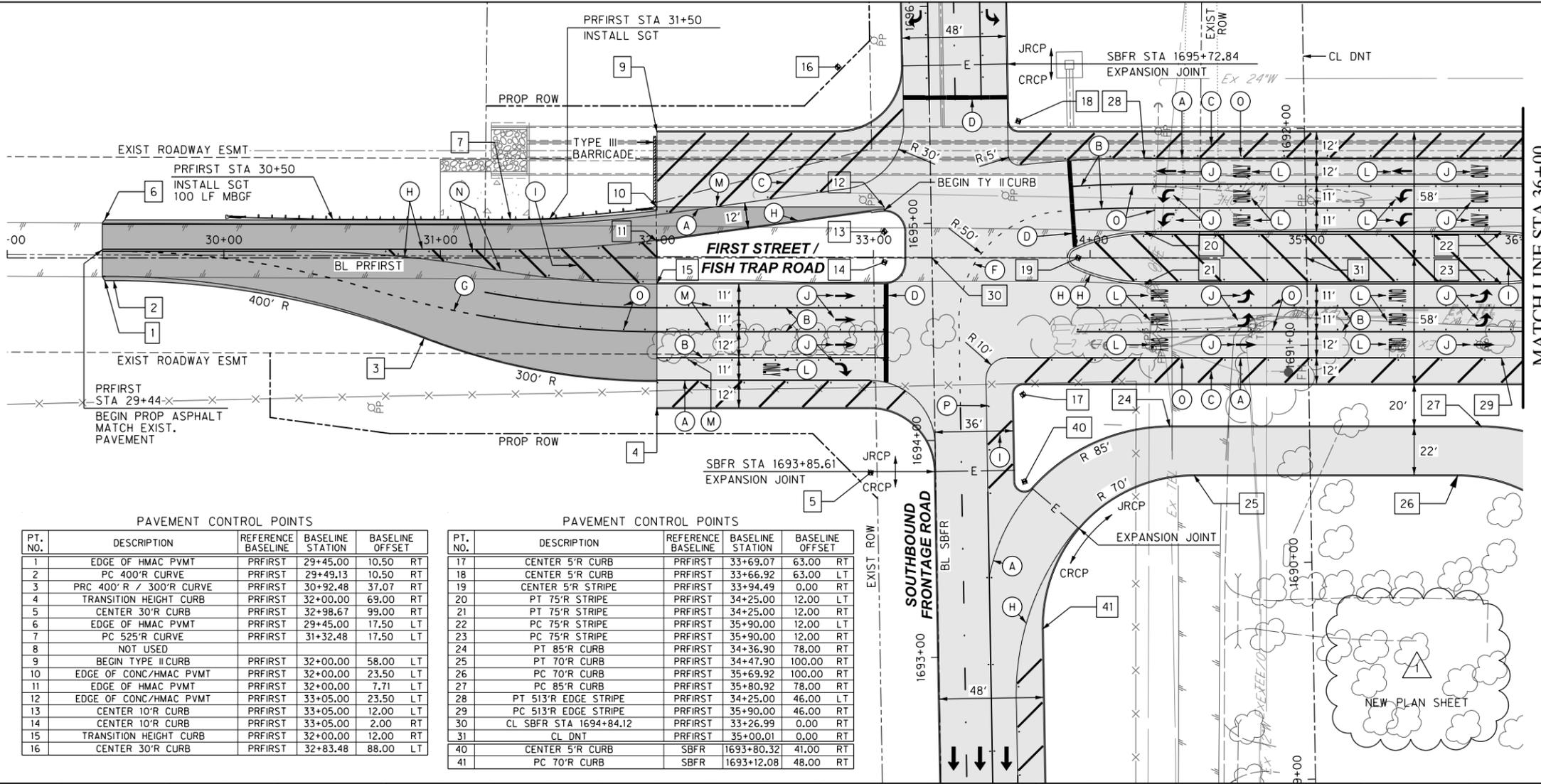


PAVING PLAN - PROFILE
WEST SERVICE ROAD
STA 1693+00 TO STA 1703+00
6 OF 40

HALFF 3803 PARKWOOD BLVD, SUITE 800
FIRBICO, TEXAS 75034-8641
TEL: (214) 618-4570
FAX: (214) 618-4574
FIRM REGISTRATION NO. 312

DRAWN	MML	DATE	6/1/2016	DESIGNED	MML	DATE	6/1/2016
CHECKED	MML	DATE	4/10/2018	SCALE			1"=100'





PAVEMENT CONTROL POINTS

PT. NO.	DESCRIPTION	REFERENCE BASELINE	BASELINE STATION	BASELINE OFFSET	
1	EDGE OF HMAC PVMT	PRFIRST	29+45.00	10.50	RT
2	PC 400'R CURVE	PRFIRST	29+49.13	10.50	RT
3	PRC 400' R / 300' R CURVE	PRFIRST	30+92.48	37.07	RT
4	TRANSITION HEIGHT CURB	PRFIRST	32+00.00	69.00	RT
5	CENTER 30' R CURB	PRFIRST	32+98.67	99.00	RT
6	EDGE OF HMAC PVMT	PRFIRST	29+45.00	17.50	LT
7	PC 525'R CURVE	PRFIRST	31+32.48	17.50	LT
8	NOT USED				
9	BEGIN TYPE II CURB	PRFIRST	32+00.00	58.00	LT
10	EDGE OF CONC/HMAC PVMT	PRFIRST	32+00.00	23.50	LT
11	EDGE OF HMAC PVMT	PRFIRST	32+00.00	7.71	LT
12	EDGE OF CONC/HMAC PVMT	PRFIRST	33+05.00	23.50	LT
13	CENTER 10' R CURB	PRFIRST	33+05.00	12.00	LT
14	CENTER 10' R CURB	PRFIRST	33+05.00	2.00	RT
15	TRANSITION HEIGHT CURB	PRFIRST	32+00.00	12.00	RT
16	CENTER 30' R CURB	PRFIRST	32+83.48	88.00	LT

PAVEMENT CONTROL POINTS

PT. NO.	DESCRIPTION	REFERENCE BASELINE	BASELINE STATION	BASELINE OFFSET	
17	CENTER 5' R CURB	PRFIRST	33+69.07	63.00	RT
18	CENTER 5' R CURB	PRFIRST	33+66.92	63.00	LT
19	CENTER 5' R STRIPE	PRFIRST	33+94.49	0.00	RT
20	PT 75' R STRIPE	PRFIRST	34+25.00	12.00	LT
21	PT 75' R STRIPE	PRFIRST	34+25.00	12.00	RT
22	PC 75' R STRIPE	PRFIRST	35+90.00	12.00	LT
23	PC 75' R STRIPE	PRFIRST	35+90.00	12.00	RT
24	PT 85' R CURB	PRFIRST	34+36.90	78.00	RT
25	PT 70' R CURB	PRFIRST	34+47.90	100.00	RT
26	PC 70' R CURB	PRFIRST	35+69.92	100.00	RT
27	PC 85' R CURB	PRFIRST	35+80.92	78.00	RT
28	PT 513' R EDGE STRIPE	PRFIRST	34+25.00	46.00	LT
29	PC 513' R EDGE STRIPE	PRFIRST	35+90.00	46.00	RT
30	CL SBFR STA 1694+84.12	PRFIRST	33+26.99	0.00	RT
31	CL DNT	PRFIRST	35+00.01	0.00	RT
40	CENTER 5' R CURB	SBFR	1693+80.32	41.00	RT
41	PC 70' R CURB	SBFR	1693+12.08	48.00	RT



- LEGEND**
- CRCP OR JRCP PAVEMENT
 - ASPHALT PAVEMENT
 - CONC. DRIVEWAY APPROACH
 - 12" CRUSHED GRAVEL DRIVEWAY APPROACH
 - EXISTING TRAFFIC FLOW
 - PROPOSED TRAFFIC FLOW
 - EXPANSION JOINT
 - SOIL BORING

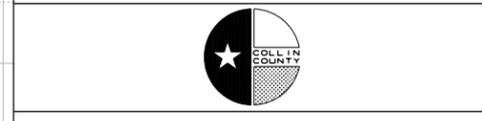
- (A) REFL PAV MRK TY I(W) 4"(SLD)(100MIL)
- (B) REFL PAV MRK TY I(W) 8"(SLD)(100MIL)
- (C) REFL PAV MRK TY I(W) 12"(SLD)(100MIL)
- (D) REFL PAV MRK TY I(W) 24"(SLD)(100MIL)
- (E) REFL PAV MRK TY I(W) 4"(BRK)(100MIL)
- (F) REFL PAV MRK TY I(W) 4"(DOT)(100MIL)
- (G) REFL PAV MRK TY I(W) 8"(DOT)(100MIL)
- (H) REFL PAV MRK TY I(Y) 4"(SLD)(100MIL)
- (I) REFL PAV MRK TY I(Y) 12"(SLD)(100MIL)
- (J) REFL PAV MRK TY I(W) (ARROW) (100MIL)
- (K) REFL PAV MRK TY I(W)(DBL ARROW)(100MIL)
- (L) REFL PAV MRK TY I(W) (WORD) (100MIL)
- (M) REFL PAV MRKR TY II-C-R
- (N) REFL PAV MRKR TY II-A-A
- (O) REFL PAV MRKR TY I-C
- (P) REFL PAV MRKR TY I-A

- NOTES:**
- EXISTING UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL CONFIRM PRESENCE AND LOCATION OF ALL UTILITIES PRIOR TO WORK.
 - SEE GEOMETRIC LAYOUT & SURVEY CONTROL DATA FOR HORIZONTAL DATUM & BENCHMARK INFORMATION.
 - SEE DRAINAGE PLAN FOR CURB INLET LOCATIONS.
 - SEE TYPICAL SECTIONS FOR ROADWAY PAVING DETAILS.
 - SEE ROADWAY GRADING PLANS FOR PAVEMENT CROSS SLOPE TRANSITION INFORMATION.

Professional Engineer Seal for Michael M. Lesh, License No. 83317, State of Texas. The seal includes the text: "STATE OF TEXAS", "MICHAEL M. LESH", "83317", "LICENSED PROFESSIONAL ENGINEER".

1	3/27/2019	Sheet Added, Replaces Sheet 106	MML
NO.	DATE	REVISION	APPROV.

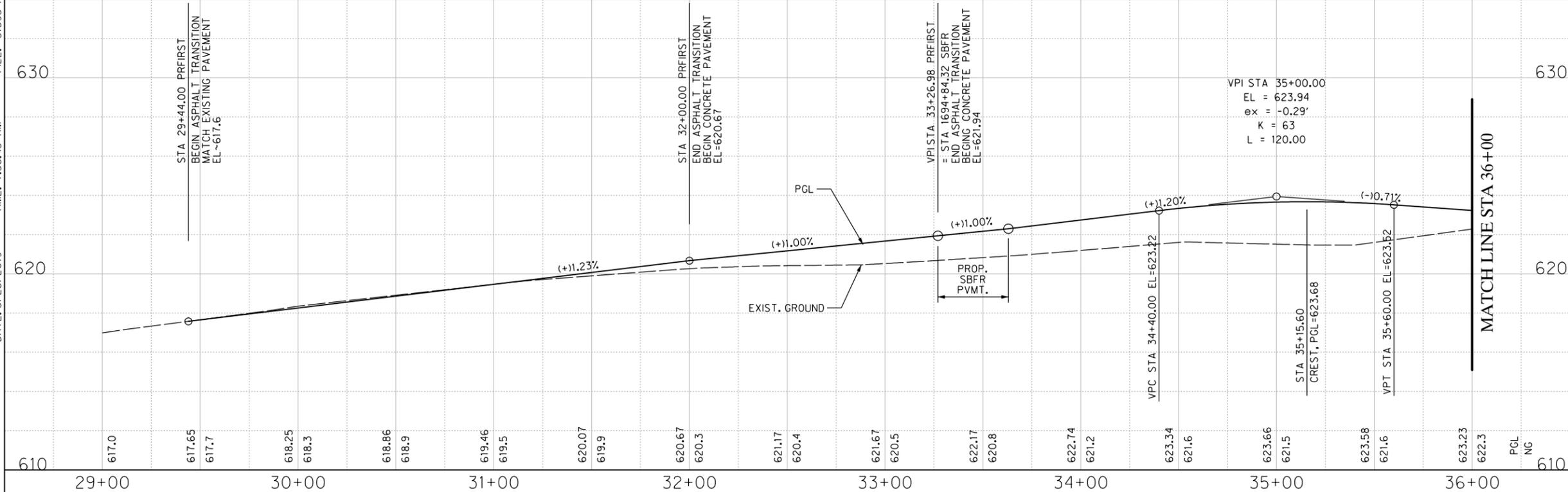
DALLAS NORTH TOLLWAY SBFR

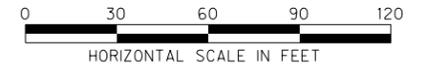


PAVING PLAN - PROFILE
FIRST STREET
STA 29+19 TO STA 36+00
OF 40

HALFF logo and contact information: 3803 PARKWOOD BLVD, SUITE 800, FORT WORTH, TEXAS 76034-8641, TEL: (214) 618-4570, FAX: (214) 618-4574, FIRM REGISTRATION NO. 312

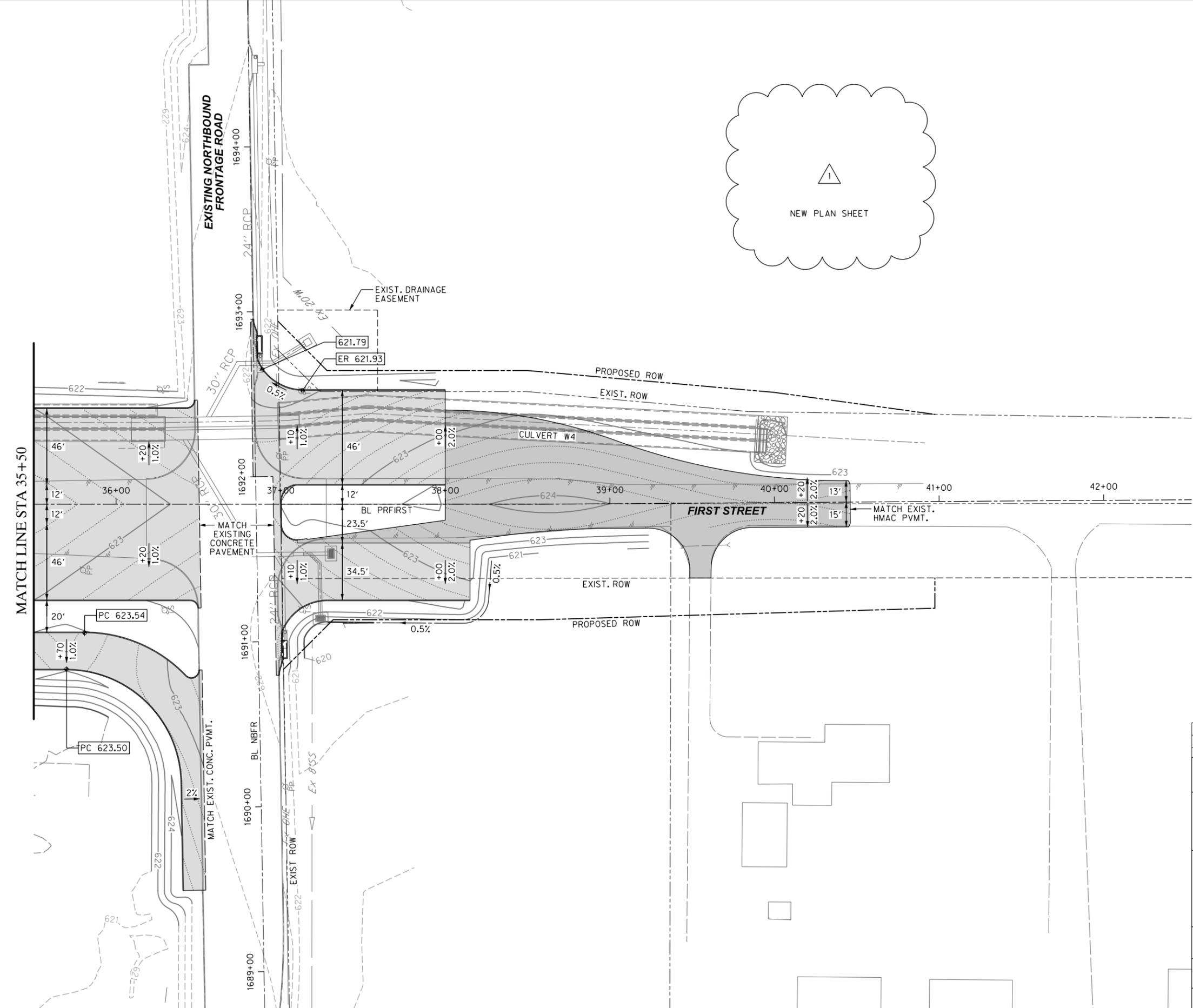
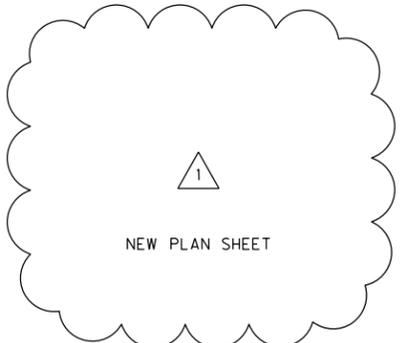
DRAWN	MML	DATE	3/27/2019	DESIGNED	MML	DATE	3/27/2019
CHECKED	DDS	DATE	3/27/2019	SCALE	1"=60'		





LEGEND

- PROPOSED 5' CONTOUR ——— 650 ———
- PROPOSED 1' CONTOUR ——— 651 ———
- PROPOSED 0.2' CONTOUR 651 (dotted line)
- EXISTING 5' CONTOUR - - - - - 650 - - - - -
- EXISTING 1' CONTOUR - - - - - 651 - - - - -



NOTES:

1. REFER TO PAVING PLAN AND PROFILE SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION AND ROADWAY DIMENSIONS.
2. REFER TO CULVERT LAYOUT SHEETS FOR CULVERT HEADWALL GRADING DETAILS.



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Michael M. Lesh

1	3/27/2019	Sheet Added, Replaces Sheet 114	MML
NO.	DATE	REVISION	APPROV.

DALLAS NORTH TOLLWAY SBFR



ROADWAY GRADING DETAILS
FIRST STREET INTERSECTION

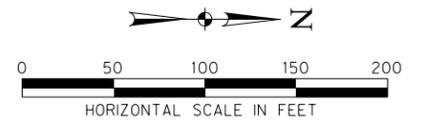
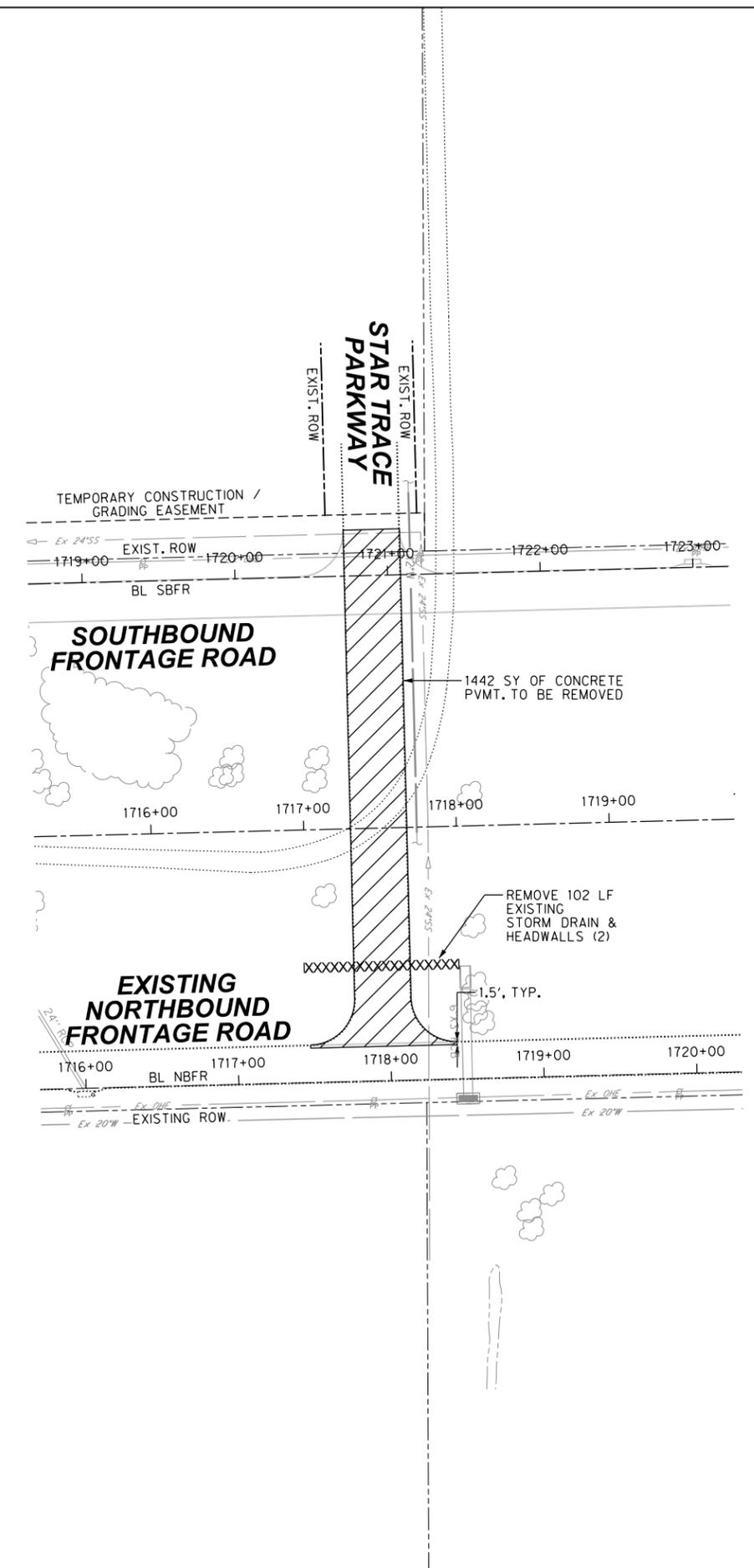
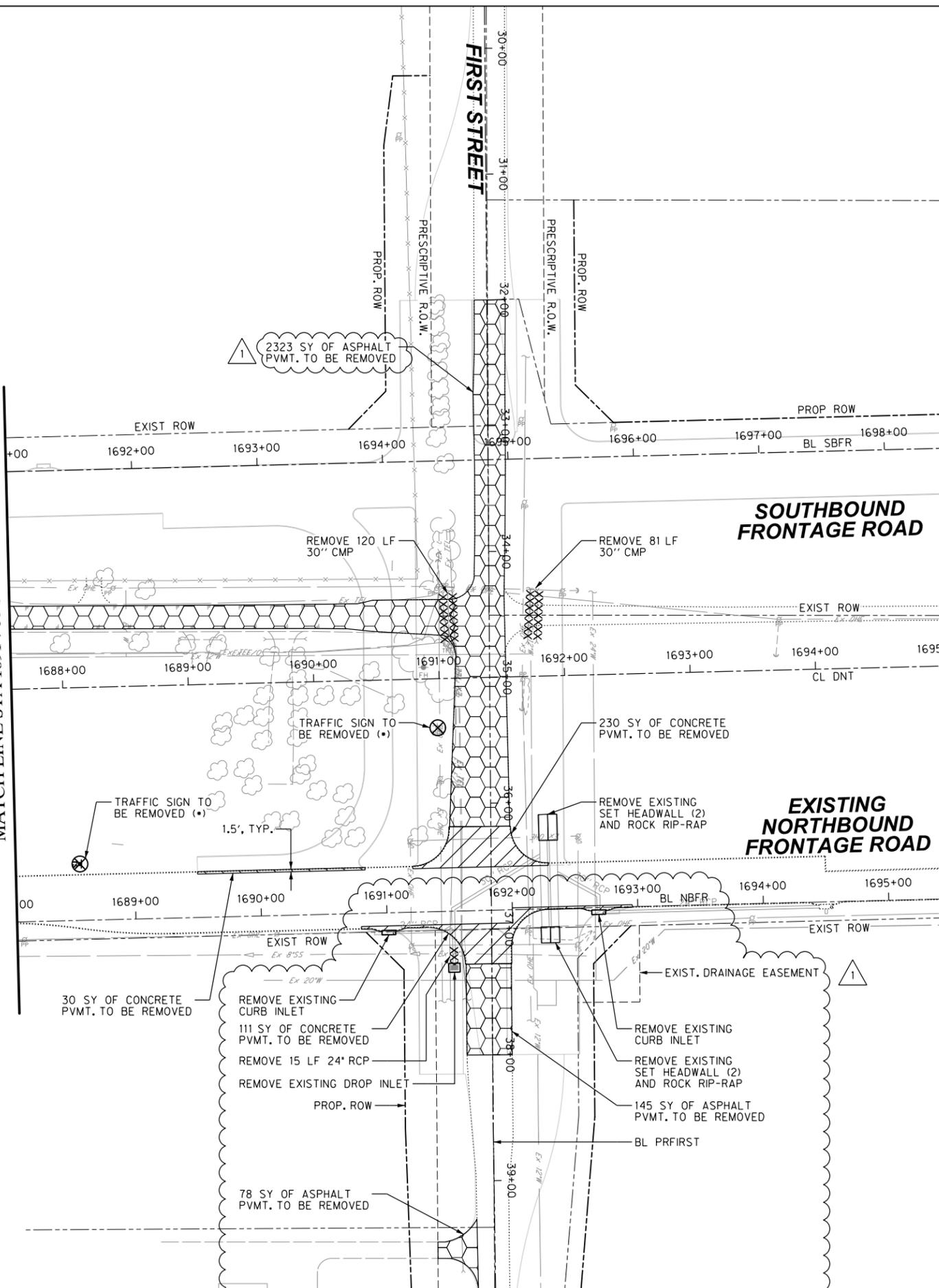
OF 8

HALFF 3803 PARKWOOD BLVD, SUITE 800
FRISCO, TEXAS 75034-8641
TEL (214) 618-4570
FAX (214) 618-4574
FIRM REGISTRATION NO. 312

DRAWN	MML	DATE	3/27/2019	DESIGNED	MML	DATE	3/27/2019
CHECKED	MML	DATE	3/27/2019	SCALE	1"=60'		

CONTRACT NO. 03787-DNT-03-CN-PM SHEET 114B OF 343

MATCH LINE STA 1691+00 SBFR



- LEGEND**
- CONCRETE PAVEMENT TO BE SAWCUT AND REMOVED
 - ASPHALT PAVEMENT TO BE REMOVED, INCLUDING BASE
 - SIGN TO BE REMOVED (SEE NOTE 1)
 - STORM DRAIN TO BE REMOVED

(*) ITEM(S) DESIGNATED AS SUBSIDIARY TO "PREPARE RIGHT-OF-WAY" (NO SEPARATE PAY ITEM).

- NOTES**
- EXISTING TRAFFIC SIGNS WITHIN THE PROJECT LIMITS ARE TO BE REMOVED UNLESS SHOWN OTHERWISE IN THE TRAFFIC SIGNS LAYOUT SHEETS.
 - FRANCHISE UTILITIES TO BE RELOCATED BY FRANCHISE UTILITY OWNERS AS REQUIRED. CONTRACTOR SHALL COORDINATE CONSTRUCTION PHASING WITH UTILITY RELOCATION.
 - ALL REMOVAL WORK SHALL BE CLOSELY COORDINATED WITH CONSTRUCTION PHASING PLANS.
 - UNLESS OTHERWISE NOTED, ALL EXISTING FENCE LINES AND TREES WITHIN THE PROJECT LIMITS SHALL BE REMOVED BY THE CONTRACTOR. THE REMOVAL AND DISPOSAL OF FENCES, DEBRIS, CONCRETE/ROCK RIPRAP, TREES & VEGETATION WITHIN THE CONSTRUCTION LIMITS SHALL BE SUBSIDIARY TO THE "PREPARE RIGHT OF WAY" PAY ITEM. CONTRACTOR SHALL REFRAIN FROM DISTURBING VEGETATION OUTSIDE THE CONSTRUCTION LIMITS, AND SHALL CONSULT WITH THE COUNTY FOR VEGETATION REMOVAL LIMITS AROUND DOE BRANCH.
 - REFER TO PAVING PLANS FOR SAWCUT DIMENSIONS.
 - CURB REMOVAL SHALL BE SUBSIDIARY TO PAVEMENT REMOVAL.
 - ALL CLEARED MATERIAL AND REMOVAL ITEMS SHALL BE DISPOSED OF BY THE CONTRACTOR, UNLESS OTHERWISE NOTED.
 - REFER TO TRAFFIC SIGNAL PLANS FOR EXISTING TRAFFIC SIGNAL ITEMS TO BE REMOVED OR ADJUSTED.
 - PIPE, HEADWALLS, AND OTHER FEATURES THAT LIE OUTSIDE OF THE CONSTRUCTION LIMITS AND ARE NOT SPECIFICALLY SHOWN FOR REMOVAL MAY BE LEFT IN PLACE.
 - DO NOT REMOVE ANY LIVESTOCK FENCES / GATES UNTIL NEW FENCES / GATES ARE IN PLACE AND APPROVED BY OWNER.

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MICHAEL M. LESH
83317
LICENSED PROFESSIONAL ENGINEER

Michael M. Lesh

NO.	DATE	REVISION	APPROV.
1	3/27/2019	First St Revisions	MML

DALLAS NORTH TOLLWAY SBFR



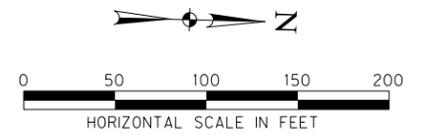
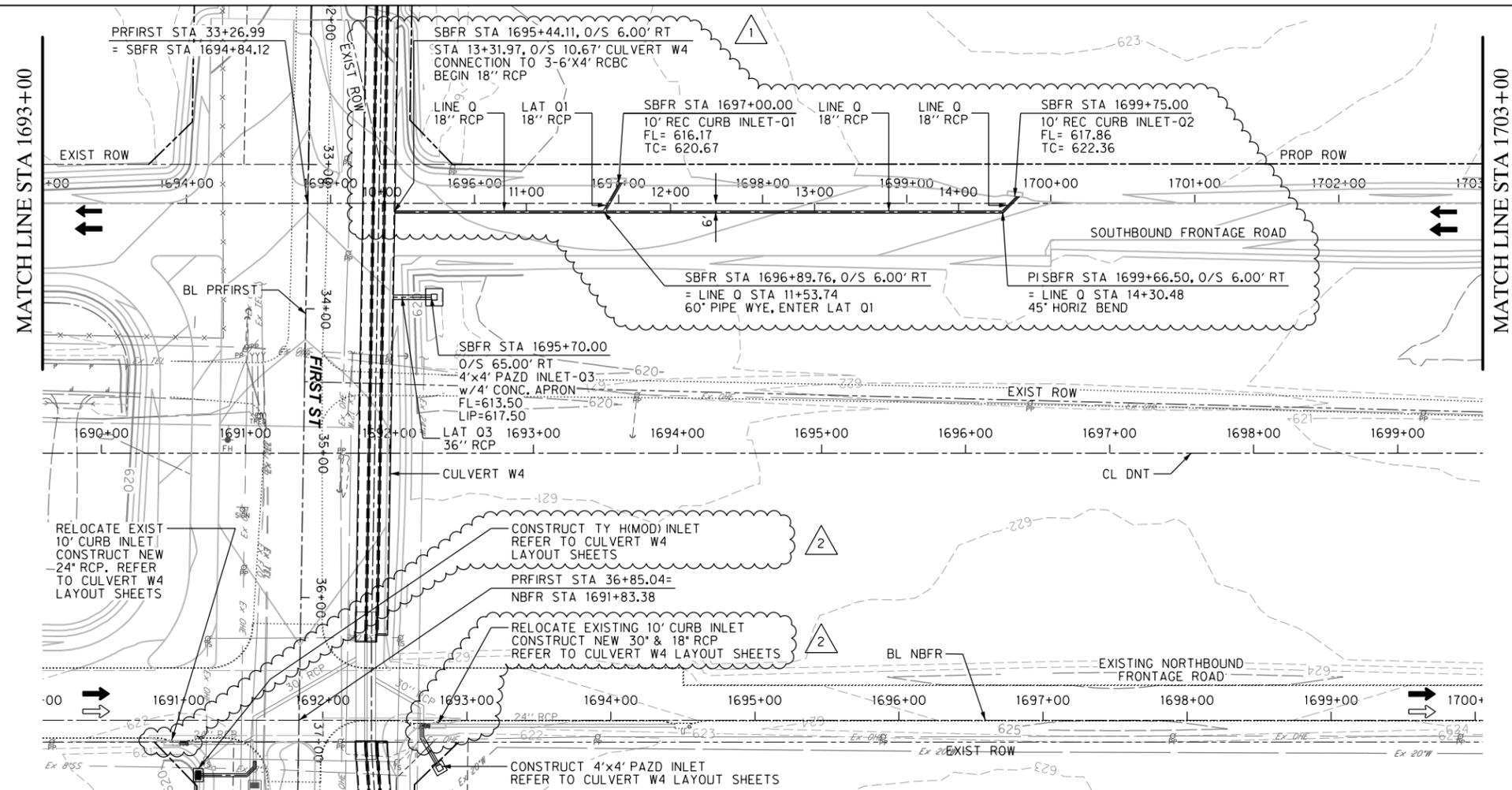
REMOVAL PLAN
FIRST STREET / STAR TRACE PKWY

2 OF 5

HALFF 3803 PARKWOOD BLVD, SUITE 800
FRENCO, TEXAS 75034-8641
TEL (214) 618-4570
FAX (214) 618-4574
FIRM REGISTRATION NO. 312

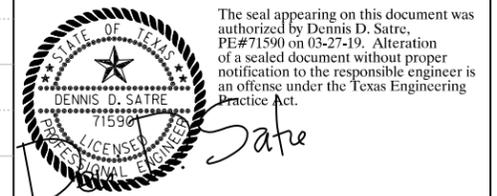
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CHECKED	MML	DATE	4/10/2018	SCALE			1"=100'

CONTRACT NO. 03787-DNT-03-CN-PM SHEET 122 OF 343



NOTES:

- EXISTING UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL CONFIRM PRESENCE AND LOCATION OF ALL UTILITIES PRIOR TO WORK.
- SEE PAVING PLANS FOR ROADWAY GEOMETRY.
- SEE DRAINAGE DETAILS FOR INLET AND S.E.T. LAYOUT DIMENSIONS.
- SEE CULVERT LAYOUTS FOR ADDITIONAL INFORMATION AND GRADING DETAILS.
- ALL DIMENSIONS ARE TO FACE OF CURB UNLESS STATED OTHERWISE.



NO.	DATE	REVISION	APPROV.
2	3/27/2019	First St Revisions	DDS
1	2/9/2019	First St Right Turn Lane	DDS

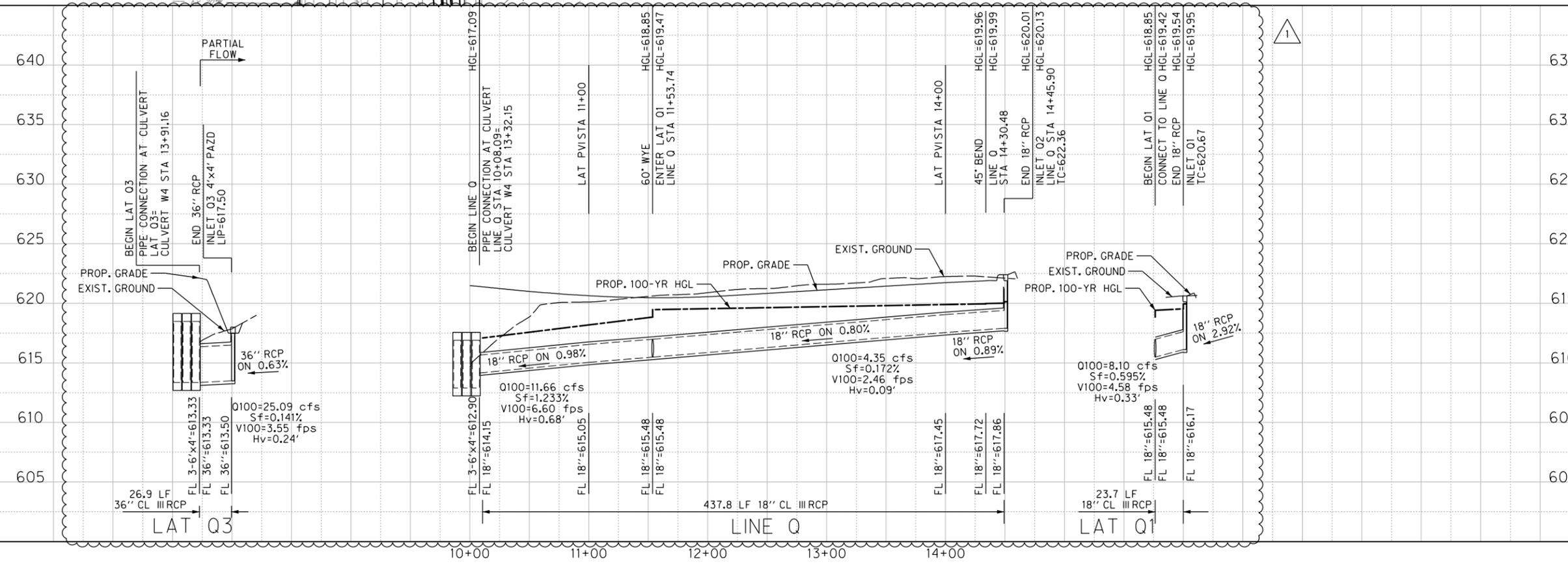
DALLAS NORTH TOLLWAY SBFR



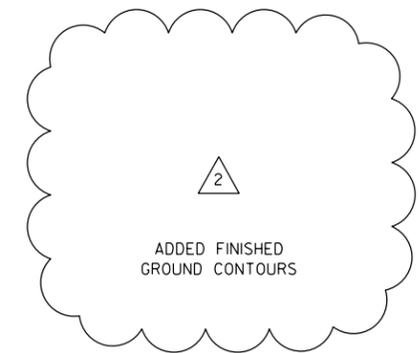
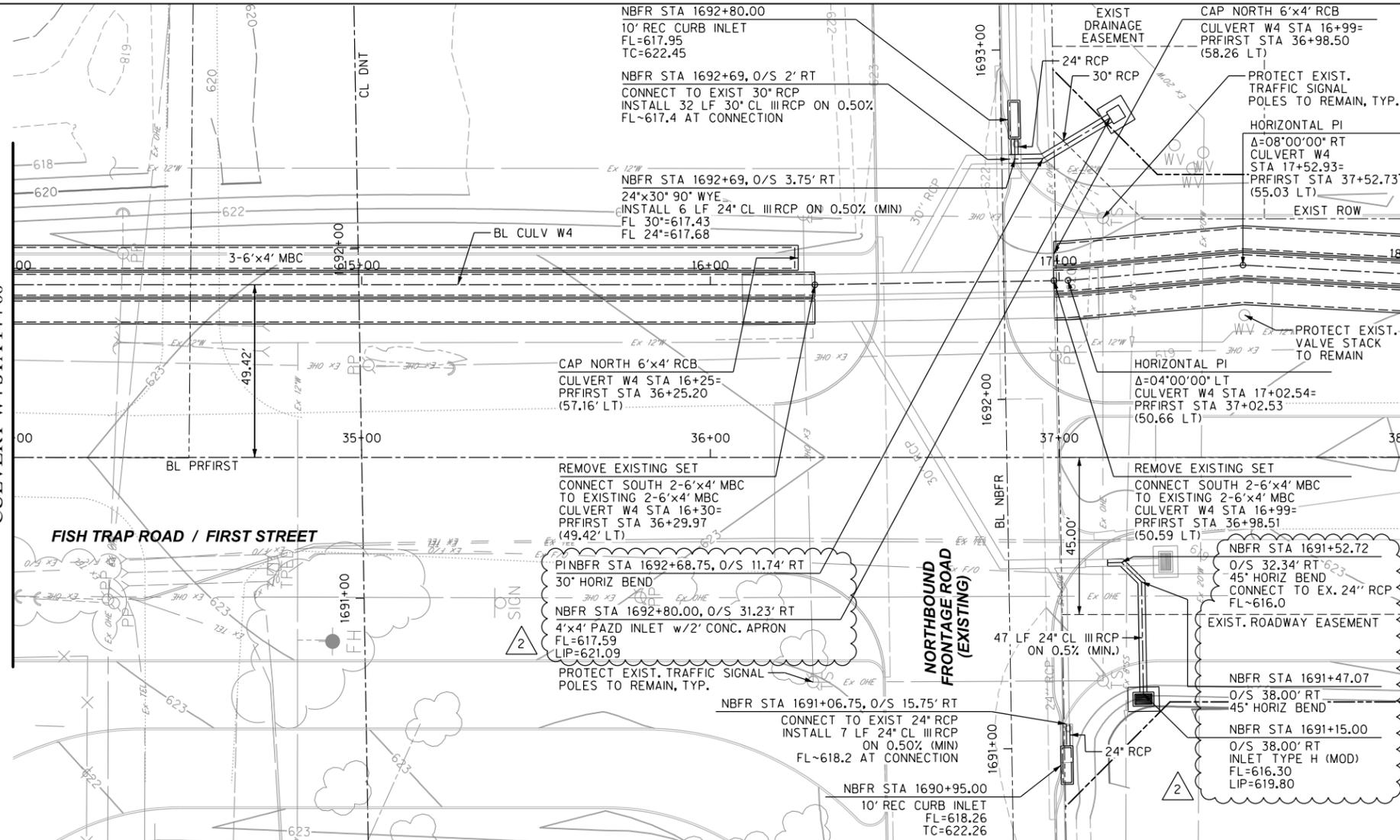
DRAINAGE PLAN - PROFILE
WEST SERVICE ROAD
STA 1693+00 TO STA 1703+00
7 OF 34



DRAWN	TMW	DATE	8/18/2016	DESIGNED	DDS	DATE	8/18/2016
CHECKED	DDS	DATE	4/10/2018	SCALE	1"=100'		



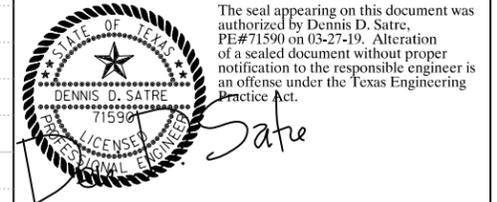
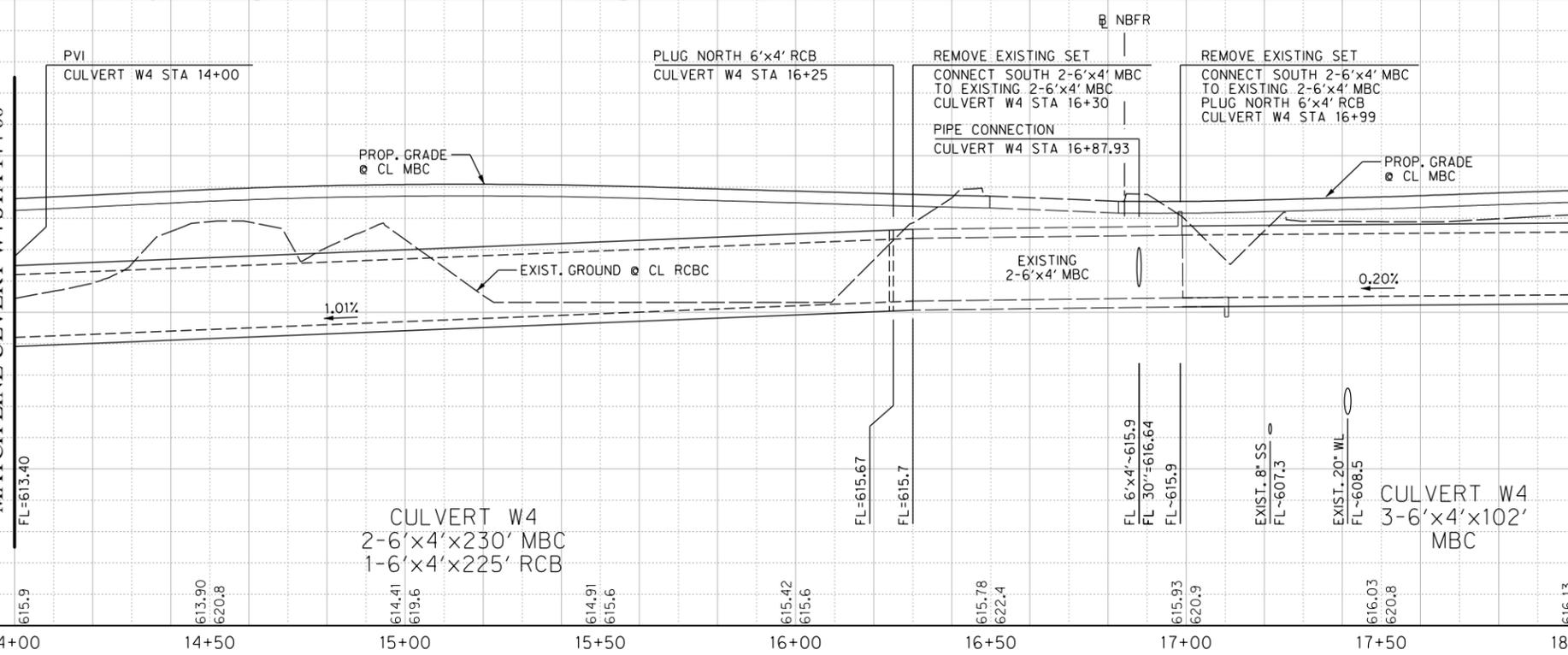
MATCHLINE FIRST STREET STA 34+00
CULVERT W4 STA 14+00



NOTES:

1. CONSTRUCT CAPS USING REINFORCED PRECAST CONCRETE SLAB, SUBSIDIARY TO CULVERT CONSTRUCTION, NO SEPARATE PAY ITEM.
2. CONSTRUCT CULVERT IN ACCORDANCE WITH TXDOT STANDARD SCP-6 AND FILL HEIGHT <=10.

MATCHLINE ULVERT W4 STA 14+00
FL=613.40



2	3/27/2019	Revised Inlet Layouts	DDS
1	9/4/2018	Sheet Added, Replaces Sheet 250	DDS
NO.	DATE	REVISION	APPROV.

DALLAS NORTH TOLLWAY SBFR



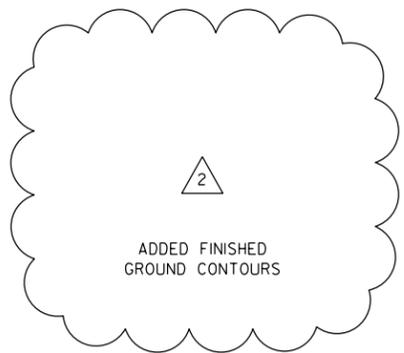
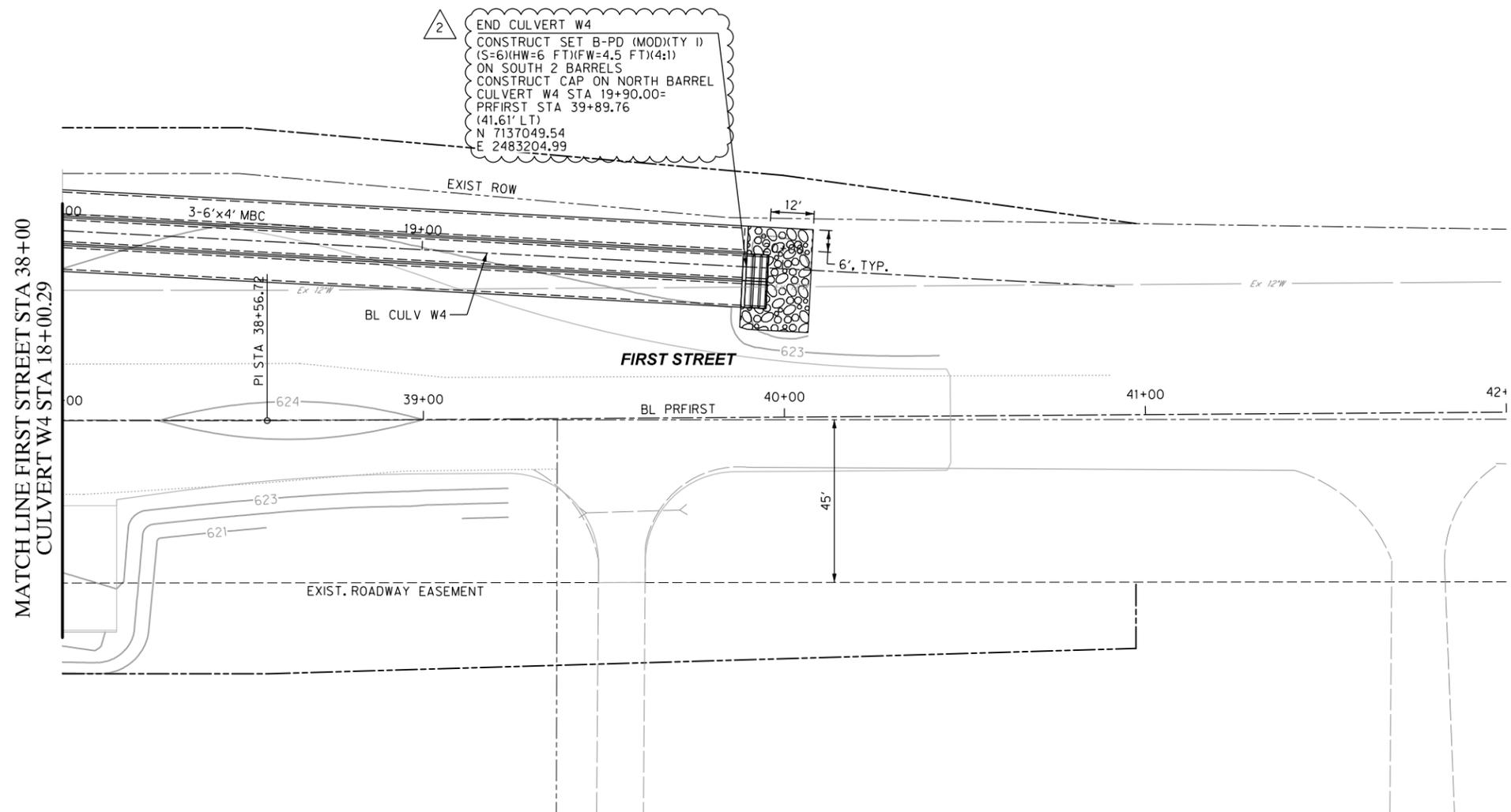
CULVERT LAYOUT
CULVERT W4

OF 10



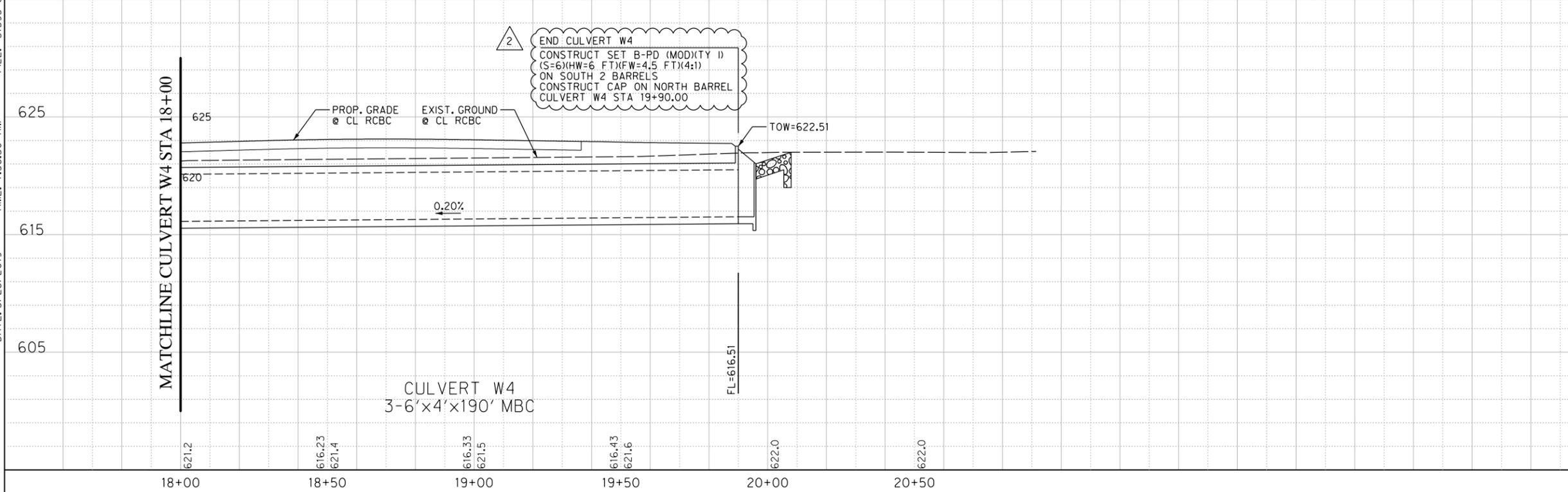
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CHECKED	DDS	DATE	3/27/2019	SCALE	H:1"=40', V:1"=10'		

CONTRACT NO. 03787-DNT-03-CN-PM SHEET 250B OF 343



NOTES:

1. CONSTRUCT CAPS USING REINFORCED PRECAST CONCRETE SLAB, SUBSIDIARY TO CULVERT CONSTRUCTION, NO SEPARATE PAY ITEM.
2. CONSTRUCT CULVERT IN ACCORDANCE WITH TXDOT STANDARD SCP-6 AND FILL HEIGHT <=10.



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D. Satre

2	3/27/2019	Revised SET	DDS
1	9/4/2018	Sheet Added, Replaces Sheet 250	DDS
NO.	DATE	REVISION	APPROV.

DALLAS NORTH TOLLWAY SBFR



CULVERT LAYOUT
CULVERT W4

OF 10

HALFF 3803 PARKWOOD BLVD, SUITE 800
 FORT WORTH, TEXAS 76034-8641
 TEL (214) 618-4570
 FAX (214) 618-4574
 FIRM REGISTRATION NO. 312

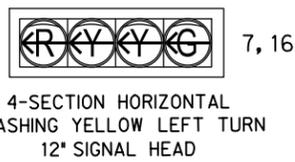
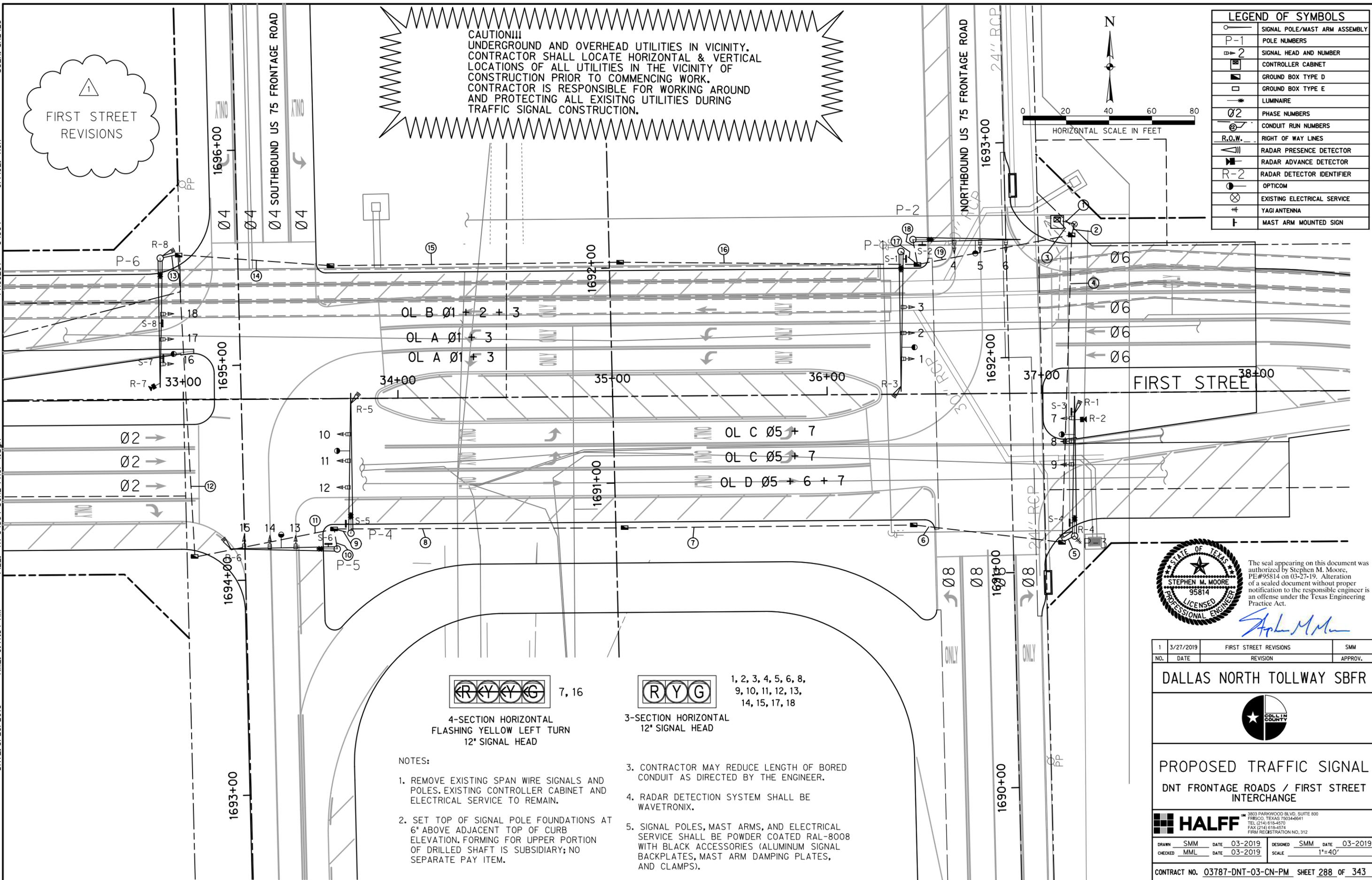
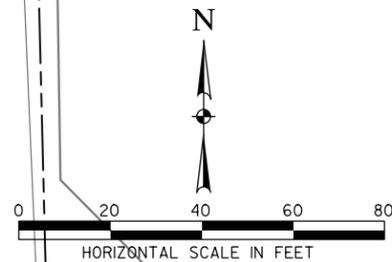
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CHECKED	DDS	DATE	3/27/2019	SCALE	H:1"=40', V:1"=10'		

USER: ah2425
 OFFICE: RCH
 PROJECT # 34564
 FILE: TR-34564-SGNL-PROP-1.dgn
 TIME: 9:47:54 AM
 DATE: 3/28/2019

FIRST STREET REVISIONS

CAUTION!!!
 UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY.
 CONTRACTOR SHALL LOCATE HORIZONTAL & VERTICAL
 LOCATIONS OF ALL UTILITIES IN THE VICINITY OF
 CONSTRUCTION PRIOR TO COMMENCING WORK.
 CONTRACTOR IS RESPONSIBLE FOR WORKING AROUND
 AND PROTECTING ALL EXISTING UTILITIES DURING
 TRAFFIC SIGNAL CONSTRUCTION.

LEGEND OF SYMBOLS	
	SIGNAL POLE/MAST ARM ASSEMBLY
	POLE NUMBERS
	SIGNAL HEAD AND NUMBER
	CONTROLLER CABINET
	GROUND BOX TYPE D
	GROUND BOX TYPE E
	LUMINAIRE
	PHASE NUMBERS
	CONDUIT RUN NUMBERS
	R.O.W. RIGHT OF WAY LINES
	RADAR PRESENCE DETECTOR
	RADAR ADVANCE DETECTOR
	RADAR DETECTOR IDENTIFIER
	OPTICOM
	EXISTING ELECTRICAL SERVICE
	YAGI ANTENNA
	MAST ARM MOUNTED SIGN



NOTES:

- REMOVE EXISTING SPAN WIRE SIGNALS AND POLES. EXISTING CONTROLLER CABINET AND ELECTRICAL SERVICE TO REMAIN.
- SET TOP OF SIGNAL POLE FOUNDATIONS AT 6" ABOVE ADJACENT TOP OF CURB ELEVATION. FORMING FOR UPPER PORTION OF DRILLED SHAFT IS SUBSIDIARY; NO SEPARATE PAY ITEM.
- CONTRACTOR MAY REDUCE LENGTH OF BORED CONDUIT AS DIRECTED BY THE ENGINEER.
- RADAR DETECTION SYSTEM SHALL BE WAVETRONIX.
- SIGNAL POLES, MAST ARMS, AND ELECTRICAL SERVICE SHALL BE POWDER COATED RAL-8008 WITH BLACK ACCESSORIES (ALUMINUM SIGNAL BACKPLATES, MAST ARM DAMPING PLATES, AND CLAMPS).



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Stephen M. Moore

1	3/27/2019	FIRST STREET REVISIONS	SMM
NO.	DATE	REVISION	APPROV.

DALLAS NORTH TOLLWAY SBFR



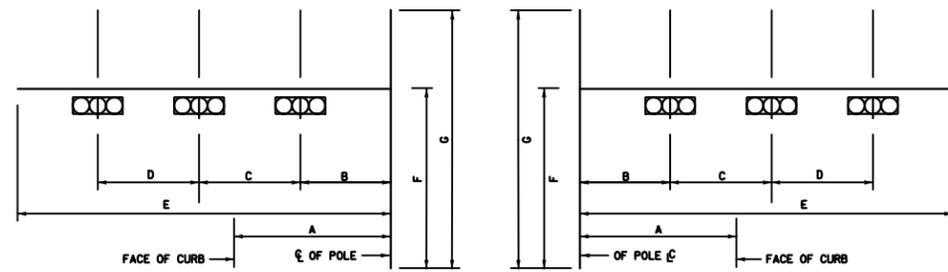
PROPOSED TRAFFIC SIGNAL
 DNT FRONTAGE ROADS / FIRST STREET INTERCHANGE

HALFF 3803 PARKWOOD BLVD., SUITE 800
 FORT WORTH, TEXAS 76034-6641
 TEL: (214) 616-4570
 FAX: (214) 616-4574
 FIRM REGISTRATION NO. 312

DRAWN	SMM	DATE	03-2019	DESIGNED	SMM	DATE	03-2019
CHECKED	MML	DATE	03-2019	SCALE			1"=40'

RUN NO.	CONDUIT (SCH 40 PVC UNLESS OTHERWISE NOTED)		INSTALL TYPE	WIRE SIZE AND TYPE (EA)										CONDUIT LENGTH (FT)		
	ELECTRICAL CONDUCTORS			SIGNAL CABLE												
	2"	3"		4"	XHHW #6	BARE #6	XHHW #6-LUM	XHHW #8-LUM	XHHW #8-ILSN	20 CNDR TYP A 14 AWG	7 CNDR TYP A 14 AWG	5 CNDR TYP A 14 AWG	SSR COAX CABLE		RADAR CABLE	OPTICOM CABLE
1	EXISTING			E	2	1										9
2	2			T	1	6	6	12								6
3		2		T	2				6			1	8	6		10
4		1		B	1	4	2	6	3			1	5	3		143
5	1			T	1		2	2	1			1	3	1		7
6		1		B	1	4			2				2	2		70
7		1		T	1	4			2				2	2		135
8		1		T	1	4			2				2	2		136
9	1			T	1	2			2	1			2	1		8
10	1			T	1	2			2	1			1	1		10
11		1		B	1											70
12		1		B	1											145
13	1			T	1	2			2	1			2	1		10
14		1		B	1	2			2	1			2	1		75
15		1		T	1	2			2	1			2	1		135
16		1		T	1	2			2	1			2	1		139
17	1			T	1		2	2	1				1	1		10
18	1			T	1		2	2	1					1		12
19		1		B	1	2	4	6	3				3	3		74
CABLE TOTALS					18	1,214	2,874	676	3,550	1,799	0	0	160	2,474	1,799	
INSTALL TYPE - E = EXISTING, T = TRENCH, B = BORE													CONDUIT TOTALS		2" TRENCH	0
															3" TRENCH	69
															3" BORE	0
															4" TRENCH	565
															4" BORE	577

POLE NUMBER	FND TYPE WIND ZONE 80 MPH	DRILLED SHAFT ITEM 416	WIRE INSIDE POLES P-1, P-2, P-3, P-4, AND P-5, AND ON SPAN P-6 - P-7							NO. OF SIGNAL HEADS	LUM-A	DIMENSION (LF)						
			ITEM 684 SIG CABLE TYPE A		ITEM 620	ITEM 620	ITEM 6002		ITEM 6006			A	B	C	D	E	F	G
			SIG HD	SIG HD	LUMINAIRE	ILSN	RADAR CABLE	OPTICOM CABLE	SSR COAX CABLE									
P-1	48-A	22	170	-	86	60	80	84	-	3	1	9	26	12	12	65	18	30
P-2	48-A	22	171	-	86	60	-	54	-	3	1	8	20	12	12	50	18	30
P-3	48-A	22	149	86	86	60	172	72	40	3	1	5	33	12	12	65	18	30
P-4	48-A	22	135	-	86	60	79	64	-	3	1	5	21	12	12	65	18	30
P-5	48-A	22	106	-	86	60	65	51	-	3	1	7	19	12	12	50	18	30
P-6	48-A	22	104	70	86	60	100	84	-	3	1	8	26	12	12	60	18	30
Total		132	835	156	516	360	496	409	40									



SIGNAL POLES P-1, P-3, P-4, AND P-6 SIGNAL POLES P-2 AND P-5

Note: This diagram shows the general placements of signal heads along the mast arms from the proposed curb lines.

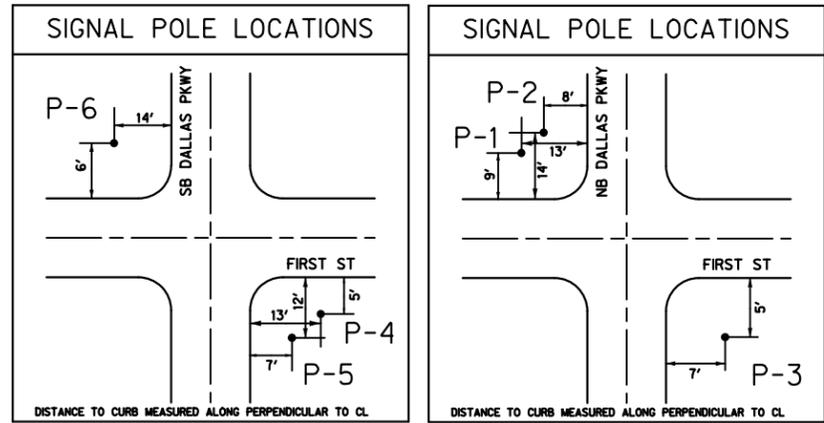


SIGN NUMBER	TYPE	LEGEND	LOCATION
S-1	ILSN	Dallas Parkway 300 S 400 S	ON P-1 ARM
S-2	ILSN	First Street 1300 W 1200 W	ON P-2 ARM
S-3	R10-17T	LEFT TURN YIELD ON FLASHING YELLOW ARROW	ON P-3 ARM
S-4	ILSN	Dallas Parkway 400 S 300 S	ON P-3 ARM
S-5	ILSN	Dallas Parkway 400 S 300 S	ON P-4 ARM
S-6	ILSN	First Street 1200 W 1300 W	ON P-5 ARM
S-7	R10-17T	LEFT TURN YIELD ON FLASHING YELLOW ARROW	ON P-6 ARM
S-8	STREET NAME	Dallas Parkway 300 S 400 S	ON P-6 ARM

SIGNS S-1, S-2, S-4, S-5, S-6 AND S-8 ARE INTERNALLY ILLUMINATED STREET NAME SIGNS (ILSNS)

CONTRACTOR IS RESPONSIBLE FOR COORDINATING STREET NAME SIGN DETAILS (STREET NAME, DIRECTION, BLOCK NUMBERS, DIMENSIONS, GRAPHICS, ETC.) WITH THE TOWN OF PROSPER, AND FOR SUBMITTING SAMPLE SIGN DETAILS TO THE TOWN FOR APPROVAL PRIOR TO FABRICATION OF ILSNS AND/OR STREET NAME BLADES

GROUND BOX SUMMARY (ITEM 624)			
TYPE	DESCRIPTION	UNIT	QTY
D	NO. 162922 W/APRON	EA	10



Note: These diagrams show the general pole placements from the proposed curb lines along the northbound and southbound Dallas Parkway and First Street.

SIGNAL HEAD NUMBERS	SIGNAL HEAD TYPE	BACK PLATE		TRAFFIC SIGNAL LAMPS					
		3 SEC	4 SEC	12" LED BALL			12" LED ARROW		
		EA	EA	R	Y	G	R	Y	G
7, 16	HORIZONTAL FLASHING YELLOW LEFT TURN (4 SECTION)	0	2	0	0	0	2	4	2
1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18	HORIZONTAL (3 SECTION)	16	0	16	16	16	0	0	0
Total		16	2	16	16	16	2	4	2



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Stephen M. Moore

1	3/27/2019	FIRST STREET REVISIONS	SMM
NO.	DATE	REVISION	APPROV.

DALLAS NORTH TOLLWAY SBFR

TRAFFIC SIGNAL DETAILS
DNT FRONTAGE ROADS / FIRST STREET INTERCHANGE

3803 PARKWOOD BLVD, SUITE 800
FORSYTH COUNTY, TEXAS 75034-6641
TEL (214) 618-4570
FAX (214) 618-4574
FIRM REGISTRATION NO. 312

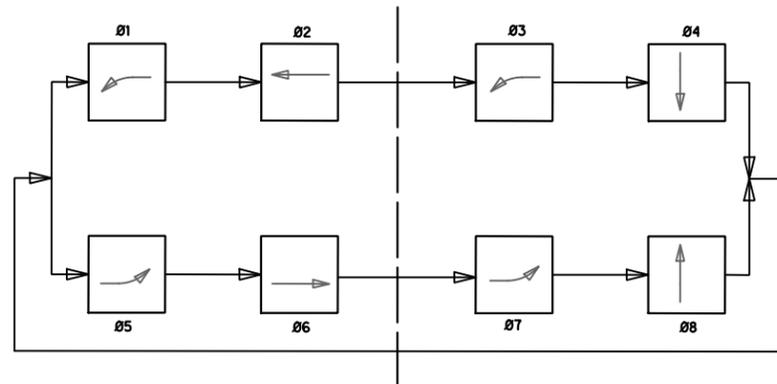
DRAWN	SMM	DATE	03-2019	DESIGNED	SMM	DATE	03-2019
CHECKED	MML	DATE	03-2019	SCALE	1"=40'		

CABLE TERMINATION CHART

CONDUCTOR NO.	CONDUCTOR COLOR	CABLE 1	CABLE 2	CABLE 3	CABLE 4	CABLE 5	CABLE 6
		20 CNDR					
		FROM CNTRL TO P-1 TERMINAL BLOCK	FROM CNTRL TO P-2 TERMINAL BLOCK	FROM CNTRL TO P-3 TERMINAL BLOCK	FROM CNTRL TO P-4 TERMINAL BLOCK	FROM CNTRL TO P-5 TERMINAL BLOCK	FROM CNTRL TO P-6 TERMINAL BLOCK
1	BLACK	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE
2	WHITE	SH COMMON					
3	RED	SH 1, 2, 3 Ø6 R	SH 4, 5, 6 Ø8 R	SH 8, 9 OL D Ø5+6+7 R	SH 10, 11, 12 Ø2 R	SH 13, 14, 15 Ø4 R	SH 17, 18 OL B Ø1+2+3 R
4	GREEN	SH 1, 2, 3 Ø6 G	SH 4, 5, 6 Ø8 G	SH 8, 9 OL D Ø5+6+7 G	SH 10, 11, 12 Ø2 G	SH 13, 14, 15 Ø4 G	SH 17, 18 OL B Ø1+2+3 G
5	ORANGE	SH 1, 2, 3 Ø6 Y	SH 4, 5, 6 Ø8 Y	SH 8, 9 OL D Ø5+6+7 Y	SH 10, 11, 12 Ø2 Y	SH 13, 14, 15 Ø4 Y	SH 17, 18 OL B Ø1+2+3 Y
6	BLUE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE
7	WHITE/BLACK	SPARE	SPARE	SH 7 OL C Ø5+7 ←Y	SPARE	SPARE	SH 16 OL A Ø1+3 ←Y
8	RED/BLACK	SPARE	SPARE	SH 7 OL C Ø5+7 ←R	SPARE	SPARE	SH 16 OL A Ø1+3 ←R
9	GREEN/BLACK	SPARE	SPARE	SH 7 OL C Ø5+7 ←G	SPARE	SPARE	SH 16 OL A Ø1+3 ←G
10	ORANGE/BLACK	SPARE	SPARE	SH 7 OL C Ø5+7 ←Y	SPARE	SPARE	SH 16 OL A Ø1+3 ←Y
11	BLUE/BLACK	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE
12	BLACK/WHITE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE
13	RED/WHITE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE
14	GREEN/WHITE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE
15	BLUE/WHITE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE
16	BLACK/RED	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE
17	WHITE/RED	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE
18	ORANGE/RED	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE
19	BLUE/RED	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE
20	RED/GREEN	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE



PROPOSED SIGNAL PHASING



OL A = Ø1 + Ø3
 OL B = Ø1 + Ø2 + Ø3
 OL C = Ø5 + Ø7
 OL D = Ø5 + Ø6 + Ø7



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Stephen M. Moore

1	3/27/2019	FIRST STREET REVISIONS	SMM
NO.	DATE	REVISION	APPROV.

DALLAS NORTH TOLLWAY SBFR



TERMINATION AND PHASING
 DNT FRONTAGE ROADS / FIRST STREET INTERCHANGE



DRAWN	SMM	DATE	03-2019	DESIGNED	SMM	DATE	03-2019
CHECKED	MML	DATE	03-2019	SCALE	1"=40'		

DISCLAIMER: The use of this standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

Shipping Parts List							
Ship each pole with the following attached: enlarged hand hole, pole cap, fixed arm connection bolts and washers, and any additional hardware listed in the table.							
Nominal Arm Length	30' Poles with Luminaire		24' Poles with ILSN		19.50' (Single Mast Arm) 20.25' (Dual Mast Arm) Poles with no Luminaire and no ILSN		
	See note above plus: one (or two if ILSN attached) small hand hole, clamp-on simplex		See note above plus one small hand hole		See note above		
Single Mast Arm							
Lf ft.	Designation	Quantity	Designation	Quantity	Designation	Quantity	
50	50L	2	50S		50		
55	55L		55S		55		
60	60L	1	60S		60		
65	65L	3	65S		65		
Dual Mast Arm							
Lf ft.	Lc ft.	Designation	Quantity	Designation	Quantity	Designation	Quantity
50	20	5020L		5020S		5020	
	24	5024L		5024S		5024	
	28	5028L		5028S		5028	
	32	5032L		5032S		5032	
	36	5036L		5036S		5036	
	40	5040L		5040S		5040	
55	20	5520L		5520S		5520	
	24	5524L		5524S		5524	
	28	5528L		5528S		5528	
	32	5532L		5532S		5532	
	36	5536L		5536S		5536	
	40	5540L		5540S		5540	
60	20	6020L		6020S		6020	
	24	6024L		6024S		6024	
	28	6028L		6028S		6028	
	32	6032L		6032S		6032	
	36	6036L		6036S		6036	
	40	6040L		6040S		6040	
65	20	6520L		6520S		6520	
	24	6524L		6524S		6524	
	28	6528L		6528S		6528	
	32	6532L		6532S		6532	
	36	6536L		6536S		6536	
	40	6540L		6540S		6540	
	44	6544L		6544S		6544	

Foundation Summary Table **

Location Ident.	Avg. N Blow/ft.	No. Each	Drill Shaft *** Length (feet)
48-A			
DALLAS PKWY / FIRST ST			
P-1		1	22
P-2		1	22
P-3		1	22
P-4		1	22
P-5		1	22
P-6		1	22
Total Drill Shaft Length			132

Notes

- ** Foundations may be listed separately or grouped according to similarity of location and type. Quantities are for the Contractor's information only.
- *** Decimal lengths in Design Table are to allow interpolation for other penetrometer values. Round to nearest foot for entry into Summary Table.



Shipping Parts List						
Traffic Signal Arms (Fixed Mount) (1 per pole) Ship each arm with listed equipment attached				Luminaire Arms (1 per 30' pole)		
Nominal Arm Length	Type IV Arm (4 Signals)		Nominal Arm Length		Quantity	
	3 Bracket Assembly and 4 CGB Connectors		8' Arm		6	
ft.	Designation	Quantity	ILSN Arm (Max. 2 per pole) Ship with clamps, bolts and washers			
50	50IV	2	Nominal Arm Length			
55	55IV		7' Arm			
60	60IV	1	9' Arm			
65	65IV	3				
Traffic Signal Arms (80 MPH Clamp-On Mount) (1 per pole) Ship each arm with listed equipment attached						
Nominal Arm Length	Type I Arm (1 Signal)		Type II Arm (2 Signals)		Type III Arm (3 Signals)	
	2 CGB connector and 1 clamp w/bolts and washers		1 Bracket Assembly and 3 CGB connectors, and 1 clamp w/bolts and washers		2 Bracket Assembly and 4 CGB connectors, and 1 clamp w/bolts and washers	
ft.	Designation	Quantity	Designation	Quantity	Designation	Quantity
20	20I-80					
24	24I-80		24II-80			
28	28I-80		28II-80			
32			32II-80		32III-80	
36			36II-80		36III-80	
40					40III-80	
44					44III-80	
Traffic Signal Arms (100 MPH Clamp-On Mount) (1 per pole) Ship each arm with listed equipment attached						
Nominal Arm Length	Type I Arm (1 Signal)		Type II Arm (2 Signals)		Type III Arm (3 Signals)	
	2 CGB connector and 1 clamp w/bolts and washers		1 Bracket Assembly and 3 CGB connectors, and 1 clamp		2 Bracket Assembly and 4 CGB connectors, and 1 clamp	
ft.	Designation	Quantity	Designation	Quantity	Designation	Quantity
20	20I-100					
24	24I-100		24II-100			
28	28I-100		28II-100			
32			32II-100		32III-100	
36			36II-100		36III-100	
40					40III-100	
44					44III-100	
Anchor Bolt Assemblies (1 per pole) Each anchor bolt assembly consists of the following: Top and bottom templates, 4 anchor bolts, 8 nuts, 8 flat washers and 4 nut anchor devices (type 2) per Standard Drawing "TS-FD". Templates may be removed for shipment.						
Anchor Bolt Diameter	Anchor Bolt Length	Quantity				
2 1/2 "	5' - 3"	6				

Abbreviations

- Lf= Fixed Arm Length
- Lc= Clamp-on Arm Length (44' Max.)



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Stephen M. Moore

DALLAS PARKWAY / FIRST STREET INTERCHANGE

1	3/27/2019	FIRST STREET REVISIONS	SMM
 Texas Department of Transportation Traffic Operations Division LONG MAST ARM ASSEMBLY PARTS LIST LMA(5)-12 Sheet 5 of 5 ©TxDOT November 2000			
REVISIONS		DN: JK	CK: GRB
CONT	SECT	JOB	HWY
DIST		COUNTY	SHEET NO.
		291	

DATE: FILE:

USER: ah1115

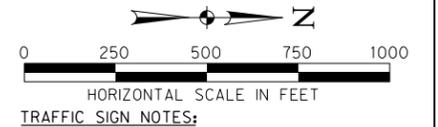
OFFICE: FRC

PROJECT # 31595

FILE: 31595-SNLA01.dgn

TIME: 7:58:51 AM

DATE: 3/28/2019



1. TRAFFIC SIGNS (EXCEPT FOR STREET NAME SIGNS) SHALL BE FABRICATED IN ALUMINUM ACCORDING TO TXDOT REQUIREMENTS AS SHOWN IN THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) AND ANY PROVISIONS CONTAINED IN THESE PLANS, PROPOSAL AND OTHER CONTRACT DOCUMENTS.

2. STREET NAME SIGNS WITHIN THE TOWN OF PROSPER SHALL BE FABRICATED IN ALUMINUM BY BRANDON INDUSTRIES OF MCKINNEY, TX OR APPROVED EQUAL PER TOWN OF PROSPER STANDARDS. STREET NAME SIGNS OUTSIDE THE TOWN OF PROSPER SHALL BE FABRICATED ACCORDING TO REQUIREMENTS SPECIFIED BY THE COLLIN COUNTY DEPARTMENT OF PUBLIC WORKS AND CITY OF CELINA, DEPENDING ON LOCATION.

3. ALL TRAFFIC SIGNS SHALL BE INSTALLED PER CURRENT TXDOT STANDARDS.

4. THE PERMANENT TRAFFIC SIGN LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE APPROVED IN THE FIELD BY THE ENGINEER AND SHALL CONFORM TO THE ADVANCE POSTING DISTANCES, SPACING AND VISIBILITY REQUIREMENTS SHOWN IN THE TMUTCD.

5. ROUTE MARKERS FOR THE DALLAS NORTH TOLLWAY SHALL BE PROVIDED BY NTTA AND INSTALLED BY THE CONTRACTOR AS PART OF THIS PROJECT.

6. THE SPEED LIMIT FOR DALLAS PARKWAY SHALL BE DETERMINED BY COLLIN COUNTY DEPARTMENT OF PUBLIC WORKS AND PROVIDED TO THE CONTRACTOR.

7. SEE PAVING PLANS FOR THE PROPOSED PAVEMENT MARKINGS.

8. SEE REMOVAL PLANS FOR TRAFFIC SIGNS TO BE REMOVED.



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Michael M. Lesh

1	3/27/2019	First St Revisions	MML
NO.	DATE	REVISION	APPROV.

DALLAS NORTH TOLLWAY SBFR



TRAFFIC SIGNS LAYOUT

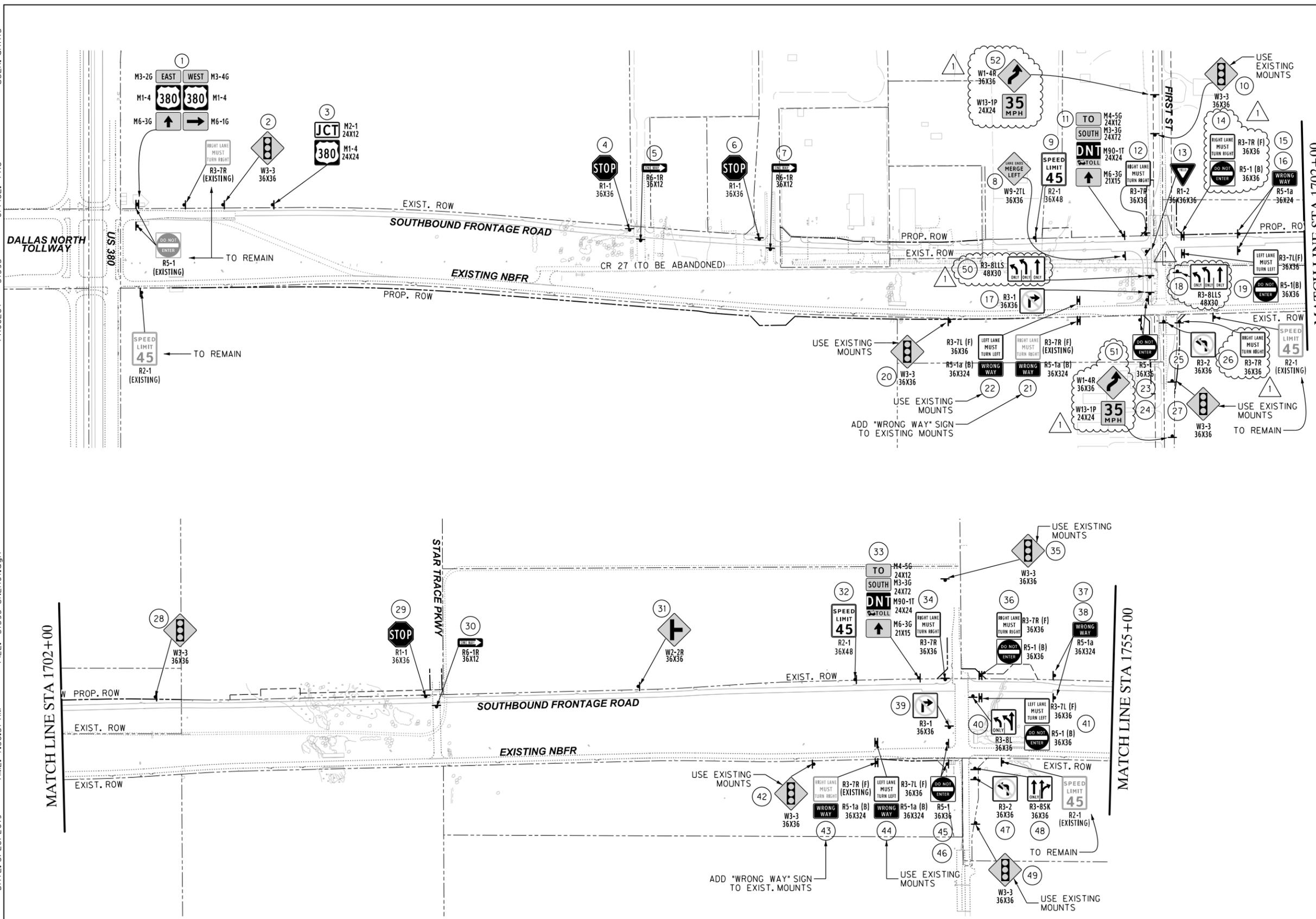
10F 3



3803 PARKWOOD BLVD, SUITE 800
FRISCO, TEXAS 75034-8641
TEL: (214) 618-4570
FAX: (214) 618-4574
FIRM REGISTRATION NO. 312

DRAWN: EEM DATE: 3/3/2017 DESIGNED: EEM DATE: 3/3/2017
CHECKED: MML DATE: 4/10/2018 SCALE: 1"=500'

CONTRACT NO. 03787-DNT-03-CN-PM SHEET 299 OF 343



MATCH LINE STA 1702+00

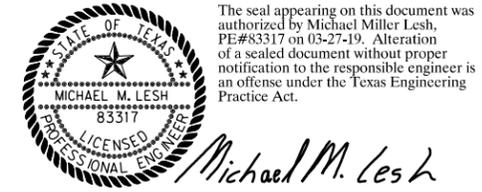
MATCH LINE STA 1755+00

SUMMARY OF SMALL SIGNS

SIGN NO.	SIGN NOMENCLATURE	SIGN TEXT	SIGN DIMENSIONS (IN x IN)	ALUMINUM TYPE A	ALUMINUM TYPE G	POST TYPE	POSTS	ANCHOR TYPE	MOUNTING DESIGNATION	EXTENSIONS (1 OR 2)
1	M3-2G	"EAST"	24 x 12	X		10BWG	1	SA	U	
	M1-4	"380"	24 x 24	X						
	M6-3G	ARROW STRAIGHT	21 x 15	X						
	33-4G	"WEST"	24 x 12	X						
2	M1-4	"380"	24 x 24	X						
	M6-1G	RIGHT ARROW	21 x 15	X						
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X		TWT	1	UA	P	
	M2-1	"JCT"	24 x 12	X		10BWG	1	SA	P	
3	M1-4	"380"	24 x 24	X						
	R1-1	STOP	36 x 36	X		TWT	1	UA	P	
	R6-1R	ONE-WAY RIGHT	36 x 12	X		TWT	1	UA	T	
	R1-1	STOP	36 x 36	X		TWT	1	UA	P	
4	W9-2TL	LANE ENDS MERGE LEFT	36 x 36	X		TWT	1	UA	P	
	R2-1	SPEED LIMIT 45	36 x 48	X		10BWG	1	SA	T	
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
	M4-5G	"TO"	24 x 12	X		10BWG	1	SA	P	
11	M3-3G	"SOUTH"	24 x 72	X						
	M90-1T	"DNT TOLL"	24 x 24	X						
	M6-3G	ARROW STRAIGHT	21 x 15	X						
	R3-7R	RIGHT LANE MUST TURN RIGHT	36 x 36	X		TWT	1	UA	T	
12	R1-2	YIELD	36 x 36 x 36	X		TWT	1	UA	T	
	R3-7R	RIGHT LANE MUST TURN RIGHT	36 x 36	X		10BWG	1	SA	T	
	R5-1	DO NOT ENTER	36 x 36	X						
	R5-1a	WRONG WAY	36 x 24	X		TWT	1	UA	T	
13	R5-1a	WRONG WAY	36 x 24	X		TWT	1	UA	T	
	R3-1	NO RIGHT TURN	36 x 36	X		TWT	1	UA	T	
	R3-8LLS	LEFT TWO LANES LEFT ONLY	48 x 30	X		TWT	1	UA	T	
	R3-7L	LEFT LANE MUST TURN LEFT	36 x 36	X		10BWG	1	SA	T	
14	R5-1	DO NOT ENTER	36 x 36	X						
	R5-1a	WRONG WAY	36 x 24	X		TWT	1	UA	T	
	R5-1a	WRONG WAY	36 x 24	X		TWT	1	UA	T	
	R3-1	NO RIGHT TURN	36 x 36	X		TWT	1	UA	T	
15	R3-8LLS	LEFT TWO LANES LEFT ONLY	48 x 30	X		TWT	1	UA	T	
	R3-7L	LEFT LANE MUST TURN LEFT	36 x 36	X		10BWG	1	SA	T	
	R5-1	DO NOT ENTER	36 x 36	X						
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
16	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
	R1-1	STOP	36 x 36	X		TWT	1	UA	P	
	R6-1R	ONE-WAY RIGHT	36 x 12	X		TWT	1	UA	T	
	W2-2R	INTERSECTION AHEAD	36 x 36	X		TWT	1	UA	P	
17	R2-1	SPEED LIMIT 45	36 x 48	X		10BWG	1	SA	T	
	M4-5G	"TO"	24 x 12	X		10BWG	1	SA	P	
	M3-3G	"SOUTH"	24 x 72	X						
	M90-1T	"DNT TOLL"	24 x 24	X						
18	M6-3G	ARROW STRAIGHT	21 x 15	X						
	R3-7R	RIGHT LANE MUST TURN RIGHT	36 x 36	X		TWT	1	UA	T	
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
19	R1-1	STOP	36 x 36	X		TWT	1	UA	P	
	R6-1R	ONE-WAY RIGHT	36 x 12	X		TWT	1	UA	T	
	W2-2R	INTERSECTION AHEAD	36 x 36	X		TWT	1	UA	P	
	R2-1	SPEED LIMIT 45	36 x 48	X		10BWG	1	SA	T	
20	M4-5G	"TO"	24 x 12	X		10BWG	1	SA	P	
	M3-3G	"SOUTH"	24 x 72	X						
	M90-1T	"DNT TOLL"	24 x 24	X						
	M6-3G	ARROW STRAIGHT	21 x 15	X						
21	R3-7R	RIGHT LANE MUST TURN RIGHT	36 x 36	X		TWT	1	UA	T	
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
	R1-1	STOP	36 x 36	X		TWT	1	UA	P	
22	R6-1R	ONE-WAY RIGHT	36 x 12	X		TWT	1	UA	T	
	W2-2R	INTERSECTION AHEAD	36 x 36	X		TWT	1	UA	P	
	R2-1	SPEED LIMIT 45	36 x 48	X		10BWG	1	SA	T	
	M4-5G	"TO"	24 x 12	X		10BWG	1	SA	P	
23	M3-3G	"SOUTH"	24 x 72	X						
	M90-1T	"DNT TOLL"	24 x 24	X						
	M6-3G	ARROW STRAIGHT	21 x 15	X						
	R3-7R	RIGHT LANE MUST TURN RIGHT	36 x 36	X		TWT	1	UA	T	
24	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
	R3-7R	RIGHT LANE MUST TURN RIGHT	36 x 36	X		10BWG	1	SA	T	
	R5-1	DO NOT ENTER	36 x 36	X						
	R5-1	DO NOT ENTER	36 x 36	X		TWT	1	UA	T	
25	R3-2	NO LEFT TURN	36 x 36	X		TWT	1	UA	T	
	R3-7R	RIGHT LANE MUST TURN RIGHT	36 x 36	X		10BWG	1	SA	T	
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
26	R1-1	STOP	36 x 36	X		TWT	1	UA	P	
	R6-1R	ONE-WAY RIGHT	36 x 12	X		TWT	1	UA	T	
	W2-2R	INTERSECTION AHEAD	36 x 36	X		TWT	1	UA	P	
	R2-1	SPEED LIMIT 45	36 x 48	X		10BWG	1	SA	T	
27	M4-5G	"TO"	24 x 12	X		10BWG	1	SA	P	
	M3-3G	"SOUTH"	24 x 72	X						
	M90-1T	"DNT TOLL"	24 x 24	X						
	M6-3G	ARROW STRAIGHT	21 x 15	X						
28	R3-7R	RIGHT LANE MUST TURN RIGHT	36 x 36	X		TWT	1	UA	T	
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
	R3-7R	RIGHT LANE MUST TURN RIGHT	36 x 36	X		10BWG	1	SA	T	
	R5-1	DO NOT ENTER	36 x 36	X						
29	R5-1a	WRONG WAY	36 x 24	X		TWT	1	UA	T	
	R5-1	DO NOT ENTER	36 x 36	X		TWT	1	UA	T	
	R5-1	DO NOT ENTER	36 x 36	X		TWT	1	UA	T	
	R3-2	NO LEFT TURN	36 x 36	X		TWT	1	UA	T	
30	R3-7R	RIGHT LANE MUST TURN RIGHT	36 x 36	X		10BWG	1	SA	T	
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
	R1-1	STOP	36 x 36	X		TWT	1	UA	P	
31	R6-1R	ONE-WAY RIGHT	36 x 12	X		TWT	1	UA	T	
	W2-2R	INTERSECTION AHEAD	36 x 36	X		TWT	1	UA	P	
	R2-1	SPEED LIMIT 45	36 x 48	X		10BWG	1	SA	T	
	M4-5G	"TO"	24 x 12	X		10BWG	1	SA	P	
32	M3-3G	"SOUTH"	24 x 72	X						
	M90-1T	"DNT TOLL"	24 x 24	X						
	M6-3G	ARROW STRAIGHT	21 x 15	X						
	R3-7R	RIGHT LANE MUST TURN RIGHT	36 x 36	X		TWT	1	UA	T	
33	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
	R3-7R	RIGHT LANE MUST TURN RIGHT	36 x 36	X		10BWG	1	SA	T	
	R5-1	DO NOT ENTER	36 x 36	X						
	R5-1a	WRONG WAY	36 x 24	X		TWT	1	UA	T	
34	R5-1a	WRONG WAY	36 x 24	X		TWT	1	UA	T	
	R3-1	NO RIGHT TURN	36 x 36	X		TWT	1	UA	T	
	R3-8L	LEFT LANE LEFT TURN ONLY	36 x 36	X		TWT	1	UA	T	
	R3-7L	LEFT LANE MUST TURN LEFT	36 x 36	X		10BWG	1	SA	T	
35	R5-1	DO NOT ENTER	36 x 36	X						
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
	R5-1	DO NOT ENTER	36 x 36	X						
36	R5-1a	WRONG WAY	36 x 24	X		TWT	1	UA	T	
	R5-1a	WRONG WAY	36 x 24	X		TWT	1	UA	T	
	R3-1	NO RIGHT TURN	36 x 36	X		TWT	1	UA	T	
	R3-8L	LEFT LANE LEFT TURN ONLY	36 x 36	X		TWT	1	UA	T	
37	R3-7L	LEFT LANE MUST TURN LEFT	36 x 36	X		10BWG	1	SA	T	
	R5-1	DO NOT ENTER	36 x 36	X						
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
	R5-1a	WRONG WAY	36 x 24	X						
38	R5-1a	WRONG WAY	36 x 24	X		TWT	1	UA	T	
	R3-1	NO RIGHT TURN	36 x 36	X		TWT	1	UA	T	
	R3-8L	LEFT LANE LEFT TURN ONLY	36 x 36	X		TWT	1	UA	T	
	R3-7L	LEFT LANE MUST TURN LEFT	36 x 36	X		10BWG	1	SA	T	
39	R5-1	DO NOT ENTER	36 x 36	X						
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
	R5-1a	WRONG WAY	36 x 24	X						
	R3-7L	LEFT LANE MUST TURN LEFT	36 x 36	X						USE EXIST MOUNT
40	R5-1a	WRONG WAY	36 x 24	X						
	R3-7L	LEFT LANE MUST TURN LEFT	36 x 36	X						USE EXIST MOUNT
	R5-1	DO NOT ENTER	36 x 36	X						
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
41	R5-1a	WRONG WAY	36 x 24	X						
	R3-7L	LEFT LANE MUST TURN LEFT	36 x 36	X						USE EXIST MOUNT
	R5-1	DO NOT ENTER	36 x 36	X						
	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
42	R5-1a	WRONG WAY	36 x 24	X						
	R3-7L	LEFT LANE MUST TURN LEFT	36 x 36	X						USE EXIST MOUNT
	R5-1	DO NOT ENTER	36 x 36	X						
	W3-3	TRAFFIC SIGNAL AHEAD	36 x							

SUMMARY OF SMALL SIGNS

SIGN NO.	SIGN NOMENCLATURE	SIGN TEXT	SIGN DIMENSIONS (IN x IN)	ALUMINUM TYPE A	ALUMINUM TYPE G	POST TYPE	POSTS	ANCHOR TYPE	MOUNTING DESIGNATION	EXTENSIONS (1 OR 2)
45	R5-1	DO NOT ENTER	36 x 36	X		TWT	1	UA	T	
46	R5-1	DO NOT ENTER	36 x 36	X		TWT	1	UA	T	
47	R3-2	NO LEFT TURN	36 x 36	X		TWT	1	UA	T	
48	R3-8SK	LEFT LANE STRAIGHT ONLY	36 x 36	X		TWT	1	UA	T	
49	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
50	R3-8LLS	LEFT TWO LANES LEFT ONLY	48 x 30	X		TWT	1	UA	T	
51	W1-4R	ROADWAY SHIFT (RIGHT)	36 x 36	X		TWT	1	UA	P	
	W13-1P	35 MPH	24 x 24	X						
52	W1-4R	ROADWAY SHIFT (RIGHT)	36 x 36	X		TWT	1	UA	P	
	W13-1P	35 MPH	24 x 24	X						
1	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X		TWT	1	UA	P	
2	R2-1	SPEED LIMIT 45	36 x 48	X		10BWG	1	SA	T	
	M4-5G	"TO"	24 x 12	X		10BWG	1	SA	P	
	M3-3G	"SOUTH"	24 x 72	X						
3	M90-1T	"DNT TOLL"	24 x 24	X						
	M6-3G	ARROW STRAIGHT	21 x 15	X						
4	R3-8SK	LEFT LANE STRAIGHT ONLY	36 x 36	X		TWT	1	UA	T	
5	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X		10BWG	1	SA	T	USE EXIST MOUNT
6	R3-7R	RIGHT LANE MUST TURN RIGHT	36 x 36	X						
	R5-1	DO NOT ENTER	36 x 36	X						
7	R5-1a	WRONG WAY	36 x 24	X		TWT	1	UA	T	
8	R5-1a	WRONG WAY	36 x 24	X		TWT	1	UA	T	
9	R3-8LS	LEFT LANE LEFT TURN ONLY	36 x 36	X		TWT	1	UA	T	
10	R3-1	NO RIGHT TURN	36 x 36	X		TWT	1	UA	T	
11	R3-8L	LEFT LANE LEFT TURN ONLY	36 x 36	X		TWT	1	UA	T	
12	R3-7L	LEFT LANE MUST TURN LEFT	36 x 36	X		10BWG	1	SA	T	
	R5-1	DO NOT ENTER	36 x 36	X						
13	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
14	R5-1a	WRONG WAY	36 x 24	X						USE EXIST MOUNT
15	R3-7L	LEFT LANE MUST TURN LEFT	36 x 36	X						USE EXIST MOUNT
	R5-1a	WRONG WAY	36 x 24	X						USE EXIST MOUNT
16	R5-1	DO NOT ENTER	36 x 36	X		TWT	1	UA	T	
17	R5-1	DO NOT ENTER	36 x 36	X		TWT	1	UA	T	
18	R3-2	NO LEFT TURN	36 x 36	X		TWT	1	UA	T	
19	R3-6R	STRAIGHT/TURN LANE	36 x 36	X		TWT	1	UA	T	
20	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X						USE EXIST MOUNT
21	W3-3	TRAFFIC SIGNAL AHEAD	36 x 36	X		TWT	1	UA	P	
22	R2-1	SPEED LIMIT 45	36 x 48	X		10BWG	1	SA	T	
	M4-5G	"TO"	24 x 12	X		10BWG	1	SA	P	
23	M3-3G	"SOUTH"	24 x 72	X						
	M90-1T	"DNT TOLL"	24 x 24	X						
	M6-3G	ARROW STRAIGHT	21 x 15	X						
24	W1-2R	RIGHT CURVE	36 x 36	X		TWT	1	UA	P	
25	W1-9TR	RIGHT ALIGNMENT	96 x 36	X		S80	1	SA	T	
26	W1-9TL	LEFT ALIGNMENT	96 x 36	X		S80	1	SA	T	
27	W1-9TR	RIGHT ALIGNMENT	96 x 36	X		S80	1	SA	T	
28	W3-1	STOP SIGN AHEAD	36 x 36	X		TWT	1	UA	P	
29	W1-2L	LEFT CURVE	36 x 36	X		TWT	1	UA	P	
30	W1-2L	LEFT CURVE	36 x 36	X		TWT	1	UA	P	
31	W2-8R	INTERSECTIONS AHEAD	36 x 36	X		TWT	1	UA	P	
32	R2-1	SPEED LIMIT 45	36 x 48	X		10BWG	1	SA	T	
33	R6-1L	ONE WAY LEFT	36 x 12	X		TWT	1	UA	T	
	M4-12T	STREET NAME	x	X		10BWG	1	SA	P	
	M4-12T	STREET NAME	x	X						
	R1-1	STOP	36 x 36	X						
35	W2-2L	INTERSECTION AHEAD	36 x 36	X		TWT	1	UA	P	
36	R6-1R	ONE-WAY RIGHT	36 x 12	X		TWT	1	UA	T	
	M4-12T	STREET NAME	x	X		10BWG	1	SA	P	
	M4-12T	STREET NAME	x	X						
	R1-1	STOP	36 x 36	X						
38	R6-1R	ONE-WAY RIGHT	36 x 12	X		TWT	1	UA	T	
	MA-12T	STREET NAME	x	X		10BWG	1	SA	P	
	M4-12T	STREET NAME	x	X						
	R1-1	STOP	36 x 36	X						
40	R6-1R	ONE-WAY RIGHT	36 x 12	X		TWT	1	UA	T	
41	R5-1a	WRONG WAY	36 x 24	X		TWT	1	UA	T	



1	3/27/2019	First St Revisions	MML
NO.	DATE	REVISION	APPROV.

DALLAS NORTH TOLLWAY SBFR



TRAFFIC SIGNS
SUMMARY OF SMALL SIGNS

2 OF 3

HALFF ENGINEERS ARCHITECTS
3803 PARKWOOD BLVD, SUITE 800
FRIEDRICH, TEXAS 75034-8641
TEL (214) 618-4570
FAX (214) 618-4574
FIRM REGISTRATION NO. 312

DRAWN EEM DATE 3/3/2017 DESIGNED EEM DATE 3/3/2017
CHECKED MML DATE 4/10/2018 SCALE NTS

CONTRACT NO. 03787-DNT-03-CN-PM SHEET 303 OF 343

USER: ah1115

OFFICE: FRC

PROJECT #: 31595

FILE: 31595-SW3P01.dgn

TIME: 7:58:55 AM

DATE: 3/28/2019



LEGEND

- SEDIMENT CONTROL FENCE (SCF)
- TYPE 1 ROCK FILTER DAM (RFD1)
- TYPE 2 ROCK FILTER DAM (RFD2)
- TYPE 3 ROCK FILTER DAM (RFD3)
- TYPE 1 CONSTRUCTION EXIT
- PAY LIMITS FOR TOPSOIL & GRASSING

- EROSION CONTROL FOR INLETS:
- (CI) 10' CURB INLET
 - INSTALL 40 LF SCF AROUND INLET BOTTOM.
 - REMOVE 40 LF SCF PRIOR TO CONSTRUCTION OF INLET WALLS AND TOP.
 - CONSTRUCT SEDIMENT TRAP (ST-CI) AROUND INLET OPENING.
 - (IH) INLET TYPE H (MOD) & PAZD SET B-PD (MOD)(TY I)
 - INSTALL 60 LF SCF AROUND INLET BOTTOM.
 - REMOVE 60 LF SCF PRIOR TO CONSTRUCTION OF INLET WALLS AND TOP.
 - INSTALL 60 LF SCF AROUND INLET OPENING UNTIL PROJECT COMPLETION.
 - (SET B) SET TYPE B - PD (MOD)
 - INSTALL 60 LF SCF AROUND INLET BOTTOM.
 - REMOVE 60 LF SCF PRIOR TO CONSTRUCTION OF INLET WALLS AND TOP.
 - INSTALL 60 LF SCF AROUND INLET OPENING UNTIL PROJECT COMPLETION.

- NOTES:
- DESIGNATED ROCK FILTER DAMS SHALL BE LEFT IN PLACE FOLLOWING THE COMPLETION OF CONSTRUCTION.
 - PAY LIMITS OF TOPSOIL AND GRASSING SHALL BE BETWEEN THE LINE SHOWN AND THE WEST R.O.W. OR EASEMENT LINE.
 - CONST. EROSION CONTROL BLANKET IN ALL V-DITCH SECTIONS 8' UP EACH SIDE, MEASURED ALONG SLOPE.

The seal appearing on this document was authorized by Michael Miller Lesh, PE #83317 on 03-27-19. Alteration of a sealed document without proper notification to the responsible engineer is an offense under the Texas Engineering Practice Act.

Michael M. Lesh

1	3/27/2019	First St Revisions	MML
NO.	DATE	REVISION	APPROV.

DALLAS NORTH TOLLWAY SBFR



SW3P LAYOUT

10F 3

HALFF 3803 PARKWOOD BLVD, SUITE 800
 FORT WORTH, TEXAS 76104-8641
 TEL (214) 618-4570
 FAX (214) 618-4574
 FIRM REGISTRATION NO. 312

DRAWN	EEM	DATE	2/16/2016	DESIGNED	EEM	DATE	2/16/2016
CHECKED	MML	DATE	4/10/2018	SCALE	1"=500'		

CONTRACT NO. 03787-DNT-03-CN-PM SHEET 337 OF 343

