1014-03-039

ROCKWALL

FINAL PLANS

NAME OF CONTRACTOR: **ED BELL CONSTRUCTION CO.**

DATE OF LETTING: **08/12/2009**

DATE WORK BEGAN: **09/23/2010**

DATE WORK COMPLETED: **08/16/2013**

DATE WORK ACCEPTED: **09/06/2013**

SUMMARY OF CHANGE ORDERS:

C.O. #	DESCRIPTION	DAYS ADDED
1.	Credit for Field Office not needed.	
2.	Changing Compost(PB) to(BOS)	
3.	Relocate drainage pipe Line E at Chandler Landing	36
4.	Cut and Restore Under Lane Closures	
5.	Addition of TCP Plan Sheets	
6.	Plan Sheet Corrections	2
7.	Additional Signals	60
8.	New Locations for low profile CTB	4
9.	Item 0508 2002 overrun and extra mobilization	
10.	Overrun of Items 04032001 and 05122017	
11.	Overrun of item 04000510	
12.	Addition of mailbox single mounts.	3
13.	Revisions to signal quantities on C.O. #7	5
14.	Addition of Louvers for Signal Head	
15.	Overrun of item 03402011 (OMITTED)	
16.	Addition of items 06662068, 06662165, and 06782008.	
17.	Upgrades to old FM 740.	
	ORIGINAL BID DAYS	476
	TOTAL DAYS	586

ROCKWALL COUNTY
DALLAS DISTRICT

1"=3 MILES

BEGIN INCIDENTAL CONSTRUCTION
CSJ 1014-03-039
STA 09+40

BEGIN PROJECT
CSJ 1014-03-039
STA 20+94.00
TRM 256+0.194

END PROJECT
CSJ 1014-03-039
STA 147+80.00
TRM 256+0.559

END INCIDENTAL CONSTRUCTION
CSJ 1014-03-039
STA 157+40

STATE OF TEXAS
NOAL THOMAS STANFORD
79752
LICENSED PROFESSIONAL ENGINEER

WORK WAS COMPLETED ACCORDING TO THE PLANS AND CONTRACT.

Signature of Registrant & Date , P.E. 11/14/13

i:\proj\01196321\dgn\sh... 10-23-0... dgn
TEMPLATE REVISED: 10-23-0...

STATE OF TEXAS
DEPARTMENT OF TRANSPORTATION

PLANS OF PROPOSED
STATE HIGHWAY IMPROVEMENT

STATE PROJECT
C 1014-3-39
CSJ: 1014-03-039

FM 740
ROCKWALL COUNTY

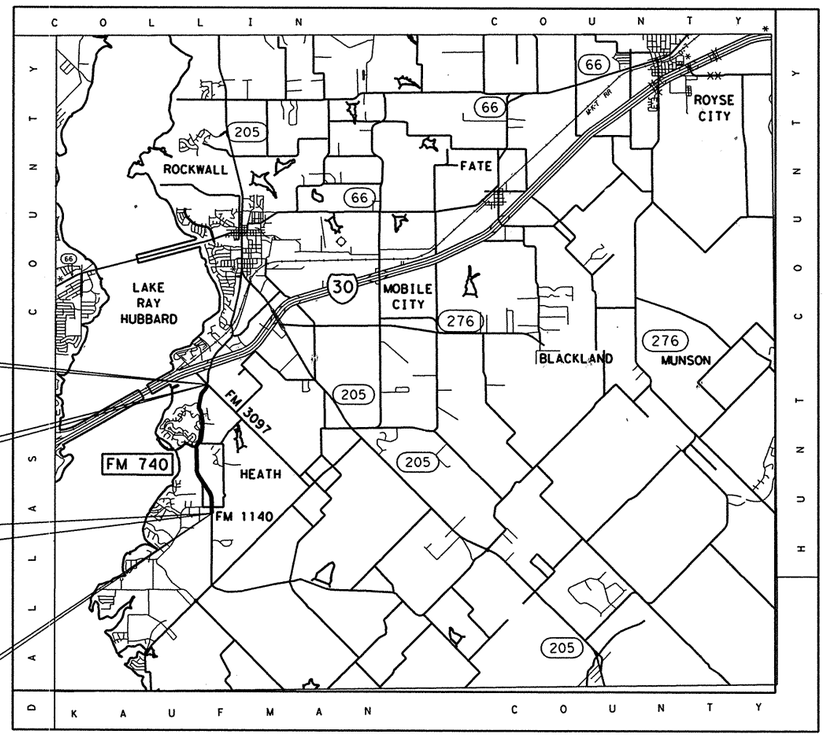
LIMITS: FROM FM 3097
TO FM 1140

TOTAL LENGTH OF PROJECT =

ROADWAY	= 12,686.00 FT.	= 2.403	MI.
BRIDGE	= 0.00 FT.	= 0.000	MI.
TOTAL	= 12,686.00 FT.	= 2.403	MI.

TYPE: THE WIDENING OF A NON-FREEWAY FACILITY

CONSISTING OF: GRADING, CONCRETE PAVING, HMAC, EMBANKMENT, DRAINAGE STRUCTURES, RETAINING WALLS, NOISE WALLS, TRAFFIC SIGNALS, SIGNING, AND PAVEMENT MARKINGS.



NO EQUATIONS
NO EXCEPTIONS
NO RAILROADS

DESIGN	FED. RD. DIV. NO.	STATE PROJECT NO.		HIGHWAY NO.
DAN	6	C 1014-3-39		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	1
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

DESIGN SPEED = 40 MPH

FM 3097 TO COUNTRY CLUB DRIVE
2010 ADT=25.300
2030 ADT=40.800
2040 ADT=45.100

COUNTRY CLUB DRIVE TO FM 1140
2010 ADT=15.700
2030 ADT=25.300
2040 ADT=27.900

NOTE:
SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION, JUNE1, 2004 AND SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS, SHALL GOVERN ON THIS PROJECT: SPECIAL LABOR PROVISIONS FOR STATE PROJECTS (000---007).

TDLR INSPECTION REQUIRED.

HUITT-ZOLLARS
Huitt-Zollars, Inc. Engineering / Architecture
3131 McKinney Ave., Ste. 600 Dallas, Texas 75204
Phone (214) 871-3311 Fax (214) 871-0757
TEXAS REGISTRATION FIRM NO. F-761

TEXAS DEPARTMENT OF TRANSPORTATION

CONCURRENCE: 4-16 2009
Chuck Todd
DIRECTOR OF PUBLIC WORKS
CITY OF ROCKWALL

CONCURRENCE: 4-16 2009
DIRECTOR OF PUBLIC WORKS
CITY OF HEATH

SUBMITTED FOR LETTING 4-16 2009
, P.E.
PROJECT MANAGER
HUITT-ZOLLARS, INC.

RECOMMENDED FOR LETTING 4-23 2009
Paul E. Williams, P.E.
AREA ENGINEER

RECOMMENDED FOR LETTING 4/24 2009
, P.E.
DIRECTOR OF TRANSPORTATION PLANNING & DEVELOPMENT

APPROVED FOR LETTING 20
, P.E.
DIRECTOR, TRAFFIC OPERATIONS DIVISION

RECOMMENDED FOR LETTING: 4/24 2009
, P.E.
DISTRICT ENGINEER

APPROVED FOR LETTING 06.01.2009
, P.E.
DIRECTOR, DESIGN DIVISION
FOR

INDEX OF SHEETS

I. GENERAL

II. TRAFFIC CONTROL PLAN

TCP STANDARDS

III. ROADWAY DETAILS

ROADWAY STANDARDS

IV. WALL DETAILS

WALL STANDARDS

V. DRAINAGE

DRAINAGE STANDARDS

VI. UTILITIES

⚠ REVISED 07.30.09 VN

* THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE HAVE BEEN ISSUED BY ME OR UNDER MY RESPONSIBLE SUPERVISION, AND ARE APPLICABLE TO THIS PROJECT

7-15-09

PHILLIP D. HANLEY, P.E. No. 91815

STATE OF TEXAS
PHILLIP D. HANLEY
91815
REGISTERED
PROFESSIONAL ENGINEER
7-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
INDEX OF SHEETS

SHEET 1 OF 2

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	2.
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

INDEX OF SHEETS (CONT)

VII. BRIDGES

--	NONE

VIII. TRAFFIC ITEMS

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303	TEMPORARY SIGNAL LAYOUT OVERVIEW AT SUMMER LEE DRIVE
304 - 309	TEMPORARY SIGNAL LAYOUT AT SUMMER LEE DRIVE
310	TEMPORARY SIGNAL LAYOUT OVERVIEW AT HENRY CHANDLER DRIVE
311 - 313	TEMPORARY SIGNAL LAYOUT AT HENRY CHANDLER DRIVE
314	FM 740 AT SUMMER LEE DRIVE SIGNAL LAYOUT
315	FM 740 AT SUMMER LEE DRIVE TRAFFIC SIGNING LAYOUT
316	FM 740 AT SUMMER LEE DRIVE SIGNAL DESIGN TABLES
317	FM 740 AT HENRY CHANDLER DRIVE SIGNAL LAYOUT
318	FM 740 AT HENRY CHANDLER DRIVE TRAFFIC SIGNING LAYOUT
319	FM 740 AT HENRY CHANDLER DRIVE SIGNAL DESIGN TABLES
319A	STREET NAME SIGN DETAILS
320	TRENCH DETAIL
321 - 327	PAVEMENT MARKING & SIGNING LAYOUT
328	PAVEMENT MARKINGS & SIGNING DETAILS
329	SIGN DETAILS

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335 - 336	(*)ED(7)-03 AND (*)ED(9)-03
337 - 338	(*)RID (LUM 1) - 07 AND (*)RID (LUM 2) - 07
339	(*)RID (FND)-07
340 - 343	(*)RIP (1)-07 THRU (*)RIP (4)-07
344 - 345	(*)WZ (BTS-1)-03 THRU (*)WZ (BTS-2)-03
346 - 347	(*)SMA-80(1)-99 (DAL) AND (*)SMA-80(2)-96
348	(*)MA-C-96
349	(*)MA-D-07
350	(*)TS-FD-99
351	LUM-A-99
352	TS-CF-04
353	(*)TRAFFIC SIGNAL HEAD IDENTIFICATION
354	(*)PEDESTRIAN SIGNAL HEAD IDENTIFICATION
355	NOT USED
356	(*)VDZ-04 (DAL)
357	(*)SIGNAL HEADS FOR SPAN WIRE INSTALLATION
358	(*)SIGNS FOR SPAN WIRE INSTALLATION
359	(*)CONSTRUCTION DETAILS FOR SPAN WIRE MOUNTED SIGNALS
360	NOT USED
361	(*)PM(1)-03
362	(*)PM(2)-08
363	(*)PM(4)-03
364	(*)PM(5)-01
365	(*)PM(6)-01
366	(*)TSR(04)-08
367	(*)TSR(05)-08
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370	(*)SMD (SLIP-2) -08
371	(*)SMD (SLIP-3) -08

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373	STORM WATER POLLUTION PREVENTION PLAN (SW3P)
374 - 380	SW3P SITE MAP
⚠1 380A	SW3P SITE MAP, HENRY M. CHANDLER DR.

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382	(*)EC (2) - 93
383	(*)EC (3) - 93
384 - 385	(*)EROSION CONTROL LOGS
386	(*)VERTICAL TRACKING FOR EROSION CONTROL (DAL)
386A	(*)SW3P PROJECT LIMITS SIGN
387	(*)VEGETATION ESTABLISHMENT SHEET (DAL)

X. MISCELLANEOUS ITEMS

388 - 390	ILLUMINATION / IRRIGATION CONDUIT LAYOUT

* THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE HAVE BEEN ISSUED BY ME OR UNDER MY RESPONSIBLE SUPERVISION, AND ARE APPLICABLE TO THIS PROJECT

7-15-09

PHILLIP D. HANLEY, P.E. No. 91815

⚠1 REVISED 07.30.09 VN

STATE OF TEXAS
PHILLIP D. HANLEY
91815
REGISTERED
PROFESSIONAL ENGINEER
7-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

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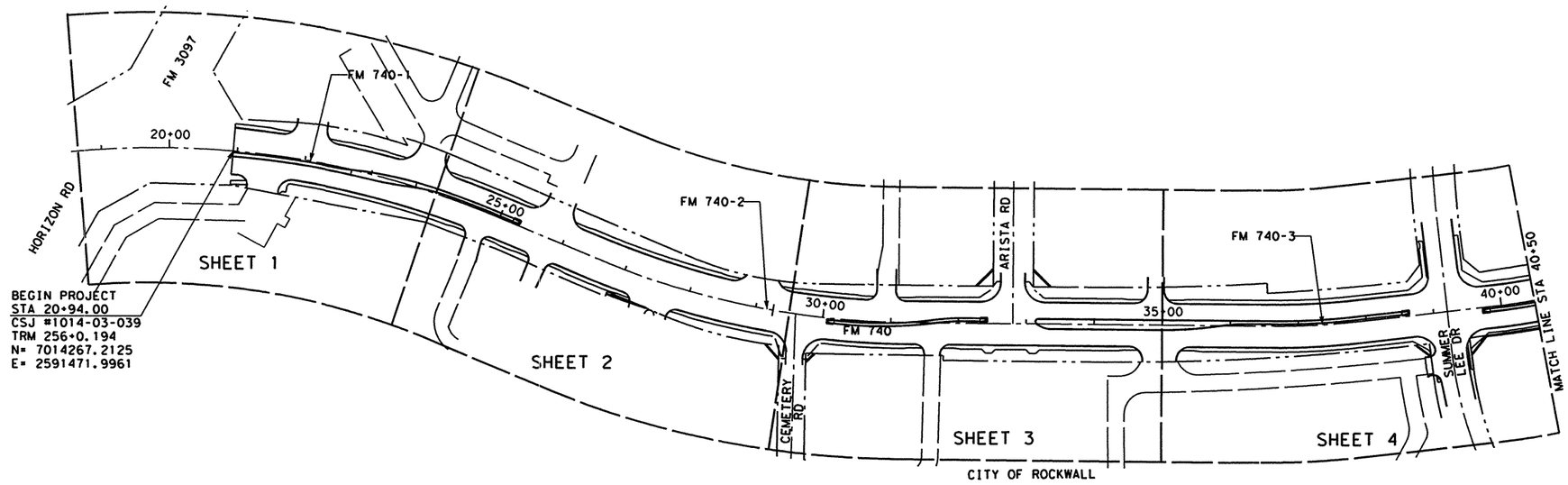
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

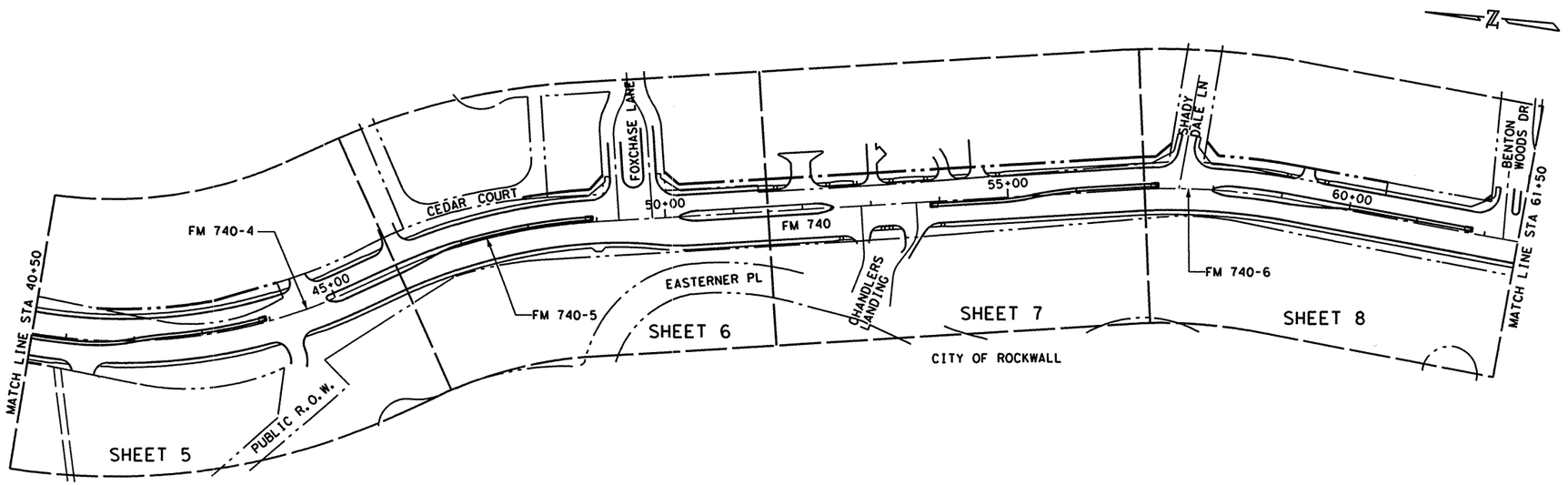
Texas Department of Transportation

FM 740
INDEX OF SHEETS

SHEET 2 OF 2

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	3
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	





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NOTE: SEE HORIZONTAL ALIGNMENT AND CONTROL POINT DATA SHEETS FOR CURVE DATA.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
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4-15-09

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Texas Department of Transportation

FM 740
PROJECT LAYOUT

SCALE: 1"=200' SHEET 1 OF 3

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	4
CHECK CVL	CONTROL	SECTION	JOB	
CHECK DAN	1014	03	039	

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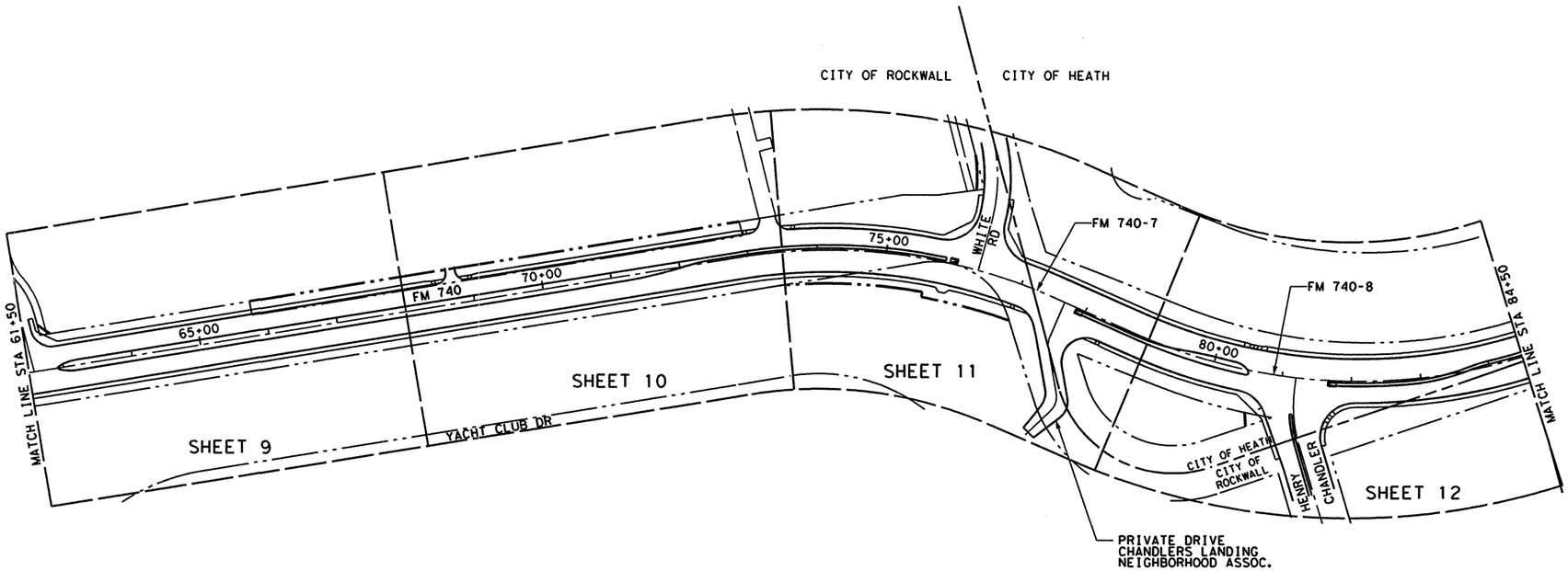

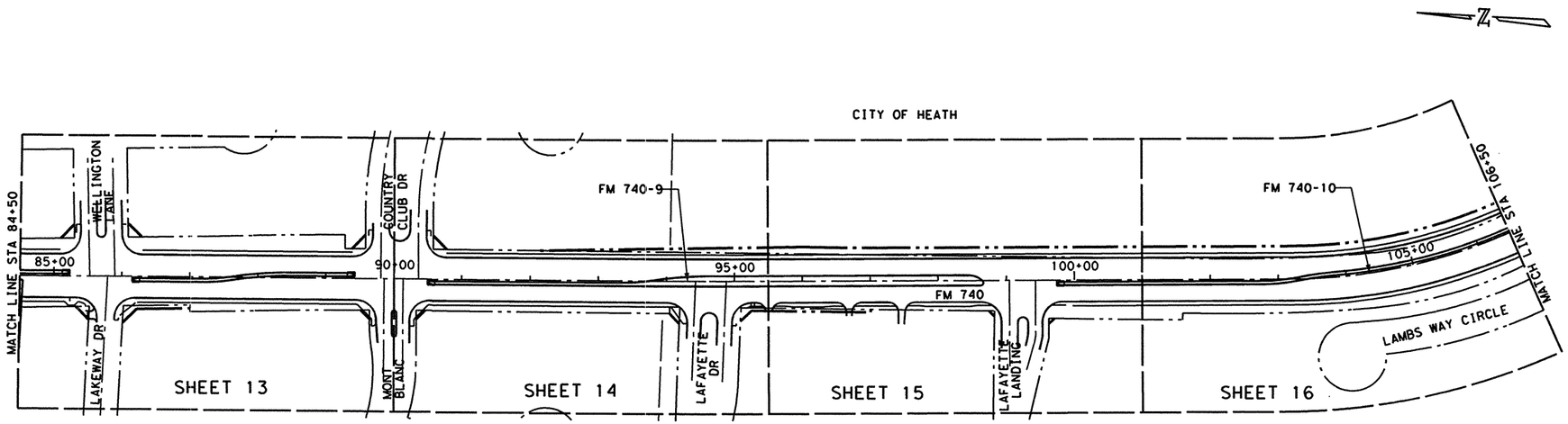

STATE OF TEXAS
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4-15-09

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FM 740
PROJECT LAYOUT

SCALE: 1"=200' SHEET 2 OF 3

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	5
CHECK CVL	CONTROL	SECTION	JOB	
CHECK DAN	1014	03	039	

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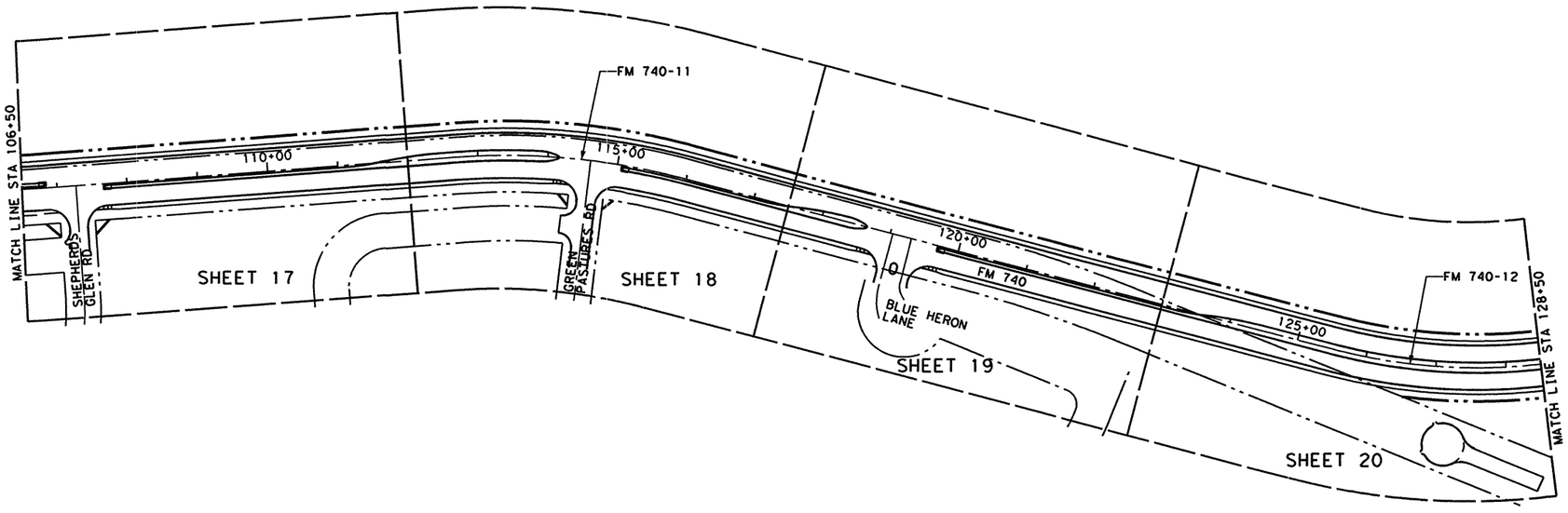

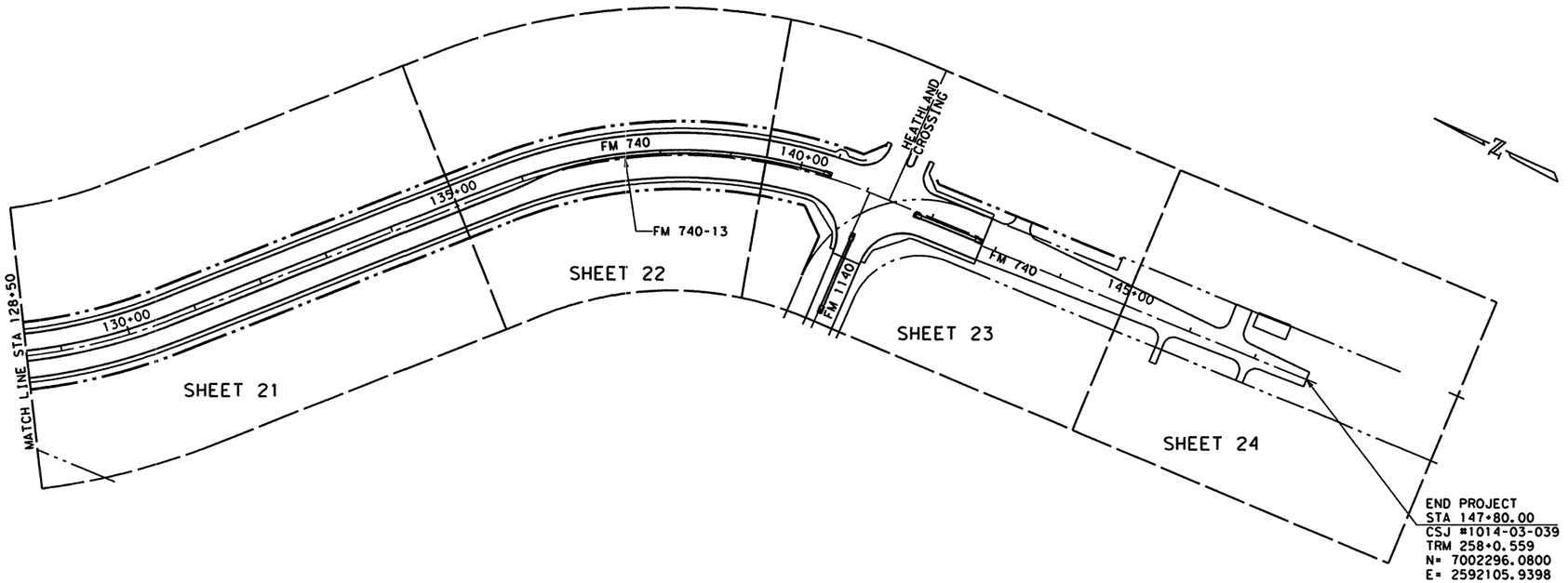

END PROJECT
STA 147+80.00
CSJ #1014-03-039
TRM 258+0.559
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SCALE IN FEET

STATE OF TEXAS
DAVID ALAN NUFER
68818
PROFESSIONAL ENGINEER
REGISTERED
4-15-09

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Texas Department of Transportation

FM 740
PROJECT LAYOUT

SCALE: 1"=200' SHEET 3 OF 3

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	6
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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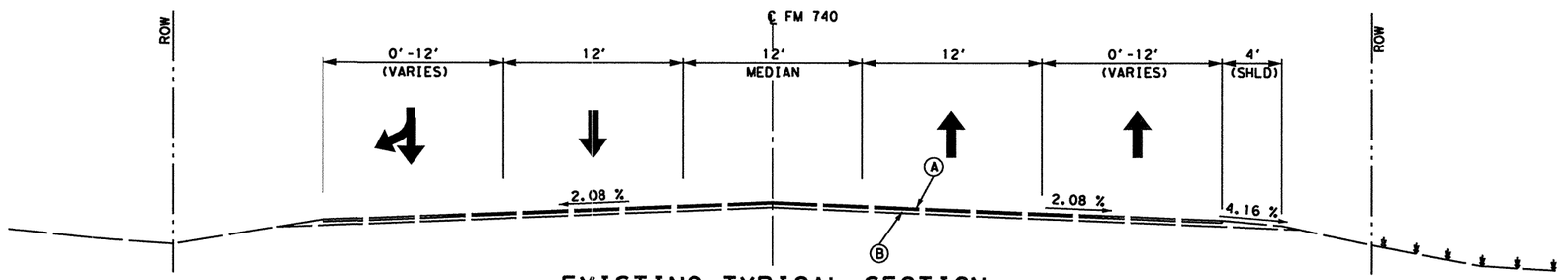
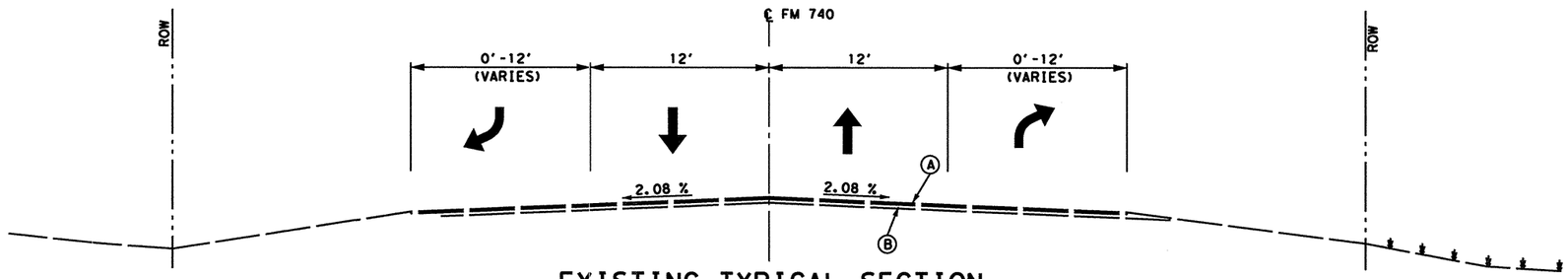


EXISTING TYPICAL SECTION

STA 20+94 TO STA 25+00
NTS



EXISTING TYPICAL SECTION

STA 25+00 TO STA 32+40
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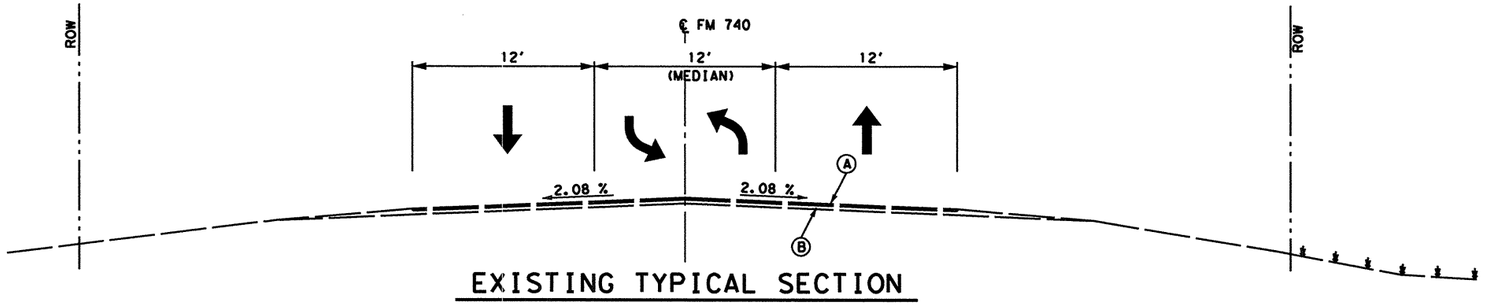

EXISTING TYPICAL SECTION

STA 32+40 TO STA 53+00
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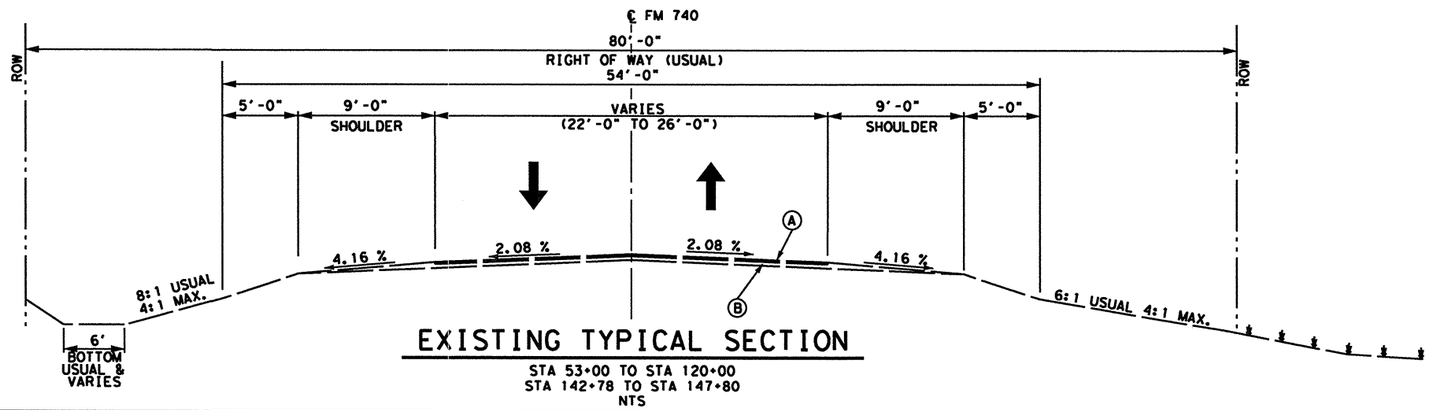

EXISTING TYPICAL SECTION

STA 53+00 TO STA 120+00
STA 142+78 TO STA 147+80
NTS

LEGEND

Ⓐ VARIABLE DEPTH ASPH PAV
Ⓑ VARIABLE DEPTH BASE COURSE

STATE OF TEXAS
DAVID ALAN NUFER
68818
PROFESSIONAL ENGINEER
5-21-09

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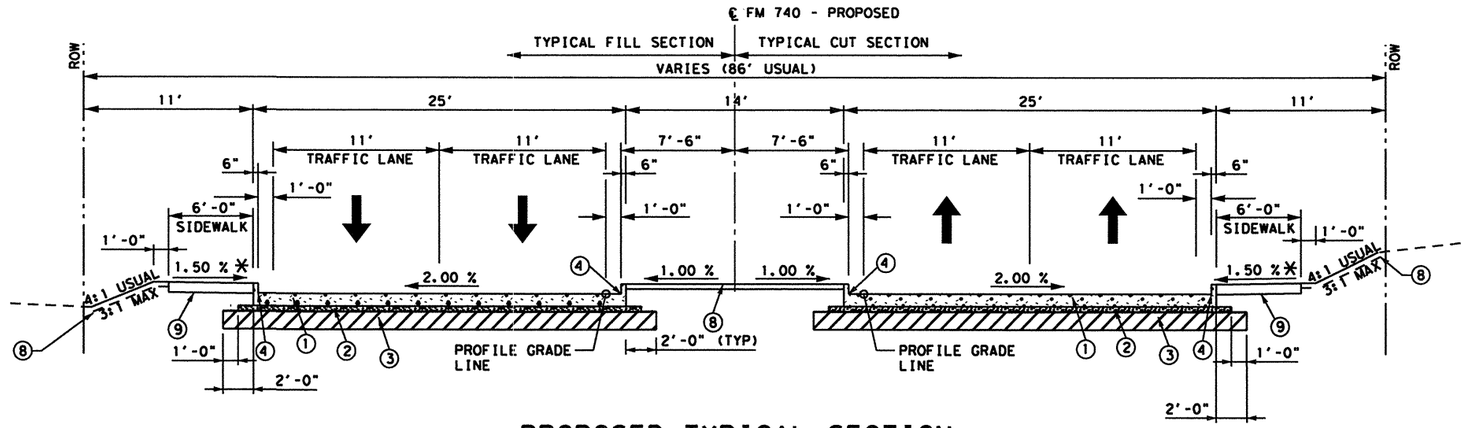
Texas Department of Transportation

FM 740

TYPICAL SECTIONS

SCALE: NTS SHEET 1 OF 5

DESIGN	FED.RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
TCB	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	7
CHECK	CONTROL	SECTION	JOB	
ANU	1014	03	039	
CHECK				



PROPOSED TYPICAL SECTION

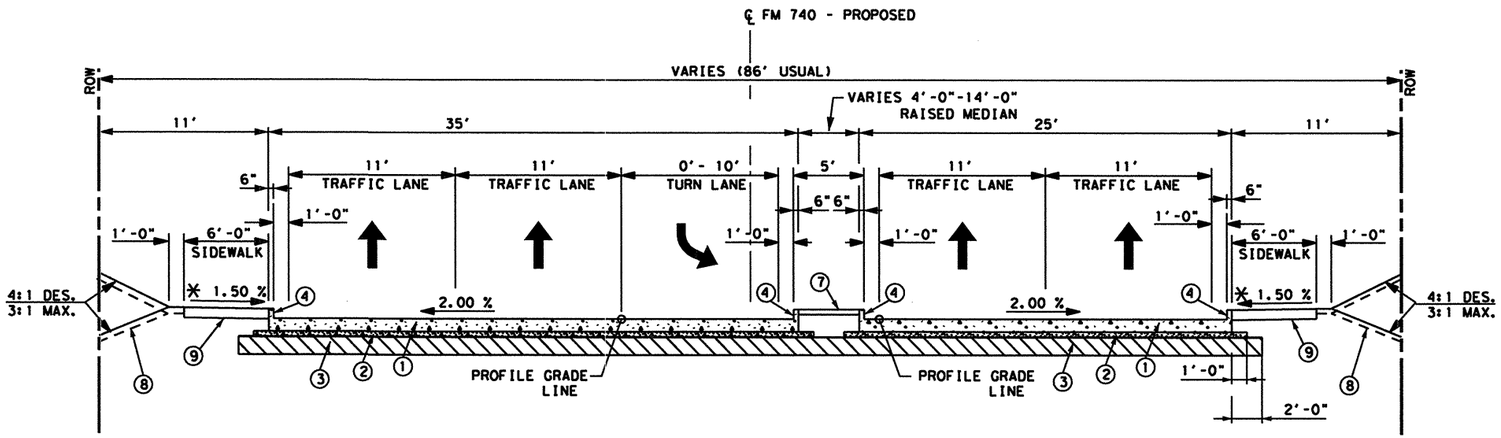
NTS

STA 29+00 TO STA 26+00
STA 30+00 TO STA 49+00
STA 53+00 TO STA 142+80

* NOTE: ADA RAMPS SHALL BE PLACED AT ALL INTERSECTIONS. MAXIMUM CROSS SLOPE FOR SIDEWALKS WILL BE 1.5%.

LEGEND

① 10" CONCRETE PAVEMENT (CRCP)
② 4" HMAC (TY B)(D-GR HMA (METH) PG 64-22)
③ 14" LIME TREATED SUBGRADE (6% LIME)
④ MONO CURB TY II
⑤ 10" HMAC (TY B)(D-GR HMA (METH) PG 64-22)
⑥ 4" HMAC (TY C)(D-GR HMA (METH) SAC-B PG 70-22)
⑦ 4" COLORED TEXTURE CONCRETE
⑧ BLOCK SOD WITH 4" COMPOST MANUF TOPSOIL
⑨ 4" CONCRETE SIDEWALK



PROPOSED NB LEFT TURN LANE TYPICAL SECTION

NTS

SEE MEDIAN DETAILS SHEETS FOR ADDITIONAL INFORMATION

* NOTE: ADA RAMPS SHALL BE PLACED AT ALL INTERSECTIONS. MAXIMUM CROSS SLOPE FOR SIDEWALKS WILL BE 1.5%.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
5-21-09

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3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740

TYPICAL SECTIONS

SCALE: NTS SHEET 2 OF 5

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
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CVL	1014	03	039	
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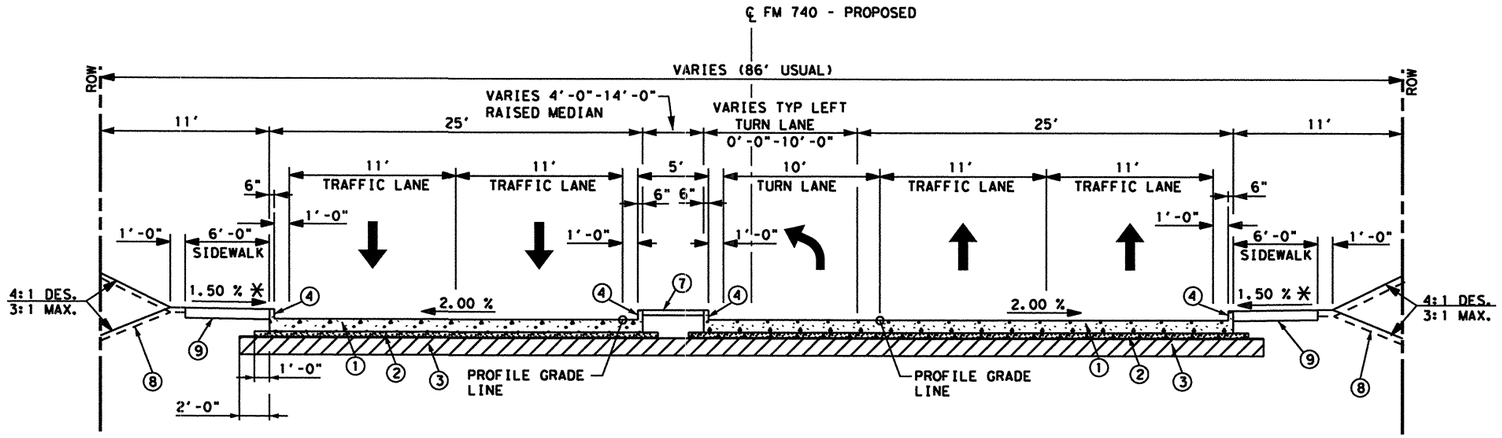
DAN				

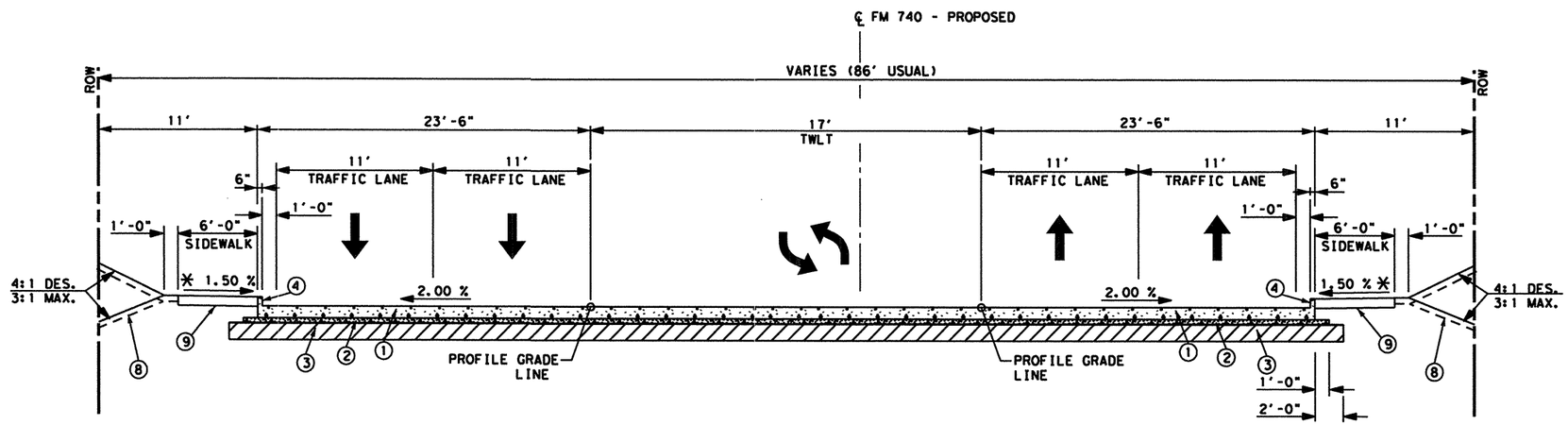


PROPOSED SB LEFT TURN LANE TYPICAL SECTION

NTS

SEE MEDIAN DETAILS SHEETS FOR ADDITIONAL INFORMATION

* NOTE: ADA RAMPS SHALL BE PLACED AT ALL INTERSECTIONS. MAXIMUM CROSS SLOPE FOR SIDEWALKS WILL BE 1.5%.



PROPOSED TWLT TYPICAL SECTION

NTS

STA 26+00 TO STA 30+00

LEGEND

1. 10" CONCRETE PAVEMENT (CRCP)
2. 4" HMAC (TY B) (D-GR HMA (METH) PG 64-22)
3. 14" LIME TREATED SUBGRADE (6% LIME)
4. MONO CURB TY II
5. 10" HMAC (TY B) (D-GR HMA (METH) PG 64-22)
6. 4" HMAC (TY C) (D-GR HMA (METH) SAC-B PG 70-22)
7. 4" COLORED TEXTURE CONCRETE
8. BLOCK SOD WITH 4" COMPOST MANUF TOPSOIL
9. 4" CONCRETE SIDEWALK

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
5-21-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740

TYPICAL SECTIONS

SCALE: NTS SHEET 3 OF 5

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	9
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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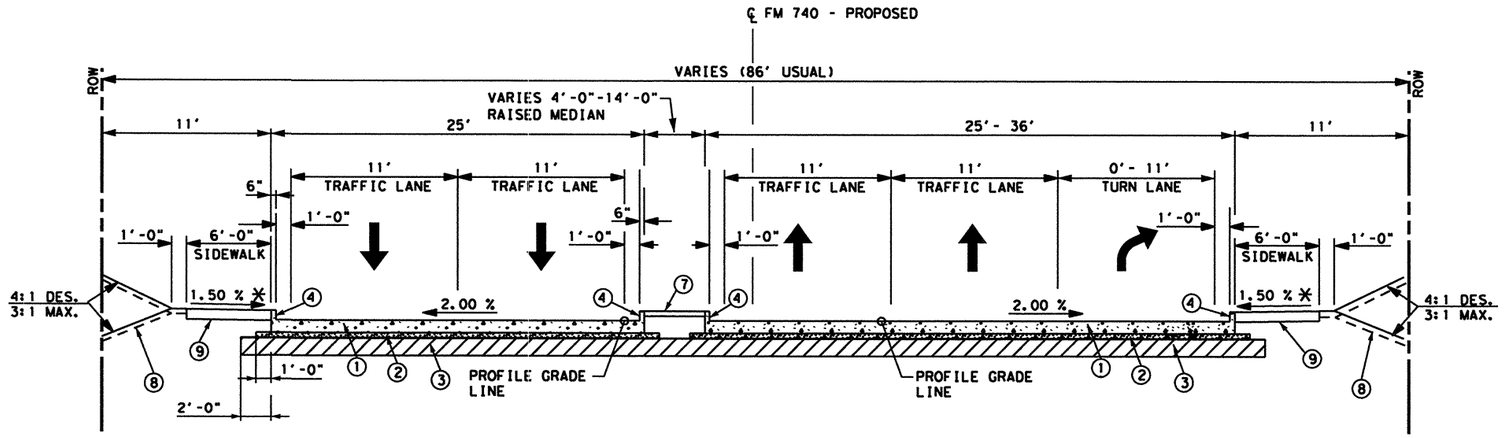
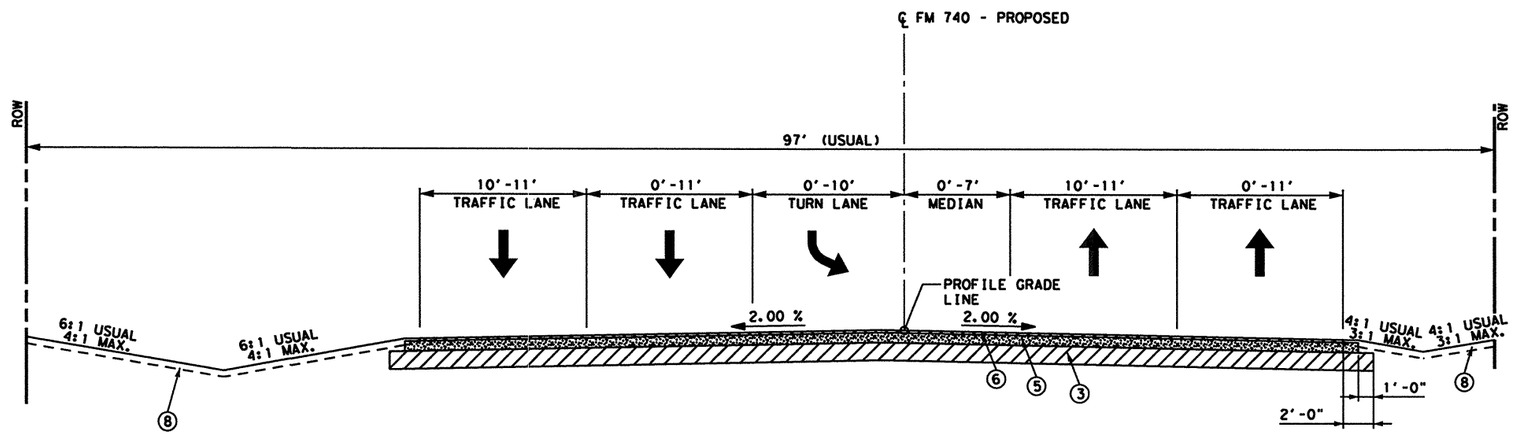


PROPOSED RIGHT TURN LANE TYPICAL SECTION

NTS

STA 49+00 TO STA 53+00

✳ NOTE: ADA RAMPS SHALL BE PLACED AT ALL INTERSECTIONS. MAXIMUM CROSS SLOPE FOR SIDEWALKS WILL BE 1.5%.



PROPOSED TYPICAL SECTION

NTS

STA 142+80 TO STA 147+80

LEGEND

1. 10" CONCRETE PAVEMENT (CRCP)
2. 4" HMAC (TY B) (D-GR HMA (METH) PG 64-22)
3. 14" LIME TREATED SUBGRADE (6% LIME)
4. MONO CURB TY II
5. 10" HMAC (TY B) (D-GR HMA (METH) PG 64-22)
6. 4" HMAC (TY C) (D-GR HMA (METH) SAC-B PG 70-22)
7. 4" COLORED TEXTURE CONCRETE
8. BLOCK SOD WITH 4" COMPOST MANUF TOPSOIL
9. 4" CONCRETE SIDEWALK

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
5-21-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

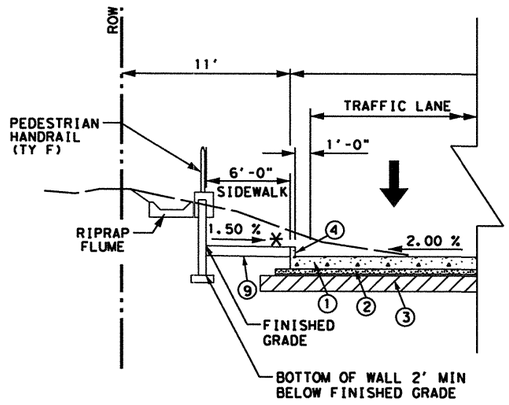
Texas Department of Transportation

FM 740

TYPICAL SECTIONS

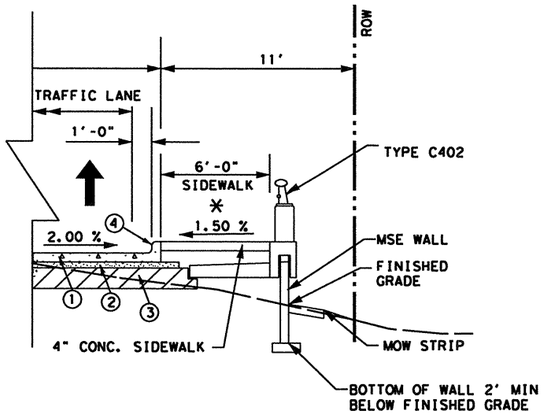
SCALE: NTS SHEET 4 OF 5

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	10
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	



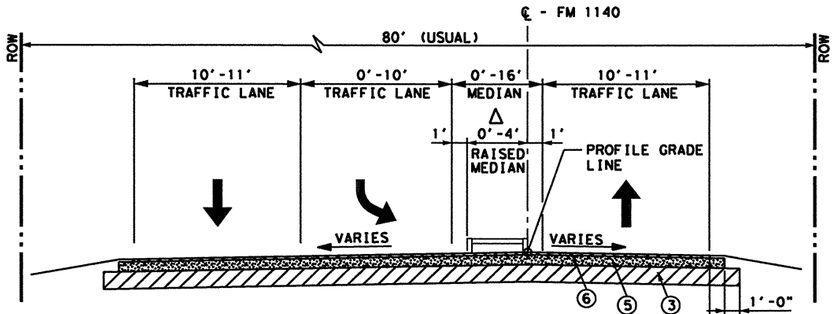
PROPOSED RETAINING WALL TYPICAL SECTION

NTS
FM 740 STA 59+85.81 TO STA 61+65.81 (LT) RET. WALL E2
FM 740 STA 63+35 TO STA 65+70 (LT) RET. WALL E3
FM 740 STA 110+40 TO STA 117+11.92 (LT) RET. WALL E4



PROPOSED RETAINING WALL TYPICAL SECTION

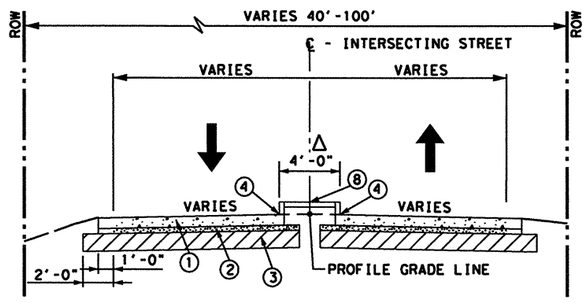
NTS
FM 740 STA 55+35 TO STA 75+16.34 (RT) RET. WALL W1



PROPOSED FM 1140 SECTION

NTS

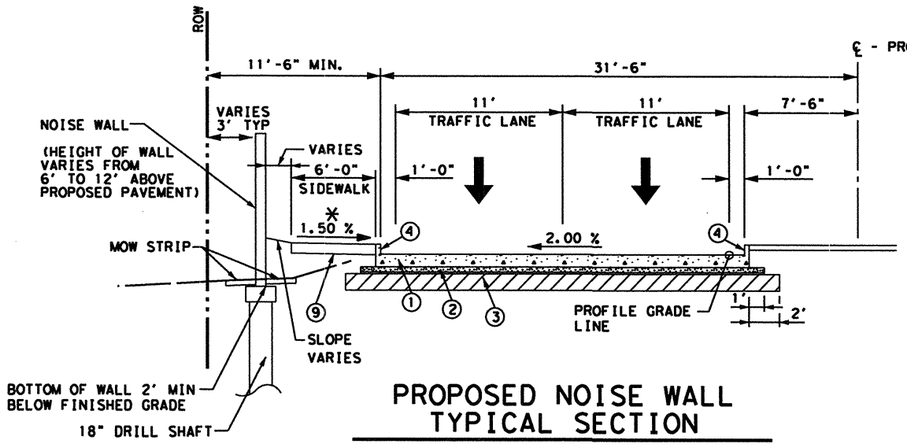
Δ NOTE: SEE INTERSECTION LAYOUT SHEET FOR MEDIAN LIMITS



PROPOSED INTERSECTING STREET SECTION

NTS

Δ NOTE: MEDIAN WIDTHS AND LOCATIONS VARY- SEE INTERSECTION SHEETS FOR MORE DETAILS.



PROPOSED NOISE WALL TYPICAL SECTION

NTS
FM 740 STA 77+42.34 TO STA 84+92.54 (LT) NOISE WALL "C"
FM 740 STA 86+43.63 TO STA 89+23.58 (LT) NOISE WALL "D"
FM 740 STA 98+68.00 TO STA 94+14.81 (LT) NOISE WALL "E"
SEE NOISE WALL LAYOUTS FOR DETAILS

✳ NOTE: ADA RAMPS SHALL BE PLACED AT ALL INTERSECTIONS. MAXIMUM CROSS SLOPE FOR SIDEWALKS WILL BE 1.5%.

LEGEND

1. 10" CONCRETE PAVEMENT (CRCP)
2. 4" HMAC (TY B) (D-GR HMA (METH) PG 64-22)
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3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740

TYPICAL SECTIONS

SCALE: NTS SHEET 5 OF 5

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	//
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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GENERAL NOTES:

SW3P RESPONSIBILITIES

TxDOT Area of Responsibility

Responsible for the area defined by the limits of the subject project, except for those areas utilized and operated by the Contractor. These areas include, though are not limited to, areas used for field offices, equipment and/or material storage, and concrete or asphalt plants.

TxDOT Operational Responsibility

Responsible for seeking coverage under the TPDES Construction General Permit (CGP) and operating the project within the requirements of the CGP for discharging storm water from the subject project and to notify MS4 permit holders of the intent to discharge storm water.

File a Notice of Termination with TCEQ upon completion of the project when the exposed areas have been stabilized with a vegetative cover of at least 70%.

Contractor Area of Responsibility

Responsible for all areas under their direct operational control which includes, though not limited to, areas used for field offices, equipment and/or material storage, and concrete or asphalt plants. These areas may be located on or off the subject project's right of way.

Contractor Operational Responsibility

Responsible for seeking coverage under the TPDES Construction General Permit (CGP) and adhering to all requirements of the permit for discharging storm water from the areas under their operational control. Perform regular inspections, prepare a written report of deficiencies, and repair deficiencies within the time frame set forth by the permit. File a Notice of Termination with TCEQ upon completion of the project when the exposed areas have been stabilized with a vegetative cover of at least 70%.

Responsible under contractual obligations to TxDOT to install, clean, repair, replace or remove sediment and erosion control devices as indicated on TxDOT's Inspection Reports, or as required by daily construction practices, within the time frame set forth by the permit.

Project Number: C 1014-3-39 Sheet: 12

County: Rockwall

Highway: FM 740 Control: 1014-03-039

Specification Data

Table 1: Soil Constants Requirements

Item	Description	Plasticity Index		Note
		Max	Min	
132	Embk(DC) (Type C1)	40	8	1
132	Embk(DC) (Type C2)	25	10	2

Note 1: Material excavated from the project must meet the PI requirements when used in the top 10 feet of embankment that supports the pavement structure or other locations shown in the plans. Do not use shale and obtain approval to incorporate shaley clay produced by the construction project.

Note 2: Use as a non-select embankment backfill as defined under Item 423.2.C.1. Use as an embankment to backfill behind abutments to the extent of the approach slab or to backfill areas enclosed by an abutment and/or retaining walls or other locations as shown in the plans.

Table 2: Basis of Estimate for Permanent Construction

Item	Description	Thickness	Rate		Quantity	
162	Block Sod	N/A			54666	Sy
166 *	Fertilizer (12-6-6)	N/A	500	Lbs/Ac		Ton
168	Vegetative Watering	N/A	140	Mg/Ac	1581	Mg
260	Hydrated Lime (slurry	14"		6% by wt	3517	Ton
310	Prime Coat (MC-30)	N/A	0.20	Gal/Sy	N/A	Gal
340	Hot Mix Asphalt (Ty B)	10"	110	Lbs/Sy/In	2137	Ton
340	Hot Mix Asphalt (Ty B)	4"	110	Lbs/Sy/In	20080	Ton
340	Hot Mix Asphalt (Ty C)	4"	110	Lbs/Sy/In	1035	Ton

* For contractor's information only

Note: (1) Base material weight based on 1.50 Ton/Cy (dry- compacted)
(2) Asphalt weight based on 110 Lbs/Sy/inch
(3) Subgrade weight based on 1.62 Ton/Cy (dry- compacted)

Table 3: Basis of Estimate for Temporary Erosion Control Items

Item	Description	Rate		Quantity	
166*	Fert (12-6-6)	500	Lbs /Ac		Ton
168	Vegetative Watering	140	Mg/Ac		Mg
*For contractor's information only					

Table 4: Hamburg Wheel Test Requirements

High-Temperature Binder Grade	Test Method	Laboratory Mixture Design or Trial Batch	Production and Placement Test[1]
		Minimum # of Passes @ 0.5" Rut Depth, Tested @122°F	Minimum # of Passes @ 0.5" Rut Depth, Tested @122°F
PG 64-22 or lower	Tex-242-F	7,000	7,000

1. The Engineer may accept if no more than 1of the 5 most recent Hamburg Wheel tests is below the specified number of passes and the failing test is no more than 2000 passes below the specified number of passes.

General:

Access will be provided to all business and residences at all times. Materials, labor and maintenance for these temporary accesses will not be paid for directly, but will be considered subsidiary to the various bid items.

The construction, operation and maintenance of the proposed project will be consistent with the state implementation plan as prepared by the Texas Commission on Environmental Quality.

The disturbed area for this project, as shown on the plans is 15.84 acres. However, **the Total Disturbed Area** (TDA) will establish the required authorization for storm water discharges. The TDA of this project will be determined by the sum of the disturbed area in all project locations in the contract, and all disturbed area on all Project-Specific Locations (PSL) located in the project limits and/or within 1 mile of the project limits. The department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction site as shown on the plans, according to the TDA of the project. The Contractor will obtain any required

authorization from the TCEQ for the discharge of storm water from any PSL for construction support activities on or off of the project row according to the TDA of the project. When the TDA for the project exceeds 1 acre, provide a copy of the appropriate application of permit (NOI, or Construction Site Notice) to the Engineer, for any PSL located in the project limits or within 1 mile of the project limits. Follow the directives and adhere to all requirements set forth in the TCEQ, Texas Pollution Discharge Elimination System, Construction General Permit (TPDES, CGP).

This project required permits with environmental resources agencies. There is a high probability that an environmentally sensitive area could be encountered on the contractor designated Project-Specific Locations (PSL) for this project (haul roads, equipment staging areas, borrow pits, disposal sites, field offices, storage areas, parking areas, etc.). Item 7.19.F, "Project-Specific Locations", will provide a listing of regulatory agencies that may need to be contacted regarding this project. This project is authorized under Nationwide Permits No. 3(a) and 12 without coordination with the USACE.

Prior to contract letting, bidders may obtain a free computer diskette or electronic files (from the Engineer's office) that contains the earthwork information. If copies of the actual cross-sections, in addition to or instead of the diskette, are requested, they will be available at the Engineer's office for borrowing by copying companies for the purpose of making copies for the bidder at the bidder's expense. This data is for non-construction purposes only and it is the responsibility of the prospective bidder to validate the enclosed data with appropriate plans, specifications and estimate for the project(s).

Leave all right of way areas undisturbed until actual construction is to be performed in said areas.

Use established industry and utility safety practices to erect poles, luminaries, signs or structures near any overhead or underground utility. Consult with the appropriate utility company prior to beginning such work.

Underground utilities owned by the Texas Department of Transportation may be present within the Right-Of-Way on this project. For signal, illumination, surveillance, and communication & control, call 1-800-DIG-TESS (1-800-344-8377), TxDOT Traffic Signal Office (214-320-6682), and TxDOT Freeway Management Office (214-320-4439) for locates a minimum of 48 hours in advance of excavation. For irrigation systems, call TxDOT Maintenance Landscape Office (214-320-6205) for locates a minimum of 48 hours in advance of excavation. If city or town owned irrigation facilities are present, call the appropriate department of the local city or town a minimum of 48 hours in advance of excavation.

For the project to be deemed complete, permanently stabilize all unpaved disturbed areas of the project with a vegetative cover at a minimum of 70% density for the control of erosion.

Contractor is to notify appropriate Homeowner Associations 48 hours prior to commencing work adjacent to or at the entrances into respective subdivisions.

Repair or replace any structures and utilities that might have been damaged by negligence or a failure to have utility locates performed.

Perform all electrical work in accordance with the National Electrical Code and Texas Department of Transportation Specifications.

Consult with appropriate electric company representatives according to their respective area to coordinate electrical services installations.
Meet weekly with the Engineer to notify him or her of planned work for the upcoming week.

Submit questions prior to letting by e-mail, fax or phone. The questions will be answered in the same format in which they are received.
e-mail: pmorrel @dot.state.tx.us
fax: (214) 320-6655,
phone: (214) 320-4443.

A file containing these questions and answers will be available for review at the area Engineer's office located at Dallas East Area Office, 4777 East Highway 80, Mesquite, TX 75150-6642.

Material On Hand (MOH) will not be used in calculating partial payments for Mobilization.

Submit all shop drawings, working drawings, or other documents which require review sufficiently in advance of scheduled construction to allow no less than thirty (30) calendar days for review and response.

Provide the Engineer with a copy of all DBE subcontractor agreements prior to commencing work.

The following standard detail sheets have been modified:

Item 8: Prosecution and Progress

This Project will be a Five-Day Workweek in accordance with Article 8.3.A.1.

Item 100: Preparing Right of Way

Remove and replace the existing roadway signs as shown on the plans, or as directed, during construction within the right of way.

The limits of preparing right of way will be measured from Sta. 20+94 to Sta. 147+80 along the centerline of construction.

Project Number: C 1014-3-39 **Sheet: 12 B**

County: Rockwall

Highway: FM 740 **Control: 1014-03-039**

Item 104: Removing Concrete

In those areas where the pavement is not to be overlaid, provide a smooth surface after the curb removal. Planing or grinding is considered an acceptable method at these locations. Measurement and payment is in accordance with this item.

Sawing of concrete is not paid for directly, but is considered subsidiary to this item.

Items 104 & 496: Removing Concrete & Removing Structures

Concrete pavement removed as a result of removing the inlets will not be paid for directly but will be considered as subsidiary to Item 496.

Removal of all concrete and structures of the types specified in the plans will be paid for under the pertinent bid item. The removal of other types of obstructions encountered will be paid for under Item 100, if applicable.

Items 105: Removing Stabilized Base and asphalt Pavement

Saw existing asphalt along neat lines where portions are to be left in place temporarily or permanently. Sawing is not paid for directly, but is subsidiary to this item.

Stockpile salvaged material at the following location: Colquitt Road Maintenance Yard.

Properly dispose of unsalvageable material at your own expense.

Items 110 & 132: Excavation & Embankment

Excavation and embankment for driveways, sleeper slabs, alleys and intersections will not be paid for directly, but will be considered subsidiary to this item.

Scarify and loosen the excavated areas, unpaved surface areas, except rock, to a depth of at least 8 inches and compact in accordance with the specifications.

Use an approved laboratory to perform tests for sulfate and plasticity index and provide results on sources outside the right of way at no additional expense to the department. Test soil for sulfate levels in accordance with Tex-145-E. Contact the engineer for a list of approved laboratories. Notify the engineer 72 hours before sampling and testing material. Perform split-sample verification testing with the engineer when directed. The engineer will sample and test material produced by the construction project for specification requirements or material sources specified in the plans.

When lime treatment is allowed to reduce Plasticity Index, apply lime slurry in accordance with Item 260, "Lime Treatment (Road-Mixed)." Furnish material containing sulfate at or below the threshold of 5000 parts per million (ppm). For material with sulfate levels greater than 3000 ppm, allow the mixture to mellow for at least three days, or as directed. The engineer will test material placed or excavated to a depth of one foot

below and laterally to one foot outside the proposed treatment limit. Notify the engineer 48 hours before lime treatment of the material.

Shale is not an acceptable material for embankment. Do not use shaley clays in embankment unless approved in writing.

Perform vertical tracking on slopes to temporarily stabilize soil. Provide equipment with a track undercarriage capable of producing a linear soil impression measuring at least 12 inches in length by 2 to 4 inches in width by ½ to 2 inches in depth. Do not exceed 12 inches between track cleats. Install continuous linear track impressions where the minimum 12 inches in length impressions is perpendicular to the direction of water flow. This will not be paid for directly but considered subsidiary to this item.

Item 132: Embankment

Earth embankment Type C1 and C2, is mainly composed of material other than shale. Furnish material that is free from vegetation or other objectionable material and that conforms to the requirements of Table 1 (Sheet B). If necessary, add lime slurry in accordance with Item 260, "Lime Treatment (Road-Mixed)" in order to meet these requirements. Use Tex-121-E, figure 1, page 5 to calculate the amount of lime required. Furnish material containing sulfate at or below the threshold of 5000 parts per million (ppm). For material with sulfate levels greater than 3000 ppm, allow the mixture to mellow for at least three days, or as directed. Test soil for sulfate levels in accordance with Tex-145-E. Use an approved laboratory to perform tests for sulfate and plasticity index and provide results on sources outside the right of way to the department. Contact the engineer for a list of approved laboratories. Notify the engineer 48 hours before sampling and testing material. Perform split-sample verification testing with the engineer when directed. The engineer will sample and test material produced by the construction project for specification requirements or material sources specified in the plans. The engineer will test material placed or excavated to a depth of one foot below and laterally to one foot outside the proposed treatment limit. Lime treatment and testing of this material will not be paid for directly, but will be considered subsidiary to this item.

Do not use shaley clays in embankment unless approved in writing.

Use embankment material Type C2 described in Table 1 "Soil Constants Requirements" for embankments behind bridge abutments to the extent of the bridge approach slabs, and other embankments enclosed by an abutment and/or retaining walls.

Item 169: Soil Retention Blankets

Hydraulically apply Flexterra FGM or CocoFlex ET-FGM, or install North American Green SC150 or Landlok CS2 for erosion control on the specified slopes or areas in the construction plan.

Water for application, seeding, labor, equipment, tools, supplies, materials, fertilizer and incidentals will not be paid for directly but will be subsidiary to this Item.
Apply as required per manufacturer's recommendations.

Use Tables under Item 164 to determine type of seeds to be used.

Item 260: Lime Treatment (Road-Mixed)

Furnish and distribute MS-2 smoothly and evenly at the rate of 0.20 gallons per square yard to cure lime, as directed.

Provide Commercial Hydrated Lime Slurry and apply lime by slurry placement method.

Item 301: Asphalt Antistripping Agents

Provide liquid antistripping agents unless otherwise directed.

Item 340: Dense-Graded Hot-Mix Asphalt (Method)

Use aggregate that meets the Surface Aggregate Classification (SAC) requirement of Class B.

Minimum requirement for coarse aggregate 5 cycle magnesium sulfate soundness is 25%. Meet this requirement for type C hot mix only.

Provide the engineer the opportunity to witness all mixture design tests. The engineer may require a retest if not given the opportunity to witness.

Dilution of tack is not allowed.

Construct detour pavement using PG binder 64-22 in both Type B and Type C mixtures.

For permanent construction, provide PG binder 64-22 in Type B mixture and PG binder 70-22 in Type C mixture.

Hamburg Wheel test requirements for mixes with PG 64-22 shall meet Table 4. The use of RAP is permitted to meet these requirements.

Item 360: Concrete Pavement

Use of multiple piece tiebars will be required. Provide chairs for multiple piece tiebars, threaded connectors or other adequate devices, used in concrete paving, or tie them to the pavement reinforcing steel. If approved by the engineer for specific areas, in lieu of multiple piece tiebars, drill holes into the pavement and grout straight tiebars in place with epoxy. Use a non-impact, rotary core drill to prevent damage to the pavement unless otherwise directed. Clean the drill holes and then completely fill with epoxy before inserting the tiebar. Do not bend the tiebars or insert them into plastic concrete without the approval of the engineer.

Provide curbs monolithically constructed with the concrete pavement. If continuous monolithic curb has to be temporarily omitted for any reason, provide dowelled curbs in the proposed areas, as detailed in the plans, and apply an approved epoxy resin to the

pavement to receive the curb as directed. This work and materials will not be paid for directly, but is considered subsidiary to this item.

If asphalt curing is used, cure the concrete pavement with MS-2.

Stockpile the concrete aggregates at the plant site.

Provide pavement widening joints, as detailed in the plans, at all locations where concrete pavement is placed adjacent to existing concrete pavement. Installation of these joints is not paid for directly, but is considered subsidiary to this item.

Payment for furnishing and installing the pre-molded expansion joint material between the retaining walls and concrete pavement is not paid for directly, but is considered subsidiary to this item.

Provide a curing machine equipped with rubber tires, or other acceptable arrangement, so that the machine will span the pavement and monolithic curb.

Curb transition is paid for as Type II curb.

The installation of curb openings is not paid for directly, but is considered subsidiary to this item.

Place construction, sawed and contraction joints in accordance with the pavement detail sheet and as directed. Joint locations, other than as shown on the plans, are subject to approval. Pavement leaveouts are required on this project as necessary to provide for traffic at driveways and side streets as shown in the plans or as directed. The cost of providing these leaveouts, including the construction of a suitable crossover connection at each site, is not paid for directly but is considered subsidiary to this item.

If a traveling form paver is used, provide one equipped with an electronically operated horizontal control device.

Provide tiebars in longitudinal joints but do not place them within 15 inches of transverse joints.

Use "mechanical steel placing equipment" at the discretion of the engineer.

Provide Class HES concrete. Design Class HES to meet the requirements of Class P and a minimum average flexural strength of 400 psi or minimum average compressive strength of 2600 psi in 24 hr.

Item 360 & 421: Concrete Pavement & Hydraulic Cement Concrete

Contractor personnel performing job-control testing on concrete must be ACI- Certified. Provide a copy of certification paper to the Engineer upon arrival and before testing at job site. Furnish hard copies of calibration reports for testing equipment when non-TxDOT approved equipment is used to test concrete.

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County: Rockwall

Highway: FM 740 **Control: 1014-03-039**

The engineer may allow the use of local commercial laboratories under contract to provide these services.

Item 400: Excavation and Backfill for Structures

Structural Excavation is not paid for directly but is considered subsidiary to pertinent Items.

When placing concrete storm drain pipe on slopes of greater than 10 percent, provide cement stabilized backfill to a depth shown on the plans. The aggregate shall conform to the requirements of Article 421.2.E.2.

Item 416: Drilled Shaft Foundations

Provide a smooth finish for all portions of drill shafts extending above proposed ground. Include cost for this work in the unit bid price for this item.

Item 420: Concrete Structures

Apply an ordinary surface finish to all concrete surfaces within 30 days after form removal unless otherwise noted.

Item 421: Hydraulic Cement Concrete

Furnish mix designs to the Engineer in a format compatible to the latest version of the Department's Construction Management System (Site Manager). Mix Design templates will be provided by the Engineer.

Provide sulfate resistant concrete for box culverts and drill shafts. High performance concrete meets the requirement for sulfate resistant concrete when Class C fly ash and Type I cement is not used in the mix design.

Strength evaluation using maturity testing, Tex-426-A, may be used for all concrete elements except drill shafts and mass concrete pours.

Maturity meters may be used for temperature gradient determination in mass concrete pours.

Air-entrain all concrete except for Class "B" and concrete used in drilled shafts. For structural concrete, if the air content is more than 1.5% below the required air, follow manufacturer recommendations to add the necessary approved air bags to increase the air content at the job site. Limit the adding of air bags in the field to one trial. Do not reject the load of concrete due to low air content; accept concrete based on strength tests.

Provide a digital hydraulic compression testing Machine and accessories. The machine shall have a minimum testing range of 2500 pounds force to 250,000 pounds force with

a hydraulic switching valve to allow for rapid advancing, hold, controlled advancing and rapid retracting. The machine shall have a load cell to measure compressive forces within the testing range and shall be calibrated and verified in accordance with ASTM latest version.

Item 423: Retaining Walls

For Mechanically Stabilized Earth (MSE) walls, provide a system from one of the following approved suppliers:

Reinforced Soil Embankment Walls
Texas Welded Wire, Inc.
645 W. Hurst Blvd.
Hurst, Texas 76053
Tel: 817-282-4560

Reinforced Earth Walls
The Reinforced Earth Company
1331 Airport Freeway, Suite 302
Euless, Texas 76040-4150
817-283-5503

Retained Earth Walls
Foster Geotechnical
901 North Highway 77
Hillsboro, Texas 76645
254-580-9100

Stabilized Earth Wall
T&B Structural Systems, Inc.
6800 Manhattan Blvd., Suite 303
Fort Worth, Texas 76120
817-280-9858

Strengthened Earth Walls
Hanson Concrete Products
3500 Maple Ave.
Dallas, Texas 75219
214-525-5877

Strengthened Soil Walls
Shaw Technologies Inc.
P.O. Box 271448
Flower Mound, Texas 75027
972-490-1924

Tensar Retaining Wall System
Tensar Earth Technologies, Inc.
5775-B Glenridge Drive
Atlanta, Georgia 30328
404-250-1290

Tricon Retained Soil Walls
Tricon Precast, Inc.
15055 Henry Rd.
Houston, Texas 77060
713-931-9832

VP Wall System
Valley Prestress Products, Inc.
P.O. Box 1367
Mission, Texas 78573
956-584-5701

Unless otherwise noted in the plans, the top of the leveling pad is located 2 feet below the proposed ground.

Square foot surface area of retaining wall is measured from the top of retaining wall to the top of the leveling pad. Footing adjustments made to accommodate the available optional retaining walls are not measured.

Project Number: C 1014-3-39 **Sheet: 12 E**

County: Rockwall

Highway: FM 740 **Control: 1014-03-039**

Unless otherwise shown on the plans, provide Type A backfill as defined under this item for permanent MSE walls not subject to inundation. Unless otherwise shown on the plans, provide type D backfill as defined under this item for walls subject to inundation.

Supply drainage aggregate meeting the requirements of this item for use as filter material with the retaining wall.

Cement-Stabilized Backfill (CSB) is not permitted.

RAP is not acceptable as backfill for MSE retaining walls.

Unless otherwise noted on the plans, provide flowable backfill meeting the requirements of Item 401 between the back of panels and inlets or drainage pipes where the required compaction can not be achieved. Flowable backfill used for this purpose is subsidiary to this item.

Provide earth reinforcements with a length greater than or equal to 70 percent of the wall height or 8 feet whichever is greater.

Submit design calculations supporting the details necessary to incorporate coping, railing, inlets, drainage, electrical conduits and any additional necessary features.

The contractor has the option of constructing any of the types of retaining walls for which details and specifications are included in the plans. Footing adjustments made to accommodate the available optional retaining walls are not measured. Regardless of option or options chosen, use the same facia pattern throughout the entire project, including cast in place full height retaining walls or retaining wall type abutments.

Submit detailed drawings depicting the patterns and matching of precast with cast-in-place for approval.

At contractor's expense, repair all damage to the precast units (such as chips) as required to match the facia pattern.

Use Embankment Type C2 as non-select embankment backfill as defined under Item 423.2.C.1.

Items 423 & 427: Retaining Walls & Surface Finishes for Concrete

Unless otherwise noted on the plans, provide a stone pattern finish on all retaining walls and retaining wall type bridge abutments. Supply form liners providing a finish similar to that derived from form liner Pattern 30673 or 30671, "Old Ashlar Stone" by Symons Company, #908 BQE "Old Cut Ashlar Stone" by Architectural Polymers Inc. or equal.

For cast in place walls, cast the top two feet smooth.

For retaining wall and noise wall colors, see table under "Item 427".

Item 427: Surface Finishes for Concrete

Finish concrete structures surface area I with an opaque sealer of the color(s) shown elsewhere in the plans in accordance Item 427. Provide 4' x 4' sample in the field of color for approval by Engineer prior to proceeding with overall finish.

Ensure that surfaces are free of weak surface material, curing compounds and other surface contaminants prior to coating.

FORM LINER FINISHES: Place architectural concrete treatments as shown. Placement is subsidiary to this item.

Where used, provide fractured fin/ribs/striations that are continuous with no apparent curves or discontinuities. Variations of the fractured ribs from true vertical exceeding ¼" for each 4'-0" of panel height are not acceptable.

Provide form liners that release without leaving pieces of liner material on the concrete and without pulling or breaking concrete from the textured surface. Provide form release agents as recommended by the manufacturer. Replace form liners as directed that have become damaged or worn. Replacement of form liners is considered incidental to the work and no additional compensation is provided.

No horizontal splices in the form liner are permitted. Vertical splices may occur only in valleys between fractured ribs.

Provide sample panels a minimum of ten days in advance of starting construction of the textured concrete surfaces. Construct sample panel(s) in accordance with Item 427.4.B.2.d "Form Liner Finish" using each type of approved form liner. Sample panels must meet the requirements of the plans and specifications and be approved before any construction form liners may be ordered, obtained or used. Provide panels having a textured portion at least 5'-0" by 5'-0" with a representative un-textured surrounding surface. If directed, construct and finish additional test panels until a satisfactory concrete surface texture is obtained.

The approved sample panel is the standard of comparison for the production concrete surface texture. If directed, build a new test panel to demonstrate acceptability of any proposed change in construction method.

Tool or replace areas requiring surface treatment that do no match their associated sample panels. Upon completion, tooled or replaced panels must match the associated sample panel. Tooling or replacement is at the contractor's expense.

Joint reveal details and location may vary slightly from what is shown to match the adjacent MSE walls as directed. No additional compensation will be allowed.

Unless otherwise noted, it is the intent of these plans that all exposed surfaces (concrete or steel) of bridges, retaining walls, noise walls, concrete traffic railing and concrete

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traffic barrier be given a tinted coating as shown or as directed. Such coating shall meet the applicable provisions of Item 427 or Item 446.

Use Federal Standard 595B colors with individual elements receiving the colors shown in the following table

Element	Color	Specification Number
Striated retaining wall surfaces	DARK BEIGE	20450
Retaining wall coping and other components except striated surfaces	LIGHT BEIGE	23717
Concrete rail parts	LIGHT BEIGE	23717
Noise walls and associated components		
Base Color	SANDSTONE	27769
"Rock" Color 1	MUSTARD BROWN	20266
"Rock" Color 2	DARK BROWN	20095
"Rock" Color 3	MEDIUM BEIGE	23448

Item 428: Concrete Surface Treatment

Provide a Class I surface treatment.

Item 442: Metal for Structures

Use temperature Zone 1 for CVN testing.

Item 464: Reinforced Concrete Pipe

The concrete collars and the connections of pipes to existing or proposed concrete boxes or pipe will not be paid for directly but will be considered subsidiary to the various bid items.

At locations where storm drains dead-end, plug with a concrete plug of a thickness equal to 1 ½ inches per foot of diameter of pipe with a minimum thickness of 3 inches. The cost of the plugs shall be included in the unit price bid per foot of the various storm drain pipes.

Item 471: Frames, Grates, Rings, and Covers

Tackweld all inlet grates and manhole covers to the frame with two 1-inch welds. Supply un-painted cast iron inlet grate and frame and/or cast iron manhole frame and cover.

Item 479: Adjusting Manholes and Inlets

Accept ownership of inlet grates and manhole covers and properly dispose of them outside the limits of the right of way in accordance with federal, state and local regulations.

Submit a plan detailing proposed methods of handling phased construction at manholes and water valves.

Payment for the phase construction will be considered subsidiary to this item.

Item 496: Removing Structures

Inlet grates and manhole covers become the property of the contractor for disposal.

Items 496 & 506: Removing Structures & Temporary Erosion, Sedimentation, and Environmental Controls

When demolishing a structure/s that span the Waters of Texas or a designated wetland, take all practicable precautions to prevent debris from being discharged into the water or within the boundaries of the wetland. Install Best Management Practices before demolition begins and maintain them during the demolition. Remove any debris or construction material that escapes containment devices and are discharged into the restricted areas, before the next rain event or within 24 hours of the discharge.

Item 502: Barricades, Signs, and Traffic Handling

Provide written proposed lane closure information by 1:00 pm on the business day prior to the proposed closures. Do not close lanes when this requirement is not met.

When excavation is required next to a pavement lane carrying traffic and the widening is not completed by the end of the work day, backfill against the edge of the pavement with at least a 3:1 slope using an acceptable material to support vehicular traffic. Carefully remove and dispose of this material when work resumes. Backfilling pavement edges, and the materials required for the work will be subsidiary to this item.

Erect a Type III barricade immediately in front of or at each end of all stockpiles that are less than 30 feet from the edge of any traveled lane. Place one Type 2 Object Marker (OM-2Y) alongside the stockpile for every 100 feet of stockpile length.

Place barricades and signs in locations that do not obstruct the sight distance of drivers entering the highway from driveways or side streets.

Provide rectangular shape (CW12-2P) Temporary Clearance Signs on all bridges where the existing vertical clearance has changed. Install Signs to the satisfaction of the Engineer prior to opening to traffic. Plywood sign blanks will have minimum dimensions of 84" X 12". Work performed and materials are subsidiary to this item.

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Do not commence work on the road before sunrise. Do not operate or park any equipment/machinery closer than 30 feet from the traveled roadway after sunset unless authorized by the engineer.

When moving unlicensed equipment on or across any pavement or public highways, protect the pavement from all damage using an acceptable method.

If required, provide uniformed off duty police officers and squad cars during lane or ramp closures, night time work or other situations that indicate a need for additional traffic control to protect the traveling public or the construction workforce. Provide documentation such as payroll, log sheets with signatures and badge number, or invoices from the government entity providing the officers for reimbursement. Reimbursement will not be made for coordination fees charged by the police department.

Traffic Control Plans with Lane Closures causing backups of 20 minutes or greater in duration will be modified by the Engineer.

Limit lane closures along FM 740 to the hours between 9:00 am and 3:30 pm. Work in other areas of the project is not restricted to this time frame.

Item 504: Field Office and Laboratory

Furnish one Field Office and a Laboratory (Type B) at the project site, one Field Laboratory (Type A) at the concrete batch plant and one Asphalt Mix Control Laboratory (Type D) at the asphalt mixing plant.

Meet the dimensional requirements specified for a Field Laboratory (Type A) for the Asphalt Mix Control Laboratory (Type D).

Provide one local phone line to the field office. Supply one phone jack and one telephone per each room in the field office. The cost of the phone installation and various monthly phone service charges will be the contractor's responsibility.

Parking shall be provided for 8 vehicles, chain link fencing will be provided around the field office and parking areas.

Provide an all in one printer/scanner/fax/copier with software that is compatible with TxDOT equipment, cost not in excess of $300. This is subsidiary to the bid item.

Item 506: Temporary Erosion, Sedimentation, and Environmental Controls

If temporary construction stream crossings are allowed under a Nationwide Permit, submit in writing for approval the type and location of each temporary stream crossing. Use temporary bridges, timber mats, or other structurally sound and non-eroding material for temporary stream crossings. A temporary culvert crossing will consist of storm sewer pipes and 4- to 8-inch nominal size rock. Temporary stream crossings must not cause more than minimal changes to the hydraulic flow characteristics of the

stream, increase flooding, or cause more than minimal degradation of water quality. Remove the temporary stream crossings in their entirety and return the affected areas to their pre-existing elevation. All work and materials use for temporary construction stream crossings will not be paid for directly but are subsidiary to pertinent Items.

SW3P Maintenance Reports are made every seven calendar days. Make corrections as soon as possible before the next anticipated rain event or within seven calendar days after being able to enter the site to work for each BMP. A BMP site being "Too Wet to Work" is the only acceptable reason for not accomplishing the corrections with the seven calendar day time limit and should be thoroughly documented on Form 2118. If maintenance corrections are not made within this time frame then all work will cease, time charges will continue until SW3P is brought into compliance and is documented on Form 2118 after TxDOT review.

This in no way releases the contractor of liability for noncompliance.

Obtain from the Engineer a copy of the project's TPDES Storm Water Program and Notice of Intent or Construction Site Notice. Laminate the sheets and bond with adhesive to 36" X 48" plywood sign blanks. Ensure the sheets remain dry. Apply Type C Blue reflective sheeting as the background and add the text "SW3P" in 5" white lettering, centered at the top. Attach the signs to approved temporary mounts and locate at each of the project limits or as directed by the Engineer. SW3P Signs, maintenance, and repostings will be subsidiary to Item 502.

Item 508: Constructing Detours

Testing of materials used in the construction of a temporary detour may be waived when approved by the Engineer.

Item 512: Portable Concrete Traffic Barrier

Contact Chris Johnson at 972-962-3617 to pick-up and return concrete traffic barrier from the storage area located at Colquitt Road Maintenance Yard. Number and repair concrete traffic barrier prior to returning to stockpile area. Provide necessary connection hardware for installation of concrete traffic barrier. Retain possession of connection hardware provided for this project. Remove damaged barrier from the project. This work is subsidiary to Item 512.

Item 529: Concrete Curb, Gutter, and Combined Curb and Gutter

Provide grooved joints at 10-foot intervals and ¾ inch expansion joint material for doweled curb at the same locations as on the existing pavement.

Curb and Gutter transitions will be paid for by the foot at the unit price for the corresponding curb or curb and gutter section.

Saw joints at the same location as on the existing pavement.

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Item 530: Intersections, Driveways, and Turnouts

Provide Class "HES" concrete for concrete intersections and driveways listed or shown on the plans.

Item 536: Concrete Medians and Directional Islands

Use Class "B" concrete for concrete medians and directional islands.

Item 542: Removing Metal Beam Guard Fence

Take possession of the salvaged metal beam guard fence removed for this project.

Item 585: Ride Quality for Pavement Surfaces

Use Surface Test Type A on all intersections and driveways.

Use Surface Test Type B pay adjustment schedule 2 on the travel lanes.

Item 610: Roadway Illumination Assemblies

Use luminaire ballasts rated for operation at 240 volts.

When luminaires are to be installed on mast arm poles, provide a separate terminal strip in the signal pole access compartment. Use a 4 circuit Buchanan Type 104SN, Kulka Type 985-GP-4 CU, or equivalent.

Item 618: Conduit

The location of conduits and ground boxes are diagrammatic only and may be shifted to accommodate field conditions as directed.

Secure permission and approval from the proper authority prior to cutting into or removing any sidewalks or curbs for installation of this Item.

When holes are drilled through concrete structures, use a coring device. Do not use masonry or concrete drills.

Structurally mount junction boxes as shown on the plans. When used for traffic signal installations, use boxes 12"x12"x8", or as approved.

Use conduit hangers for 3 inch and larger conduit when hanging conduit from structures.

Place conduit under existing pavement by an approved boring method. Do not place boring pits closer than 2 feet from the edge of the pavement unless otherwise directed. Do not use water jetting. When boring is used for under pavement conduit installations, the maximum allowable over-cut is 1" in diameter. When conduits are bored, do not

exceed 18 inches in the vertical and horizontal tolerances as measured from the intended target point.

Do not use a pneumatically driven device for punching holes beneath the pavement (commonly known as a "missile").

Furnish and install a non-metallic pull rope in conduit runs in excess of 50 feet.

Use a colored cleaner-primer on all PVC to PVC joints before application of PVC cement.

Seal all conduit ends with a permanently soft, non-toxic duct seal. Use a duct seal that does not adversely affect other plastic materials or corrode metals.

Furnish and install non-metallic pull ropes in conduit installed for future use and cap using standard weather-tight conduit caps, as approved. This work will not be paid for directly, but is subsidiary to this Item.

Item 620: Electrical Conductors

When two or more conductors are present in one conduit or enclosure, identify the conductors as shown in the "Electrical Details" (ED) standard sheets. If the identification tag with two plastic straps is too large for the conductors, use a tag with a single plastic strap if approved. On each tag indicate the circuit number, letter, or other identification as shown on the plans.

Do not use non-certified persons to perform electrical work. See Item 7.15 "Electrical Requirements" for additional details.

Item 624: Ground Boxes

When using existing ground boxes, ensure that the ground boxes are clean, properly secured, and have a minimum of 9 inches of gravel as a base. This work will not be paid for directly, but is subsidiary to this Item.

Ground all junction boxes mounted on bridges and underpasses with a ground rod.

Item 627: Treated Timber Poles

Use the timber pole heights, as shown on the plans and in the material summary, for bidding purposes only. Coordinate pole locations, and make field measurements before construction to ensure a vertical clearance of 17 to 19 feet from the highest point on the roadway surface to the span. In addition, place the signal heads a minimum of 40 feet and a maximum of 180 feet from the stop line. If the nearest signal must be more than 180 feet from the stop line, place a supplemental near-side signal head. Determine the field measurements and elevations from the actual field location of the poles, considering all above and below ground utilities and existing roadway elevations.

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Item 628: Electrical Services

Contact the appropriate utility company during the first three weeks of the project lead-time period to allow adequate time for any necessary utility adjustments, transformer installation, etc.

Label the service enclosures indicating service address as well as all required information as shown on the Electrical Detail (ED) standard sheets. Labeling shall be silk screening or other acceptable method. This work will not be paid for directly, but is subsidiary to this Item.

When concrete for service pole foundations is required, use Class A in accordance with Item 421, "Concrete for Structures", except consider the concrete subsidiary to Item 628 for payment purposes. When reinforcing steel for service pole foundations is required, it will be in accordance with Item 440,"Reinforcing Steel", except consider the steel subsidiary to Item 628 for payment purposes.

Use only white insulated wire for neutral wire.

Bill the electrical service power usage to the Texas Department of Transportation.

Item 636: Aluminum Signs

Affix a sign identification decal to the back of all signs in accordance with item 643.

Existing City of Rockwall and City of Heath Street signs removed during construction are to be stored until such time as they can be remounted on new sign posts. This work is subsidiary to Item 644.

Items 644: Small Roadside Sign Supports and Assemblies

Prior to taking elevations to determine lengths for fabrication of sign posts and/or sign support towers, obtain verification of all proposed locations.

Provide field galvanizing and metalizing equipment, as per Item 445, at all times and make repairs to galvanized surfaces according to the above specification item at intervals as directed.

Base all sign support quantities for pipe and structural steel on the dimensions shown the approved shop drawings or as approved in writing. Make calculations for measurement of the sign support quantities form the approved shop drawing in accordance with Article 9.1 of the standard specifications. Measure increases or decreases in quantities caused by changes in design after the shop drawings are approved as specified and revised quantities will be the basis for payment.

After sign supports with signs attached have been erected, wash individual units requiring cleaning with an approved cleaning solution to remove all grease, oil, dirt, smears, streaks, and other foreign particles.

Item 656: Foundations for Traffic Control Devices

Form a 3/4-inch chamfer on the top edge of each signal pole foundation.

Probe for utilities and underground structures prior to drilling foundations. Foundations shall be paid for once regardless of extra work caused by obstructions.

Item 666: Reflectorized Pavement Markings

Provide Type III Glass Traffic Beads that meet the requirements of Departmental Materials Specifications DMS-8290.

Item 672: Raised Pavement Markers

Black adhesive will be used on asphalt pavements. White adhesive will be used on concrete pavements.

Item 677: Eliminating Existing Pavement Markings and Markers

Grinding of pavements is not allowed to eliminate pavement markings.

Placement of paint or thermo is not allowed to eliminate pavement markings.

Strip seal is the only acceptable method for eliminating permanent pavement markings.

Item 680: Installation of Highway Traffic Signals

Requirements for this Item include the following work, all of which are subsidiary to this Item:

1. Furnish and install all sign panels for mounting on signal poles, mast arms, and span wires. Fabricate the sign panels in accordance with Item 636, and mount with Astro-Sign Brac, Signfix aluminum channel, or equal as approved by the Engineer. Submit five (5) sets of shop drawings for street name signs.
   Install the sign panels supplied for mounting on signal poles, mast arms, and span wires. Furnish and install all other signs in accordance to Item 636. Furnish all mounting hardware for all signs. Mount signs with Astro-Sign Brac, Signfix aluminum channel, or equal as approved by the Engineer.
2. Provide submittal literature for all traffic signal equipment before installation.
3. Have a qualified technician on the project site to place the traffic signal in operation.
4. Use qualified personnel to respond to and diagnose all trouble calls during the thirty-day test period. Repair any malfunction to Contractor-supplied signal equipment. Provide to the Engineer a local telephone number, not subject to frequent changes and available on a 24-hour basis, for reporting trouble calls. Response time to reported calls must be less than 2 hours. Make appropriate repairs within 24 hours. Place a logbook in the controller cabinet and keep a record of each trouble call

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reported. Notify the Engineer of each trouble call. Do not clear the error log in the conflict monitor during the thirty-day test period without approval.

5. Install the Opticom equipment supplied by the City of Heath and Rockwall.
6. Furnish and install two new eight-phase NEMA TS2 Type 2 controllers, meeting the requirements of Departmental Materials Specifications DMS-11170. Provide the cabinet (NEMA TS2 Type 1) with an "A" connector harness (for NEMA TS2 Type 2 controller). Provide detector panel toggle switches that additionally permit the user to disconnect the detector. For a ground-mount cabinet, provide cabinet configuration 4 (16 position load bay) in a TS2 Size 6 cabinet. For a pole-mount cabinet, provide cabinet configuration 3 (12 position load bay) in a TS2 Size 5 cabinet. For a pole-mount controller, install a 5'x5'x4" Class A concrete pad under the pole-mounted controller cabinet in accordance to Items 420 and 421. Install a 1 inch RM conduit from the cabinet to the nearest ground box for the phone line.
7. Connect all field wiring to the controller assembly. The District will assist in determining how the detector loop lead-in cables are to be connected, and will also program the controller for operation, hook up the conflict monitor, detector units, and other equipment, and turn on the controller. Have a qualified technician and a representative from the controller supplier on the project site to place the traffic signals in operation.
8. Install the controller cabinet in an orientation as directed.
9. Deliver the cabinet, controller, and accessories to the District Signal Shop, 4777 E Hwy 80, Mesquite. Notify the District Signal Shop two working days before delivery at (214)320-6682.
10. Prevent any damage to property owner's poles, fences, shrubs, mailboxes, etc. Protect all underground and overhead utilities and repair any damage. Provide access to all driveways during construction.
11. Integrate the proposed traffic signal(s) with the existing closed-loop system to make one system linked by hardwire (or wireless (spread spectrum radio)) communication as shown on the plans. Signal monitor communications are part of the closed-loop system. Provide communication between the master controller unit and any controller linked by either hardwire or radio that is transparent to the communication media. The existing closed-loop system consists of (Econolite Controllers) and Encom spread spectrum radios. Ensure that all controller units on the proposed closed-loop system are compatible to allow for proper closed-loop operation. The existing controller units on the proposed system are located at:

    1. FM 740 and Yellow Jacket, Rockwall, TX
    2. FM 740 and White Hill, Rockwall, TX
    3. FM 740 and IH-30, Rockwall, TX
    4. FM 740 and Steger Towne, Rockwall, TX
    5. FM 740 and Horizon, Rockwall, TX
    6. FM 740 and Summer Lee, Rockwall, TX
    7. FM 740 and Henry Chandler, Rockwall, TX
    8. IH-30 and Horizon, Rockwall, TX
    9. FM 3097 and Ralph Hall, Heath, TX
    10. FM 549 and SH-66, Heath, TX
    11. FM 549 and IH-30(N), Rockwall, TX
    12. FM 549 and IH-30(S), Rockwall, TX

13. FM 549 and IH-276, Heath, TX

12. Notify the District Signal Maintenance Office at (214)320-6682 and Construction Office at (214)320-6694 one week before beginning any work involving traffic signals.
13. Furnish a spare base-mount compatible with new cabinet.

Item 681: Temporary Traffic Signals

Requirements for this Item include the following work, all of which are subsidiary to this Item:

1. Re-guy signal heads and re-strap the cable after making adjustments to head locations. Accomplish relocation of signal heads and re-zone detectors for a phase change during the same day.
2. Relocate existing street name signs from existing to the temporary signal.
3. Provide submittal literature for all traffic signal equipment before installation.
4. Furnish and install ~~two~~ new eight-phase NEMA controllers meeting the requirements of Departmental Materials Specifications DMS-11170, in ~~\~~ pole base mounted cabinets. Provide a pole-mounted cabinet that is 38 inches wide, 54 inches high, 26 inches deep, and that has three brackets for pole mounting.
5. Operation and maintenance of the temporary signal includes repair of Contractor-supplied equipment, providing of telephone number to the District for trouble calls, adjustment of timing, and the generation and implementation of traffic signal timing during all phases of the project. Make traffic turning movement volume counts on weekdays between 6 AM and 9 AM, between 11 AM and 1 PM, and between 4 PM and 7 PM and on Saturday and Sunday between 10 AM and 4 PM to generate the signal timing. Signal may be required to operate fixed-time. Use the timing plan generation software known as "Synchro" to generate the timing cycle lengths and splits. Prepare the timing plan under the supervision of a registered Traffic Engineer, and submit for approval. Load the approved timing plan into the controller and fine-tune the timing with field observations. Make timing adjustments for capacity and roadway alignment changes.
6. Install the Opticom equipment supplied by the City of Rockwall.

Item 682: Vehicle and Pedestrian Signal Heads

Install signal head attachments so that the wiring to each signal head passes from the mast arm through the attachment hardware to the signal head. Do not leave cable or wiring exposed.

Provide signal head attachments that allow for adjustment about the horizontal and vertical axis.

Provide aluminum signal heads and aluminum tubing in the following color: Federal Yellow #13538 of Federal Standard 595. Provide back plates, louvers, and the inside of visors with a flat black finish. Provide polycarbonate back plates for all traffic signal heads.

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Turn down signal heads or cover with burlap or other material, as approved, until traffic signal is placed in operation.

Mount signal heads level and plumb and aimed as directed.

Provide louvers that have 5 vanes and a flat black finish on the inside surfaces. Securely fasten a hardware cloth screen with 5/8 inch or smaller mesh size to the front face of each louver to prevent entry by birds.

Item 684: Traffic Signal Cables

Provide stranded 14 AWG Type A signal cables

Provide a separate multi-conductor signal cable (14 AWG) inside pedestal poles and signal poles from the terminal strip to each signal head as shown on the plans.

Identify each cable as shown on the plans (cable 1, etc.) with permanent marking labels (Panduit Type PLM standard single marker tie, Thomas&Betts Type 548M, or equal) at each ground box, pole base, and controller.

Item 686: Traffic Signal Pole Assemblies (Steel)

Provide 12 circuit Buchanan Type 112SN, Kulka Type 985-GP-12 CU, or equal terminal strips in the signal pole access compartment. Provide additional terminal strips of 8 circuits each when more than 12 circuits are required.

Mark pole shafts and mast arms with the identification numbers from the plans to facilitate field-assembly. Identify pole shafts and mast arms by intersection for projects with multiple intersections.

Provide nuts on top and bottom (double nuts) of the base plate as shown on the plans. Set anchor bolts for mast arm signal poles and strain poles so that two are in tension and two are in compression. Obtain approval of anchor bolt placement before placing concrete.

Use the traffic signal pole heights and mast arm lengths shown on the plans and in the material summary for bidding purposes only. Make field measurements to determine the actual pole height and mast arm length required. Provide vertical clearance of 17 to 19 feet from the roadway to the lowest point of the signal head or mast arm. Place signal heads 40 feet minimum and 180 feet maximum from the stop line. If the nearest signal is more than 180 feet from the stop line, place a supplemental near-side signal head. Determine the field measurements and elevations from the actual field location of the poles, considering all above and below ground utilities and existing roadway elevations.

Provide vibration dampers for mast arms 28 feet long and longer. Use dampers 18"x48" for arms up to 48 feet long, and 16"x66" for longer mast arms. Install using Astro-sign

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Brac, Signfix aluminum channel, or equal, at a maximum of 3 feet from the end of the mast arm.

For existing signal poles, replacement of existing conductors is not required inside the poles.

Provide 3 pipe plugs for wiring access on strain poles.

Item 687: Pedestal Pole Assemblies

Use a 24 inch drilled shaft foundation for all pedestal pole assemblies.

Item 688: Pedestrian Detectors and Vehicle Loop Detectors

Provide pedestrian push button assemblies that have permanent-type signs within the detector unit which indicates which crosswalk signal is actuated. Provide push buttons with a minimum 2 inch convex plunger. Provide a protective shroud encircling the plunger to deter vandalism that is cast as part of the housing cover. Use a plunger that protrudes beyond the shroud a distance adequate to accommodate the switch travel. Verify the location of the push button assemblies and the direction of the arrows on the signs prior to installation.

Item 730: Roadside Mowing

Mow non-paved areas within the project prior to placement of permanent vegetation. Mow up to eight (8) cycles per growing season.

Item 6006: Spread Spectrum Radios for Traffic Signals

Supply one spare omni-directional and one uni-directional antenna, and two spare spread spectrum radios. Deliver to the District Signal Shop at 4777 E. Hwy 80, Mesquite.

Install the coaxial cable so that it is not exposed to the outdoor environment.

Provide the latest version of the applicable SSR diagnostic software to the District on 3.5 inch disks, and ensure that it will operate under DOS 6.2 or Windows 98 operating systems.

Item 6007: Removing Traffic Signals

Salvage the existing traffic signals at Summer Lee Dr. & Henry Chandler Rd., etc. as shown on the plans. Salvage poles, cabinets, service poles and equipment, exposed conduit, and any other equipment as directed. This equipment remains the property of the Texas Department of Transportation, and is to be stockpiled at a TxDOT maintenance yard as directed. Maintain the operation of the existing traffic signal until directed to remove it.

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Completely remove timber poles not set in concrete without cutting off the pole. Timber poles set in concrete are considered unsalvageable.

Item 6266: Video Imaging Vehicle Detection System

Provide a Video Processor System (VPS) that can provide up to thirty-two (32) detector outputs to the controller from up to eight (8) camera/video processor units (C/VPU). Route the detector outputs through the detector panel and the detector test switches. For each C/VPU, provide a field of view with a minimum of thirty-two (32) virtual detection zones for vehicle detection.
(Note: Use one processor system per intersection)

Wire the outputs as follows:

Card1		Card2	
Output	Detector	Output	Detector
1	1-1	17	3-1
2	6-1	18	8-1
3	6-2	19	8-2
4	6-3	20	8-3
5	6-4	21	8-4
6	Spare	22	Spare
7	SD1	23	SD5
8	SD2	24	SD6
9	5-1	25	7-1
10	2-1	26	4-1
11	2-2	27	4-2
12	2-3	28	4-3
13	2-4	29	4-4
14	Spare	30	Spare
15	SD3	31	SD7
16	SD4	32	SD8

*SD: System Detector

Provide 6 cameras for this project, including one spare camera for a total of 7 cameras.

Central control will be located at the District Signal Shop. The District will provide a workstation computer (IBM 300PL), telephone line and modem at the central location. Provide all software and other necessary equipment. Transmit video to the central computer. Codec or other equipment to enhance the video performance is not required.

Provide a set-up system. Load required set-up software onto all of the District Signal Shop's notebook computers and provide all necessary licensing. The Contractor does not provide computers as part of the set-up system.

Provide phase red and green load switch outputs from up to eight (8) phases of a NEMA TS2 Type 2 controller as inputs to the VPU for use with internal detector extend/delay

timing functions. Ensure the C/VPU is able to condition the detector outputs and detection zones based on the state of the associated phase number and color.

Supply a package that will operate with Windows 98 and NT and provide the functionality defined in both sections 7.0 and 9.0 in both a direct connect and remote communications mode. Ensure the software resident in the C/VPU and the personal computer is capable of transmitting and receiving all information needed for zone set up, monitoring vehicle detection by viewing flashing detection zone overlays, and uploading/downloading and interrogating all stored data within the C/VPU. Ensure remote communications with the C/VPU is possible with the addition of external communication devices (modem, Codec, etc.) using the RS-232 and video output ports on the front of the VPU.

Ensure the C/VPU operational software is stored internally in flash memory and capable of being updated without the removal and replacement of memory devices.

Provide a camera interface panel mounted to the wall of the cabinet for protecting the camera video and power inputs/outputs. The panel shall contain as a minimum; an EDCO ACP-340 for the camera and VIVDS Processor unit power, with an on/off switch, a convenience outlet protected by the ACP-340, a 10-amp circuit breaker, and a terminal strip with a minimum of six (6) 8-32 binder head screws. The AC connections shall be protected using a piece of 1/8-inch plexi-glass.

Install the VIVDS detection zones as directed. Have qualified personnel on site at the time of the signal turn-on to assist with the installation of detection zones.

If the camera locations shown in the plans do not allow for proper sight of the proposed detection zones, relocate the cameras as needed and as directed. This labor and material cost will not be paid separately, but is subsidiary to this item.

The Video Processor Unit (VPU) may reside inside the camera housing. Use video output from the C/VPU in color or black/white with active detection zones overlaid on full motion video.

Provide Field Communications Link required by the manufacturer of the video detection system. These cables will be paid for as the type shown in the plans regardless of actual type of cable.

Required Items, Item 6266:

Spec. Item	Description	Required	Not Required	State Supplied
	CONFIGURATION			
	Cameras (each)	11		
	Processor System (each)	2		
1.3	REMOTE COMMUNICATIONS LINK	X		
3.5	VIVDS TRAFFIC DATA PARAMETERS		X	

4.3.4.1	NEMA TS1 DETECTOR INTERFACE		
	16 Detector Outputs		X
	32 Detector Outputs	X	
6.0	FIELD COMMUNICATIONS LINK	X	
7.0	FIELD SET-UP SYSTEM	X	
8.0	TEMPORARY USE AND RETESTING		X
9.0	OPERATION FROM CENTRAL		
	Workstation Computer & Peripherals		X
	Central Control Software	X	
10.3	INSTALLATION AND TRAINING		
	Eight (8) Hours		X
	Sixteen (16) Hours	X	

The list of material below is for the Contractor's information only.
It is the responsibility of the Contractor to verify
all items and quantities listed below.

LIST OF MATERIAL/LABOR

SUBSIDIARY TO ITEM 680

DESCRIPTION	UNIT	QUANTITY
250W HPS LUMINAIRE	EA	4
8 PHASE NEMA CONTROLLER COMPLETE W/ CABINET AND ACCESSORIES AND ONE SPARE	EA	3
TRAFFIC SIGNAL CONTROLLER FOUNDATION	EA	2
DETECTOR CARD RACK	EA	2
2-CHANNEL DETECTOR CARDS	EA	7
INSTALL OPTICOM EQUIPMENT (INTERSECTION)	LS	2
INTERSECTION DISPLAY BOARD	EA	2
REGULATORY SIGN PANEL (R10-12,ETC)	EA	22
SINGLE STREET NAME SIGN PANEL	EA	7
CONCRETE PAD (9' X 8' X 6", CLASS B)	SF	144

Project Number: C 1014-3-39 **Sheet: 12 N**

County: Rockwall

Highway: FM 740 **Control: 1014-03-039**

LIST OF MATERIAL/LABOR
SUBSIDIARY TO ITEM 681

DESCRIPTION	UNIT	QUANTITY
50 FT TIMBER POLE (CLASS 2)	EA	10
8 FT LUMINARE MAST-ARM FOR WOOD POLE MOUNTING W/LUMINAIRE	EA	7
3/8 INCH ZINC-COATED STRANDED STEEL CABLE	LF	1808
1/4 INCH ZINC-COATED STRANDED STEEL CABLE	LF	1179
LED TRAFFIC SIGNAL HEAD, 3H	EA	19
LED TRAFFIC SIGNAL HEAD, 5H	EA	4
DOUBLE EYE ANCHOR ROD	EA	10
GROUND ANCHORS	EA	10
YELLOW PLASTIC GUY GUARD	EA	10
5/8"x8' COPPERHEAD GROUND ROD W/CLAMP	EA	2
RE-ZONE DETECTION DURING CONSTRUCTION	LS	16
NO.6 XHHW CONDUCTOR	LF	260
NO.8 XHHW CONDUCTORS FOR LUMINAIRES	LF	968
NO. 8 BARE CONDUCTOR	LF	1133
ADJUST HEADS DURING CONSTRUCTION	EA	36
20 CNDR. MULTI CONDUCTOR CABLE	LF	1813
SPREAD SPECTRUM RADIO CABLE	LF	60
WEATHER HEADS	EA	16
8 PHASE NEMA CONTROLLER COMPLETE W/ POLE MOUNTED CABINET AND ACCESSORIES	EA	2
VIDEO IMAGING DETECTORS	EA	10
VIDEO PROCESSORS	EA	2

Project Number: C 1014-3-39 **Sheet: 12 N**

County: Rockwall

Highway: FM 740 **Control: 1014-03-039**

VIVID POWER CABLE	LF	1734
VIVID COMM CABLE	LF	1734
RELOCATE EXISTING SIGNS TO NEW TEMPORARY SIGNAL	LS	10

LIST OF MATERIAL
FURNISHED BY THE CITY OF ROCKWALL FOR TEMPORARY SIGNALS

DESCRIPTION	UNIT	QUANTITY
OPTICOM CABLE	LF	1673
OPTICOM DETECTOR W/MOUNTING BRACKET	EA	10
OPTICOM MODULES (2-CHANNEL)	EA	10
OPTICOM CARD RACK AND HARNESS	EA	3
OPTICOM CONTROLLER ASSEMBLY ~~COMPLETE WITH CABINET~~ AND ACCESSORIES	EA	3

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LIST OF MATERIAL
FURNISHED BY THE CITY OF ROCKWALL FOR PERMANENT SIGNALS

DESCRIPTION	UNIT	QUANTITY
OPTICOM CABLE	LF	1572
OPTICOM DETECTOR W/MOUNTING BRACKET	EA	7
OPTICOM MODULES (2-CHANNEL)	EA	7
OPTICOM CARD RACK AND HARNESS	EA	2
OPTICOM CONTROLLER ASSEMBLY ~~COMPLETE WITH CABINET~~ AND ACCESSORIES	EA	2
~~TRAFFIC SIGNAL CONTROLLER/CABINET~~	~~EA~~	~~2~~

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ESTIMATE SUMMARY

PROJECT C 1014-3-39
CONTROL 1014-03-039
FM 740
ALL BID ITEMS

EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	ALT.	ITEM-CODE ITEM NO	DESC CODE	SP NO	DESCRIPTION	UNIT	TOTAL EST.	TOTAL FINAL
								127.000			100	2002	002	PREPARING ROW	STA	127.000	
								7470.000			104	2001		REMOVING CONC (PAV)	SY	7470.000	
								76.000			104	2009		REMOVING CONC (RIPRAP)	SY	76.000	
								79.000			104	2011		REMOVING CONC (MEDIANS)	SY	79.000	
								264.000			104	2015		REMOVING CONC (SIDEWALKS)	SY	264.000	
								3044.000			104	2017		REMOVING CONC (DRIVEWAYS)	SY	3044.000	
								288.000			104	2021		REMOVING CONC (CURB)	LF	288.000	
								13.000			104	2032		REMOVING CONC (WHEELCHAIR RAMP)	SY	13.000	
								43327.000			105	2014		REMOVING STAB BASE & ASPH PAV (7"-12")	SY	43327.000	
								97988.000			110	2001		EXCAVATION (ROADWAY)	CY	97988.000	
								20332.000		3	132	2025		EMBANKMENT (FINAL) (DENS CONT) (TY C1)	CY	20332.000	
								2119.000			132	2026		EMBANKMENT (FINAL) (DENS CONT) (TY C2)	CY	2119.000	
								54666.000			161	2005	001	COMPOST MANUF TOPSOIL (PB) (4")	SY	54666.000	
								54666.000			162	2002		BLOCK SODDING	SY	54666.000	
								24239.000			164	2009	002	BROADCAST SEED (TEMP) (WARM)	SY	24239.000	
								24239.000			164	2011	002	BROADCAST SEED (TEMP) (COOL)	SY	24239.000	
								1581.000			168	2001		VEGETATIVE WATERING	MG	1581.000	
								2922.000			169	2001	001	SOIL RETENTION BLANKETS (CL 1) (TY A)	SY	2922.000	
								23.000			216	2001		PROOF ROLLING	HR	23.000	
								3517.000			260	2002	001	LIME (HYDRATED LIME (SLURRY))	TON	3517.000	
								96895.000			260	2059	001	LIME TREAT (EXIST MATL) (14")	SY	96895.000	
								22217.000			340	2011	003	D-GR HMA (METH) TY-B PG64-22	TON	22217.000	
								1035.000			340	2048	003	D-GR HMA (METH) TY-C SAC-B PG70-22	TON	1035.000	
								85242.000			360	2003	003	CONC PVMT (CONT REINF-CRCP) (10")	SY	85242.000	
								1919.000			400	2009	004	CUT & RESTORING PAV (CONC)	SY	1919.000	
								6071.000		1	402	2001		TRENCH EXCAVATION PROTECTION	LF	6071.000	
								7307.000			403	2001		TEMPORARY SPL SHORING	SF	7307.000	
								2775.000			416	2001	001	DRILL SHAFT (18 IN)	LF	2775.000	
								10.000			416	2003	001	DRILL SHAFT (30 IN)	LF	10.000	
								91.000			416	2032	001	DRILL SHAFT (TRF SIG POLE) (36 IN)	LF	91.000	
								25907.000			423	2001		RETAINING WALL (MSE)	SF	25907.000	
								7.000			432	2002		RIPRAP (CONC) (5 IN)	CY	7.000	
								56.000		1	432	2023		RIPRAP (STONE PROTECTION) (24 IN)	CY	56.000	
								119.100			432	2039		RIPRAP (MOW STRIP) (4 IN)	CY	119.100	
								65.200			432	2048		RIPRAP (CONC) (FLUME)	CY	65.200	
								2195.000			450	2071		RAIL (TY C402)	LF	2195.000	
								865.000			450	2077		RAIL (HANDRAIL) (TY F)	LF	865.000	
								7610.000		1	464	2003		RC PIPE (CL III) (18 IN)	LF	7610.000	
								1934.000		1	464	2005		RC PIPE (CL III) (24 IN)	LF	1934.000	
								19.000			464	2006		RC PIPE (CL III) (27 IN)	LF	19.000	
								306.000		1	464	2007		RC PIPE (CL III) (30 IN)	LF	306.000	
								479.000			464	2009		RC PIPE (CL III) (36 IN)	LF	479.000	
								1128.000		1	464	2010		RC PIPE (CL III) (42 IN)	LF	1128.000	
								97.000			464	2011		RC PIPE (CL III) (48 IN)	LF	97.000	
								342.000			464	2021		RC PIPE (CL IV) (18 IN)	LF	342.000	
								578.000			464	2022		RC PIPE (CL IV) (24 IN)	LF	578.000	
								678.000			464	2024		RC PIPE (CL IV) (30 IN)	LF	678.000	
								994.000			464	2026		RC PIPE (CL IV) (36 IN)	LF	994.000	
								442.000			464	2027		RC PIPE (CL IV) (42 IN)	LF	442.000	
								706.000			464	2041		RC PIPE (CL V) (42 IN)	LF	706.000	

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ESTIMATE & QUANTITY SHEET

1 REVISED 07.30.09 VN

STATE DIST. NO.	COUNTY	PROJECT NO.	SHEET NO.
18	ROCKWALL	C 1014-3-39	13

ESTIMATE SUMMARY

PROJECT C 1014-3-39
CONTROL 1014-03-039
FM 740
ALL BID ITEMS

EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	ALT	ITEM-CODE ITEM NO	DESC CODE	SP NO	DESCRIPTION	UNIT	TOTAL EST.	TOTAL FINAL
								4.000			465	2003	001	INLET (COMPL) (TY H)	EA	4.000	
								35.000	⚠1		465	2005	001	MANH (COMPL) (TY M)	EA	35.000	
								65.000			465	2104	001	INLET EXT	EA	65.000	
								76.000			465	2195	001	INLET (COMPL) (CURB) (TY 1)	EA	76.000	
								1.000	⚠1		466	2100		HEADWALL (CH-FW-30) (DIA= 42 IN)	EA	1.000	
								2.000	⚠1		467	2209		SET (TY II) (18 IN) (RCP) (3: 1) (C)	EA	2.000	
								2.000			467	2213		SET (TY II) (30 IN) (RCP) (3: 1) (C)	EA	2.000	
								1.000			467	2217		SET (TY II) (48 IN) (RCP) (3: 1) (C)	EA	1.000	
								3.000			467	2222		SET (TY II) (18 IN) (RCP) (4: 1) (C)	EA	3.000	
								12.000			467	2288		SET (TY II) (24 IN) (RCP) (6: 1) (P)	EA	12.000	
								1.000			496	2002		REMOV STR (INLET)	EA	1.000	
								2.000			496	2003		REMOV STR (MANHOLE)	EA	2.000	
								43.000			496	2004		REMOV STR (SET)	EA	43.000	
								3004.000			496	2007		REMOV STR (PIPE)	LF	3004.000	
								1.000			500	2001	005	MOBILIZATION	LS	1.000	
								24.000			502	2001	033	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	24.000	
								90.000			506	2003	010	ROCK FILTER DAMS (INSTALL) (TY 3)	LF	90.000	
								90.000			506	2009	010	ROCK FILTER DAMS (REMOVE)	LF	90.000	
								134.000	⚠1		506	2016	010	CONSTRUCTION EXITS (INSTALL) (TY 1)	SY	134.000	
								134.000	⚠1		506	2019	010	CONSTRUCTION EXITS (REMOVE)	SY	134.000	
								200.000			506	2024	010	BACKHOE WORK (EROSION & SEDM CONT)	HR	200.000	
								24488.000	⚠1		506	2034	010	TEMPORARY SEDIMENT CONTROL FENCE	LF	24488.000	
								10958.000			508	2002		CONSTRUCTING DETOURS	SY	10958.000	
								1860.000	⚠1		512	2017	001	PORT CTB (DES SOURCE) (LOW PROF) (TY 1)	LF	1860.000	
								20.000			512	2018	001	PORT CTB (DES SOURCE) (LOW PROF) (TY 2)	LF	20.000	
								1860.000	⚠1		512	2026	001	PORT CTB (MOVE) (LOW PROF) (TY 1)	LF	1860.000	
								20.000			512	2027	001	PORT CTB (MOVE) (LOW PROF) (TY 2)	LF	20.000	
								1860.000	⚠1		512	2035	001	PORT CTB (STKPL) (LOW PROF) (TY 1)	LF	1860.000	
								20.000			512	2036	001	PORT CTB (STKPL) (LOW PROF) (TY 2)	LF	20.000	
								2671.000			528	2001		COLORED TEXTURED CONC (4")	SY	2671.000	
								47090.000			529	2006		CONC CURB (MONO) (TY II)	LF	47090.000	
								3004.000			530	2010		DRIVEWAYS (CONC)	SY	3004.000	
								285.000			530	2011		DRIVEWAYS (ACP)	SY	285.000	
								5.000			531	2005	006	CURB RAMPS (TY 1)	EA	5.000	
								8.000			531	2006	006	CURB RAMPS (TY 2)	EA	8.000	
								1.000			531	2010	006	CURB RAMPS (TY 7)	EA	1.000	
								55.000			531	2011	006	CURB RAMPS (TY 8)	EA	55.000	
								2.000			531	2017	006	CURB RAMPS (TY 21)	EA	2.000	
								14320.000	⚠1		531	2031	006	CONC SIDEWALKS (4")	SY	14320.000	
								64.000			531	2041	006	CURB RAMPS (TY 10)	EA	64.000	
								271.000			536	2002		CONC MEDIAN	SY	271.000	
								825.000			542	2001		REMOVING METAL BEAM GUARD FENCE	LF	825.000	
								6.000			544	2003	001	GUARDRAIL END TREATMENT (REMOVE)	EA	6.000	
								1.000			610	2055	006	INS RD IL AM (TY ST) 50S-8 (.4 KW) S	EA	1.000	
								5373.000		⚠2	618	2018		CONDT (PVC) (SCHD 40) (2")	LF	5373.000	
								91.000			618	2022		CONDT (PVC) (SCHD 40) (3")	LF	91.000	
								684.000			618	2024		CONDT (PVC) (SCHD 40) (4")	LF	684.000	
								441.000			618	2025		CONDT (PVC) (SCHD 40) (4") (BORE)	LF	441.000	
								756.000			620	2009	001	ELEC CONDR (NO. 6) BARE	LF	756.000	
								136.000			620	2010	001	ELEC CONDR (NO. 6) INSULATED	LF	136.000	

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ESTIMATE & QUANTITY SHEET

⚠ REVISED 07.30.09 VN

STATE DIST. NO.	COUNTY	PROJECT NO.	SHEET NO.
18	ROCKWALL	C 1014-3-39	14

ESTIMATE SUMMARY

PROJECT C 1014-3-39
CONTROL 1014-03-039
FM 740
ALL BID ITEMS

EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	ALT.	ITEM-CODE ITEM NO	ITEM-CODE DESC CODE	ITEM-CODE SP NO	DESCRIPTION	UNIT	TOTAL EST.	TOTAL FINAL
								1328.000			620	2012	001	ELEC CONDR (NO. 8) INSULATED	LF	1328.000	
								30.000	⚠		624	2007		GROUND BOX TY A (122311)	EA	30.000	
								9.000			624	2012		GROUND BOX TY C (162911) W/APRON	EA	9.000	
								8.000	⚠		624	2023		GROUND BOX (CITY TYPE)	EA	8.000	
								2.000			628	2099		ELC SRV TY D 120/240 070 (NS) SS (E) GC (O)	EA	2.000	
								39.000			644	2001		INS SM RD SN SUP&AM TY 10BWG (1) SA (P)	EA	39.000	
								2.000			644	2004		INS SM RD SN SUP&AM TY 10BWG (1) SA (T)	EA	2.000	
								1.000			644	2007		INS SM RD SN SUP&AM TY 10BWG (1) SB (P)	EA	1.000	
								4.000			644	2027		INS SM RD SN SUP&AM TY S80 (1) SA (U)	EA	4.000	
								2.000			644	2056		RELOCATE SM RD SN SUP & AM TY 10BWG	EA	2.000	
								89.000			644	2060		REMOVE SM RD SN SUP & AM	EA	89.000	
								28.000	⚠		644	2085		RELOCATE SM RD SN SUP & AM (SIGN ONLY)	EA	28.000	
								14771.000			662	2004		WK ZN PAV MRK NON-REMOV (W) 4" (SLD)	LF	14771.000	
								17328.000			662	2032		WK ZN PAV MRK NON-REMOV (Y) 4" (SLD)	LF	17328.000	
								48.000			662	2065		WK ZN PAV MRK REMOV (W) 4" (DOT)	LF	48.000	
								27170.000	⚠		662	2067		WK ZN PAV MRK REMOV (W) 4" (SLD)	LF	27170.000	
								275.000			662	2079		WK ZN PAV MRK REMOV (W) 24" (SLD)	LF	275.000	
								36368.000			662	2099		WK ZN PAV MRK REMOV (Y) 4" (SLD)	LF	36368.000	
								6020.000			666	2003		REFL PAV MRK TY I (W) 4" (BRK) (100MIL)	LF	6020.000	
								25251.000	⚠		666	2012		REFL PAV MRK TY I (W) 4" (SLD) (100MIL)	LF	25251.000	
								4171.000	⚠		666	2036		REFL PAV MRK TY I (W) 8" (SLD) (100MIL)	LF	4171.000	
								824.000			666	2042		REFL PAV MRK TY I (W) 12" (SLD) (100MIL)	LF	824.000	
								219.000			666	2048		REFL PAV MRK TY I (W) 24" (SLD) (100MIL)	LF	219.000	
								46.000	⚠		666	2054		REFL PAV MRK TY I (W) (ARROW) (100MIL)	EA	46.000	
								39.000	⚠		666	2096		REFL PAV MRK TY I (W) (WORD) (100MIL)	EA	39.000	
								160.000			666	2105		REFL PAV MRK TY I (Y) 4" (BRK) (100MIL)	LF	160.000	
								23205.000	⚠		666	2111		REFL PAV MRK TY I (Y) 4" (SLD) (100MIL)	LF	23205.000	
								453.000			666	2132		REFL PAV MRK TY I (Y) 24" (SLD) (100MIL)	LF	453.000	
								6020.000			666	2142		REF PAV MRK TY II (W) 4" (BRK)	LF	6020.000	
								25251.000	⚠		666	2145		REF PAV MRK TY II (W) 4" (SLD)	LF	25251.000	
								4171.000	⚠		666	2153		REF PAV MRK TY II (W) 8" (SLD)	LF	4171.000	
								824.000			666	2155		REF PAV MRK TY II (W) 12" (SLD)	LF	824.000	
								219.000			666	2157		REF PAV MRK TY II (W) 24" (SLD)	LF	219.000	
								46.000	⚠		666	2160		REF PAV MRK TY II (W) (ARROW)	EA	46.000	
								39.000	⚠		666	2173		REF PAV MRK TY II (W) (WORD)	EA	39.000	
								160.000			666	2176		REF PAV MRK TY II (Y) 4" (BRK)	LF	160.000	
								23205.000	⚠		666	2178		REF PAV MRK TY II (Y) 4" (SLD)	LF	23205.000	
								453.000			666	2185		REF PAV MRK TY II (Y) 24" (SLD)	LF	453.000	
								448.000			672	2012	034	REFL PAV MRKR TY I-C	EA	448.000	
								300.000			672	2017	034	REFL PAV MRKR TY II-C-R	EA	300.000	
								21280.000			677	2001		ELIM EXT PAV MRK & MRKS (4")	LF	21280.000	
								44.000			677	2007		ELIM EXT PAV MRK & MRKS (24")	LF	44.000	
								54636.000	⚠		678	2001		PAV SURF PREP FOR MRK (4")	LF	54636.000	
								4171.000	⚠		678	2003		PAV SURF PREP FOR MRK (8")	LF	4171.000	
								824.000			678	2004		PAV SURF PREP FOR MRK (12")	LF	824.000	
								672.000			678	2006		PAV SURF PREP FOR MRK (24")	LF	672.000	
								46.000	⚠		678	2007		PAV SURF PREP FOR MRK (ARROW)	EA	46.000	
								39.000	⚠		678	2018		PAV SURF PREP FOR MRK (WORD)	EA	39.000	
								2.000			680	2002		INSTALL HWY TRF SIG (ISOLATED)	EA	2.000	
								2.000			681	2001		TEMP TRAF SIGNALS	EA	2.000	

ESTIMATE & QUANTITY SHEET

⚠ REVISED 07.30.09 VN

STATE DIST. NO.	COUNTY	PROJECT NO.	SHEET NO.
18	ROCKWALL	C 1014-3-39	15

ESTIMATE SUMMARY

PROJECT C 1014-3-39
CONTROL 1014-03-039
FM 740
ALL BID ITEMS

EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	ALT.	ITEM-CODE ITEM NO	DESC CODE	SP NO	DESCRIPTION	UNIT	TOTAL EST.	TOTAL FINAL
								15.000			682	2001	001	BACK PLATE (12 IN) (3 SEC)	EA	15.000	
								4.000			682	2003	001	BACK PLATE (12 IN) (5 SEC)	EA	4.000	
								12.000			682	2013	001	PED SIG SEC (12 IN) INC (2 INDICATIONS)	EA	12.000	
								4.000			682	2022	001	VEH SIG SEC (12 IN) LED (GRN ARW)	EA	4.000	
								19.000			682	2023	001	VEH SIG SEC (12 IN) LED (GRN)	EA	19.000	
								4.000			682	2024	001	VEH SIG SEC (12 IN) LED (YEL ARW)	EA	4.000	
								19.000			682	2025	001	VEH SIG SEC (12 IN) LED (YEL)	EA	19.000	
								19.000			682	2027	001	VEH SIG SEC (12 IN) LED (RED)	EA	19.000	
								438.000			684	2031		TRF SIG CBL (TY A) (14 AWG) (5 CONDR)	LF	438.000	
								438.000			684	2033		TRF SIG CBL (TY A) (14 AWG) (7 CONDR)	LF	438.000	
								1243.000			684	2042		TRF SIG CBL (TY A) (14 AWG) (16 CONDR)	LF	1243.000	
								3.000			686	2035		INS TRF SIG PL AM(S) 1 ARM (36')	EA	3.000	
								1.000			686	2037		INS TRF SIG PL AM(S) 1 ARM (36') LUM	EA	1.000	
								3.000			686	2045		INS TRF SIG PL AM(S) 1 ARM (44') LUM	EA	3.000	
								2.000			687	2001		PED POLE ASSEMBLY	EA	2.000	
								12.000			688	2001		PED DETECT (2 INCH PUSH BTN)	EA	12.000	
								18.000			730	2113	003	FULL-WIDTH MOWING	CYC	18.000	
								12.000			734	2002		LITTER REMOVAL	CYC	12.000	
								12.000			738	2224	001	CLEANING/SWEEPING (STREET)	CYC	12.000	
								4760.000	⚠		5049	2002		BIODGRD EROSION CONTROL LOGS (18" DIA)	LF	4760.000	
								6768.000			5296	2003		NOISE WALLS (12 FT)	SF	6768.000	
								216.000			5296	2004		NOISE WALL (6 FT)	SF	216.000	
								252.000			5296	2005		NOISE WALL (7 FT)	SF	252.000	
								960.000			5296	2006		NOISE WALL (8 FT)	SF	960.000	
								1620.000			5296	2007		NOISE WALL (9 FT)	SF	1620.000	
								840.000			5296	2008		NOISE WALL (10 FT)	SF	840.000	
								3036.000			5296	2009		NOISE WALL (11 FT)	SF	3036.000	
								2.000			6006	2001		SPREAD SPECTRUM RADIO	EA	2.000	
								157.000			6006	2002		COAXIAL CABLE	LF	157.000	
								2.000			6006	2005		ANTENNA (UNI-DIRECTIONAL)	EA	2.000	
								2.000			6007	2001		REMOVING TRAFFIC SIGNALS	EA	2.000	
								2.000			6266	2001		VIVDS PROCESSOR SYSTEM	EA	2.000	
								11.000			6266	2002		VIVDS CAMERA ASSEMBLY	EA	11.000	
								2.000			6266	2003		VIVDS SET-UP SYSTEM	EA	2.000	
								2.000			6266	2004		VIVDS CENTRAL CONTROL	EA	2.000	
								2606.000			6266	2005		VIVDS COMMUNICATION CABLE (COAXIAL)	LF	2606.000	
								2.000			6266	2007		VIVDS TEMPORARY	EA	2.000	
								2.000			6834	2002		PORTABLE CHANGEABLE MESSAGE SIGN	EA	2.000	

ESTIMATE & QUANTITY SHEET

⚠ REVISED 07.30.09 VN

STATE DIST. NO.	COUNTY	PROJECT NO.	SHEET NO.
18	ROCKWALL	C 1014-3-39	16

EARTHWORK SUMMARY

STATION	110 2001 EXCAVATION (ROADWAY)	132 2025 EMBANKMENT (FINAL) (DENS CONT) (TY C1)	132 2026 EMBANKMENT (FINAL) (DENS CONT) (TY C2)	ACCUM EXCAVATION	ACCUM EMBANKMENT (TY C1)	ACCUM EMBANKMENT (TY C2)
	CY	CY	CY	CY	CY	CY
21+00.00 - 21+44.88	283	11		283	11	
21+44.88 - 21+50.00	32	2		315	13	
21+50.00 - 22+00.00	346	16		661	29	
22+00.00 - 22+02.27	17	1		678	30	
22+02.27 - 22+50.00	341	17		1019	47	
22+50.00 - 23+00.00	359	18		1378	65	
23+00.00 - 23+50.00	427	16		1805	81	
23+50.00 - 23+76.44	278	8		2083	89	
23+76.44 - 24+00.00	272	5		2355	94	
24+00.00 - 24+50.00	568	5		2923	99	
24+50.00 - 24+75.78	279	8		3202	107	
24+75.78 - 25+00.00	256	7		3458	114	
25+00.00 - 25+50.00	562	12		4020	126	
25+50.00 - 25+76.26	331	19		4351	145	
25+76.26 - 25+76.93	9	1		4360	146	
25+76.93 - 26+00.00	298	15		4658	161	
26+00.00 - 26+50.00	587	17		5245	178	
26+50.00 - 27+00.00	537	15		5782	193	
27+00.00 - 27+50.00	508	14		6290	207	
27+50.00 - 28+00.00	473	23 A		6763	230	
28+00.00 - 28+50.00	432	32 A		7195	262	
28+50.00 - 29+00.00	412	17 A		7607	279	
29+00.00 - 29+50.00	390	18 A		7997	297	
29+50.00 - 30+00.00	365	47 A		8362	344	
30+00.00 - 30+50.00	345	59		8707	403	
30+50.00 - 30+92.04	275	49 A		8982	452	
30+92.04 - 31+00.00	52	9		9034	461	
31+00.00 - 31+50.00	342	48 A		9376	509	
31+50.00 - 31+61.52	84	7		9460	516	
31+61.52 - 32+00.00	280	36		9740	552	
32+00.00 - 32+50.00	359	50		10099	602	
32+50.00 - 33+00.00	356	43		10455	645	
33+00.00 - 33+50.00	300	59 A		10755	704	
33+50.00 - 34+00.00	245	72 A		11000	776	
34+00.00 - 34+50.00	240	64 A		11240	840	
34+50.00 - 34+90.11	205	32		11445	872	
34+90.11 - 34+95.93	32	4		11477	876	
34+95.93 - 35+00.00	22	3		11499	879	
35+00.00 - 35+50.00	234	39 A		11733	918	
35+50.00 - 36+00.00	235	32 A		11968	950	
36+00.00 - 36+50.00	305	15 A		12273	965	
36+50.00 - 37+00.00	360	9		12633	974	
37+00.00 - 37+50.00	399	6		13032	980	
37+50.00 - 38+00.00	445	2		13477	982	
38+00.00 - 38+50.00	480			13957	982	
38+50.00 - 39+50.00	976			14933	982	
39+50.00 - 40+00.00	484	1		15417	983	
40+00.00 - 40+50.00	462	2		15879	985	
40+50.00 - 41+00.00	439	1		16318	986	
41+00.00 - 41+28.20	238			16556	986	
41+28.20 - 41+50.00	173	1		16729	987	
41+50.00 - 42+00.00	406	4		17135	991	
42+00.00 - 42+50.00	432	3		17567	994	
42+50.00 - 43+00.00	453	2 A		18020	996	
43+00.00 - 43+50.00	471	3 A		18491	999	
43+50.00 - 44+00.00	488	1 A		18979	1000	
44+00.00 - 44+24.45	275			19254	1000	
44+24.45 - 44+50.00	290			19544	1000	

EARTHWORK SUMMARY

STATION	110 2001 EXCAVATION (ROADWAY)	132 2025 EMBANKMENT (FINAL) (DENS CONT) (TY C1)	132 2026 EMBANKMENT (FINAL) (DENS CONT) (TY C2)	ACCUM EXCAVATION	ACCUM EMBANKMENT (TY C1)	ACCUM EMBANKMENT (TY C2)
	CY	CY	CY	CY	CY	CY
44+50.00 - 44+58.11	83			19627	1000	
44+58.11 - 45+00.00	401	11		20028	1011	
45+00.00 - 45+50.00	451	30 A		20479	1041	
45+50.00 - 46+00.00	441	76 A		20920	1117	
46+00.00 - 46+07.99	68	21 A		20988	1138	
46+07.99 - 46+50.00	330	121 A		21318	1259	
46+50.00 - 47+00.00	341	153 A		21659	1412	
47+00.00 - 47+50.00	301	171 A		21960	1583	
47+50.00 - 48+00.00	280	172 A		22240	1755	
48+00.00 - 48+50.00	297	129 A		22537	1884	
48+50.00 - 49+00.00	334	62 A		22871	1946	
49+00.00 - 49+50.00	389	18		23260	1964	
49+50.00 - 50+00.00	463	4		23723	1968	
50+00.00 - 50+50.00	485	3		24208	1971	
50+50.00 - 51+00.00	493			24701	1971	
51+00.00 - 51+50.00	500			25201	1971	
51+50.00 - 52+00.00	549			25750	1971	
52+00.00 - 52+00.69	8			25758	1971	
52+00.69 - 52+50.00	557			26315	1971	
52+50.00 - 52+85.52	373	2		26688	1973	
52+85.52 - 53+00.00	172	1		26860	1974	
53+00.00 - 53+05.16	68			26928	1974	
53+05.16 - 53+50.00	508	17		27436	1991	
53+50.00 - 53+51.31	13	1		27449	1992	
53+51.31 - 54+00.00	506	29		27955	2021	
54+00.00 - 54+09.00	99	4		28054	2025	
54+09.00 - 54+50.00	401	30 A		28455	2055	
54+50.00 - 54+57.74	66	8 A		28521	2063	
54+57.74 - 55+00.00	243	87 A		28764	2150	
55+00.00 - 55+50.00	107	177 A	8	28871	2327	8
55+50.00 - 56+00.00	36	254 A	24	28907	2581	32
56+00.00 - 56+50.00	10	364 A	47	28917	2945	79
56+50.00 - 57+00.00	2	461 A	78	28919	3406	157
57+00.00 - 57+50.00	2	495 A	105	28921	3901	262
57+50.00 - 58+00.00	2	590 A	129	28923	4491	391
58+00.00 - 58+50.00	1	629 A	117	28924	5120	508
58+50.00 - 59+00.00	2	504 A	70	28926	5624	578
59+00.00 - 59+30.63	9	223 A	21	28935	5847	599
59+30.63 - 59+50.00	22	108 A	9	28957	5955	608
59+50.00 - 60+00.00	167	197 A	18	29124	6152	626
60+00.00 - 60+50.00	299	74 A	10	29423	6226	636
60+50.00 - 61+00.00	323	39 A	6	29746	6265	642
61+00.00 - 61+50.00	262	87 A	9	30008	6352	651
61+50.00 - 62+00.00	156	142 A	14	30164	6494	665
62+00.00 - 62+50.00	64	190 A	22	30228	6684	687
62+50.00 - 62+51.54	1	6 A	1	30229	6690	688
62+51.54 - 63+00.00	39	100 A	27	30268	6790	715
63+00.00 - 63+50.00	18	209 A	39	30286	6999	754
63+50.00 - 64+00.00		525 A	85	30286	7524	839
64+00.00 - 64+50.00		740 A	145	30286	8264	984
64+50.00 - 65+00.00		887 A	161	30286	9151	1145
65+00.00 - 65+50.00	1	844 A	147	30287	9995	1292
65+50.00 - 66+00.00	1	718 A	111	30288	10713	1403
66+00.00 - 66+50.00	3	618 A	73	30291	11331	1476
66+50.00 - 67+00.00	18	526 A	60	30309	11857	1536
67+00.00 - 67+50.00	50	478 A	47	30359	12335	1583
67+50.00 - 68+00.00	75	232 A	36	30434	12567	1619
68+00.00 - 68+50.00	68	213 A	32	30502	12780	1651

No.	DATE	REVISION	APPROV.
A	~~09-10-09~~	ADDENDUM , QUANTITY CHANGE	

B - REPLACED 8/10/09 CVL

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

FM 740
SUMMARY SHEETS

SHEET 1 OF 4

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	17
CHECK DAN	CONTROL	SECTION	JOB	
CHECK CVL	1014	03	039	

EARTHWORK SUMMARY

STATION	110 2001 EXCAVATION (ROADWAY)	132 2025 EMBANKMENT (FINAL) (DENS CONT) (TY C1)	132 2026 EMBANKMENT (FINAL) (DENS CONT) (TY C2)	ACCUM EXCAVATION	ACCUM EMBANKMENT (TY C1)	ACCUM EMBANKMENT (TY C2)
	CY	CY	CY	CY	CY	CY
68+50.00 - 68+72.20	19	183 2	13	30521	12963	1664
68+72.20 - 69+00.00	23	111 2	16	30544	13074	1680
69+00.00 - 69+50.00	45	221 2	30	30589	13295	1710
69+50.00 - 70+00.00	36	221 2	30	30625	13516	1740
70+00.00 - 70+50.00	38	2	29	30663	13516	1769
70+50.00 - 71+00.00	45	2	26	30708	13516	1795
71+00.00 - 71+50.00	45	1 2	27	30753	13517	1822
71+50.00 - 72+00.00	36	127 2	36	30789	13644	1858
72+00.00 - 72+50.00	24	127 2	44	30813	13771	1902
72+50.00 - 73+00.00	25	129 2	45	30838	13900	1947
73+00.00 - 73+33.39	31	146 2	29	30869	14046	1976
73+33.39 - 73+50.00	22	58 2	14	30891	14104	1990
73+50.00 - 74+00.00	116	162 2	50	31007	14266	2040
74+00.00 - 74+50.00	168	158 2	44	31175	14424	2084
74+50.00 - 75+00.00	220	132 2	25	31395	14556	2109
75+00.00 - 75+50.00	315	63 2	10	31710	14619	2119
75+50.00 - 76+00.00	476	12 2		32186	14631	2119
76+00.00 - 76+50.00	609			32795	14631	2119
76+50.00 - 77+00.00	696			33491	14631	2119
77+00.00 - 77+50.00	699	20		34190	14651	2119
77+50.00 - 78+00.00	586	58		34776	14709	2119
78+00.00 - 78+50.00	502	91		35278	14800	2119
78+50.00 - 79+00.00	455	107		35733	14907	2119
79+00.00 - 79+50.00	399	103		36132	15010	2119
79+50.00 - 80+00.00	344	86		36476	15096	2119
80+00.00 - 80+50.00	334	75		36810	15171	2119
80+50.00 - 81+00.00	320	74		37130	15245	2119
81+00.00 - 81+50.00	299	68 2		37429	15313	2119
81+50.00 - 82+00.00	342	47		37771	15360	2119
82+00.00 - 82+50.00	426	31 2		38197	15391	2119
82+50.00 - 83+00.00	485	28 2		38682	15419	2119
83+00.00 - 83+50.00	511	22		39193	15441	2119
83+50.00 - 84+00.00	543	7		39736	15448	2119
84+00.00 - 84+50.00	546			40282	15448	2119
84+50.00 - 85+00.00	493			40775	15448	2119
85+00.00 - 85+50.00	412	36		41187	15484	2119
85+50.00 - 86+00.00	340	59 2		41527	15543	2119
86+00.00 - 86+50.00	298	94 2		41825	15637	2119
86+50.00 - 87+00.00	279	107 2		42104	15744	2119
87+00.00 - 87+50.00	257	75 2		42361	15819	2119
87+50.00 - 88+00.00	267	55 2		42628	15874	2119
88+00.00 - 88+50.00	320	34 2		42948	15908	2119
88+50.00 - 89+00.00	388	21		43336	15929	2119
89+00.00 - 89+50.00	450	3		43786	15932	2119
89+50.00 - 90+00.00	539	1		44325	15933	2119
90+00.00 - 90+50.00	534	1		44859	15934	2119
90+50.00 - 91+00.00	457	1		45316	15935	2119
91+00.00 - 91+50.00	434	1		45750	15936	2119
91+50.00 - 92+00.00	397	3		46147	15939	2119
92+00.00 - 92+50.00	374	2		46521	15941	2119
92+50.00 - 93+00.00	332	4		46853	15945	2119
93+00.00 - 93+50.00	264	14 2		47117	15959	2119
93+50.00 - 94+00.00	214	24 2		47331	15983	2119
94+00.00 - 94+50.00	209	35		47540	16018	2119
94+50.00 - 95+00.00	211	52 2		47751	16070	2119
95+00.00 - 95+50.00	207	54 2		47958	16124	2119
95+50.00 - 95+50.61	2	1 2		47960	16125	2119
95+50.61 - 96+00.00	203	51 2		48163	16176	2119
96+00.00 - 96+50.00	228	40 2		48391	16216	2119

EARTHWORK SUMMARY

STATION	110 2001 EXCAVATION (ROADWAY)	132 2025 EMBANKMENT (FINAL) (DENS CONT) (TY C1)	132 2026 EMBANKMENT (FINAL) (DENS CONT) (TY C2)	ACCUM EXCAVATION	ACCUM EMBANKMENT (TY C1)	ACCUM EMBANKMENT (TY C2)
	CY	CY	CY	CY	CY	CY
96+50.00 - 96+68.78	103	9 2		48494	16225	2119
96+68.78 - 97+00.00	177	14 2		48671	16239	2119
97+00.00 - 97+45.89	279	19		48950	16258	2119
97+45.89 - 97+50.00	27	2		48977	16260	2119
97+50.00 - 98+00.00	313	18		49290	16278	2119
98+00.00 - 98+50.00	303	15		49593	16293	2119
98+50.00 - 99+00.00	287	14		49880	16307	2119
99+00.00 - 99+50.00	296	11		50176	16318	2119
99+50.00 - 100+00.00	318	6		50494	16324	2119
100+00.00 - 100+50.00	327	5		50821	16329	2119
100+50.00 - 101+00.00	365	11		51186	16340	2119
101+00.00 - 101+50.00	392	33		51578	16373	2119
101+50.00 - 102+00.00	371	60 2		51949	16433	2119
102+00.00 - 102+50.00	351	49 2		52300	16482	2119
102+50.00 - 103+00.00	357	31		52657	16513	2119
103+00.00 - 103+50.00	371	35 2		53028	16548	2119
103+50.00 - 104+00.00	438	26 2		53466	16574	2119
104+00.00 - 104+50.00	537	7		54003	16581	2119
104+50.00 - 105+00.00	632			54635	16581	2119
105+00.00 - 105+50.00	662			55297	16581	2119
105+50.00 - 106+00.00	670			55967	16581	2119
106+00.00 - 106+50.00	685			56652	16581	2119
106+50.00 - 107+00.00	666			57318	16581	2119
107+00.00 - 107+50.00	634			57952	16581	2119
107+50.00 - 108+00.00	598	1		58550	16582	2119
108+00.00 - 108+50.00	550	7		59100	16589	2119
108+50.00 - 109+00.00	503	19		59603	16608	2119
109+00.00 - 109+50.00	476	29		60079	16637	2119
109+50.00 - 110+00.00	471	32		60550	16669	2119
110+00.00 - 110+50.00	470	53 2		61020	16722	2119
110+50.00 - 111+00.00	518	40 2		61538	16762	2119
111+00.00 - 111+50.00	608	4		62146	16766	2119
111+50.00 - 112+00.00	658	2		62804	16768	2119
112+00.00 - 112+50.00	682			63486	16768	2119
112+50.00 - 113+00.00	716			64202	16768	2119
113+00.00 - 113+50.00	738			64940	16768	2119
113+50.00 - 114+00.00	739			65679	16768	2119
114+00.00 - 114+50.00	521			66200	16768	2119
114+50.00 - 115+00.00	514			66714	16768	2119
115+00.00 - 115+50.00	702			67416	16768	2119
115+50.00 - 116+00.00	670			68086	16768	2119
116+00.00 - 116+50.00	654			68740	16768	2119
116+50.00 - 117+00.00	643			69383	16768	2119
117+00.00 - 117+50.00	656			70039	16768	2119
117+50.00 - 118+00.00	601			70640	16768	2119
118+00.00 - 118+50.00	448			71088	16780	2119
118+50.00 - 119+00.00	325	12		71413	16790	2119
119+00.00 - 119+17.72	100	10 2		71513	16816	2119
119+17.72 - 119+50.00	156	26 2		71669	16892	2119
119+50.00 - 120+00.00	186	76 2		71855	16964	2119
120+00.00 - 120+50.00	216	72 2		72071	16987	2119
120+50.00 - 121+00.00	316	23 2		72387	16989	2119
121+00.00 - 121+50.00	418	2		72805	16989	2119
121+50.00 - 122+00.00	496			73301	16989	2119
122+00.00 - 122+50.00	554			73855	16989	2119
122+50.00 - 123+00.00	555			74410	16989	2119
123+00.00 - 123+50.00	490			74900	16989	2119
123+50.00 - 124+00.00	427			75327	16989	2119
124+00.00 - 124+50.00	427			75754	16989	2119

No.	DATE	REVISION	APPROV.
2	~~09-18-09~~	ADDENDUM , QUANTITY CHANGE	

3 REPLACED 8/10/09 CAR

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
SUMMARY SHEETS

SHEET 2 OF 4

DESIGN	FED.RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	18
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

EARTHWORK SUMMARY

STATION	110 2001 EXCAVATION (ROADWAY)	132 2025 EMBANKMENT (FINAL) (DENS CONT) (TY C1)	132 2026 EMBANKMENT (FINAL) (DENS CONT) (TY C2)	ACCUM EXCAVATION	ACCUM EMBANKMENT (TY C1)	ACCUM EMBANKMENT (TY C2)
	CY	CY	CY	CY	CY	CY
124+50.00 - 125+00.00	439	2		76193	16991	2119
125+00.00 - 125+50.00	379	17		76572	17008	2119
125+50.00 - 126+00.00	315	41 △2		76887	17049	2119
126+00.00 - 126+50.00	276	46 △2		77163	17095	2119
126+50.00 - 127+00.00	251	33		77414	17128	2119
127+00.00 - 127+50.00	234	27		77648	17155	2119
127+50.00 - 128+00.00	242	21		77890	17176	2119
128+00.00 - 128+50.00	269	17		78159	17193	2119
128+50.00 - 129+00.00	242	32		78401	17225	2119
129+00.00 - 129+50.00	203	52		78604	17277	2119
129+50.00 - 130+00.00	198	62		78802	17339	2119
130+00.00 - 130+50.00	187	75 △2		78989	17414	2119
130+50.00 - 131+00.00	205	66 △2		79194	17480	2119
131+00.00 - 131+50.00	248	44		79442	17524	2119
131+50.00 - 132+00.00	239	58 △2		79681	17582	2119
132+00.00 - 132+50.00	226	53 △2		79907	17635	2119
132+50.00 - 133+00.00	275	27		80182	17662	2119
133+00.00 - 133+50.00	319	22		80501	17684	2119
133+50.00 - 134+00.00	324	21		80825	17705	2119
134+00.00 - 134+50.00	293	28		81118	17733	2119
134+50.00 - 135+00.00	246	52 △2		81364	17785	2119
135+00.00 - 135+50.00	258	46 △2		81622	17831	2119
135+50.00 - 136+00.00	345	13		81967	17844	2119
136+00.00 - 136+50.00	427			82394	17844	2119
136+50.00 - 137+00.00	542			82936	17844	2119
137+00.00 - 137+50.00	593			83529	17844	2119
137+50.00 - 138+00.00	486			84015	17844	2119
138+00.00 - 138+50.00	380	2		84395	17846	2119
138+50.00 - 139+00.00	278	15 △3		84673	17861	2119
139+00.00 - 139+50.00	186	41 △3		84859	17902	2119
139+50.00 - 140+00.00	150	58 △3		85009	17960	2119
140+00.00 - 140+50.00	168	43 △3		85177	18003	2119
140+50.00 - 141+00.00	233	13		85410	18016	2119
141+00.00 - 141+50.00	203	31 △3		85613	18047	2119
141+50.00 - 142+00.00	147	80 △3		85760	18127	2119
142+00.00 - 142+36.63	122	68 △3		85882	18195	2119
142+36.63 - 142+50.00	41	25 △3		85923	18220	2119
142+50.00 - 143+00.00	113	55		86036	18275	2119
143+00.00 - 143+50.00	48	113 △3		86084	18388	2119
143+50.00 - 144+00.00	6	271 △3		86090	18659	2119
144+00.00 - 144+50.00	5	395 △3		86095	19054	2119
144+50.00 - 145+00.00	116	399 △3		86211	19453	2119
145+00.00 - 145+50.00	121	363 △3		86332	19816	2119
145+50.00 - 145+67.71	3	153 △3		86335	19969	2119
145+67.71 - 146+00.00	8	213 △3		86343	20182	2119
146+00.00 - 146+50.00	47	117 △3		86390	20299	2119
146+50.00 - 146+92.09	74	28 △3		86464	20327	2119
146+92.09 - 147+00.00	17	2		86481	20329	2119
147+00.00 - 147+50.00	106	3 △2		86587	20332	2119
147+50.00 - 147+80.00	62			86649	20332	2119
TOTALS	86649	20332 △2	2119	86649	20332 △2	2119

No.	DATE	REVISION	APPROV.
△2	~~08-10-09~~	ADDENDUM , QUANTITY CHANGE	

△3 - REPLACED 8/10/09 CVL

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
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Texas Department of Transportation

FM 740
SUMMARY SHEETS

SHEET 3 OF 4

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	19
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

EARTHWORK SUMMARY
FM 1140

SHEET NO	STATION	110 2001 EXCAVATION (ROADWAY)	132 2025 EMBANKMENT (FINAL) (DENS CONT) (TY C1)	ACCUM EXCAVATION	ACCUM EMBANKMENT
		CY	CY	CY	CY
	10+40.00 - 10+50.00	67	1	67	1
	10+50.00 - 11+00.00	223	8	290	9
	11+00.00 - 11+50.00	171	11	461	20
	11+50.00 - 12+00.00	159	11	620	31
	12+00.00 - 12+39.02	130	4	750	35
	12+39.02 - 12+50.00	36	0	786	35
	12+50.00 - 13+00.00	149	4	935	39
	13+00.00 - 13+50.00	137	9	1072	48
	13+50.00 - 13+70.87	57	2	1129	50
	13+70.87 - 14+00.00	76	4	1205	54
	14+00.00 - 14+50.00	118	10	1323	64
	14+50.00 - 14+95.00	101	2	1424	66
	TOTALS	1424	66	1424	66

EARTHWORK SUMMARY
CROSS STREETS

CROSS STREET	STATION	110 2001 EXCAVATION (ROADWAY)	132 2025 EMBANKMENT (FINAL) (DENS CONT) (TY C1)	ACCUM EXCAVATION	ACCUM EMBANKMENT (TY C1)
		CY	CY	CY	CY
CEMETERY RD	10+30.00 - 10+75.00	121		121	
ARISTA RD	10+30.50 - 10+75.00	107		107	
SUMMER LEE DR	8+65.00 - 9+30.00	274		274	
	9+30.00 - 10+00.00	455		729	
	10+00.00 - 10+60.00	403		1132	
	10+60.00 - 11+35.00	333		1465	
FOXCHASE LN	10+30.50 - 10+70.00	217		217	
	10+70.00 - 11+15.00	187		404	
CHANDLERS LANDING	10+30.50 - 10+50.00	109		109	
	10+50.00 - 10+80.00	60		169	
SHADY DALE LANE	10+30.50 - 10+80.00	368		368	
BENTON WOODS DRIVE	10+30.50 - 10+75.00	359		359	
WHITE RD	10+30.50 - 11+30.00	653		653	
	11+30.00 - 11+90.00	156		809	
PRIVATE DR	10+30.50 - 11+00.00	595		595	
	11+00.00 - 12+10.00	764		1359	
HENRY M. CHANDLER R	10+30.50 - 10+80.00	647		647	
	10+80.00 - 11+75.00	998		1645	
WELLINGTON LN	10+30.50 - 10+40.00	33		33	
	10+40.00 - 10+70.00	104		137	
	10+70.00 - 11+09.00	154		291	
LAKEWAY DR	10+30.50 - 10+64.00	66		66	
COUNTRY CLUB DR	10+30.50 - 10+50.00	136		136	
	10+50.00 - 11+00.00	253		389	
MONT BLANC	10+30.50 - 10+95.00	336		336	
LAFAYETTE DR	10+30.50 - 10+93.00	333		333	
LAFAYETTE LANDING	10+30.50 - 11+00.00	407		407	
SHEPHERDS GLEN RD	10+30.50 - 10+55.00	90		90	
	10+55.00 - 10+95.00	72		162	
GREEN PASTURES RD	10+30.50 - 10+55.00	81		81	
	10+55.00 - 11+55.00	173		254	
BLUE HERON LN	10+30.50 - 10+75.00	187		187	
HEATHLAND CROSSING	10+30.50 - 10+50.00	71		71	
	10+50.00 - 1075	96		167	
OLD FM 740	10+30.50 - 10+60.00	48	10	48	10
	10+60.00 - 10+70.00	20	3	68	13
	10+70.00 - 1200	449	0	517	13
	TOTAL	9915	13	9915	13

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FM 740
SUMMARY SHEETS

SHEET 4 OF 4

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	19A
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

SUMMARY OF PAVEMENT ITEMS

SHEET NO	LOCATION	100 2002 PREPARING ROW	216 2001 PROOF ROLLING	260 2002 LIME (HYDRATED LIME (SLURRY))	260 2059 LIME TREAT (EXIST MATL) (14 ")	340 2011 D-GR HMA (METH) TY - B PG64-22	340 2048 D-GR HMA (METH) TY-C SAC-B PG70-22	360 2003 CONC PVMT (CONT REINF-CRCP) (10")	400 2009 CUT & RESTORING PAV (CONC)	528 2001 COLORED TEXTURED CONC (4")	529 2006 CONC CURB (MONO) (TY II)	531 2031 CONC SIDEWALKS (4")	531 2005 CURB RAMPS (TY 1)	531 2006 CURB RAMPS (TY 2)	531 2010 CURB RAMPS (TY 7)	531 2011 CURB RAMPS (TY 8)	531 2017 CURB RAMPS (TY 21)	531 2041 CURB RAMPS (TY 10)	536 2002 CONC MEDIAN
		STA	HR	TON	SY	TON	TON	SY	SY	SY	LF	SY	EA	EA	EA	EA	EA	EA	SY
1 OF 24	STA 20+94 - STA 24+00	3.0	0.5	81	2083	443	-	1913	-	27	1183	239	-	-	1	1	-	3	-
2 OF 24	STA 24+00 - STA 29+50	5.5	1.0	148	4148	886	-	3843	-	54	1467	424	-	-	-	1	-	11	9
3 OF 24	STA 29+50 - STA 35+00	5.5	1.0	148	3939	840	-	3633	-	105	2023	513	2	-	-	5	-	6	17
4 OF 24	STA 35+00 - STA 40+50	5.5	1.0	178	4980	1069	-	4675	-	154	2239	718	-	-	-	9	-	2	17
5 OF 24	STA 40+50 - STA 46+00	5.5	1.0	145	3777	804	-	3472	-	158	2049	511	-	-	-	-	-	7	9
6 OF 24	STA 46+00 - STA 51+50	5.5	1.0	158	4423	946	-	4118	-	110	2208	645	2	-	-	4	-	1	9
7 OF 24	STA 51+50 - STA 57+00	5.5	1.0	153	3997	852	-	3691	-	141	2293	465	-	-	-	-	-	12	9
8 OF 24	STA 57+00 - STA 62+50	5.5	1.0	155	4109	877	-	3803	-	100	1997	673	-	3	-	6	1	2	17
9 OF 24	STA 62+50 - STA 68+00	5.5	1.0	131	3400	721	-	3094	-	7	2139	730	-	1	-	2	-	-	-
10 OF 24	STA 68+00 - STA 73+50	5.5	1.0	133	3415	724	-	3109	-	69	2213	657	-	-	-	-	-	3	-
11 OF 24	STA 73+50 - STA 79+00	5.5	1.0	191	5414	1164	-	5108	-	155	2316	680	1	-	-	3	-	3	17
12 OF 24	STA 79+00 - STA 84+50	5.5	1.0	173	4930	1058	-	4625	1919	198	2380	733	-	2	-	2	-	-	9
13 OF 24	STA 84+50 - STA 90+00	5.5	1.0	175	4932	1058	-	4627	-	175	2147	717	-	-	-	12	-		26
14 OF 24	STA 90+00 - STA 95+50	5.5	1.0	162	4491	961	-	4185	-	158	2353	735	-	-	-	4	-	1	9
15 OF 24	STA 95+50 - STA 101+00	5.5	1.0	149	3984	850	-	3678	-	60	2137	552	-	-	-	-	-	7	9
16 OF 24	STA 101+00 - STA 106+50	5.5	1.0	149	3851	820	-	3545	-	244	2197	733	-	-	-	-	1	-	-
17 OF 24	STA 106+50 - STA 112+00	5.5	1.0	153	4081	871	-	3776	-	184	2070	668	-	-	-	-	-	2	16
18 OF 24	STA 112+00 - STA 117+50	5.5	1.0	146	4112	880	-	3834	-	110	2076	666	-	-	-	-	-	2	9
19 OF 24	STA 117+50 - STA 123+00	5.5	1.0	145	4079	868	-	3746	-	160	2030	654	-	-	-	-	-	2	9
20 OF 24	STA 123+00 - STA 128+50	5.5	1.0	148	4457	1158	126	3546	-	31	2432	653	-	2	-	-	-	-	40
21 OF 24	STA 128+50 - STA 134+00	5.5	1.0	126	3239	686	-	2933	-	-	2200	733	-	-	-	-	-	-	-
22 OF 24	STA 134+00 - STA 139+50	5.5	1.0	140	3599	765	-	3293	-	145	2207	733	-	-	-	-	-	-	-
23 OF 24	STA 139+50 - STA 145+00	5.5	1.0	178	6208	2299	640	2995	-	126	734	488	-	-	-	6	-	-	40
24 OF 24	STA 145+00 - STA 147+80	3.0	0.5	52	1247	617	269	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS		127	23	3517	96895	22217	1035	85242	1919	2671	47090	14320	5	8	1	55	2	64	271

* CUT AND RESTORING PAVEMENT QUANTITIES TO THE CONTRACTOR FOR INSTALLING THE 42" PIPE ON HENRY CHANDLER DR.

SUMMARY OF REMOVAL ITEMS

SHEET NO	LOCATIONS	104 2001 REMOVING CONC (PAV)	104 2009 REMOVING CONC (RIPRAP)	104 2015 REMOVING CONC (SIDEWALKS)	104 2017 REMOVING CONC (DRIVEWAYS)	104 2021 REMOVING CONC (CURB)	104 2032 REMOVING CONC (WHEELCHAIR RAMP)	105 2014 REMOVING STAB BASE & ASPH PAV (7"-12")	496 2002 REMOV STR (INLET)	496 2003 REMOV STR (MANHOLE)	496 2004 REMOV STR (SET)	496 2007 REMOV STR (PIPE)	542 2001 REMOVING METAL BEAM GUARD FENCE	544 2003 GUARDRAIL END TREATMENT (REMOVE)
		SY	SY	SY	SY	LF	SY	SY	EA	EA	EA	LF	LF	EA
1 OF 6	BEGIN - STA: 40+50	1010	0	264	1412	0	13	10786	0	1	20	766	-	-
2 OF 6	STA: 40+50 - STA: 62+50	927	76	-	1453	288	-	8573	1	1	11	713	425	3
3 OF 6	STA: 62+50 - STA: 84+50	909	-	-	88	-	-	8377	-	-	3	406	400	3
4 OF 6	STA: 84+50 - STA: 106+50	3130	-	-	-	-	-	5806	-	-	5	738	-	-
5 OF 6	STA: 106+50 - STA: 128+50	790	-	-	-	-	-	6992	-	-	-	102	-	-
6 OF 6	STA: 128+50 - STA: 147+80	704	-	-	91	-	-	2793	-	-	4	279	-	-
TOTALS		7470	76	264	3044	288	13	43327	1	2	43	3004	825	6

Huitt-Zollars, Inc. - Firm Registration No. F-761

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Texas Department of Transportation

FM 740
SUMMARY SHEETS

SHEET 1 OF 1

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	20
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

SUMMARY OF DETOUR AND TRAFFIC CONTROL ITEMS

SHEET NO	104 2011 REMOVING CONC (MEDIANS)	* 340 2011 D-GR HMA (METH) TY-B PG64-22	* 340 2034 D-GR HMA (METH) TY-C PG64-22	502 2001 BARRICADES SIGNS AND TRAFFIC HANDLING	508 2002 CONSTRUCTING DETOUR	512 2017 PORT CTB (DES SOURCE) (LOW PROF) (TY 1)	512 2018 PORT CTB (DES SOURCE) (LOW PROF) (TY 2)	512 2026 PORT CTB (MOVE) (LOW PROF) (TY 1)	512 2027 PORT CTB (MOVE) (LOW PROF) (TY 2)	512 2035 PORT CTB (STKPL) (LOW PROF) (TY 1)	512 2036 PORT CTB (STKPL) (LOW PROF) (TY 2)	662 2004 WK ZN PAV MRK NON-REMOV (W) 4" (SLD)	662 2032 WK ZN PAV MRK NON-REMOV (Y) 4" (SLD)	662 2065 WK ZN PAV MRK REMOV (W) 4" (DOT)	662 2067 WK ZN PAV MRK REMOV (W) 4" (SLD)	662 2079 WK ZN PAV MRK REMOV (W)24" (SLD)	662 2099 WK ZN PAV MRK REMOV (Y) 4" (SLD)	677 2001 ELIM EX PAV MRK & MRKS (4")	677 2007 ELIM EX PAV MRK & MRKS (24")	6834 2002 PORTABLE CHANGEABLE MESSAGE SIGN
	SY	TON	TON	MO	SY	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA
PHASE 1																				
FM 3097 PHASE 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	-	-	-	-	-
1 OF 7	79	543	181	-	1646	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2 OF 7	-	228	76	-	690	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 OF 7	-	147	49	-	445	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4 OF 7	-	936	312	-	2874	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 OF 7	-	108	36	-	327	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6 OF 7	-	-	-	-	477	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 OF 7	-	331	110	-	1003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FM 1140 PHASE 1 STAGE 1	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1 OF 1	-	269	90	-	815	-	-	-	-	-	-	-	-	-	837	-	1724	861	-	-
FM 1140 PHASE 1 STAGE 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1 OF 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1048	-	2142	-	-	-
PHASE 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FM 3097 PHASE 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1 OF 6	-	258	86	-	782	-	-	-	-	-	-	3635	3532	-	197	-	597	6210	-	-
2 OF 6	-	164	55	-	496	-	-	-	-	-	-	3681	4406	-	-	-	-	3632	-	-
3 OF 6	-	46	15	-	138	-	-	-	-	-	-	1359	3294	-	-	-	-	736	-	-
4 OF 6	-	136	45	-	413	-	-	-	-	-	-	4446	4446	-	-	-	-	6600	-	-
5 OF 6	-	46	15	-	138	-	-	-	-	-	-	1650	1650	-	-	-	-	2475	-	-
6 OF 6	-	0	0	-	0	-	-	-	-	-	-	-	-	-	-	-	-		-	-
SUMMER LEE DR PHASE 2 STAGE 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	814	-	-	-
SUMMER LEE DR PHASE 2 STAGE 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	993	-	-	-
FM 1140 PHASE 2	-	186	62	-	564	-	-	-	-	-	-	-	-	-	1992	-	1763	766	-	-

* FOR CONTRACTOR INFORMATION ONLY SUBSIDIARY TO BID ITEM 508

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Huitt-Zollars, Inc. - Firm Registration No. F-761

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Texas Department of Transportation

FM 740
SUMMARY SHEETS

SHEET 1 OF 2

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	21
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

SUMMARY OF DETOUR AND TRAFFIC CONTROL ITEMS (CONT)

SHEET NO	104 2011 REMOVING CONC (MEDIANS)	* 340 2011 D-GR HMA (METH) TY-B PG64-22	* 340 2034 D-GR HMA (METH) TY-C PG64-22	502 2001 BARRICADES SIGNS AND TRAFFIC HANDLING	508 2002 CONSTRUCTING DETOUR	512 2017 PORT CTB (DES SOURCE) (LOW PROF) (TY 1)	512 2018 PORT CTB (DES SOURCE) (LOW PROF) (TY 2)	512 2026 PORT CTB (MOVE) (LOW PROF) (TY 1)	512 2027 PORT CTB (MOVE) (LOW PROF) (TY 2)	512 2035 PORT CTB (STKPL) (LOW PROF) (TY 1)	512 2036 PORT CTB (STKPL) (LOW PROF) (TY 2)	662 2004 WK ZN PAV MRK NON-REMOV (W) 4" (SLD)	662 2032 WK ZN PAV MRK NON-REMOV (Y) 4" (SLD)	662 2065 WK ZN PAV MRK REMOV (W) 4" (DOT)	662 2067 WK ZN PAV MRK REMOV (W) 4" (SLD)	662 2079 WK ZN PAV MRK REMOV (W)24" (SLD)	662 2099 WK ZN PAV MRK REMOV (Y) 4" (SLD)	677 2001 ELIM EX PAV MRK & MRKS (4")	677 2007 ELIM EX PAV MRK & MRKS (24")	6834 2002 PORTABLE CHANGEABLE MESSAGE SIGN
	SY	TON	TON	MO	SY	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA
FM 3097 PHASE 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHASE 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1 OF 6	-	-	-	-	-	-	-	-	-	-	-	-	-	48	4210	-	4184	-	11	-
2 OF 6	-	-	-	-	-	810	-	810	-	810	-	-	-	-	4400	-	4400	-	-	-
3 OF 6	-	-	-	-	-	1050	20	1050	20	1050	20	-	-	-	2830	11	2830	-	-	-
4 OF 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1466	-	1466	-	-	-
5 OF 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4397	-	4398	-	-	-
6 OF 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3604	33	1853	-	-	-
SUMMER LEE DR PHASE 3 STAGE 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	854	-	-	-
SUMMER LEE DR PHASE 3 STAGE 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230	42	816	-	-	-
HENRY M. CHANDLER DR PHASE 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	936	-	-	-
FM 3097 PHASE 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FM 1140 PHASE 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	290	-	-	-
FM 3097 PHASE 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHASE 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1 OF 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2 OF 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 OF 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1076	-	3070	-	-	-
4 OF 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 OF 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6 OF 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	267	52	298	-	-	-
HENRY M. CHANDLER DR PHASE 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33	956	-	-	-
PHASE 5 STAGE 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHASE 5 STAGE 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHASE 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FM 1140 1 OF 2 STAGE 1	-	50	17	-	150	-	-	-	-	-	-	-	-	-	496	-	989	-	33	-
FM 1140 2 OF 2 STAGE 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FM 11401 OF 2 STAGE 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	995	-	-	-
FM 1140 2 OF 2 STAGE 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	79	3448 *	1149 *	24	10958	1860 ⚠	20	1860 ⚠	20	1860 ⚠	20	14771	17328	48	27170 ⚠	275	36368	21280	44	2

* FOR CONTRACTOR INFORMATION ONLY SUBSIDIARY TO BID ITEM 508

⚠ REVISED 07.30.09 VN

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
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Texas Department of Transportation

FM 740
SUMMARY SHEETS

SHEET 2 OF 2

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	22
CHECK DAN	CONTROL	SECTION	JOB	
CHECK CVL	1014	03	039	

SUMMARY OF NOISE WALL ITEMS

SHEET NO	LOCATION	NAME	416 2001 DRILL SHAFT (18 IN)	432 2039 RIPRAP (MOW STRIP) (4")	5296 NOISE WALLS (6 FT)	5296 NOISE WALLS (7 FT)	5296 NOISE WALLS (8 FT)	5296 NOISE WALLS (9 FT)	5296 NOISE WALLS (10 FT)	5296 NOISE WALLS (11 FT)	5296 2003 NOISE WALLS (12 FT)
			LF	CY	SF	SF	SF	SF	SF	SF	SF
1 OF 2	STA 0+00 - STA 2+90	WALL "C"	625	14	-	-	-	-	240	1056	2016
2 OF 2	STA 2+90 - STA 7+12	WALL "C"	875	21	72	84	672	1296	240	1584	-
1 OF 1	STA 0+00 - STA 2+80	WALL "D"	600	14	72	84	192	216	240	264	1872
1 OF 1	STA 0+00 - STA 3+18	WALL "E"	675	16	72	84	96	108	120	132	2880
TOTALS			2775	64.5	216	252	960	1620	840	3036	6768

SUMMARY OF RETAINING WALL ITEMS

SHEET NO	LOCATION	NAME	403 2001 TEMPORARY SPL SHORING	423 2001 RETAINING WALL (MSE)	432 2048 RIPRAP (CONC) (FLUME)	432 2039 RIPRAP (MOW STRIP) (4 IN)	450 2071 RAIL (TY C402)	450 2077 RAIL (HANDRAIL) (TY F)
			SF	SF	CY	CY	LF	LF
1 OF 5	STA 0+00 - STA 19+60	WALL W1	-	18222	-	48.6	1960	-
1 OF 1	STA 0+00 - STA 1+80	WALL E2	1813	1272	13.9	-	-	180
1 OF 1	STA 0+00 - STA 2+35	WALL E3	-	2292	-	6.0	235	-
1 OF 2	STA 0+00 - STA 6+85	WALL E4	5494	4121	51.3	-	-	685
TOTALS			7307	25907	65.2	54.6	2195	865

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FM 740
SUMMARY SHEETS

SHEET 1 OF 1

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	23
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

SUMMARY OF PAVEMENT MARKING ITEMS

SHEET NO.	LOCATION	666 2003 REFL PAV MRK TY I (W) 4" (BRK) (100MIL)	666 2012 REFL PAV MRK TY I (W) 4" (SLD) (100MIL)	666 2036 REFL PAV MRK TY I (W) 8" (SLD) (100MIL)	666 2042 REFL PAV MRK TY I (W) 12" (SLD) (100MIL)	666 2048 REFL PAV MRK TY I (W) 24" (SLD) (100MIL)	666 2054 REFL PAV MRK TY I (W) (ARROW) (100MIL)	666 2096 REFL PAV MRK TY I (W) (WORD) (100MIL)	666 2105 REFL PAV MRK TY I (Y) 4" (BRK) (100MIL)	666 2111 REFL PAV MRK TY I (Y) 4" (SLD) (100MIL)	666 2132 REFL PAV MRK TY I (Y) 24" (SLD) (100MIL)	672 2012 REFL PAV MRKR TY I-C	672 2017 REFL PAV MRKR TY II-C-R
		LF	LF	LF	LF	LF	EA	EA	LF	LF	LF	EA	EA
1 OF 7	BEGIN - STA: 40+50	940	3983	591	491	110	15	8	160	3142	0	64	47
2 OF 7	STA: 40+50 - STA: 62+50	1100	4455	826	0	0	8	8	0	3090	0	84	55
3 OF 7	STA: 62+50 - STA: 84+50	1060	3946	524	333	79	4	5	0	3584	0	68	52
4 OF 7	STA: 84+50 - STA: 106+50	1100	3703	995	0	0	9	8	0	3650	0	100	55
5 OF 7	STA: 106+50 - STA: 128+50	1100	4376	850	0	0	7	7	0	3808	0	93	55
6 OF 7	STA: 128+50 - STA: 147+80	720	4228	385	0	30	3	3	0	4857	312	39	36
7 OF 7	MATCH LINE A	0	560	0	0		0	0	0	1074	141	0	0
	TOTAL	6020	25251	4171	824	219	46	39	160	23205	453	448	300

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SHEET NO.	LOCATION	666 2142 REF PAV MRK TY II (W) 4" (BRK)	666 2145 REF PAV MRK TY II (W) 4" (SLD)	666 2153 REF PAV MRK TY II (W) 8" (SLD)	666 2155 REF PAV MRK TY II (W) 12" (SLD)	666 2157 REF PAV MRK TY II (W) 24" (SLD)	666 2160 REF PAV MRK TY II (W) (ARROW)	666 2173 REF PAV MRK TY II (W) (WORD)	666 2176 REF PAV MRK TY II (Y) 4" (BRK)	666 2178 REF PAV MRK TY II (Y) 4" (SLD)	666 2185 REF PAV MRK TY II (Y) 24" (SLD)
		(LF)	LF	LF	LF	LF	EA	EA	LF	LF	LF
1 OF 7	BEGIN - STA: 40+50	940	3983	591	491	110	15	8	160	3142	0
2 OF 7	STA: 40+50 - STA: 62+50	1100	4455	826	0	0	8	8	0	3090	0
3 OF 7	STA: 62+50 - STA: 84+50	1060	3946	524	333	79	4	5	0	3584	0
4 OF 7	STA: 84+50 - STA: 106+50	1100	3703	995	0	0	9	8	0	3650	0
5 OF 7	STA: 106+50 - STA: 128+50	1100	4376	850	0	0	7	7	0	3808	0
6 OF 7	STA: 128+50 - STA: 147+80	720	4228	385	0	30	3	3	0	4857	312
7 OF 7	MATCH LINE A	0	560	0	0	0	0	0	0	1074	141
	TOTAL	6020	25251	4171	824	219	46	39	160	23205	453

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SHEET NO.	LOCATION	678 2001 PAV SURF PREP FOR MRK (4")	678 2003 PAV SURF PREP FOR MRK (8")	678 2004 PAV SURF PREP FOR MRK (12")	678 2006 PAV SURF PREP FOR MRK (24")	678 2007 PAV SURF PREP FOR MRK (ARROW)	678 2018 PAV SURF PREP FOR MRK (WORD)
		LF	LF	LF	LF	EA	EA
1 OF 7	BEGIN - STA: 40+50	8225	591	491	110	15	8
2 OF 7	STA: 40+50 - STA: 62+50	8645	826	0	0	8	8
3 OF 7	STA: 62+50 - STA: 84+50	8590	524	333	79	4	5
4 OF 7	STA: 84+50 - STA: 106+50	8453	995	0	0	9	8
5 OF 7	STA: 106+50 - STA: 128+50	9284	850	0	0	7	7
6 OF 7	STA: 128+50 - STA: 147+80	9805	385	0	342	3	3
7 OF 7	MATCH LINE A	1634	0	0	141	0	0
	TOTAL	54636	4171	824	672	46	39

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FM 740
SUMMARY SHEETS

SHEET 1 OF 1

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	24
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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SUMMARY OF STORM WATER POLLUTION PREVENTION

SHEET NO	LOCATION	161 2005 COMPOST MANUF TOPSOIL (PB) (4")	162 2002 BLOCK SODDING	164 2009 BROADCAST SEED (TEMP) (WARM)	164 2011 BROADCAST SEED (TEMP) (COOL)	168 2001 VEGETATIVE WATERING	169 2001 SOIL RETENTION BLANKETS (CL 1) (TY A)	506 2003 ROCK FILTER DAMS (INSTALL) (TY 3)	506 2009 ROCK FILTER DAMS (REMOVE)	506 2016 CONSTRUCTION EXITS (INSTALL) (TY 1)	506 2019 CONSTRUCTION EXITS (REMOVE)	506 2024 BACKHOE WORK (EROSION & SEDM CONT)	506 2034 TEMPORARY SEDIMENT CONTROL FENCE	5049 2002 BIODGRD EROSION CONTROL LOGS (18" DIA)
		SY	SY	SY	SY	MG	SY	LF	LF	SY	SY	HR	LF	LF
1 OF 7	BEGIN - STA 40+50	5770	5770	2580	2579	167	-	10	10	-	-	-	3264	560
2 OF 7	STA 40+50 - STA 62+50	11966	11966	5575	5574	346	-	-	-	-	-	-	3771	952
3 OF 7	STA 62+50 - STA 84+50	12304	12304	5381	5381	356	-	40	40	-	-	-	4353	1232
4 OF 7	STA 84+50 - STA 106+50	6187	6187	2726	2726	179	-	0	-	-	-	-	3976	616
5 OF 7	STA 106+50 - STA 128+50	7095	7095	2915	2915	205	-	40	40	134	134	-	4709	560
6 OF 7	STA 128+50 - STA 147+80	9090	9090	3934	3933	263	-	-	-	-	-	-	3855	504
7 OF 7	MATCHLINE A	2255	2255	1128	1127	65	-	-	-	-	-	-	560	0
1 OF 1	HENRY M. CHANDLER DR.	-	-	-	-	-	-	-	-	-	-	-	0	336
TOTAL		54666	54666	24239	24235	1581	* 2700	90	90	134	134	* 200	24488	4760

* LOCATIONS TO BE DETERMINED BY ENGINEER IN FIELD

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SUMMARY OF MAINTENANCE ITEMS

SHEET NO	LOCATION	730 2113 FULL WIDTH MOWING	734 2002 LITTER REMOVAL	738 2224 CLEANING / SWEEPING (STREET)
		CYC	CYC	CYC
		-	-	-
1 OF 7	BEGIN - STA 40+50	-	-	-
2 OF 7	STA 40+50 - STA 62+50	-	-	-
3 OF 7	STA 62+50 - STA 84+50	-	-	-
4 OF 7	STA 84+50 - STA 106+50	-	-	-
5 OF 7	STA 106+50 - STA 128+50	-	-	-
6 OF 7	STA 128+50 - STA 147+80	-	-	-
7 OF 7	MATCHLINE A	-	-	-
TOTAL		18	12	12

SUMMARY TABLE FOR IRRIGATION / ILLUM ITEMS

SHEET NO	LOCATION	618 2018 CONDT (PVC) (SCHD 40) (2")	618 2024 CONDT (PVC) (SCHD 40) (4")	624 2007 GROUND BOX TY A (122311)	624 2023 GROUND BOX (CITY TYPE)
		LF	LF	EA	EA
1 OF 3	BEGIN - STA: 40+50	1582	125	10	3
2 OF 3	STA: 40+50 - STA: 62+50	2077	141	11	3
3 OF 3	STA: 62+50 - STA: 84+50	1714	94	9	2
	TOTALS	5373	360	30	8

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SUMMARY OF SIGNS

SHEET NO	LOCATION	644 2001 INS SM RD SN SUP & AM TY 10BWG (1) SA (P)	644 2004 INS SM RD SN SUP & AM TY 10BWG (1) SA (T)	644 2027 INS SM RD SN SUP & AM TY S80 (1) SA (U)	644 2007 INS SM RD SN SUP & AM TY 10BWG (1) SB (P)	644 2056 RELOCATE SM RD SN SUP & AM TY 10BWG	644 2060 REMOVE SM RD SN SUP & AM	644 2085 RELOCATE SM RD SN & AM (SIGN ONLY)
		EA	EA	EA	EA	EA	EA	EA
1 OF 7	BEGIN - STA: 40+50	8	-	1	-	-	18	2
2 OF 7	STA: 40+50 - STA: 62+50	5	-	-	-	1	17	3
3 OF 7	STA: 62+50 - STA: 84+50	8	-	-	-	-	26	3
4 OF 7	STA: 84+50 - STA: 106+50	7	-	-	-	-	9	12
5 OF 7	STA: 106+50 - STA: 128+50	5	-	-	-	1	6	6
6 OF 7	STA: 128+50 - STA: 147+80	4	2	3	1	-	4	2
7 OF 7	MATCH LINE A	2	-	-	-	-	9	-
	TOTALS	39	2	4	1	2	89	28

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FM 740
SUMMARY SHEETS

SHEET 1 OF 1

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	25
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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ITEM 465											
INLET ID	INLET LOCATION	* LENGTH FT.	* WIDTH FT.	* HEIGHT FT.	INLET COMPL. (CURB) TY I EA.	INLET EXT EA.	MANHOLE (COMPL) (TY M) EA.	INLET (COMPL) (TY H) 1-GRATE EA.			
CI-A7	31.50 RT FM740 STA. 26+29.98	5.0	3.0	3.5	1	1					
MH-A1	25.50 LT FM740 STA. 26+44.98	4.0	4.0	4.0			1				
MH-A2	26.32 LT FM740 STA. 29+17.18	4.0	4.0	4.0			1				
MH-A3	25.50 LT FM740 STA. 32+13.64	4.0	4.0	8.0			1				
MH-A4	47.39 LT FM740 STA. 32+78.41	4.0	4.0	6.5			1				
MH-A5	25.50 LT FM740 STA. 34+32.11	4.0	4.0	5.0			1				
MH-A6	25.50 LT FM740 STA. 36+13.41	4.0	4.0	4.5			1				
MH-A7	25.50 LT FM740 STA. 38+66.50	4.0	4.0	5.0			1				
MH-A8	25.50 RT FM740 STA. 40+51.59	4.0	4.0	4.5			1				
C1-A1	31.50 LT FM740 STA. 26+44.98	5.0	3.0	3.0	1	1					
CI-A8	31.50 RT FM740 STA. 29+17.17	5.0	3.0	3.0	1	1					
CI-A2	31.50 LT FM740 STA. 30+34.81	5.0	3.0	3.0	1	1					
CI-A6	31.50 LT FM740 STA. 32+13.64	5.0	3.0	5.5	1						
CI-A9	31.50 RT FM740 STA. 32+13.64	5.0	3.0	5.5	1						
CI-A5	31.50 LT FM740 STA. 34+32.11	5.0	3.0	3.0	1	1					
CI-A10	31.50 RT FM740 STA. 34+25.00	5.0	3.0	3.0	1						
CI-A11	31.50 RT FM740 STA. 36+13.41	5.0	3.0	3.0	1	2					
CI-A4	31.50 LT FM740 STA. 38+66.50	5.0	3.0	4.0	1	2					
CI-A4A	107.73 LT FM740 STA. 38+96.06	5.0	3.0	3.5	1						
CI-A4B	107.76 LT FM740 STA. 39+43.47	5.0	3.0	3.5	1						
CI-A3	31.50 LT FM740 STA. 40+51.59	5.0	3.0	4.0	1	1					
CI-B1	31.50 LT FM740 STA. 43+77.80	5.0	3.0	3.0	1	1					
MH-B1	25.50 LT FM740 STA. 43+77.80	4.0	4.0	3.5			1				
MH-B2	25.50 LT FM740 STA. 46+92.19	4.0	4.0	4.0			1				
MH-B3	25.50 LT FM740 STA. 50+37.06	4.0	4.0	6.5			1				
CI-B6	44.41 RT FM740 STA. 50+34.41	5.0	3.0	11.5	1	2					
MH-B4	43.15 RT FM740 STA. 49+89.33	4.0	4.0	10.5			1				
CI-B2	31.50 LT FM740 STA. 45+41.52	5.0	3.0	3.5	1	1					
CI-B3	31.50 LT FM740 STA. 46+92.19	5.0	3.0	3.5	1	1					
CI-B4	31.50 RT FM740 STA. 46+85.27	5.0	3.0	3.5	1	1					
CI-B5	33.51 LT FM740 STA. 50+37.06	5.0	3.0	5.5	1	2					
MH-D1	25.50 LT FM740 STA. 52+53.23	4.0	4.0	9.5			1				
MH-D2	25.50 LT FM740 STA. 55+88.31	4.0	4.0	11.5			1				
MH-D3	25.50 LT FM740 STA. 57+14.02	4.0	4.0				1				
MH-D4	25.50 LT FM740 STA. 60+22.19	4.0	4.0	10.0			1				
MH-D5	25.50 LT FM740 STA. 62+98.79	4.0	4.0	8.0			1				
MH-D6	25.50 LT FM740 STA. 65+36.20	4.0	4.0	4.5			1				
MH-D7	25.50 RT FM740 STA. 67+23.91	4.0	4.0	8.5			1				
MH-D8	25.50 LT FM740 STA. 69+75.78	4.0	4.0	10.5			1				
MH-D9	25.50 LT FM740 STA. 72+92.37	4.0	4.0	6.0			1				
CI-D21	31.50 LT FM740 STA. 72+91.81	5.0	3.0	7.5	1						
CI-D10	74.40 LT FM740 STA. 62+09.36	5.0	3.0	8.5	1						
CI-D11	76.06 LT FM740 STA. 62+62.47	5.0	3.0	7.0	1						
CI-D1	31.50 LT FM740 STA. 52+53.23	5.0	3.0	4.5	1	1					
CI-D2	31.50 LT FM740 STA. 55+88.31	5.0	3.0	5.5	1	1					
CI-D3	31.50 LT FM740 STA. 57+14.02	5.0	3.0	6.0	1	1					
CI-D4	31.50 RT FM740 STA. 57+00.00	5.0	3.0	6.0	1						
CI-D5	31.50 LT FM740 STA. 58+07.09	5.0	3.0	12.0	1	1					
CI-D7	31.50 LT FM740 STA. 60+22.19	5.0	3.0	7.5	1	1					
CI-D8	31.50 RT FM740 STA. 60+68.73	5.0	3.0	7.5	1						
CI-D9	31.50 LT FM740 STA. 61+73.93	5.0	3.0	9.5	1	1					
CI-D12	31.50 LT FM740 STA. 62+98.79	5.0	3.0	9.5	1	1					
CI-D13	31.50 RT FM740 STA. 63+52.96	5.0	3.0	6.5	1	1					
CI-D14	31.50 LT FM740 STA. 65+36.20	5.0	3.0	5.5	1						
CI-D15	31.50 RT FM740 STA. 65+36.49	5.0	3.0	3.5	1						

*FOR CONTRACTORS INFORMATION ONLY.

NO.	REVISION	BY	DATE

CP&Y Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

DALLAS DIST.-FM740

SUMMARY SHEETS

SHEET 1 OF 3

Designed: AJA	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			SHEET NO.
Checked: GRB	6	TEXAS				26
Drawn:	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
Checked: RRH	DALLAS	ROCKWALL	1014	03	039	FM 740

					465 2195	465 2104	465 2005	465 2003			
INLET ID	INLET LOCATION	* LENGTH FT.	* WIDTH FT.	* HEIGHT FT.	INLET (COMPL) (CURB) TY I EA.	INLET EXT	MANH (COMPL) (TY M) EA.	INLET (COMPL) (TY H) EA.			
CI-D16	31.50 LT FM740 STA. 65+92.95	5.0	3.0	6.5	1	1					
CI-D17	31.50 LT FM740 STA. 67+23.91	5.0	3.0	6.0	1	1					
CI-D18	31.50 LT FM740 STA. 69+75.78	5.0	3.0	7.5	1	1					
CI-D19	31.50 LT FM740 STA. 71+77.35	5.0	3.0	3.0	1	2					
CI-D20	31.50 LT FM740 STA. 72+92.36	5.0	3.0	3.5	1	1					
MH-E1	25.50 LT FM740 STA. 73+90.00	4.0	4.0	4.5			1				
MH-E2	25.50 LT FM740 STA. 77+04.10	4.0	4.0	14.5			1				
MH-E3	25.50 LT FM740 STA. 80+07.85	4.0	4.0	7.5			1				
MH-E4	32.65 RT CHAND STA. 10+61.67	4.0	4.0	19.5			1				
MH-E5	25.21 RT CHAND STA. 13+87.03	4.0	4.0	28.0			1				
MH-E6	25.07 RT CHAND STA. 17+74.17	4.0	4.0	19.5			1				
MH-E7	25.71 RT CHAND STA. 25+98.03	4.0	4.0	8.0			1				
MH-E8	24.49 RT CHAND STA. 26+01.92	4.0	4.0	10.0			1				
MH-E9	24.27 RT CHAND STA. 30+00.32	4.0	4.0	9.5			1				
CI-E1	31.50 LT FM740 STA. 73+90.00	5.0	3.0	4.0	1	2					
CI-E2	31.50 RT FM740 STA. 74+18.53	5.0	3.0	4.0	1	2					
DI-E3	59.16 LT FM740 STA. 76+78.19			2.5				1			
CI-E4	31.50 LT FM740 STA. 77+04.10	5.0	3.0	6.0	1	1					
DI-E6	53.57 RT FM740 STA. 78+28.14			10.5				1			
CI-E7	38.51 RT FM740 STA. 10+61.67	5.0	3.0	8.0	1	2					
CI-E5	31.50 LT FM740 STA. 78+21.84	5.0	3.0	14.0	1	1					
DI-G4	44.31 LT FM740 STA. 86+37.75			3.0				1			
CI-G3	31.50 LT FM740 STA. 86+37.82	5.0	3.0	8.0	1	1					
CI-G2	31.50 LT FM740 STA. 83+44.55	5.0	3.0	3.5	1	1					
CI-G1	31.50 LT FM740 STA. 80+07.85	5.0	3.0	5.5	1	1					
CI-H4	31.50 RT FM740 STA. 86+44.27	5.0	3.0	5.5	1	1					
CI-H3	33.48 RT CHAND STA. 82+08.45	5.0	3.0	5.5	1	1					
CI-H1	30.46 LT CHAND STA. 11+18.15	5.0	3.0	2.5	1	1					
DI-H2	62.54 RT CHAND STA. 81+87.74			3.0				1			
CI-I1	31.50 LT FM740 STA. 94+78.61	5.0	3.0	4.0	1						
CI-I2	31.50 LT FM740 STA. 97+78.72	5.0	3.0	4.0	1						
CI-I3	31.50 LT FM740 STA. 100+78.04	5.0	3.0	4.0	1	1					
CI-I4	31.50 LT FM740 STA. 102+82.65	5.0	3.0	5.0	1						
CI-J4	31.50 RT FM740 STA. 102+82.65	5.0	3.0	5.5	1						
MH-J3	34.70 RT FM740 STA. 102+04.36	4.0	4.0	6.5			1				
CI-J1	31.50 RT FM740 STA. 93+94.43	5.0	3.0	4.5	1						
CI-J2	31.50 RT FM740 STA. 97+07.63	5.0	3.0	4.0	1						
CI-J3	31.50 RT FM740 STA. 99+88.90	5.0	3.0	4.5	1	1					
CI-L1	31.50 LT FM740 STA. 110+88.00	5.0	3.0	3.5	1						
CI-L2	31.50 RT FM740 STA. 110+88.00	5.0	3.0	7.0	1						
CI-L3	31.47 RT FM740 STA. 112+74.06	5.0	3.0	6.2	1	1					
CI-L4	31.50 LT FM740 STA. 112+73.59	5.0	3.0	5.5	1	1					
MH-L5	33.68 RT FM740 STA. 114+77.06	4.0	4.0	5.0			1				
CI-L7	31.50 RT FM740 STA. 116+09.21	5.0	3.0	4.0	1						
CI-L6	31.50 LT FM740 STA. 116+09.21	5.0	3.0	3.5	1	1					
CI-M1	31.50 LT FM740 STA. 121+79.18	5.0	3.0	5.0	1	1					
MH-M1	35.55 LT FM740 STA. 124+14.00	4.0	4.0	2.5			1				
CI-M4	44.43 RT FM740 STA 125+52.46	5.0	3.0	4.0	1	1					
MH-E10	25.00' RT CHAND STA. 30+50.00	4.0	4.0	14.0			1				
CI-M3	31.50 RT FM740 STA. 121+79.18	5.0	3.0	5.0	1	1					
CI-M2	31.50 LT FM740 STA 126+50.00	5.0	3.0	4.0	1						
CI-O1	31.50 LT FM740 STA. 131+85.48	5.0	3.0	5.5	1	1					
CI-O2	31.50 LT FM740 STA. 134+67.08	5.0	3.0	4.5	1						
CI-O3	31.50 LT FM740 STA. 136+00.00	5.0	3.0	4.0	1	1					
CI-P1	31.50 RT FM740 STA. 131+85.48	5.0	3.0	5.5	1	2					
CI-P4	31.50 RT FM740 STA. 134+16.45	5.0	3.0	4.5	1	2					
CI-P2	31.50 RT FM740 STA. 134+67.08	5.0	3.0	4.5	1	2					
CI-P3	31.50 RT FM740 STA. 136+00.00	5.0	3.0	4.0	1	2					
CI-P5	31.50 RT FM740 STA. 135+23.86	5.0	3.0	4.5	1	2					
					76	65	35 ⚠1	4			

*FOR CONTRACTORS INFORMATION ONLY.

⚠ REVISED 07.30.09 VN

NO.	REVISION	BY	DATE

Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

DALLAS DIST.-FM740

SUMMARY SHEETS

SHEET 2 OF 3

Designed: AJA	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			SHEET NO.
Checked: GRB	6	TEXAS				27
Drawn:	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
Checked: RRH	DALLAS	ROCKWALL	1014	03	039	FM 740

INLET ID	INLET LOCATION	* LENGTH FT.	* WIDTH FT.	* HEIGHT FT.	465 2195 INLET (COMPL) (CURB) TY I EA.	465 2104 INLET EXT	465 2005 MANH (COMPL) (TY M) EA.	465 2003 INLET (COMPL) (TY H) EA.			
CI-D16	31.50 LT FM740 STA. 65+92.95	5.0	3.0	6.5	1	1					
CI-D17	31.50 LT FM740 STA. 67+23.91	5.0	3.0	6.0	1	1					
CI-D18	31.50 LT FM740 STA. 69+75.78	5.0	3.0	7.5	1	1					
CI-D19	31.50 LT FM740 STA. 71+77.35	5.0	3.0	3.0	1	2					
CI-D20	31.50 LT FM740 STA. 72+92.36	5.0	3.0	3.5	1	1					
MH-E1	25.50 LT FM740 STA. 73+90.00	4.0	4.0	4.5			1				
MH-E2	25.50 LT FM740 STA. 77+04.10	4.0	4.0	14.5			1				
MH-E3	25.50 LT FM740 STA. 80+07.85	4.0	4.0	7.5			1				
MH-E4	32.65 RT CHAND STA. 10+61.67	5.0	5.0	19.5			1				
MH-E5	25.21 RT CHAND STA. 13+87.03	5.0	5.0	28.0			1				
MH-E6	25.07 RT CHAND STA. 17+74.17	5.0	5.0	19.5			1				
MH-E7	25.71 RT CHAND STA. 25+98.03	5.0	5.0	8.0			1				
MH-E8	24.49 RT CHAND STA. 26+01.92	5.0	5.0	10.0			1				
MH-E9	24.27 RT CHAND STA. 30+00.32	5.0	5.0	9.5			1				
CI-E1	31.50 LT FM740 STA. 73+90.00	5.0	3.0	4.0	1	2					
CI-E2	31.50 RT FM740 STA. 74+18.53	5.0	3.0	4.0	1	2					
DI-E3	59.16 LT FM740 STA. 76+78.19			2.5				1			
CI-E4	31.50 LT FM740 STA. 77+04.10	5.0	3.0	6.0	1	1					
DI-E6	53.57 RT FM740 STA. 78+28.14			10.5				1			
CI-E7	38.51 RT FM740 STA. 10+61.67	5.0	3.0	8.0	1	2					
CI-E5	31.50 LT FM740 STA. 78+21.84	5.0	3.0	14.0	1	1					
DI-G4	44.31 LT FM740 STA. 86+37.75			3.0				1			
CI-G3	31.50 LT FM740 STA. 86+37.82	5.0	3.0	8.0	1	1					
CI-G2	31.50 LT FM740 STA. 83+44.55	5.0	3.0	3.5	1	1					
CI-G1	31.50 LT FM740 STA. 80+07.85	5.0	3.0	5.5	1	1					
CI-H4	31.50 RT FM740 STA. 86+44.27	5.0	3.0	5.5	1	1					
CI-H3	33.48 RT CHAND STA. 82+08.45	5.0	3.0	5.5	1	1					
CI-H1	30.46 LT CHAND STA. 11+18.15	5.0	3.0	2.5	1	1					
DI-H2	62.54 RT CHAND STA. 81+87.74			3.0				1			
CI-I1	31.50 LT FM740 STA. 94+78.61	5.0	3.0	4.0	1						
CI-I2	31.50 LT FM740 STA. 97+78.72	5.0	3.0	4.0	1						
CI-I3	31.50 LT FM740 STA. 100+78.04	5.0	3.0	4.0	1	1					
CI-I4	31.50 LT FM740 STA. 102+82.65	5.0	3.0	5.0	1						
CI-J4	31.50 RT FM740 STA. 102+82.65	5.0	3.0	5.5	1						
MH-J3	34.70 RT FM740 STA. 102+04.36	4.0	4.0	6.5			1				
CI-J1	31.50 RT FM740 STA. 93+94.43	5.0	3.0	4.5	1						
CI-J2	31.50 RT FM740 STA. 97+07.63	5.0	3.0	4.0	1						
CI-J3	31.50 RT FM740 STA. 99+88.90	5.0	3.0	4.5	1	1					
CI-L1	31.50 LT FM740 STA. 110+88.00	5.0	3.0	3.5	1						
CI-L2	31.50 RT FM740 STA. 110+88.00	5.0	3.0	7.0	1						
CI-L3	31.47 RT FM740 STA. 112+74.06	5.0	3.0	6.2	1	1					
CI-L4	31.50 LT FM740 STA. 112+73.59	5.0	3.0	5.5	1	1					
MH-L5	33.68 RT FM740 STA. 114+77.06	4.0	4.0	5.0			1				
CI-L7	31.50 RT FM740 STA. 116+09.21	5.0	3.0	4.0	1						
CI-L6	31.50 LT FM740 STA. 116+09.21	5.0	3.0	3.5	1	1					
CI-M1	31.50 LT FM740 STA. 121+79.18	5.0	3.0	5.0	1	1					
MH-M1	35.55 LT FM740 STA. 124+14.00	4.0	4.0	2.5			1				
CI-M4	44.43 RT FM740 STA. 125+52.46	5.0	3.0	4.0	1	1					
△ MH-E10	25.00' RT CHAND STA. 30+50.00	5.0	5.0	13.0			1				
CI-M3	31.50 RT FM740 STA. 121+79.18	5.0	3.0	5.0	1	1					
CI-M2	31.50 LT FM740 STA 126+50.00	5.0	3.0	4.0	1						
CI-O1	31.50 LT FM740 STA. 131+85.48	5.0	3.0	5.5	1	1					
CI-O2	31.50 LT FM740 STA. 134+67.08	5.0	3.0	4.5	1						
CI-O3	31.50 LT FM740 STA. 136+00.00	5.0	3.0	4.0	1	1					
CI-P1	31.50 RT FM740 STA. 131+85.48	5.0	3.0	5.5	1	2					
CI-P4	31.50 RT FM740 STA. 134+16.45	5.0	3.0	4.5	1	2					
CI-P2	31.50 RT FM740 STA. 134+67.08	5.0	3.0	4.5	1	2					
CI-P3	31.50 RT FM740 STA. 136+00.00	5.0	3.0	4.0	1	2					
CI-P5	31.50 RT FM740 STA. 135+23.86	5.0	3.0	4.5	1	2					
△ MH-E11	N=7008115.1562, E=2588972.3652	5.0	5.0	9.5			1				
					76	65	37 △	4			

*FOR CONTRACTORS INFORMATION ONLY.

No.	DATE	REVISION	APPROVE.
△	11-02-10	NEW MANHOLE, ADD CDS	

NO.	REVISION	BY	DATE

CP&Y Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

 Texas Department of Transportation

DALLAS DIST.-FM740

SUMMARY SHEETS

SHEET 2 OF 3

Designed: AJA	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			SHEET NO.
Checked: GRB	6	TEXAS				27A
Drawn:	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
Checked: RRH	DALLAS	ROCKWALL	1014	03	039	FM 740

STORM SEWER SUMMARY

LINE ID	FROM	TO	ITEM 464 RC PIPE (CL III) 18" LF	24" LF	27" LF	30" LF	36" LF	42" LF	48" LF	ITEM 464 RC PIPE (CL IV) 18" LF	24" LF	30" LF	36" LF	42" LF	ITEM 464 RC PIPE (CL V) 42" LF	0402 2001 TRENCH PROTECTION LF	0432 2002 RIPRAP (CONC) (5 IN) CY	0169 2001 SOIL RETENTION BLANKET (CL 1) (TY A) SY	0432 2023 RIPRAP (STONE PROTECTION) (24 IN) CY
LINE A	CI-A7	MH-A8	1486	643	19											124			
LINE B	CI-B1	OUT	387	415							50					245			
LINE D	MH-B3	OUT	714				479			342	120	575	555			1978	2		
LINE E	MH-D9	OUT	251	58		221		1128				103	439	442	706	2465			
LINE G	DI-G4	MH-E3	613													163			44
LINE H	CI-H4	CI-E7	655													291			
LINE I	CI-I1	MH-J3	788	138												46			
LINE J	CI-J1	OUT	793	7															
LINE L	CI-L1	OUT	316	420							265					535			
LINE M	CI-M3	OUT	678													147			
LINE O	CI-O1	CI-O3	407																
LINE P	CI-P1	CI-P3	393						97							77	3	222	12
CULVERT Q			67																
CULVERT R						85													
LINE E6B											143						2		
CULVERT N			62																
TCP TEMP				83															
TOTALS			7610	1764	19	306	479	1128	97	342	578	678	994	442	706	6071	7	222	56

* FOR CONTRACTORS INFORMATION ONLY

HEADWALL SUMMARY

HEADWALL ID	HEADWALL LOCATION	ITEM 466 0466 2100 HEADWALL (CH-FW-30) (DIA=42 IN) EA.	* SL H:V
LINE E	LAKE RAY HUBBARD	1	2:1

* FOR CONTRACTORS INFORMATION ONLY

SAFETY END TREATMENT

S.E.T. ID	S.E.T. LOCATION	0467 2209 SET (TY II) (18 IN) (RCP) (3:1) (C) EA	0467 2213 SET (TY II) (30 IN) (RCP) (3:1) (C) EA	0467 2217 SET (TY II) (48 IN) (RCP) (3:1) (C) EA	0467 2222 SET (TY II) (18 IN) (RCP) (4:1) (C) EA
LINE M	38.17 RT FM740EXT STA. 10+94.56				1
LINE P	50.11 LT FM740 STA. 134+67.55			1	
CULVERT N	FM 740EXT STA. 11+33.45				2
CULVERT Q	FM 1140 STA. 11+00.00	2			
CULVERT R	FM 740 STA. 145+00.00		2		
	PROJECT TOTALS	2	2	1	3

NO.	REVISION	BY	DATE

Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

DALLAS DIST.-FM740

SUMMARY SHEETS

SHEET 3 OF 3

Designed: AJA	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			SHEET NO.
Checked: GRB	6	TEXAS				28
Drawn:	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
Checked: RRH	DALLAS	ROCKWALL	1014	03	039	FM 740

⚠ REVISED 07.30.09 VN

$PENTBLS$
$PWFILE$
$PLTDRVS$
7/15/2009 1:38:29 PM aedams

STORM SEWER SUMMARY

LINE ID	FROM	TO	ITEM 464 RC PIPE (CL III) 18" LF	24" LF	27" LF	30" LF	36" LF	42" LF	48" LF	ITEM 464 RC PIPE (CL IV) 18" LF	24" LF	30" LF	36" LF	42" LF	ITEM 464 RC PIPE (CL V) 42" LF	0402 2001 TRENCH PROTECTION LF	0432 2002 RIPRAP (CONC) (5 IN) CY	0169 2001 SOIL RETENTION BLANKET (CL 1) (TY A) SY	0432 2023 RIPRAP (STONE PROTECTION) (24 IN) CY
LINE A	CI-A7	MH-A8	1486	643	19											124			
LINE B	CI-B1	OUT	387	415							50					245			
LINE D	MH-B3	OUT	714				479			342	120	575	555			1978	2		
LINE E	MH-D9	OUT	251	82		221		1736				103	439	442	706	3614			44 △
LINE G	DI-G4	MH-E3	613													163			
LINE H	CI-H4	CI-E7	655													291			
LINE I	CI-I1	MH-J3	788	138												46			
LINE J	CI-J1	OUT	793	7															
LINE L	CI-L1	OUT	316	420							265					535			
LINE M	CI-M3	OUT	678													147			
LINE O	CI-O1	CI-O3	407																
LINE P	CI-P1	CI-P3	393						97							77	3	222	12
CULVERT Q			67																
CULVERT R						85													
LINE E6B											143						2		
CULVERT N			62																
TCP TEMP				83															
TOTALS			7610	1788 △	19	306	479	1736 △	97	342	578	678	994	442	706	7220 △	7	222	56 △

* FOR CONTRACTORS INFORMATION ONLY

HEADWALL SUMMARY

HEADWALL ID	HEADWALL LOCATION	ITEM 466 △ 0466 2070 HEADWALL (CH-FW-0) (DIA=42 IN) EA.	* SL H:V
LINE E	LAKE RAY HUBBARD	1	2:1

* FOR CONTRACTORS INFORMATION ONLY

SAFETY END TREATMENT

S.E.T. ID	S.E.T. LOCATION	0467 2209 SET (TY II) (18 IN) (RCP) (3:1) (C) EA	0467 2213 SET (TY II) (30 IN) (RCP) (3:1) (C) EA	0467 2217 SET (TY II) (48 IN) (RCP) (3:1) (C) EA	0467 2222 SET (TY II) (18 IN) (RCP) (4:1) (C) EA
LINE M	38.17 RT FM740EXT STA. 10+94.56				1
LINE P	50.11 LT FM740 STA. 134+67.55			1	
CULVERT N	FM 740EXT STA. 11+33.45				2
CULVERT Q	FM 1140 STA. 11+00.00	2			
CULVERT R	FM 740 STA. 145+00.00		2		
	PROJECT TOTALS	2	2	1	3

No.	DATE	REVISION	APPROVE.
△	07-14-09	WINGWALL CHANGE & 42" PIPE LENGTHENING	

NO.	REVISION	BY	DATE

CP&Y Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

DALLAS DIST.-FM740

SUMMARY SHEETS

SHEET 3 OF 3

Designed: AJA	FED. RD. DIV. NO. 6	STATE TEXAS	FEDERAL AID PROJECT NO.			SHEET NO. 28A
Checked: GRB						
Drawn:	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
Checked: RRH	DALLAS	ROCKWALL	1014	03	039	FM 740

LEVELS DISPLAYED ACC:

SUMMARY OF SMALL SIGNS

SM RD SGN ASSM TY XXXXX(X)XX(X-XXXX)

PLAN SHEET NO.	SIGN NO.	SIGN NOMENCLATURE	SIGN TEXT	DIMENSIONS	ALUMINUM TYPE A	ALUMINUM TYPE G	Post Type FRP = Fiberglass TWT = Thin-Wall 10BWG = 10 BWG S80 = Sch 80	Posts (1 or 2)	Anchor Type UA=Univer-Conc UB=Univer-Bolt SA=Slip-Conc SB=Slip-Bolt WS=Wedge Steel WP=Wedge Plastic	Mounting Designation P = Prefab. "Plain" T = Prefab. "T" U = Prefab. "U"	1EXT or 2EXT = # of Ext. BM = Extruded Wind Beam WC = 1.12 #/ft Wing Chan. EXAL= Extruded Aluminum
1	1	M3-1	NORTH	24" X 12"	X		S80	1	SA	U	
		M1-6F	740	24" X 24"							
		M6-3	(STRAIGHT ARROW)	21" X 15"							
		M3-3	SOUTH	24" X 12"							
		M1-6F	3097	24" X 24"							
		M6-1BR	(RIGHT ARROW)	21" X 15"							
1	2	R1-1	STOP	30" X 30"	X		10BWG	1	SA	P	
1	3	D3-1	GLENHILL CEMETERY		X		10BWG	1	SA	P	REMOVE, STORE AND REMOUNT EXISTING CITY SIGN
1	4	M3-3	SOUTH	24" X 12"			10BWG	1	SA	P	(PAID UNDER ITEM 644-2085)
		M1-6F	3097	24" X 24"							
1	5	R2-1	SPEED LIMIT 40	24" X 30"	X		10BWG	1	SA	P	
1	6	D12-4T	ADOPT A HIGHWAY	48" X 48"	X		10BWG	1	SA	P	
			NEXT 2 MILES NORTH MESQUITE								
			HIGH SCHOOL CRIME STOPPERS								
											REMOVE, STORE AND REMOUNT
		D3-1	ARISTA RD								EXISTING CITY SIGN
1	7	R1-1	STOP	30" X 30"	X		10BWG	1	SA	P	(PAID UNDER ITEM 644-2085)
1	8	M2-1	JCT	24" X 18"	X		10BWG	1	SA	P	
		M1-6F	3097	24" X 24"							
1	9	R1-1	STOP	30" X 30"	X		10BWG	1	SA	P	
2	1	R2-1	SPEED LIMIT 40	24" X 30"	X		10BWG	1	SA	P	
		D3-1	FOXCHASE LN								REMOVE, STORE AND REMOUNT
2	2	R1-1	STOP	30" X 30"	X		10BWG	1	SA	P	EXISTING CITY SIGN
											(PAID UNDER ITEM 644-2085)
2	3	R2-1	SPEED LIMIT 45	24" X 30"	X		10BWG	1	SA	P	
											REMOVE, STORE AND REMOUNT
		D3-1	SHADY DALE LN								EXISTING CITY SIGNS
2	4	R1-1	STOP	30" X 30"	X		10BWG	1	SA	P	(PAID UNDER ITEM 644-2085)
											REMOVE, STORE AND REMOUNT
		D3-1	BENTON WOODS DR								EXISTING CITY SIGNS
2	5	R1-1	STOP	30" X 30"	X		10BWG	1	SA	P	(PAID UNDER ITEM 644-2085)
3	1	R19-6	LITTERING PROHIBITED $10-2000 FINE	48" X 30"	X		10BWG	1	SA	P	
			STATE LAW								
3	2	R2-1	SPEED LIMIT 45	24" X 30"	X		10BWG	1	SA	P	
3	4	R2-1	SPEED LIMIT 45	24" X 30"	X		10BWG	1	SA	P	
		D3-1	RIDGE RD								REMOVE, STORE AND REMOUNT
		D3-1	WHITE RD								EXISTING CITY SIGNS
3	5	R1-1	STOP	30" X 30"	X		10BWG	1	SA	P	(PAID UNDER ITEM 644-2085)
3	6	R2-1	SPEED LIMIT 25	24" X 30"	X		10BWG	1	SA	P	
			SLOW								
			CHILDREN								
			AT PLAY								
3	7		HEATH CITY LIMITS	36" X 24"	X		10BWG	1	SA	P	
3	8	R2-1	SPEED LIMIT 45	24" X 30"	X		10BWG	1	SA	P	
3	9		NO FIREWORKS CITY ORDINANCE		X		10BWG	1	SA	P	REMOVE, STORE AND REMOUNT EXISTING CITY SIGN
											(PAID UNDER ITEM 644-2085)

ALUMINUM SIGN BLANKS (TYPE A)

Square Ft.	Min. Thickness
Less than 7.5	0.080"
7.5 to 15	0.100"
Greater than 15	0.125"

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

SUMMARY OF SMALL SIGNS

DN.: TxDOT CK.: TxDOT DW.: TxDOT CK.: TxDOT

REVISIONS: 11-93 7-02 8-95 2-07 1-02 9-08

STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
	6	SEE TITLE SHEET	29

COUNTY	CONTROL	SECTION	JOB	HIGHWAY
ROCKWALL	1014	03	039	FM 740

LEVELS DISPLAYED
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

ACC:

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SUMMARY OF SMALL SIGNS

SM RD SGN ASSM TY XXXXX(X)XX(X-XXXX)

- Post Type: FRP = Fiberglass; TWT = Thin-Wall; 10BWG = 10 BWG; S80 = Sch 80
- Posts (1 or 2)
- Anchor Type: UA=Univer-Conc; UB=Univer-Bolt; SA=Slip-Conc; SB=Slip-Bolt; WS=Wedge Steel; WP=Wedge Plastic
- Mounting Designation: P = Prefab. "Plain"; T = Prefab. "T"; U = Prefab. "U"
- 1EXT or 2EXT = # of Ext.; BM = Extruded Wind Beam; WC = 1.12 #/ft Wing Chan.; EXAL= Extruded Aluminum

PLAN SHEET NO.	SIGN NO.	SIGN NOMENCLATURE	SIGN TEXT	DIMENSIONS	ALUMINUM TYPE A	ALUMINUM TYPE G	Post Type	Posts (1 or 2)	Anchor Type	Mounting Designation	
		D3-1	RIDGE RD								REMOVE, STORE AND REMOUNT
		D3-1	WELLINGTON LN								EXISTING CITY SIGNS
4	1	R1-1	STOP	30" X 30"		X	10BWG	1	SA	P	(PAID UNDER ITEM 644-2085)
		D3-1	RIDGE RD								REMOVE, STORE AND REMOUNT
		D3-1	COUNTRY CLUB DR								EXISTING CITY SIGNS
4	2	R1-1	STOP	30" X 30"		X	10BWG	1	SA	P	(PAID UNDER ITEM 644-2085)
4	3	W14-2	NO OUTLET	30" X 30"		X	10BWG	1	SA	P	
		D3-1	LAKEWAY DR								REMOVE, STORE AND REMOUNT
		D3-1	RIDGE RD								EXISTING CITY SIGNS
4	4	R1-1	STOP	30" X 30"		X	10BWG	1	SA	P	(PAID UNDER ITEM 644-2085)
		D3-1	MONT BLANC DR								REMOVE, STORE AND REMOUNT
		D3-1	RIDGE RD								EXISTING CITY SIGNS
4	5	R1-1	STOP	30" X 30"		X	10BWG	1	SA	P	(PAID UNDER ITEM 644-2085)
		D3-1	RIDGE RD								REMOVE, STORE AND REMOUNT
		D3-1	LAYFAYETTE LANDING								EXISTING CITY SIGNS
4	6	R1-1	STOP	30" X 30"		X	10BWG	1	SA	P	(PAID UNDER ITEM 644-2085)
		D3-1	RIDGE RD								REMOVE, STORE AND REMOUNT
		D3-1	LAYFAYETTE DR								EXISTING CITY SIGNS
4	7	R1-1	STOP	30" X 30"		X	10BWG	1	SA	P	(PAID UNDER ITEM 644-2085)
		D3-1	RIDGE RD								REMOVE, STORE AND REMOUNT
		D3-1	SHEPHERDS GLEN RD								EXISTING CITY SIGNS
5	1	R1-1	STOP	30" X 30"		X	10BWG	1	SA	P	(PAID UNDER ITEM 644-2085)
5	2	M3-3	SOUTH	24" X 12"		X	10BWG	1	SA	P	
		M1-6F	740	24" X 24"							
		D3-1	RIDGE RD								REMOVE, STORE AND REMOUNT
		D3-1	GREEN PASTURES RD								EXISTING CITY SIGNS
5	3	R1-1	STOP	30" X 30"		X	10BWG	1	SA	P	(PAID UNDER ITEM 644-2085)
		D3-1	RIDGE RD								REMOVE, STORE AND REMOUNT
		D3-1	BLUE HERON LN								EXISTING CITY SIGNS
5	4	R1-1	STOP	30" X 30"		X	10BWG	1	SA	P	(PAID UNDER ITEM 644-2085)
5	5	M2-1	JCT	24" X 18"		X	10BWG	1	SA	P	
		M1-6F	1140	24" X 24"							
6	1	D12-4T	ADOPT A HIGHWAY	48" X 48"	X		10BWG	1	SA	T	
			NEXT 2 MILES NORTH MESQUITE								
			HIGH SCHOOL CRIME STOPPERS								
6	2	D1-2	(ARROW) FORNEY	54" X 24"	X		10BWG	1	SA	T	
			HEATH (ARROW)								
6	3	R2-1	SPEED LIMIT 45	24" X 30"		X	10BWG	1	SA	P	
		D3-1	LAWRENCE DR								REMOVE, STORE AND REMOUNT
		D3-1	HEATHLAND CROSSING								EXISTING CITY SIGNS
6	4	R1-1	STOP	30" X 30"		X	10BWG	1	SA	P	(PAID UNDER ITEM 644-2085)
6	5	M3-1	NORTH	24" X 12"		X	S80	1	SA	U	
		M1-6F	740	24" X 24"							
		M6-3	(STRAIGHT ARROW)	21" X 15"							
		M3-3	SOUTH	24" X 12"							
		M1-6F	740	24" X 24"							
		M6-1L	(LEFT ARROW)	21" X 15"							
6	6	R4-7	(KEEP RIGHT SIGN)	24" X 30"		X	10BWG	1	SA	P	

ALUMINUM SIGN BLANKS (TYPE A)

Square Ft.	Min. Thickness
Less than 7.5	0.080"
7.5 to 15	0.100"
Greater than 15	0.125"

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

SUMMARY OF SMALL SIGNS

DN: TxDOT CK: TxDOT DW: TxDOT CK: TxDOT

REVISIONS 11-93 8-95 1-02 7-02 2-07 9-08

COUNTY	DISTRICT	REGION	CONTROL	SECTION	JOB	HIGHWAY
ROCKWALL	6	SEE TITLE SHEET	1014	03	039	FM 740

FEDERAL AID PROJECT

SHEET 30

LEVELS DISPLAYED

1	2	3	4	7	9	10	11	12	13	14	15	16	ACC:			
17	18	19	20	21	25	26	27	28	29	30	31	32				
33	34	35	36	37	40	41	42	43	44	45	46	47	48			
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63		

SUMMARY OF SMALL SIGNS

SM RD SGN ASSM TY XXXXX(X)XX(X-XXXX)

- Post Type: FRP = Fiberglass; TWT = Thin-Wall; 10BWG = 10 BWG; S80 = Sch 80
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PLAN SHEET NO.	SIGN NO.	SIGN NOMENCLATURE	SIGN TEXT	DIMENSIONS	ALUMINUM TYPE A	ALUMINUM TYPE G	Post Type	Posts	Anchor Type	Mounting Designation	
6	7	M3-3	SOUTH	24" X 12"		X	S80	1	SA	U	
		M1-6F	740	24" X 24"							
		M6-3	(STRAIGHT ARROW)	21" X 15"							
		M3-3	SOUTH	24" X 12"							
		M1-6F	1140	24" X 24"							
		M6-1	(RIGHT ARROW)	21" X 15"							
6	8	R4-7	(KEEP RIGHT SIGN)	24" X 30"		X	10BWG	1	SA	P	
6	9	R1-1	STOP	30" X 30"		X	10BWG	1	SB	P	
6	10	M3-1	NORTH	24" X 12"		X	S80	1	SA	U	
		M1-6F	740	24" X 24"							
		M6-1L	(LEFT ARROW)	21" X 15"							
		M3-3	SOUTH	24" X 12"							
		M1-6F	740	24" X 24"							
		M6-1	(RIGHT ARROW)	21" X 15"							
6	11	M3-3	SOUTH	24" X 12"		X	10BWG	1	SA	P	
		M1-6F	740	24" X 24"							
6	12	M2-1	JCT	24" X 18"		X	10BWG	1	SA	P	
		M1-6F	1140	24" X 24"							

ALUMINUM SIGN BLANKS (TYPE A)

Square Ft.	Min. Thickness
Less than 7.5	0.080"
7.5 to 15	0.100"
Greater than 15	0.125"

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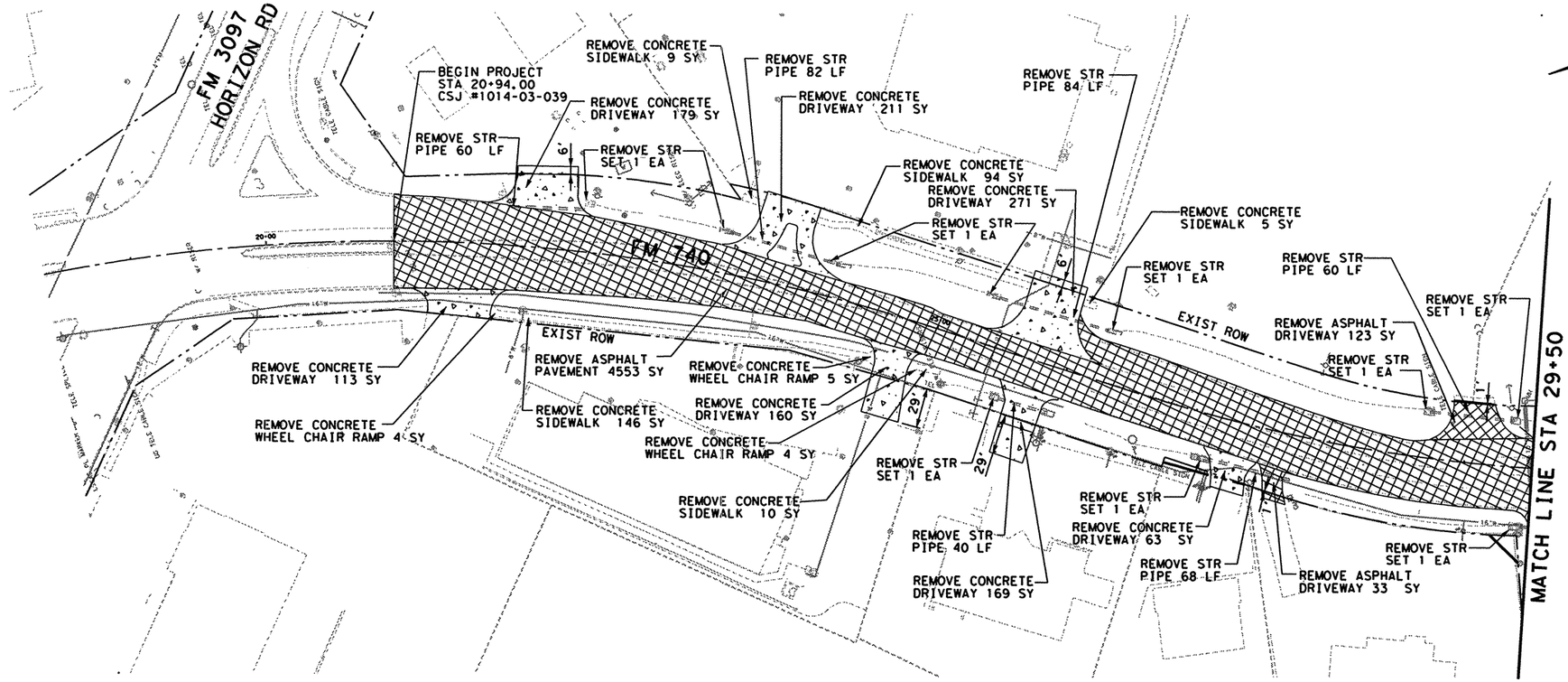
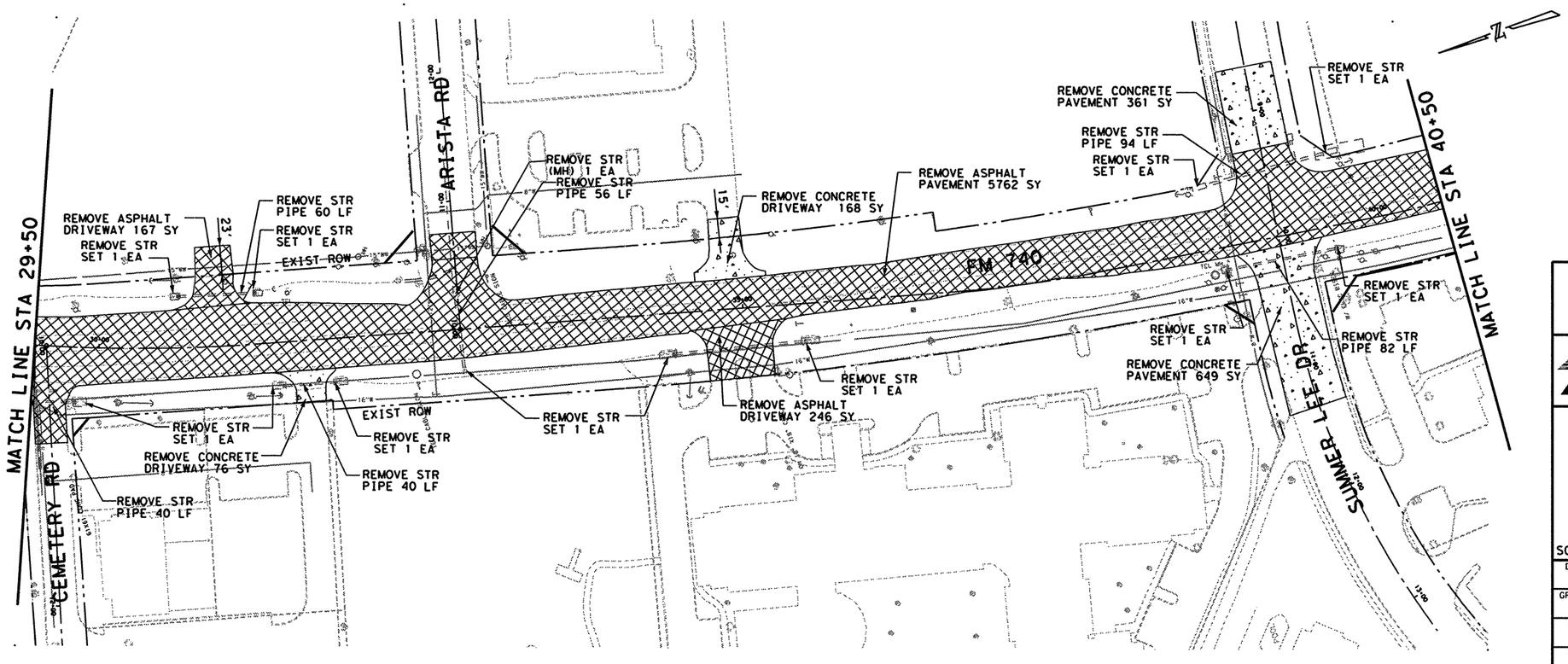
SUMMARY OF SMALL SIGNS

DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
REVISIONS			
11-93	7-02		
8-95	2-07		
1-02	9-08		

COUNTY	DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
ROCKWALL	6	SEE TITLE SHEET		37

CONTROL	SECTION	JOB	HIGHWAY
1014	03	039	FM 740





STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
4-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

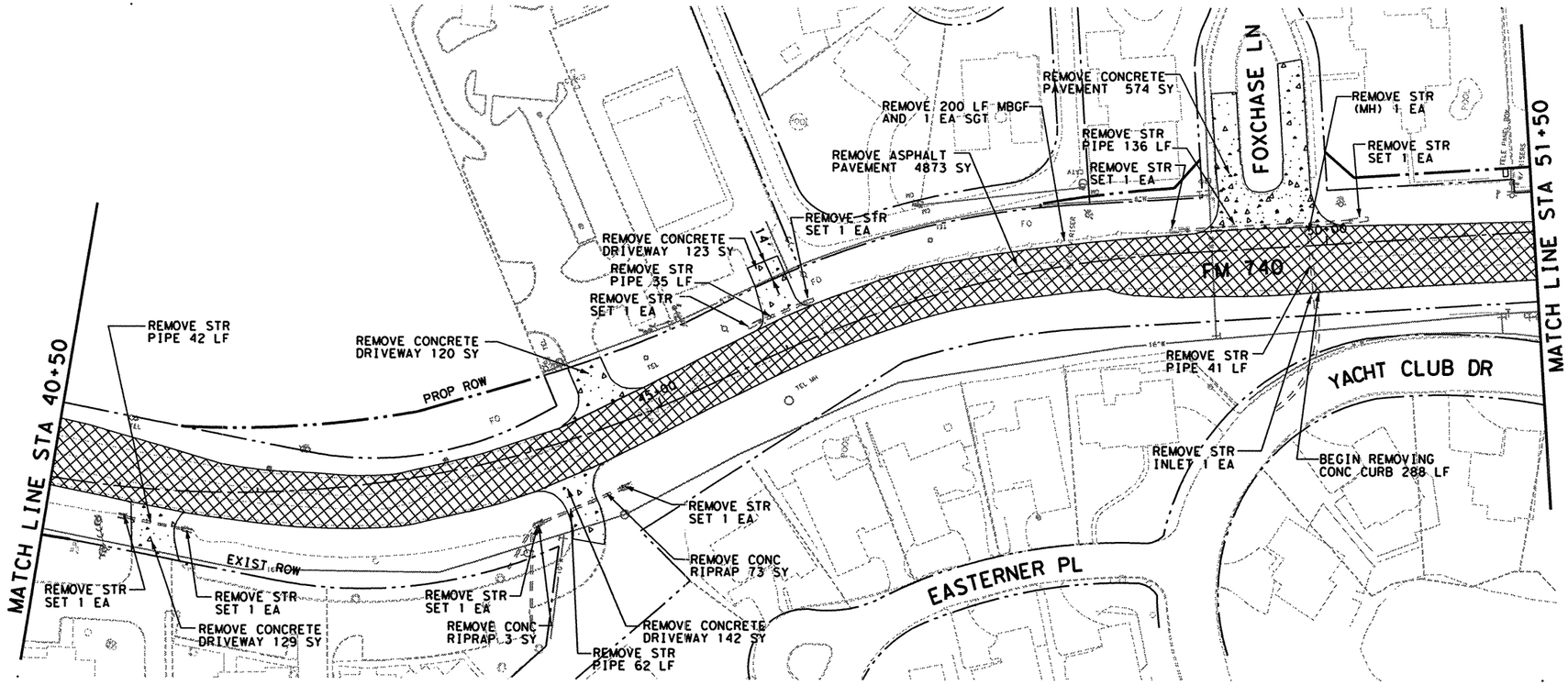
Texas Department of Transportation

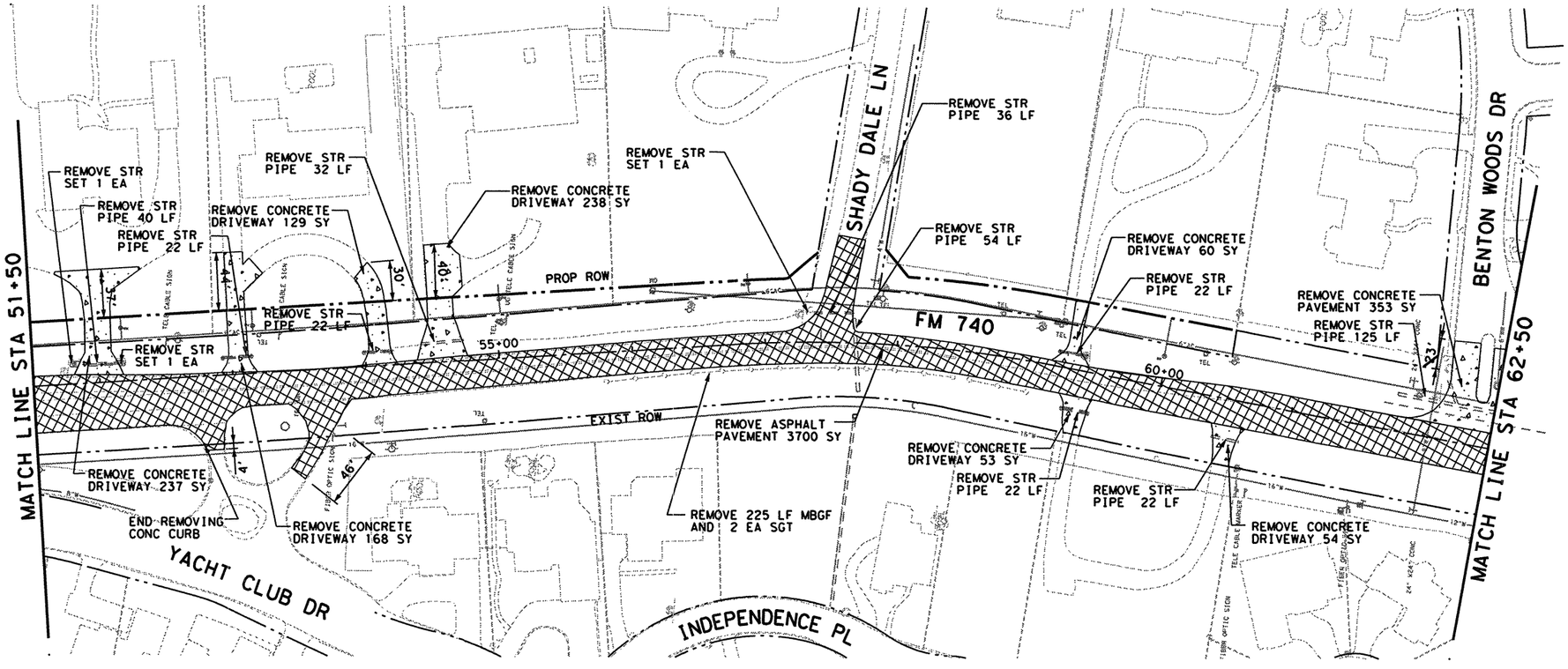
FM 740
REMOVAL ITEMS

BEGIN PROJECT TO STA 40+50

SCALE: 1"=100' SHEET 1 OF 6

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	3Z
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	





0 25 50 75 100
SCALE IN FEET

LEGEND

- EXISTING ACP
- EXISTING CONCRETE DRIVEWAY
- EXISTING GRAVEL DRIVEWAY
- EXISTING DIRT DRIVEWAY

STATE OF TEXAS
DAVID ALAN NUFER
68818
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4-15-09

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Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
REMOVAL ITEMS
STA 40+50 TO STA 62+50

SCALE: 1"=100' SHEET 2 OF 6

DAN				
	6	SEE TITLE SHEET		FM 740
MTU				
CVL	TEXAS	DALLAS	ROCKWALL	33
DAN	1014	03	039	

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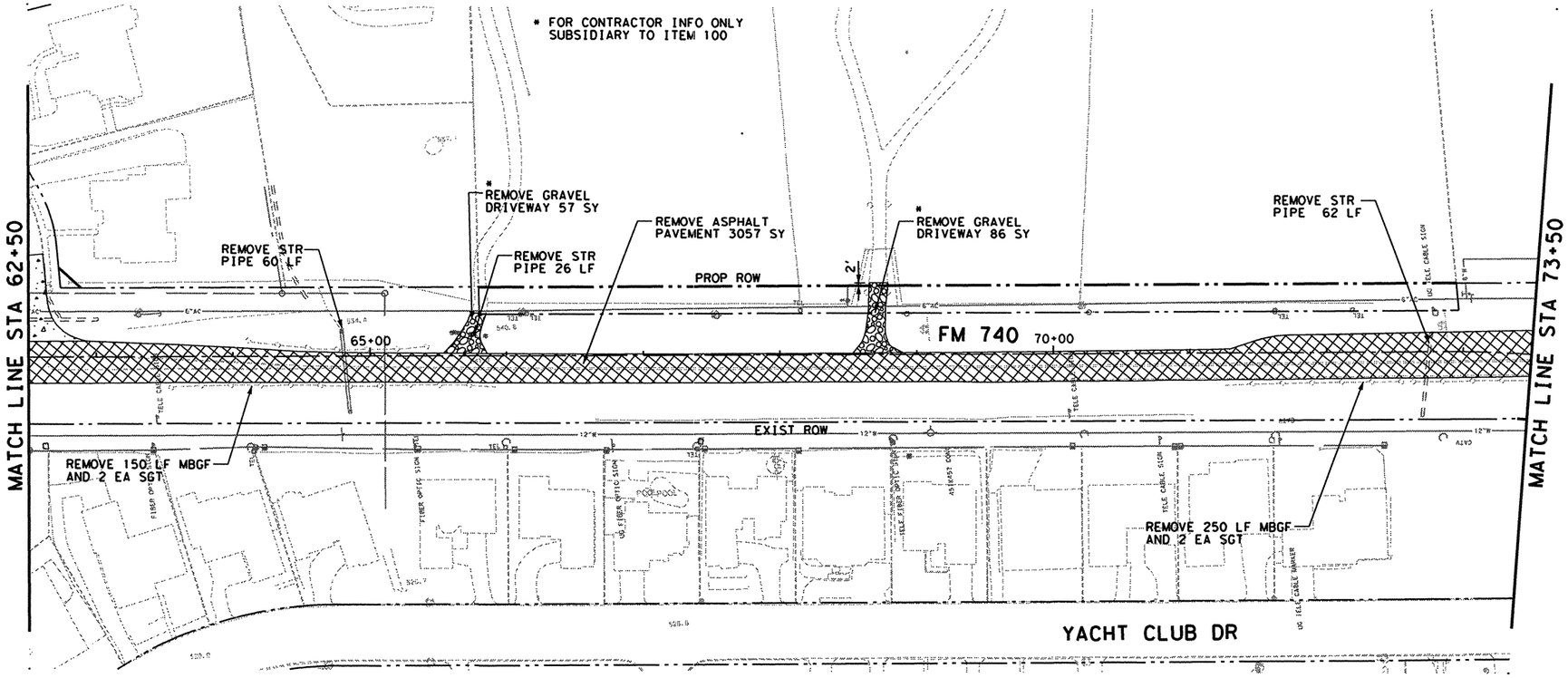

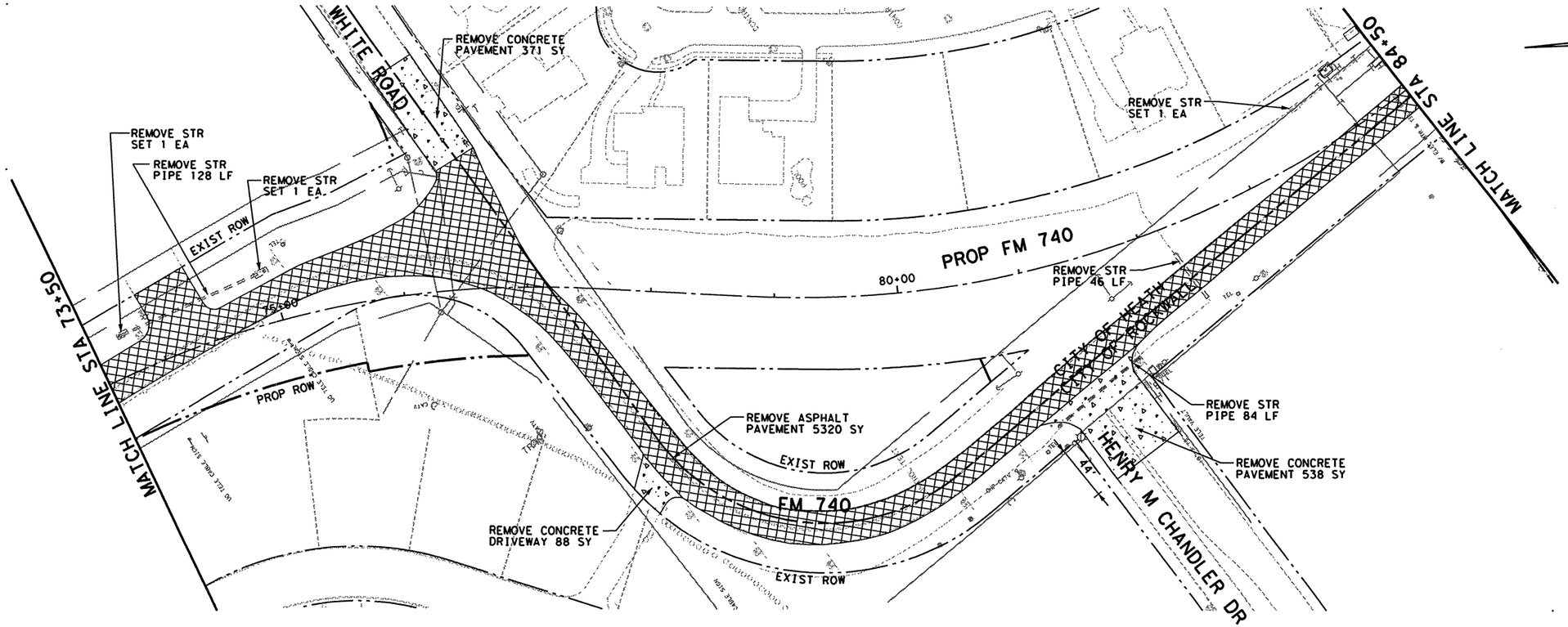

0 25 50 75 100
SCALE IN FEET

LEGEND

- EXISTING ACP
- EXISTING CONCRETE DRIVEWAY
- EXISTING GRAVEL DRIVEWAY
- EXISTING DIRT DRIVEWAY

STATE OF TEXAS
DAVID ALAN NUFER
68818
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4-15-09

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3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
REMOVAL ITEMS
STA 62+50 TO STA 84+50

SCALE: 1"=100' SHEET 3 OF 6

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	34
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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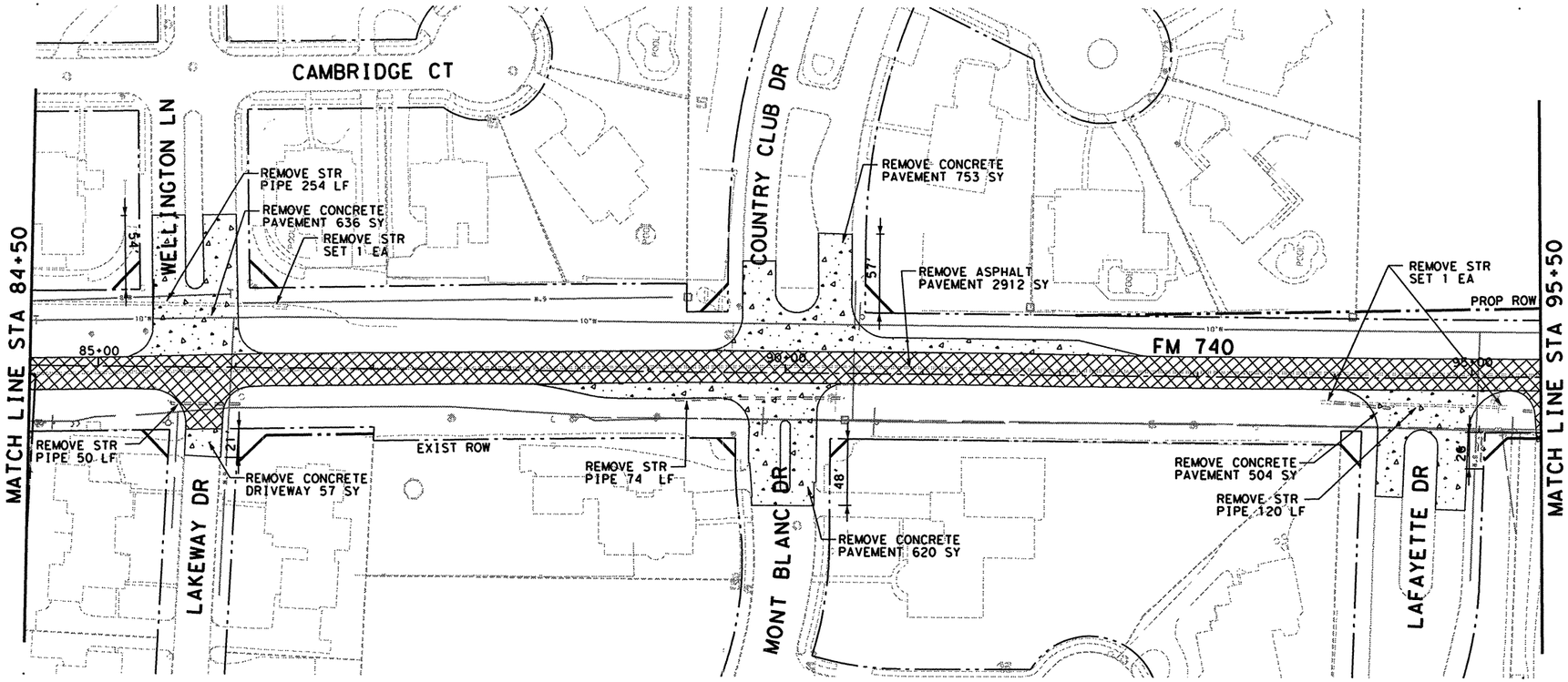

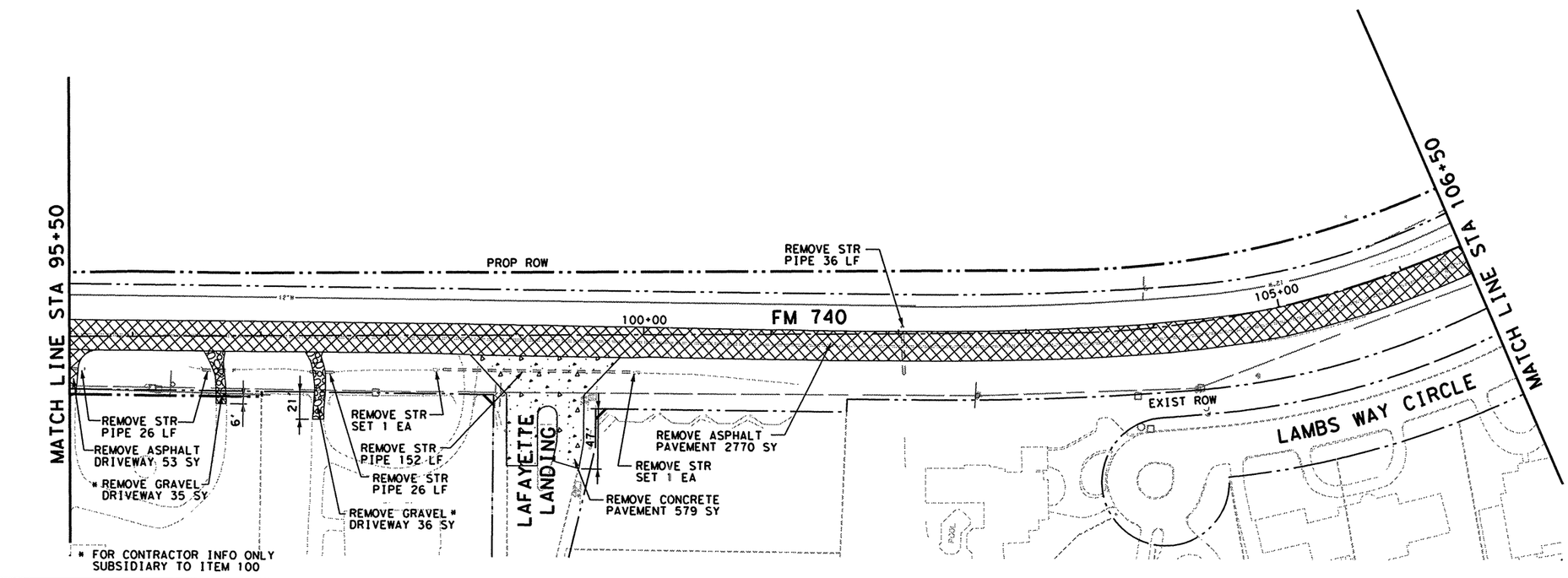

SCALE IN FEET: 0 25 50 75 100

LEGEND

- EXISTING ACP
- EXISTING CONCRETE DRIVEWAY
- EXISTING GRAVEL DRIVEWAY
- EXISTING DIRT DRIVEWAY

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
4-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

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Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
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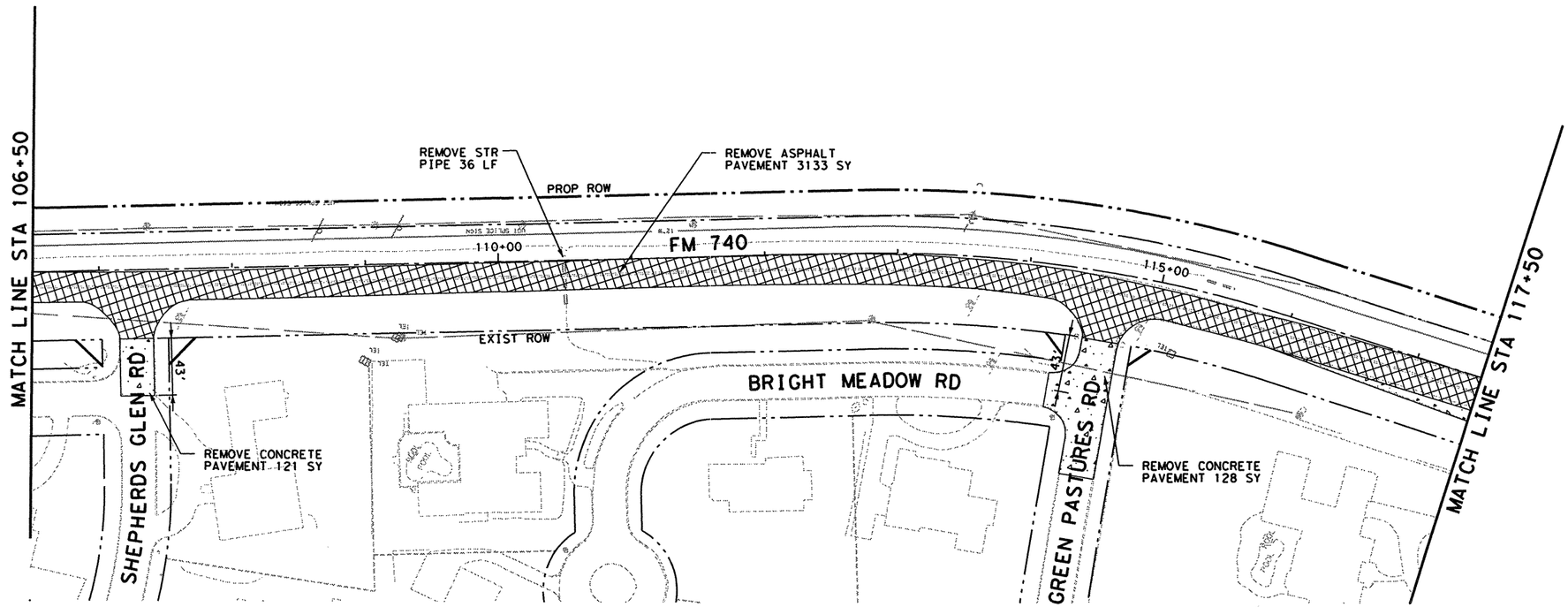
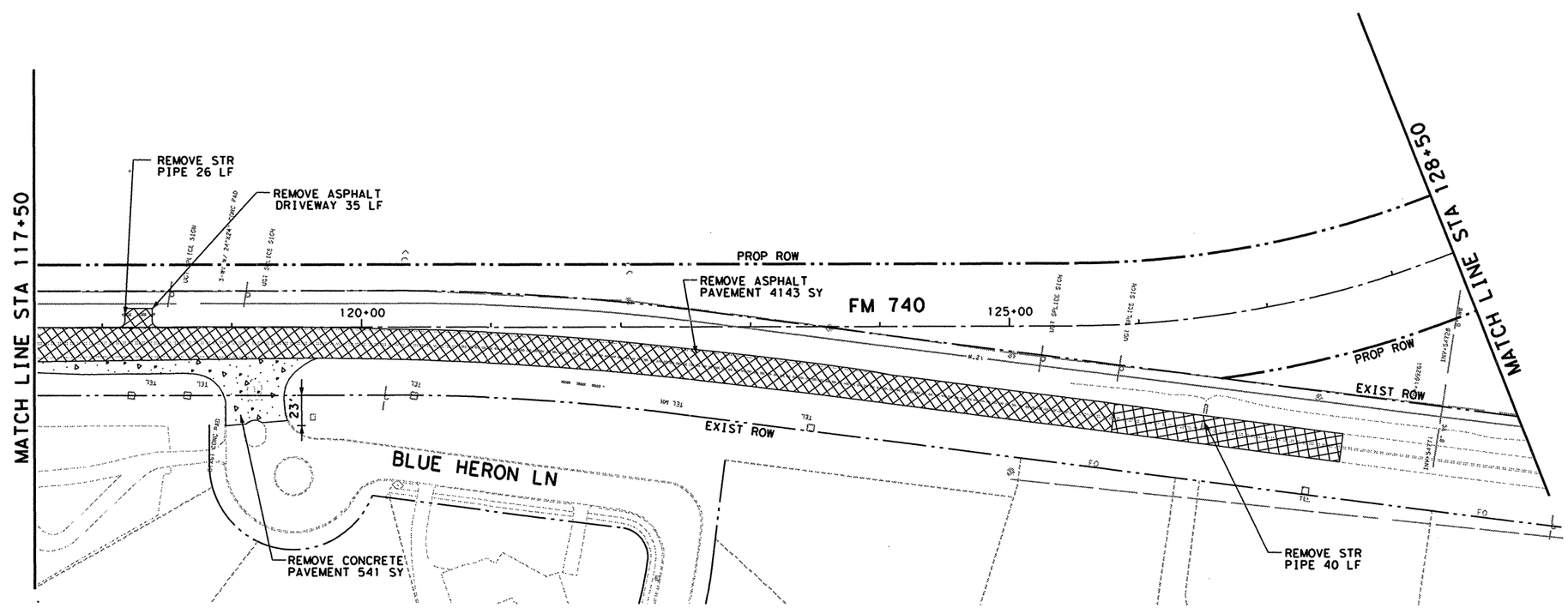
Texas Department of Transportation

FM 740
REMOVAL ITEMS
STA 84+50 TO STA 106+50

SCALE: 1"=100' SHEET 4 OF 6

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	35
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	





N

0 25 50 75 100
SCALE IN FEET

LEGEND

- EXISTING ACP
- EXISTING CONCRETE DRIVEWAY
- EXISTING GRAVEL DRIVEWAY
- EXISTING DIRT DRIVEWAY

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
5-21-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

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3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
REMOVAL ITEMS
STA 106+50 TO STA 128+50

SCALE: 1"=100' SHEET 5 OF 6

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	36
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

jparas
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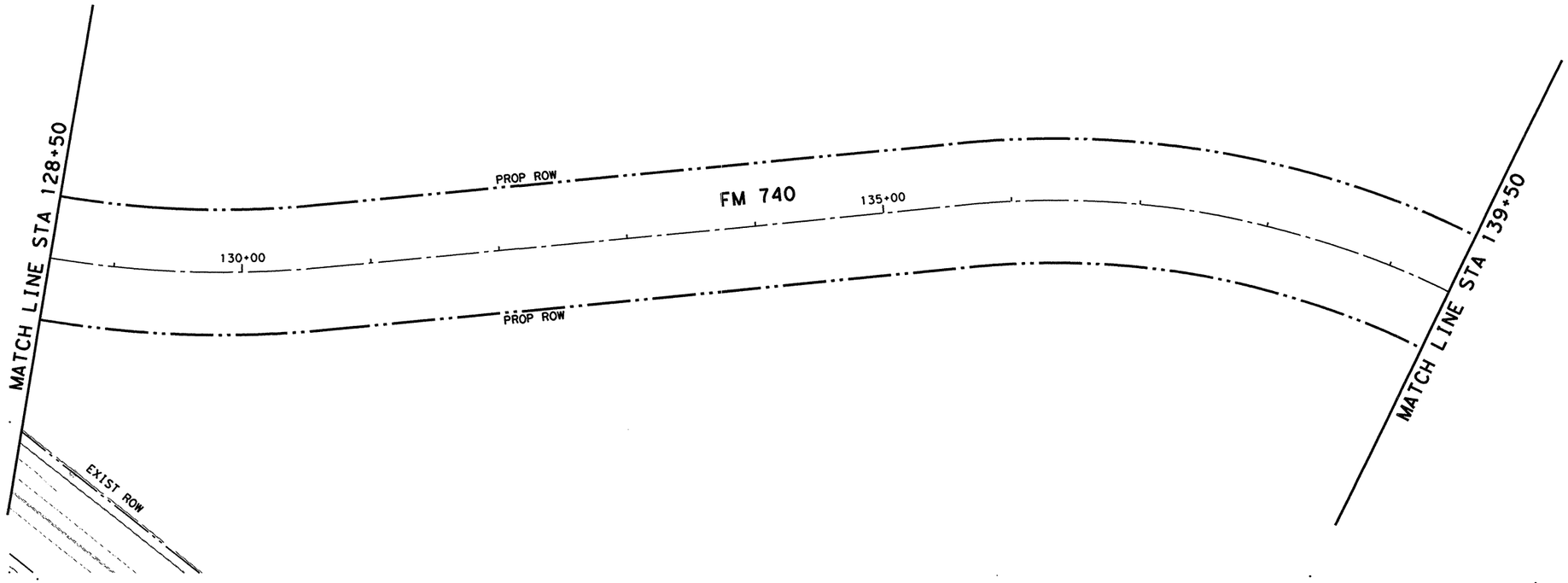
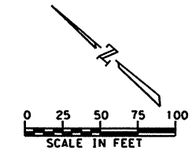
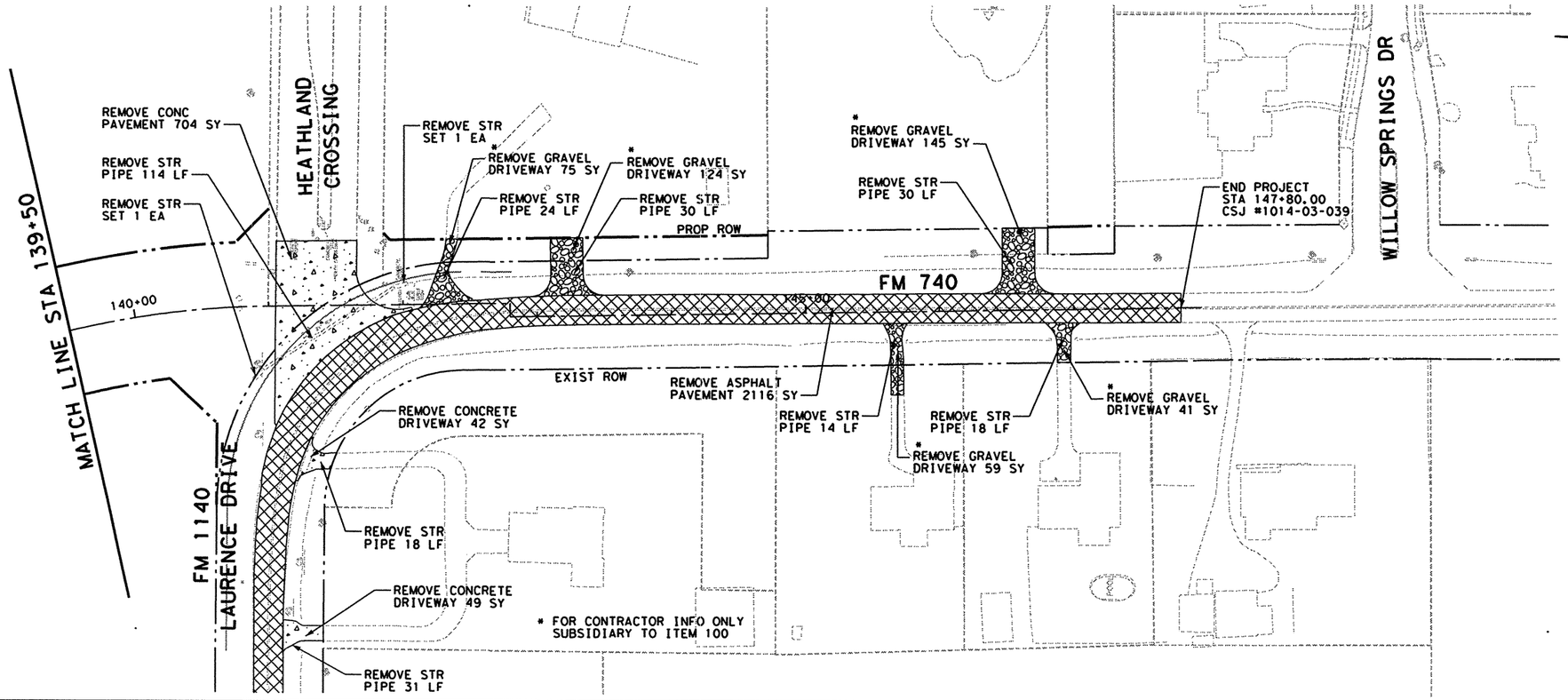




LEGEND

- EXISTING ACP
- EXISTING CONCRETE DRIVEWAY
- EXISTING GRAVEL DRIVEWAY
- EXISTING DIRT DRIVEWAY



STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
4-15-09

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Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
REMOVAL ITEMS
STA 128+50 TO END OF PROJECT

SCALE: 1"=100' SHEET 6 OF 6

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	37
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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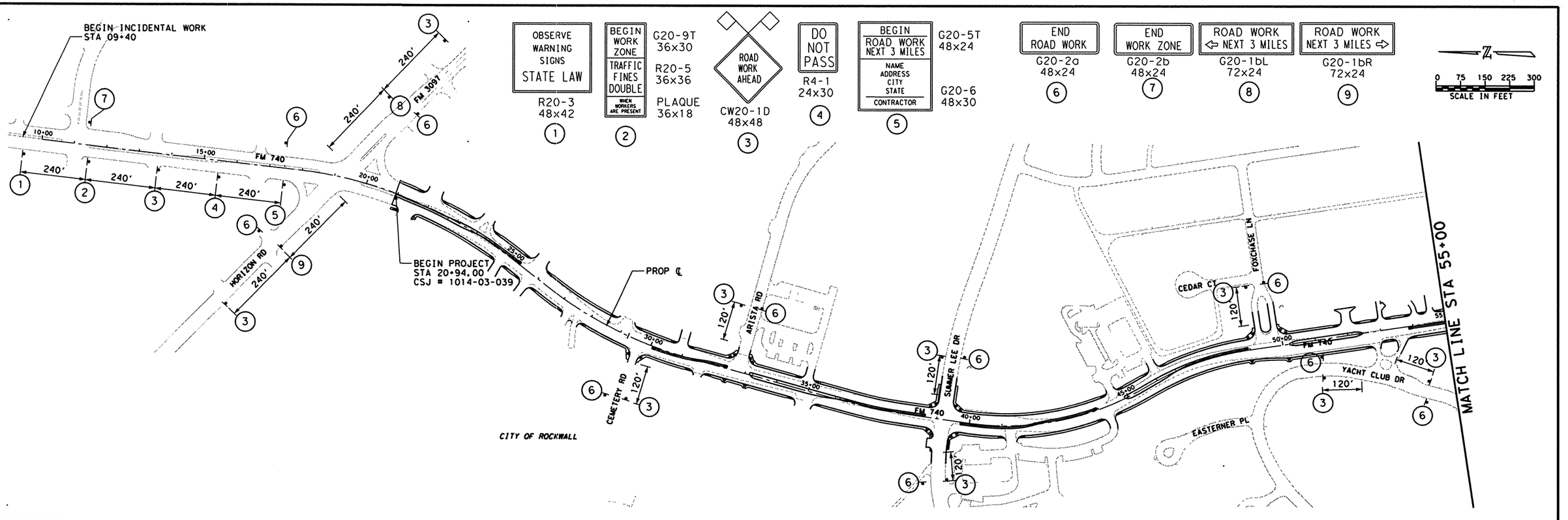

Huitt-Zollars, Inc. - Firm Registration No. F-761

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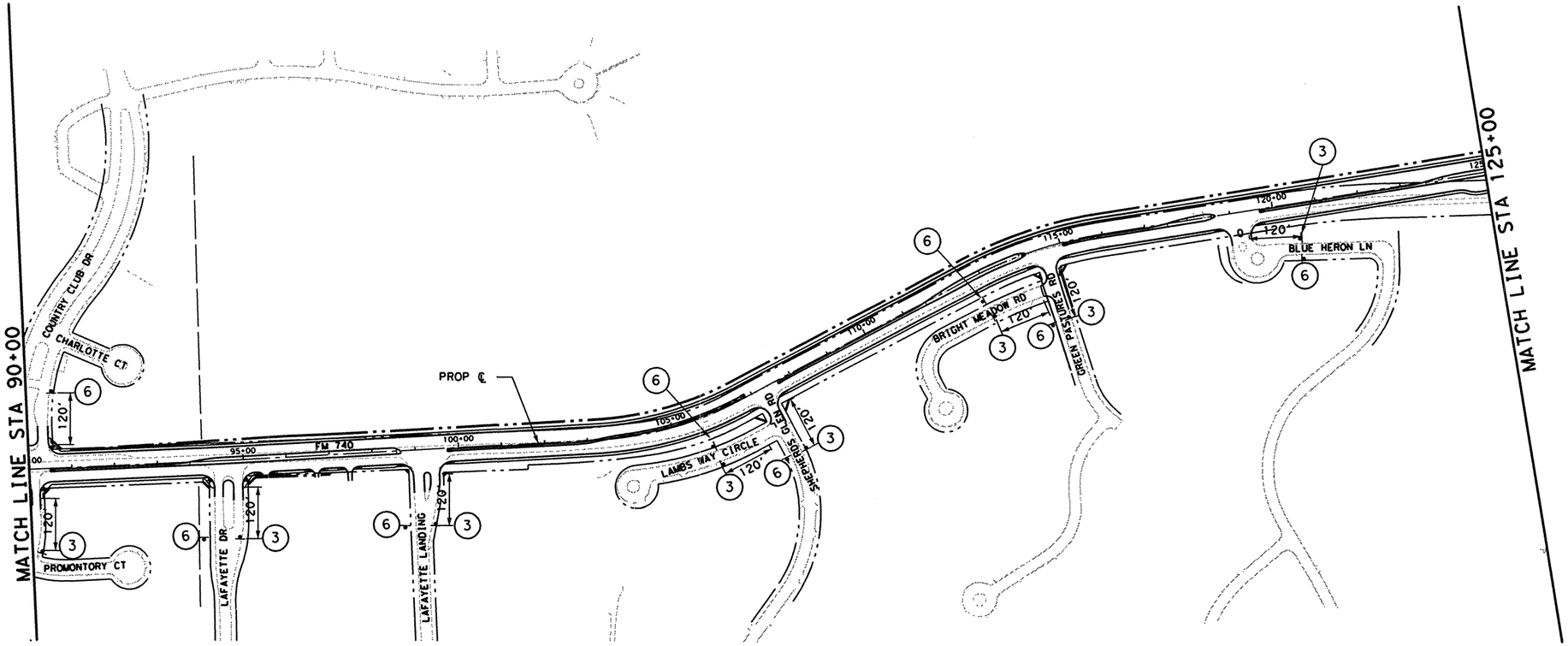
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

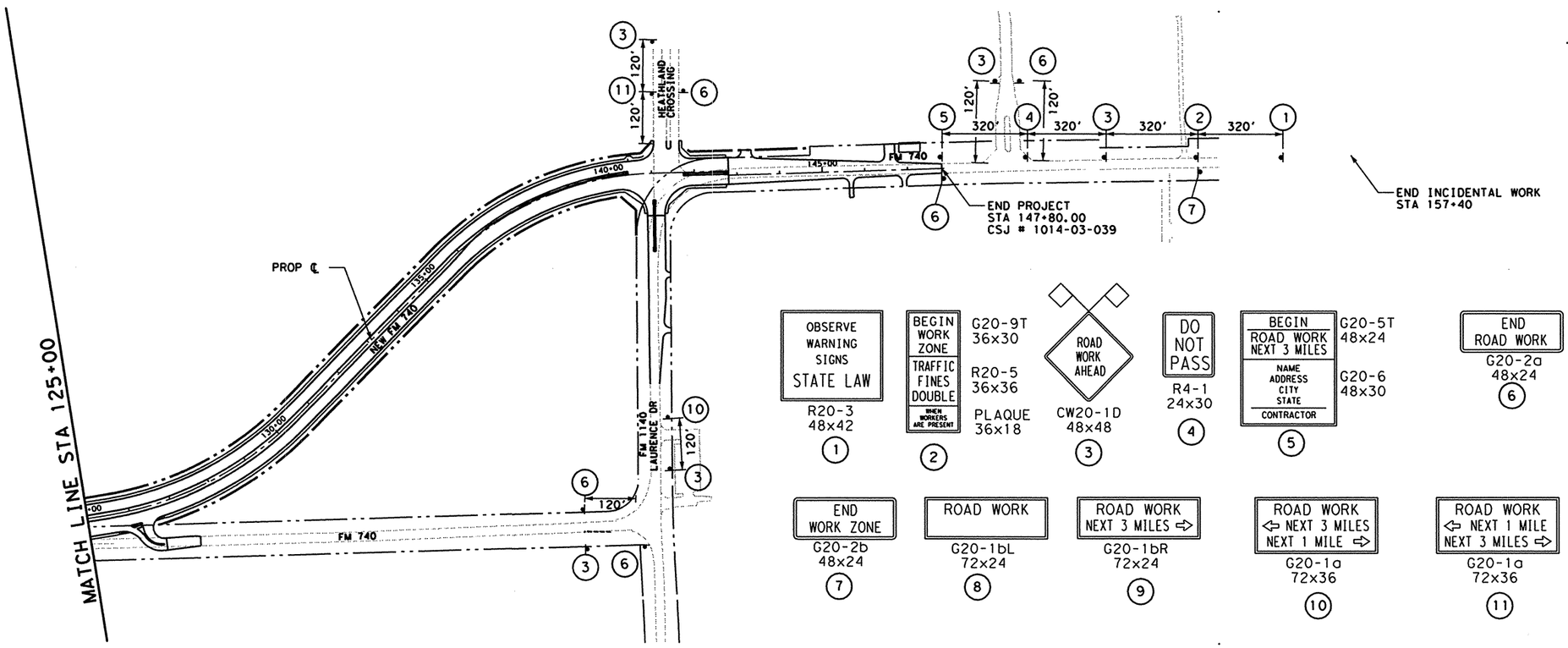
Texas Department of Transportation

FM 740
TRAFFIC CONTROL
ADVANCE WARNING SIGNS

SCALE: 1"=300' SHEET 1 OF 2

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	38
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	





0 75 150 225 300
SCALE IN FEET

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
5-21-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

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Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL ADVANCE WARNING SIGNS

SCALE: 1"=300' SHEET 2 OF 2

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	39
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

GENERAL NOTES FOR ALL STAGES OF WORK

1. ALL WORK AND MATERIALS REQUIRED FOR TRAFFIC HANDLING SHALL NOT BE PAID FOR DIRECTLY. BUT SHALL BE CONSIDERED PART OF ITEM 502 "BARRICADES, SIGNS, AND TRAFFIC HANDLING." ALL BARRICADES AND SIGNS SHALL BE INSTALLED BY THE CONTRACTOR. AT ALL TIMES THE CONTRACTOR SHALL HAVE ENOUGH BARRICADES AND/OR SIGNS TO REPLACE THOSE DAMAGED.

2. THE SIGNS, BARRICADES, ETC LISTED HEREIN ARE CONSIDERED TO BE THE MINIMUM REQUIRED FOR TRAFFIC HANDLING ON THIS PROJECT. DO NOT CHANGE THE TCP WITHOUT APPROVAL.

3. MAINTAIN SIGNS/BARRICADES ON A REGULAR BASIS.

4. MAINTAIN ACCESS TO ADJACENT PROPERTY AT ALL TIMES DURING CONSTRUCTION. PLACE DRUMS AND SIGNS IN SUCH A MANNER AS TO NOT INTERFERE WITH DRIVEWAY OPERATIONS.

5. SIGN LOCATIONS ARE APPROXIMATE AND MAY BE MODIFIFIED AS DIRECTED. INSTALL IN ACCORDANCE WITH THE TMUTCD AND TRAFFIC STANDARD SHEETS.

6. WITH THE APPROVAL AND AS DIRECTED, VARY THE NUMBER AND LOCATION OF SIGNS AND BARRICADES AS INDICATED ON THE PLANS IN ORDER TO MAINTAIN A SAFE AND UNINTERRUPTED FLOW OF TRAFFIC PARTICULARLY IN THOSE AREAS OF IMMEDIATE WORK.

7. THE CONSTRUCTION SEQUENCING AND TRAFFIC CONTROL SHOWN ON THESE PLANS IS A "SUGGESTED SEQUENCE" ONLY AND MAY BE MODIFIED WITH APPROVAL.

8. ENSURE POSITIVE DRAINAGE DURING THE ROADWAY AND STORM DRAINAGE CONSTRUCTION. THIS MAY INCLUDE THE PLACEMENT OF TEMPORARY PIPE, THE MODIFYING OR EXTENDING OF EXISTING DRAINAGE PIPES AND RE-GRADING OF DITCHES. THIS WORK WILL BE CONSIDERED SUBSIDIARY TO ITEM 508. REMOVE ACCUMLATED WATER/RUNOFF. NEVER LEAVE PONDED WATER THAT DOES NOT RECEDE IN 24 HOURS.

9. SEPARATE WORKING AREAS AND TRAVEL LANES BY APPROPRIATE TRAFFIC CONTROL DEVICES.

10. WHERE TRAFFIC IS TO BE ROUTED ON SECTIONS OF NEW ROADWAY, INSTALL FINAL SIGNS IN ACCORDANCE WITH THE SIGNING LAYOUT OR PROVIDE TEMPORARY SIGNING ACCORDINGLY.

SUGGESTED SEQUENCE OF CONSTRUCTION

PHASE 1

1. PLACE ALL ADVANCE WARNING SIGNS AS SHOWN IN PLANS OR AS DIRECTED
2. INSTALL REQUIRED STORM WATER POLLUTION PREVENTION MEASURES PRIOR TO COMMENCING WORK ACTIVITIES.
3. PLACE TEMPORARY PAVEMENT ALONG THE EXISTING ROADWAY AT 27' MAX FROM PROPOSED CENTERLINE (ON BOTH SIDES) (SEE STA LIMITS ON TCP TYPICALS).
4. CONSTRUCT FM 740 FROM STA 142+00 TO STA 147+80 AND TEMPORARY PAVEMENT ALONG FM 1140.
5. RECONFIGURE TRAFFIC CONTROL DEVICES INCLUDING DRUMS, VERTICAL PANELS, SIGNS AND TEMPORARY PAVEMENT MARKINGS TO REFLECT TRAFFIC SHIFTS.
6. CONTRUCT THE PORTION OF FM 740 FROM STA 125+00 TO STA 142+80. ONCE COMPLETED, PROCEED TO HENRY CHANDLER DRIVE TO INSTALL STORM SEWER OUTFALL.

PHASE 2

1. INSTALL REQUIRED STORM WATER POLLUTION PREVENTION MEASURES PRIOR TO COMMENCING WORK ACTIVITIES.
2. SHIFT TRAFFIC ONTO THE EXISTING AND TEMPORARY PAVEMENT.
3. CONSTRUCT 42 IN RCP OUTFALL (LINE E) ALONG HENRY CHANDLER DRIVE FROM MANHOLE E4 TO OUTFALL AT LAKE RAY HUBBARD. MAINTAIN ONE LANE OF TRAFFIC EACH DIRECTION THROUGHOUT CONSTRUCTION. PROCEED WITH CONSTRUCTION ON FM 740 FROM THE SOUTH END OF THE PROJECT NORTHWARD ONLY UPON COMPLETION OF THE PORTION OF FM 740 FROM STATION 125+00 TO STATION 142+80 AND STORM SEWER (LINE E) ALONG HENRY CHANDLER DRIVE.
4. CONSTRUCT PORTIONS OF THE PROPOSED NORTHBOUND PAVEMENT INCLUDING LEFT TURN LANES, CURBS, SIDEWALKS, AND RETAINING WALLS.
5. PLACE TEMPORARY PAVEMENT AT CROSSOVERS FOR LEVEL-UP BETWEEN EXISTING AND PROPOSED PAVEMENT. THIS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE SUBSIDIARY TO BID ITEM 508 CONSTRUCTING DETOUR. OMIT CONSTRUCTION OF CURB AT CROSSOVER LOCATION.
6. RECONFIGURE TRAFFIC CONTROL DEVICES INCLUDING DRUMS, VERTICAL PANELS, SIGNS AND TEMPORARY PAVEMENT MARKINGS TO REFLECT TRAFFIC SHIFTS.

PHASE 3

1. INSTALL REQUIRED STORM WATER POLLUTION PREVENTION MEASURES PRIOR TO COMMENCING WORK ACTIVITIES.
2. RELOCATE TRAFFIC (ONE LANE IN EACH DIRECTION) TO THE NORTHBOUND AND TEMPORARY PAVEMENT.
3. CONSTRUCT THE ENTIRE PROPOSED SOUTHBOUND PAVEMENT INCLUDING LEFT TURN LANES, CURBS, SIDEWALKS, AND RETAINING WALLS.
4. RECONFIGURE TRAFFIC CONTROL DEVICES INCLUDING DRUMS, VERTICAL PANELS, SIGNS AND TEMPORARY PAVEMENT MARKINGS TO REFLECT TRAFFIC SHIFTS.

PHASE 4

1. INSTALL REQUIRED STORM WATER POLLUTION PREVENTION MEASURES PRIOR TO COMMENCING WORK ACTIVITIES.
2. RELOCATE TRAFFIC TO THE FINAL CONFIGURATION. ONE LANE EACH DIRECTION. (EXCEPT BETWEEN STA 73+05 TO STA 76+55- NORTHBOUND TRAFFIC IS ON SOUTHBOUND PAVEMENT).
3. CONSTRUCT THE REMAINING PORTION OF THE NORTHBOUND PAVEMENT BETWEEN STA 73+05 TO STA 76+55.
4. CONSTRUCT PORTIONS OF WHITE ROAD AND HENRY M CHANDLER DR AND REMAINING PORTIONS OF MEDIAN AREAS, INCLUDING CURBS OMITED IN PREVIOUS PHASES.
5. RECONFIGURE TRAFFIC CONTROL DEVICES INCLUDING DRUMS, VERTICAL PANELS, SIGNS AND TEMPORARY PAVEMENT MARKINGS TO REFLECT TRAFFIC SHIFTS.

PHASE 5 STAGE 1 AND 2 FM 1140/ LAURENCE DRIVE

1. SHIFT TRAFFIC ON TO TEMPORARY PAVEMENT AND EXISTING WESTBOUND LANE AS SHOWN IN THE TYPICAL SECTIONS FOR STAGE 1.
2. CONSTRUCT THE EASTBOUND LANE AND TEMPORARY PAVEMENT BETWEEN STA 13+82.61 TO 15+71.92.
3. SHIFT TRAFFIC ON TO THE EASTBOUND LANE AS SHOWN IN THE TYPICAL SECTION FOR STAGE 2.
4. CONSTRUCT THE INSIDE LANE AND MEDIAN.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
6-30-09

⚠ REPLACED 07.30.09 VN

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HUITT-ZOLLARS
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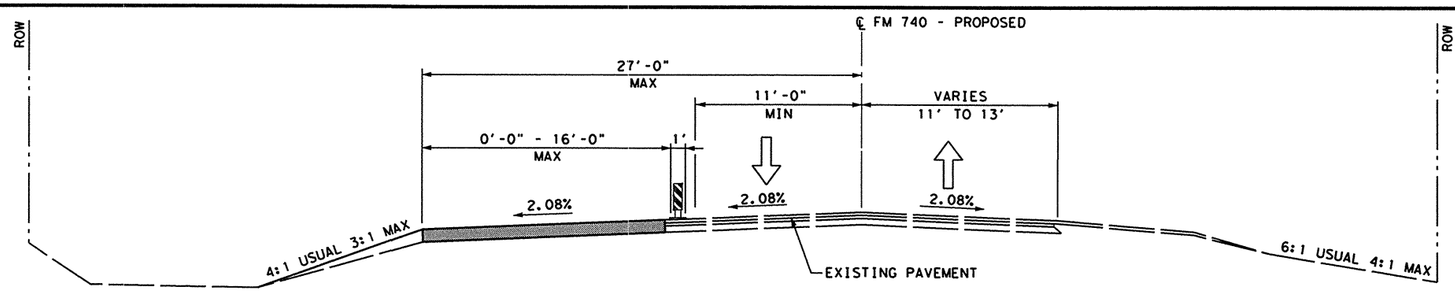
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL NARRATIVE

SCALE: NONE SHEET 1 OF 1

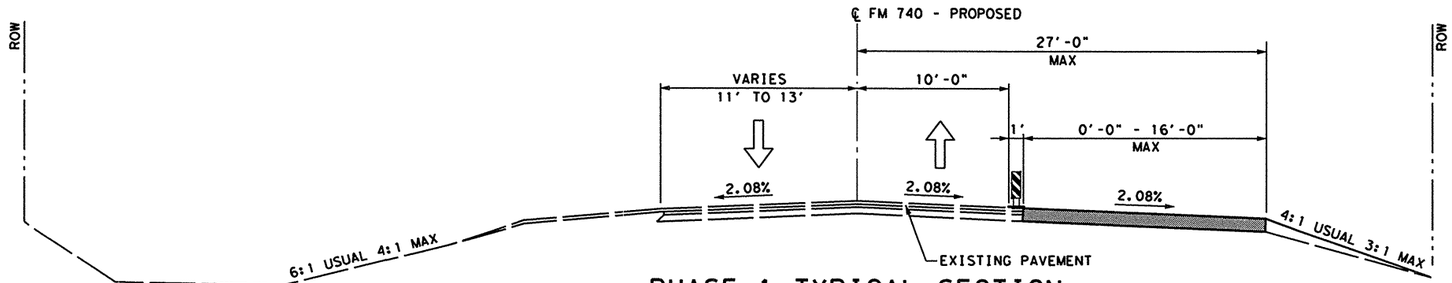
DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	40
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



PHASE 1 TYPICAL SECTION

NTS

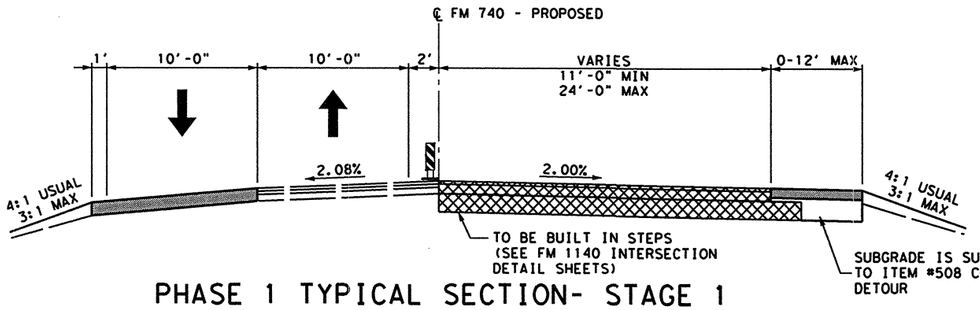
STA 73+05 TO 76+56
STA 141+80 TO 148+92



PHASE 1 TYPICAL SECTION

NTS

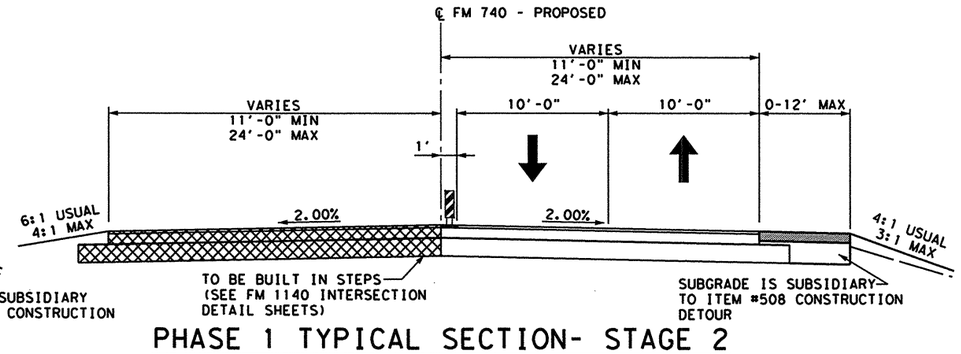
STA 23+12 TO 48+99
STA 48+99 TO 74+89 (NO TEMP PVMT, USE EXIST PVMT)
STA 74+89 TO 76+55
STA 76+55 TO 83+50 (NO TEMP PVMT, USE EXIST PVMT)
STA 83+50 TO 114+26
STA 114+26 TO 149+57 (NO TEMP PVMT, USE EXIST PVMT)



PHASE 1 TYPICAL SECTION- STAGE 1

NTS

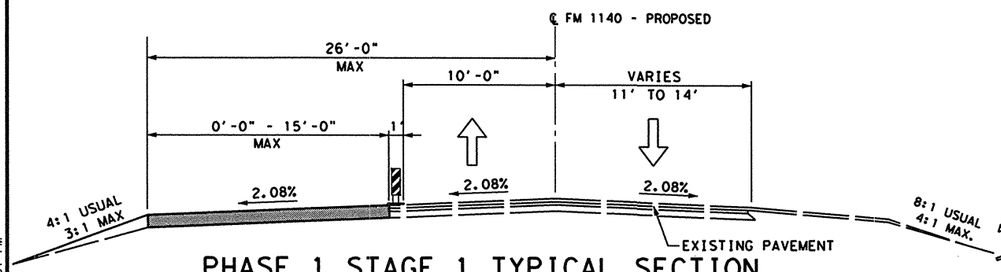
STA 142+80 TO 147+80
STA 143+99 TO 147+95 (TEMPORARY PAVEMENT)



PHASE 1 TYPICAL SECTION- STAGE 2

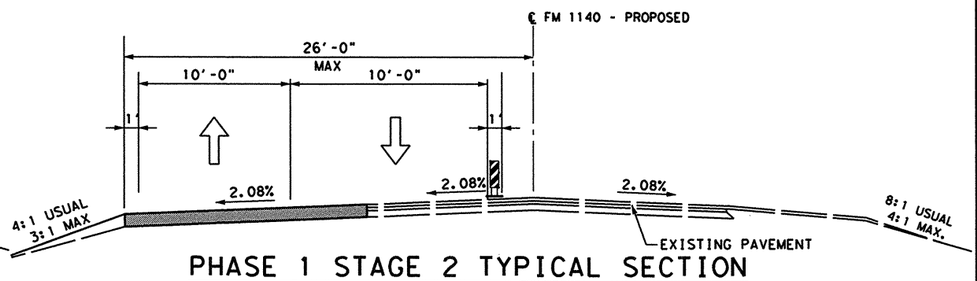
NTS

STA 142+80 TO 147+80



PHASE 1 STAGE 1 TYPICAL SECTION

STA 10+12.74 TO 13+20.06
NTS



PHASE 1 STAGE 2 TYPICAL SECTION

STA 10+12.74 TO 13+20.06
NTS

⚠ REPLACED 07.30.09 VN

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY 6" HMAC TY B, 2" HMAC TY C
- (A) 4" SOLID WHITE REMOVABLE
- (B) 4" DOUBLE SOLID YELLOW REMOVABLE
- (D) 4" SOLID YELLOW REMOVABLE
- DRUM
- VERTICAL PANEL
- EXIST DIRECTION OF TRAFFIC
- PROPOSED DIRECTION OF TRAFFIC

NOTE :

REMOVE MEDIAN AND PLACE TEMPORARY PAVEMENT ON FM 740 STA 19+82.45 - 20+97.04
SEE SHEET NO. 46

TEMPORARY PAVEMENT ON WHITE ROAD STA 12+49.47 - 11+39.33
SEE SHEET NO. 49

STATE OF TEXAS
DAVID ALAN NUFER
68818
PROFESSIONAL ENGINEER
6-30-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

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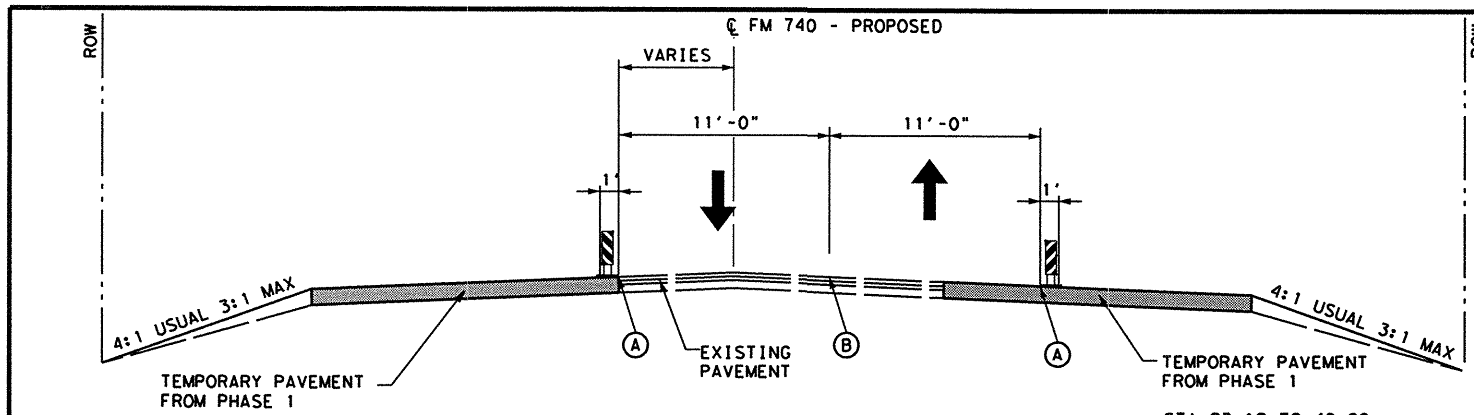
FM 740
TRAFFIC CONTROL TYPICAL SECTIONS
PHASE 1

SCALE: NTS SHEET 1 OF 5

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	41
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

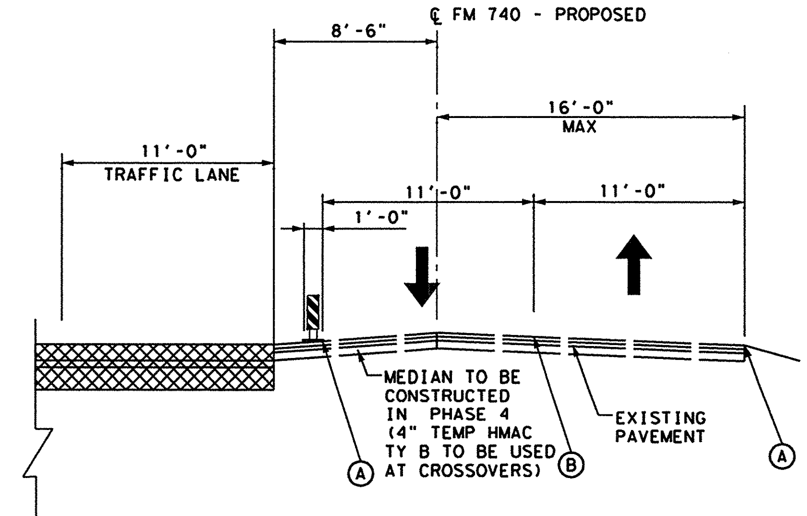


STA 73+05 TO 76+56
STA 141+80 TO 148+92

STA 23+12 TO 48+99
STA 74+89 TO 76+55
STA 83+50 TO 114+26

PHASE 2 TYPICAL SECTION

NTS



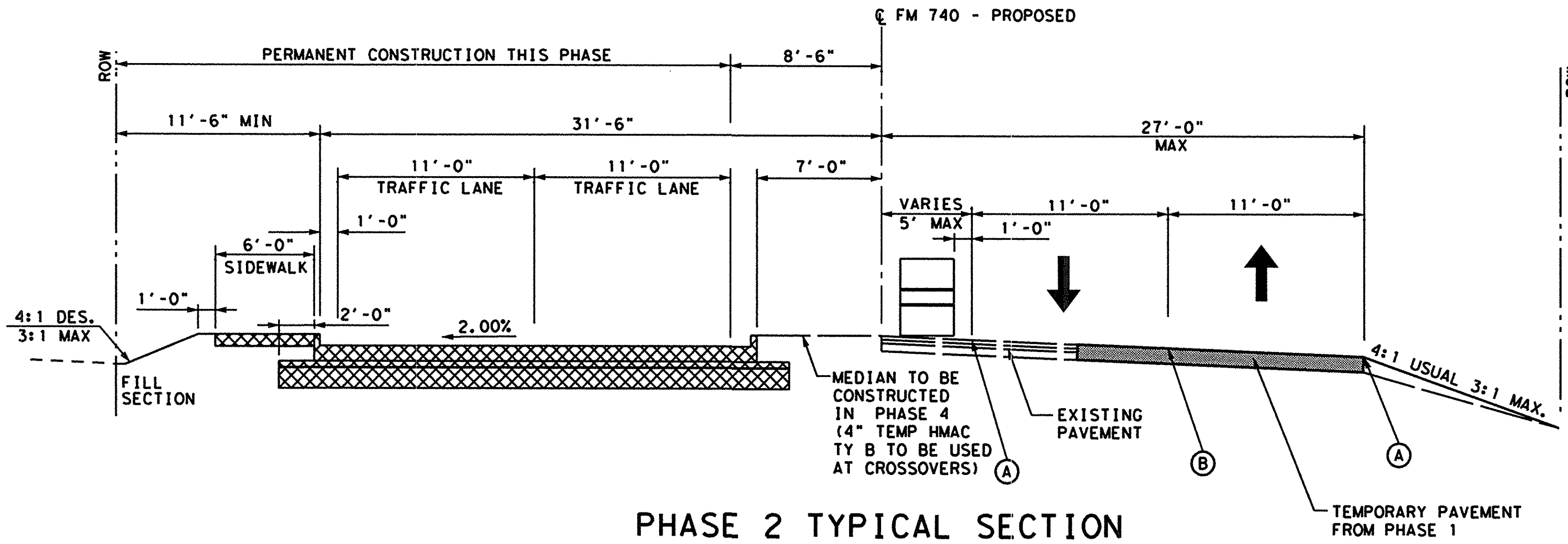
PHASE 2 TYPICAL SECTION

NTS

STA 55+20 TO 59+00 (NO TEMP PVMT, USE EXIST PVMT)

LEGEND

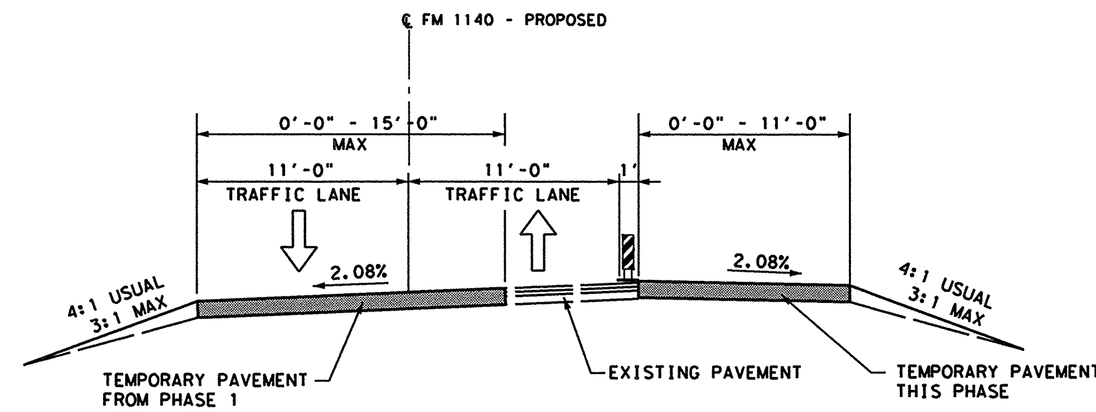
- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY 6" HMAC TY B, 2" HMAC TY C
- (A) 4" SOLID WHITE REMOVABLE
- (B) 4" DOUBLE SOLID YELLOW REMOVABLE
- (D) 4" SOLID YELLOW REMOVABLE
- DRUM
- VERTICAL PANEL
- EXIST DIRECTION OF TRAFFIC
- PROPOSED DIRECTION OF TRAFFIC



PHASE 2 TYPICAL SECTION

NTS

STA 20+94 TO 50+00
STA 50+00 TO 52+60 (ADDITIONAL RIGHT TURN LANE, NO TEMP PVMT, USE EXIST PVMT)
STA 52+60 TO 55+20 (NO TEMP PVMT, USE EXIST PVMT)
STA 59+00 TO 83+50 (NO TEMP PVMT, USE EXIST PVMT)
STA 83+50 TO 114+26
STA 114+26 TO 124+58 (NO TEMP PVMT, USE EXIST PVMT)
STA 124+58 TO 140+87 (BUILD ENTIRE SECTION)
STA 140+87 TO 142+80



PHASE 2 TYPICAL SECTION

FM 1140
STA 10+77.56 TO 15+72.10
NTS

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
6-30-09

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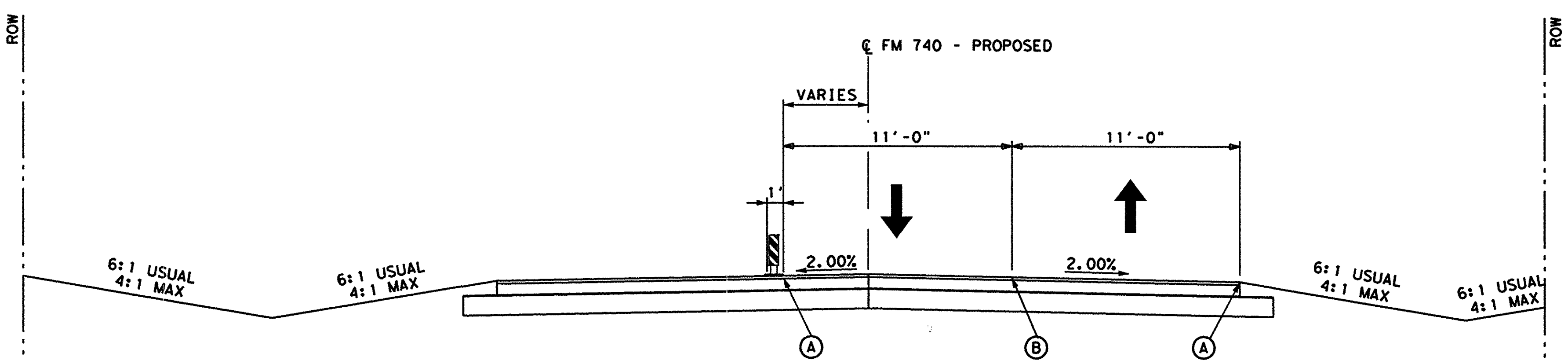

PHASE 2 TYPICAL SECTION

NTS

STA 142+80 TO 147+80 (NO CONSTRUCTION, TRAFFIC IN TRANSITION)

⚠ REPLACED 07.30.09 VN

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FM 740
TRAFFIC CONTROL TYPICAL SECTIONS
PHASE 2

SCALE: NTS SHEET 2 OF 5

DESIGN CVL	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	42
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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SCALE: 1:10
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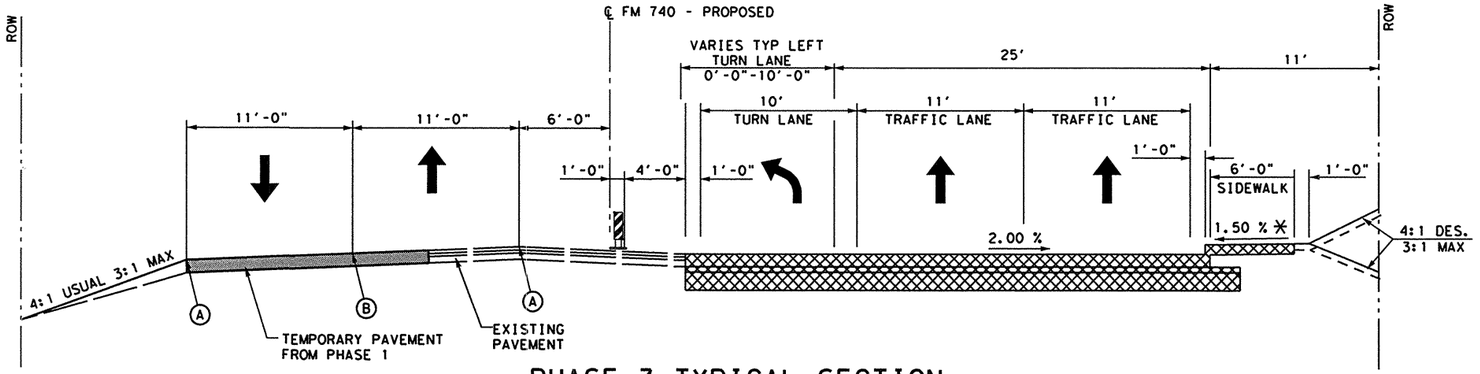
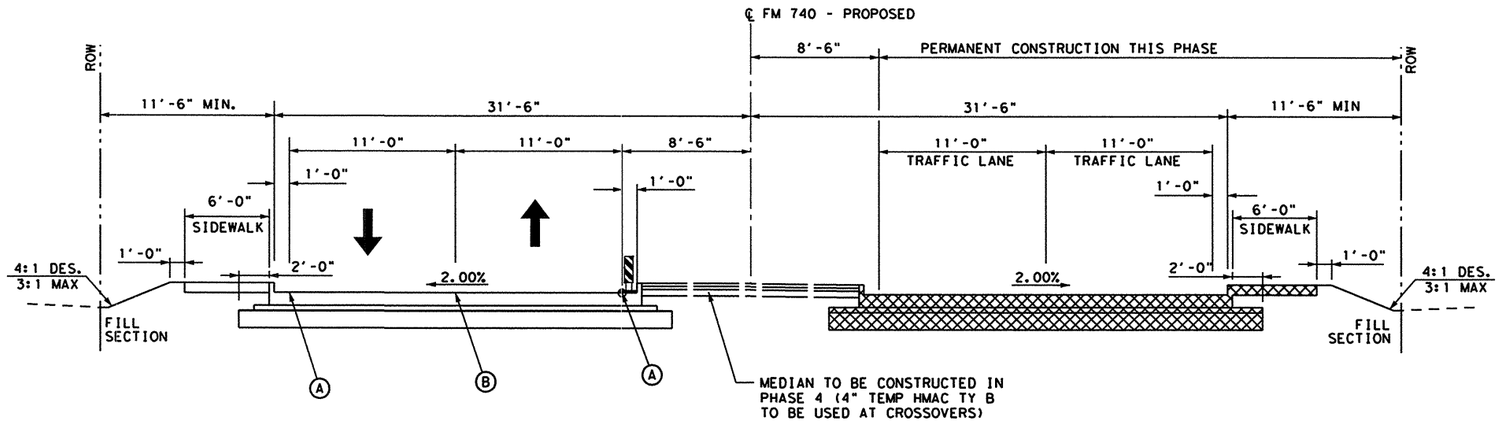


PHASE 3 TYPICAL SECTION

NTS

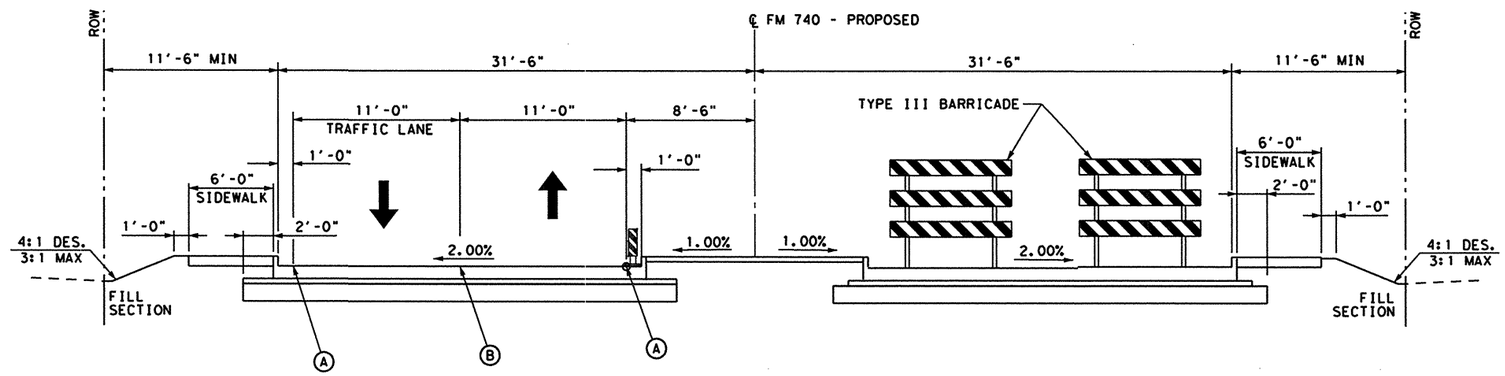
STA 73+05 TO 76+55



PHASE 3 TYPICAL SECTION

NTS

STA 20+94 TO 73+05
STA 76+55 TO 124+58



PHASE 3 TYPICAL SECTION

NTS

STA 124+58 TO 140+87

⚠ REPLACED 07.30.09 VN

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY 6" HMAC TY B, 2" HMAC TY C
- (A) 4" SOLID WHITE REMOVABLE
- (B) 4" DOUBLE SOLID YELLOW REMOVABLE
- (D) 4" SOLID YELLOW REMOVABLE
- DRUM
- VERTICAL PANEL
- EXIST DIRECTION OF TRAFFIC
- PROPOSED DIRECTION OF TRAFFIC

STATE OF TEXAS
DAVID ALAN NUFER
68818
PROFESSIONAL ENGINEER
6-30-09

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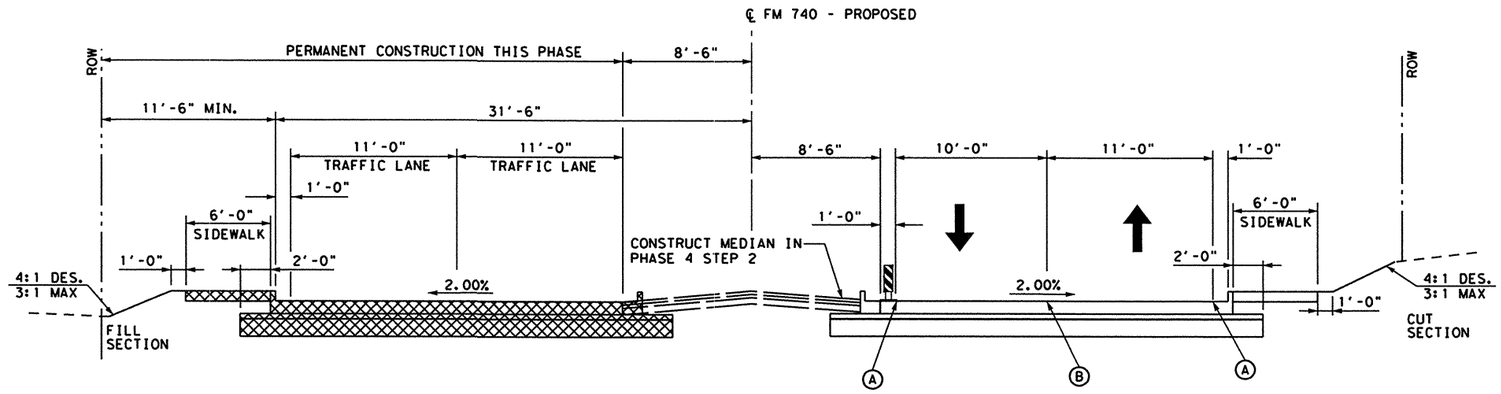
FM 740
TRAFFIC CONTROL TYPICAL SECTIONS
PHASE 3

SCALE: NTS SHEET 3 OF 5

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	43
CHECK DAN	CONTROL	SECTION	JOB	
CHECK CVL	1014	03	039	



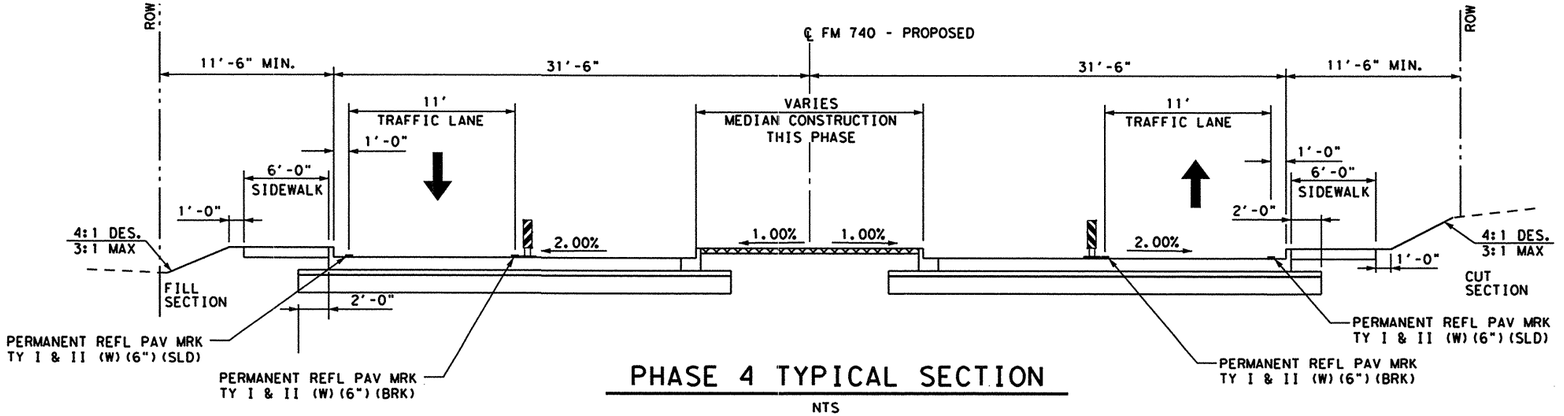
PHASE 4 TYPICAL SECTION

NTS

STA 73+05 TO 76+55

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY 6" HMAC TY B, 2" HMAC TY C
- (A) 4" SOLID WHITE REMOVABLE
- (B) 4" DOUBLE SOLID YELLOW REMOVABLE
- (D) 4" SOLID YELLOW REMOVABLE
- DRUM
- VERTICAL PANEL
- EXIST DIRECTION OF TRAFFIC
- PROPOSED DIRECTION OF TRAFFIC



PHASE 4 TYPICAL SECTION

NTS

STA 20+94 TO 71+05
STA 81+66 TO 124+58
STA 141+74 TO 142+80

NOTE: STA 71+05 TO 73+05 (NO CONSTRUCTION UNTIL STEP 2, TRAFFIC IN TRANSITION)
STA 76+55 TO 81+66 (NO CONSTRUCTION UNTIL STEP 2, TRAFFIC IN TRANSITION)
STA 124+58 TO 141+74 (CONSTRUCTED PREVIOUS)

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STATE OF TEXAS
DAVID ALAN NUFER
68818
PROFESSIONAL ENGINEER
6-30-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

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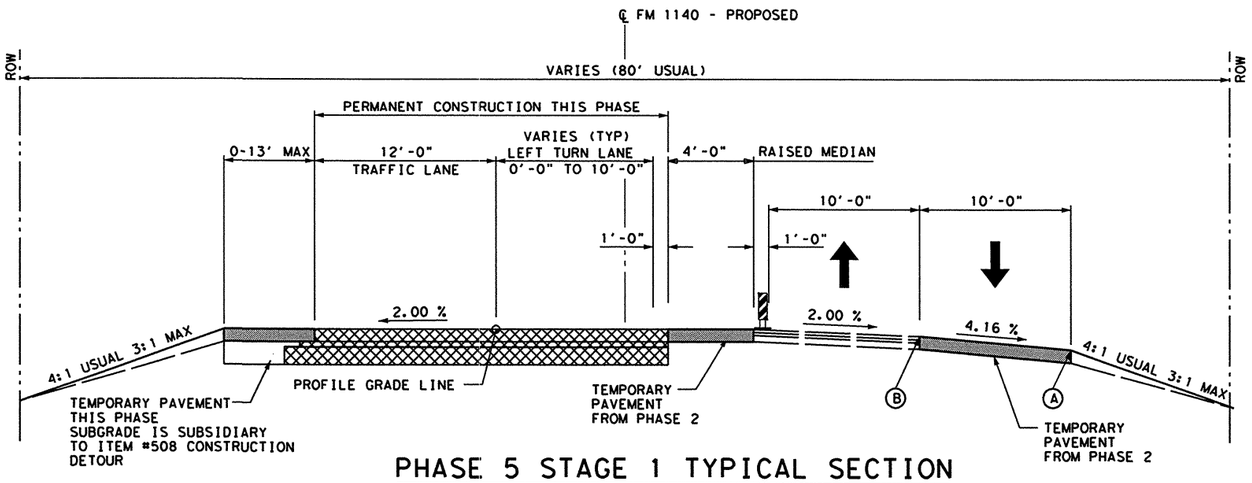
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL TYPICAL SECTIONS
PHASE 4

SCALE: NTS SHEET 4 OF 5

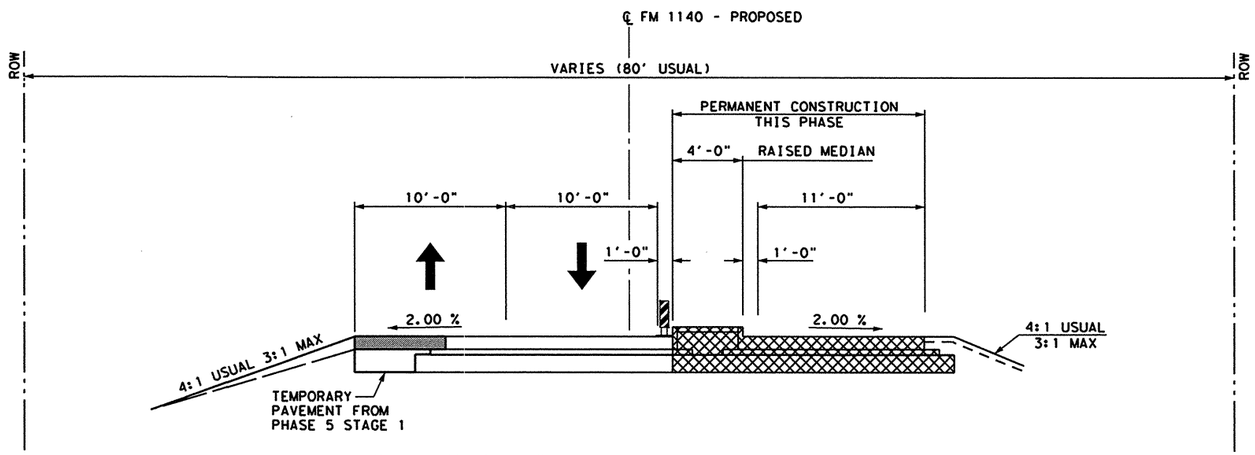
DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	44
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



PHASE 5 STAGE 1 TYPICAL SECTION

FM 1140 STA 11+45 TO 15+78
NTS

STA 10+77.56 TO 15+72.10 (TEMPORAY PAVEMENT (RT))
STA 13+82.61 TO 15+71.92 (TEMPORAY PAVEMENT (LT))
STA 10+63.00 TO 10+96.58 (TEMPORAY PAVEMENT (MEDIAN))



PHASE 5 STAGE 2 TYPICAL SECTION

FM 1140 STA 11+45 TO 15+78
NTS

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY 6" HMAC TY B, 2" HMAC TY C
- (A) 4" SOLID WHITE REMOVABLE
- (B) 4" DOUBLE SOLID YELLOW REMOVABLE
- (D) 4" SOLID YELLOW REMOVABLE
- DRUM
- VERTICAL PANEL
- EXIST DIRECTION OF TRAFFIC
- PROPOSED DIRECTION OF TRAFFIC

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
6-30-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

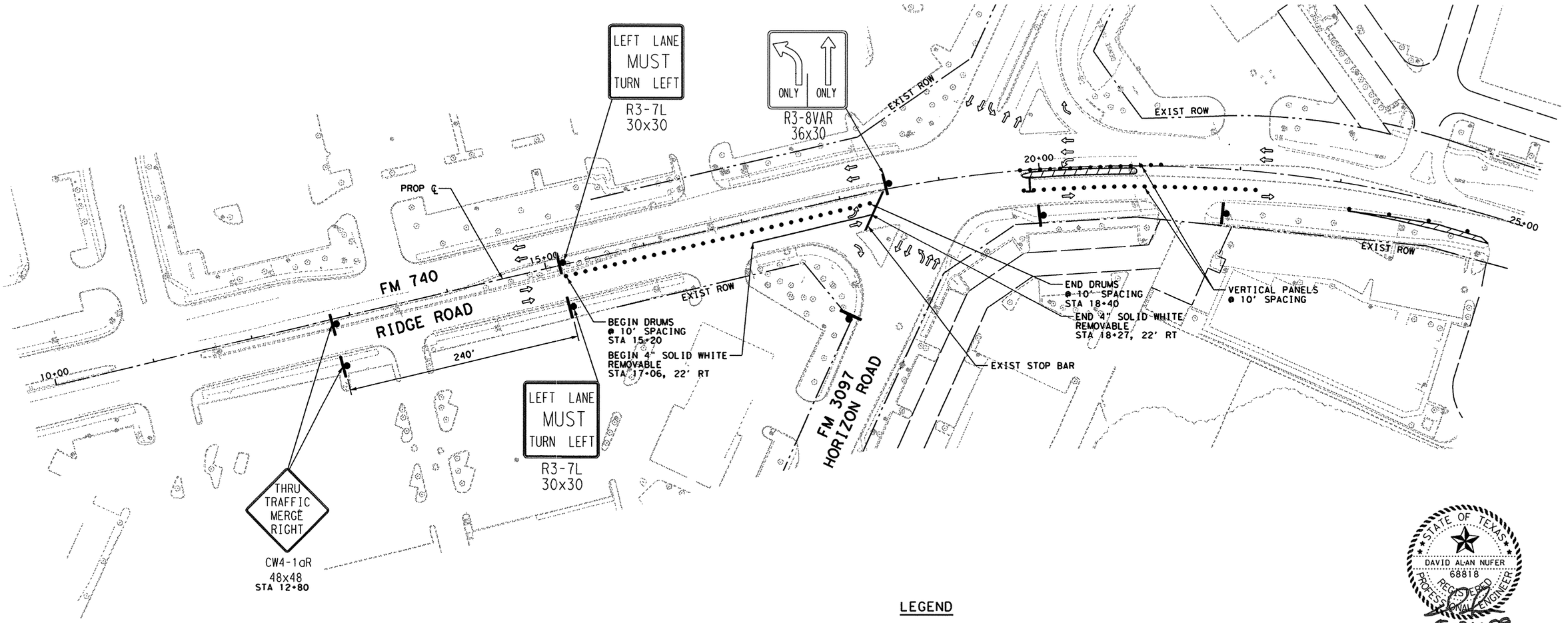
Texas Department of Transportation

FM 740
TRAFFIC CONTROL TYPICAL SECTIONS
PHASE 5

SCALE: NTS SHEET 5 OF 5

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	45
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

⚠ REPLACED 07.30.09 VN



LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
- LOW PROFILE CONCRETE BARRIER (LPCB)
- TY III BARRICADE
- VERTICAL PANELS USED AS CHANNELIZING DEVICES DIRECTLY BETWEEN TRAVEL LANES AND WORK ZONE TO MAINTAIN 11' (10' MIN) TRAVEL LANES AT ALL TIMES. DRUMS USED IN OTHER AREAS.
- PORTABLE CHANGEABLE MESSAGE SIGN
- ARROW PANEL SUPPORT OR TRAILER

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
5-21-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

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Dallas, Texas 75204-2489

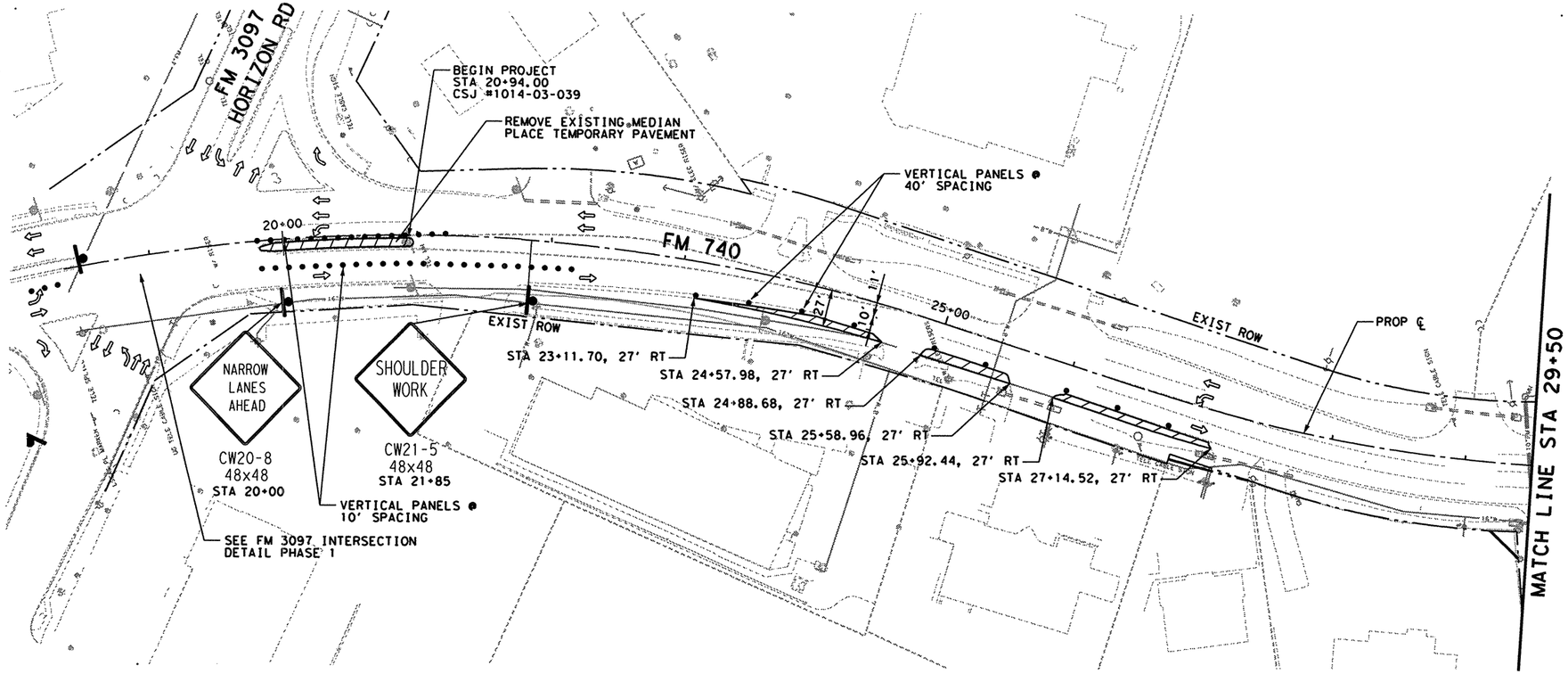
Texas Department of Transportation

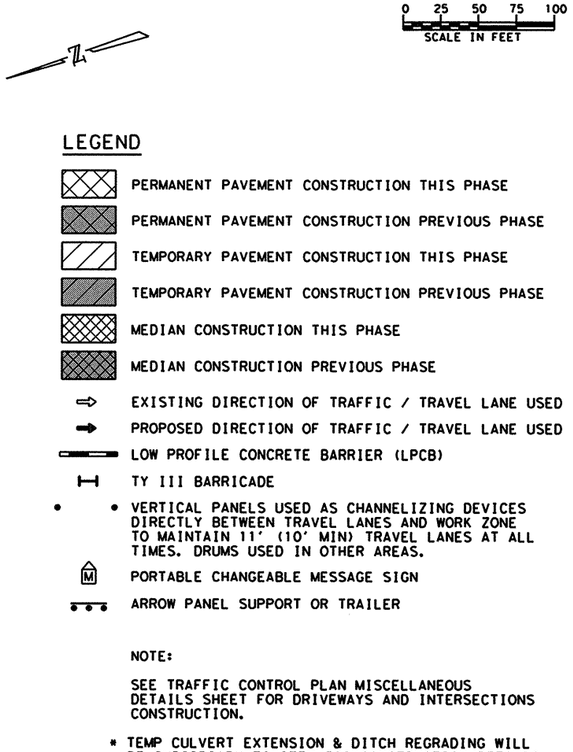
FM 740
TRAFFIC CONTROL

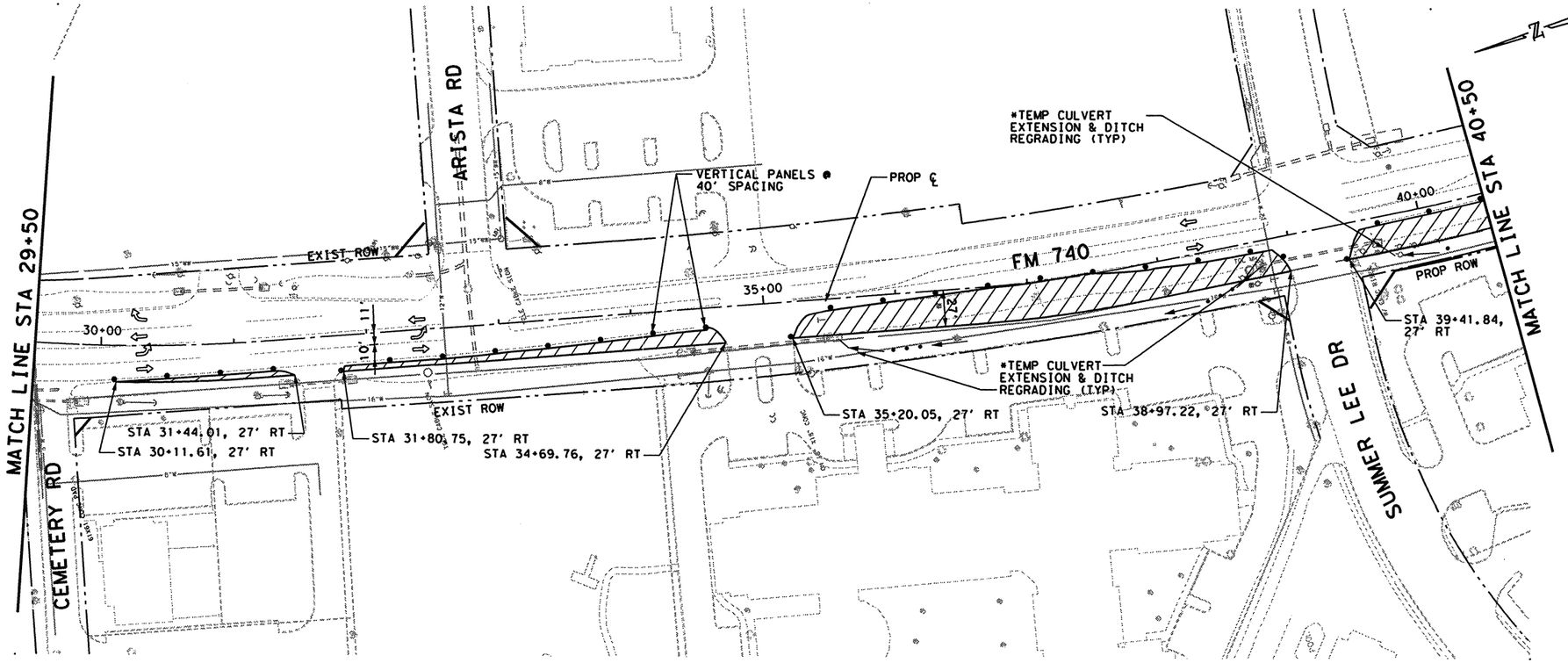
FM 3097 INTERSECTION DETAIL PHASE 1

SCALE: 1"=100' SHEET 1 OF 1

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	46
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	







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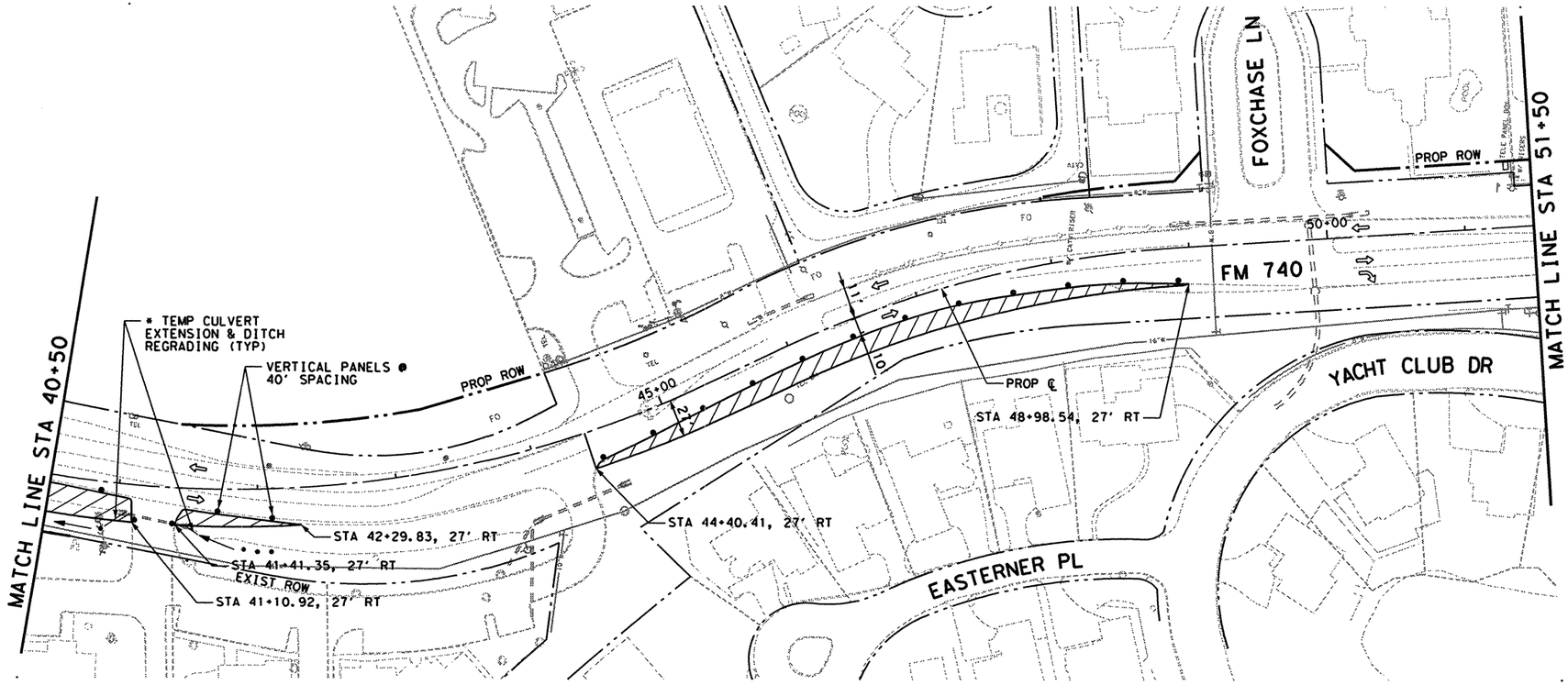
Dallas, Texas 75204-2489

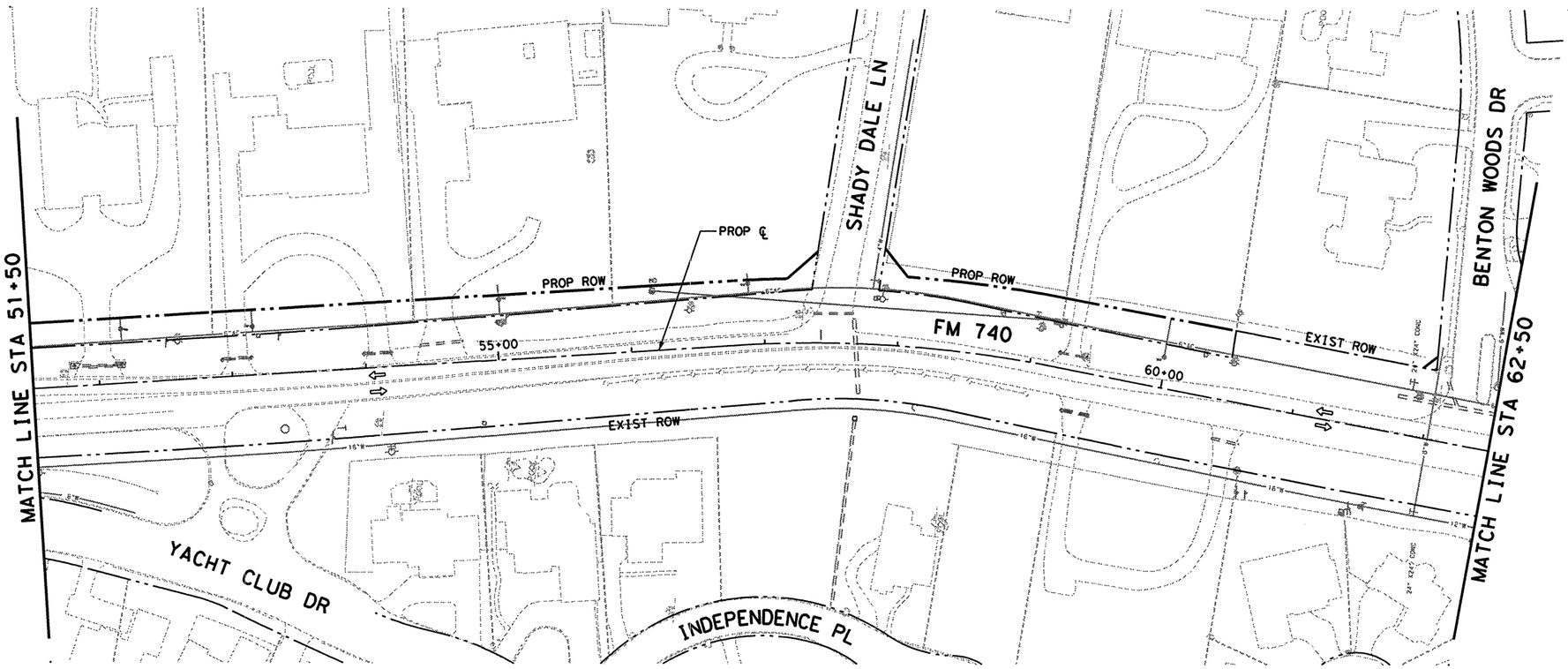
Texas Department of Transportation

FM 740
TRAFFIC CONTROL
PHASE 1
BEGIN PROJECT TO STA 40+50

SCALE: 1"=100' SHEET 1 OF 7

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	47
CHECK	CONTROL	SECTION	JOB	
DAN	1014	03	039	
CHECK				
CVL				





0 25 50 75 100
SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
- LOW PROFILE CONCRETE BARRIER (LPCB)
- TY III BARRICADE
- • VERTICAL PANELS USED AS CHANNELIZING DEVICES DIRECTLY BETWEEN TRAVEL LANES AND WORK ZONE TO MAINTAIN 11' (10' MIN) TRAVEL LANES AT ALL TIMES. DRUMS USED IN OTHER AREAS.
- M PORTABLE CHANGEABLE MESSAGE SIGN
- ARROW PANEL SUPPORT OR TRAILER

NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.

* TEMP CULVERT EXTENSION & DITCH REGRADING WILL BE SUBSIDIARY TO ITEM 508 CONSTRUCTION DETOURS.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
4-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

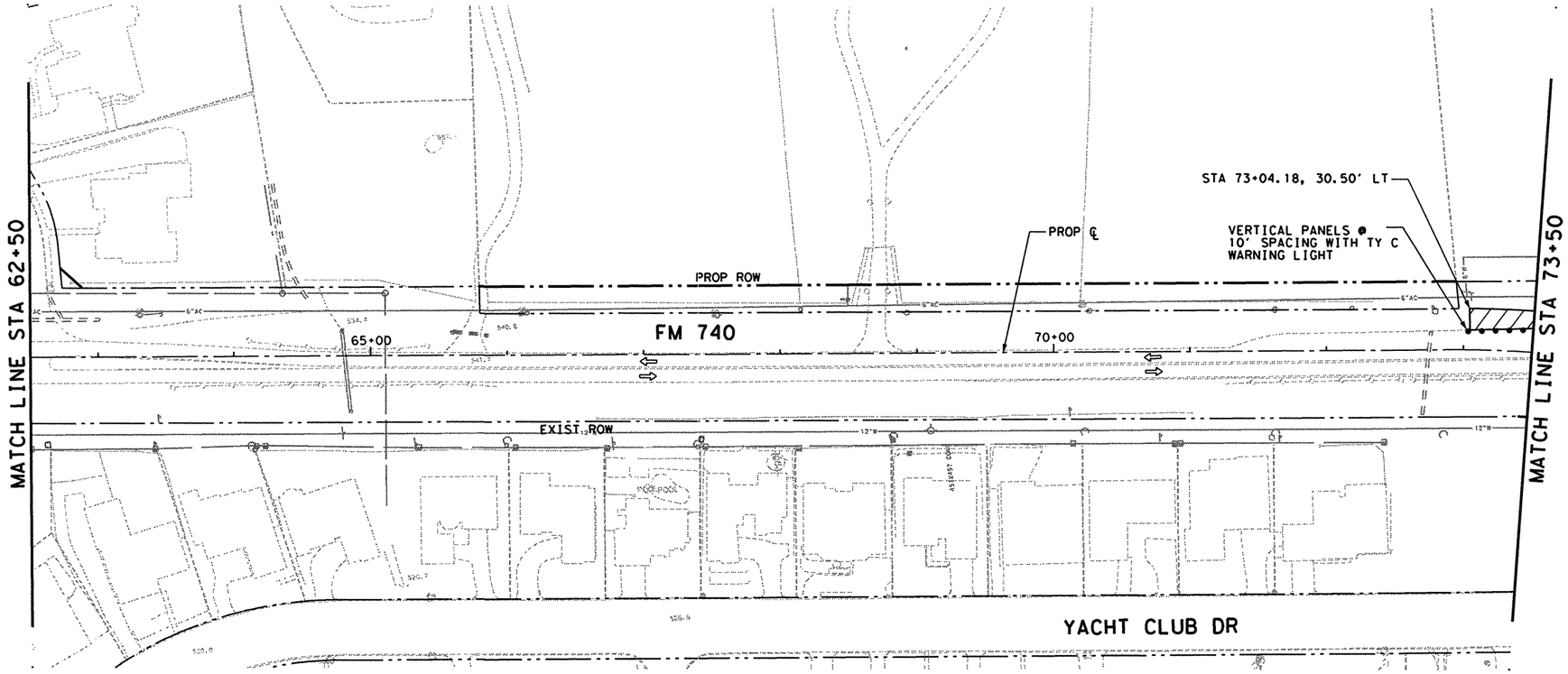
HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL
PHASE 1
STA 40+50 TO STA 62+50

SCALE: 1"=100' SHEET 2 OF 7

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	48
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



0 25 50 75 100
SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- ⇨ EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- ➡ PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
- LOW PROFILE CONCRETE BARRIER (LPCB)
- TY III BARRICADE
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NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.

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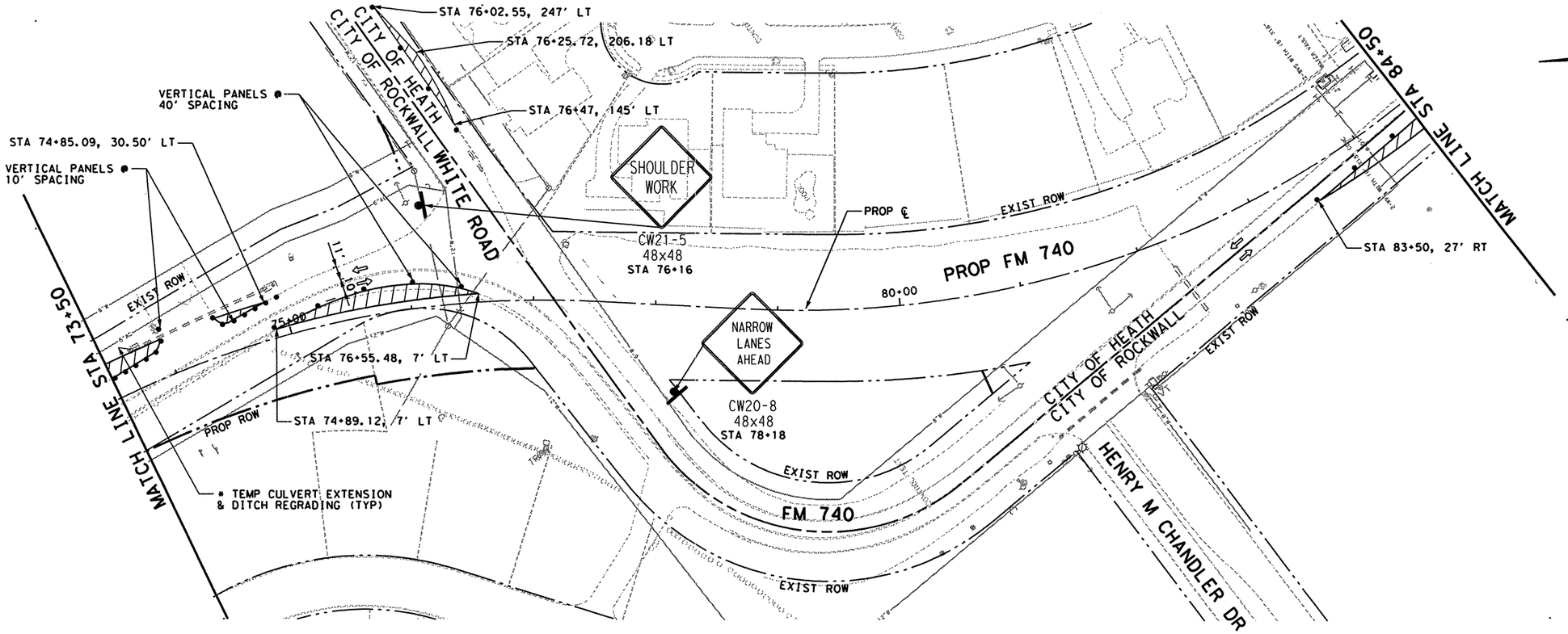

STATE OF TEXAS
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68818
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5-21-09

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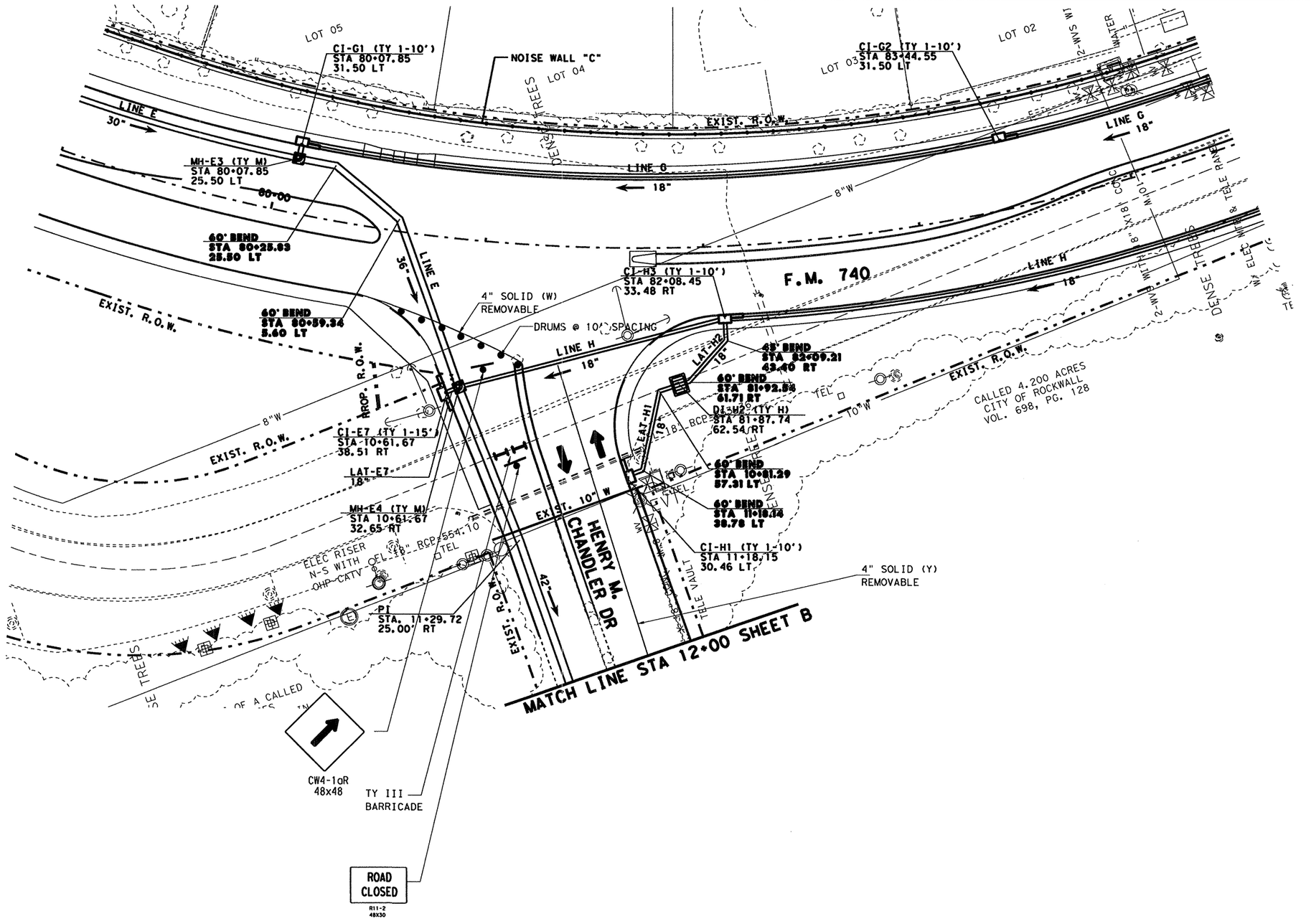
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 1
STA 62+50 TO STA 84+50

SCALE: 1"=100' SHEET 3 OF 7

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	49
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



25 0 25 50
HORIZ SCALE IN FEET

2.5 0 2.5 5
VERT SCALE IN FEET

STATE OF TEXAS
JAHOR L. ROY, P.E.
83789
LISENCED
PROFESSIONAL ENGINEER

Jahor Roy 11-8-10

NO.	REVISION	BY	DATE

CP&Y Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

 Texas Department of Transportation

DALLAS DIST.-FM740

TRAFFIC CONTROL
PHASE 1 A

SHEET 1 OF 5

Designed: JCR	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			SHEET NO.
Checked: RRH	6	TEXAS	(SEE TITLE SHEET)			49A
Drawn: GBG	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
Checked: RRH	DALLAS	ROCKWALL	1014	03	039	FM 740

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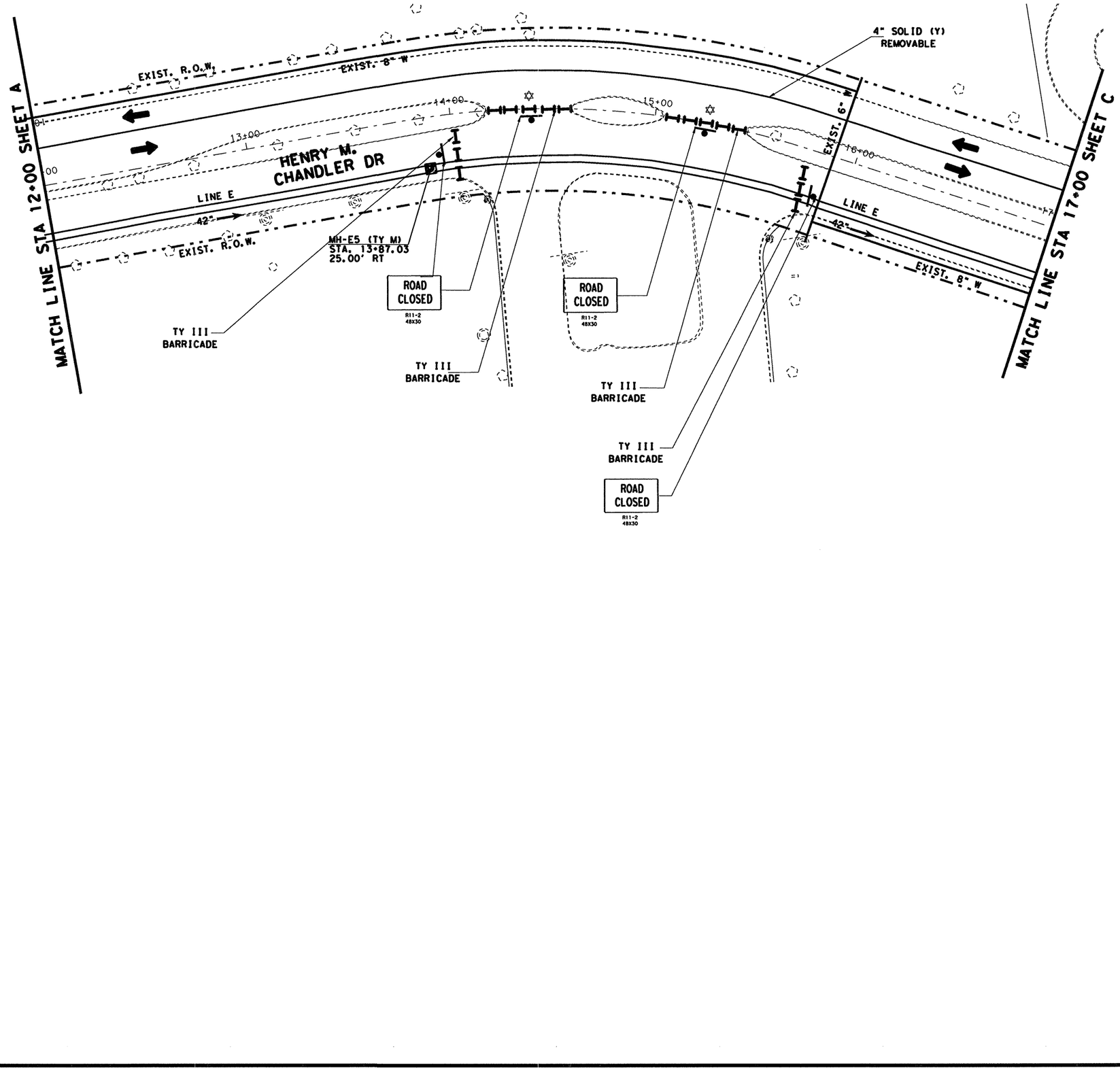
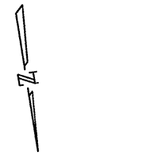
$USERNAME$S$
$TIME$S$
$PLTDRVS$S$
$DATE$S$





25 0 25 50
HORIZ SCALE IN FEET

2.5 0 2.5 5
VERT SCALE IN FEET

✡ DRIVEWAY TRAFFIC WILL BE HANDLED MANUALLY BASED ON CONSTRUCTION PROGRESS.

STATE OF TEXAS
JAHOR L. ROY, P.E.
83789
LISENCED
PROFESSIONAL ENGINEER

Jahor Roy 11-8-10

NO.	REVISION	BY	DATE

CP&Y Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

 Texas Department of Transportation

DALLAS DIST.-FM740

TRAFFIC CONTROL

PHASE 1 A

SHEET 2 OF 5

Designed: JCM	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			SHEET NO.
Checked: RRH	6	TEXAS	(SEE TITLE SHEET)			49B
Drawn: GBG	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
Checked: RRH	DALLAS	ROCKWALL	1014	03	039	FM 740

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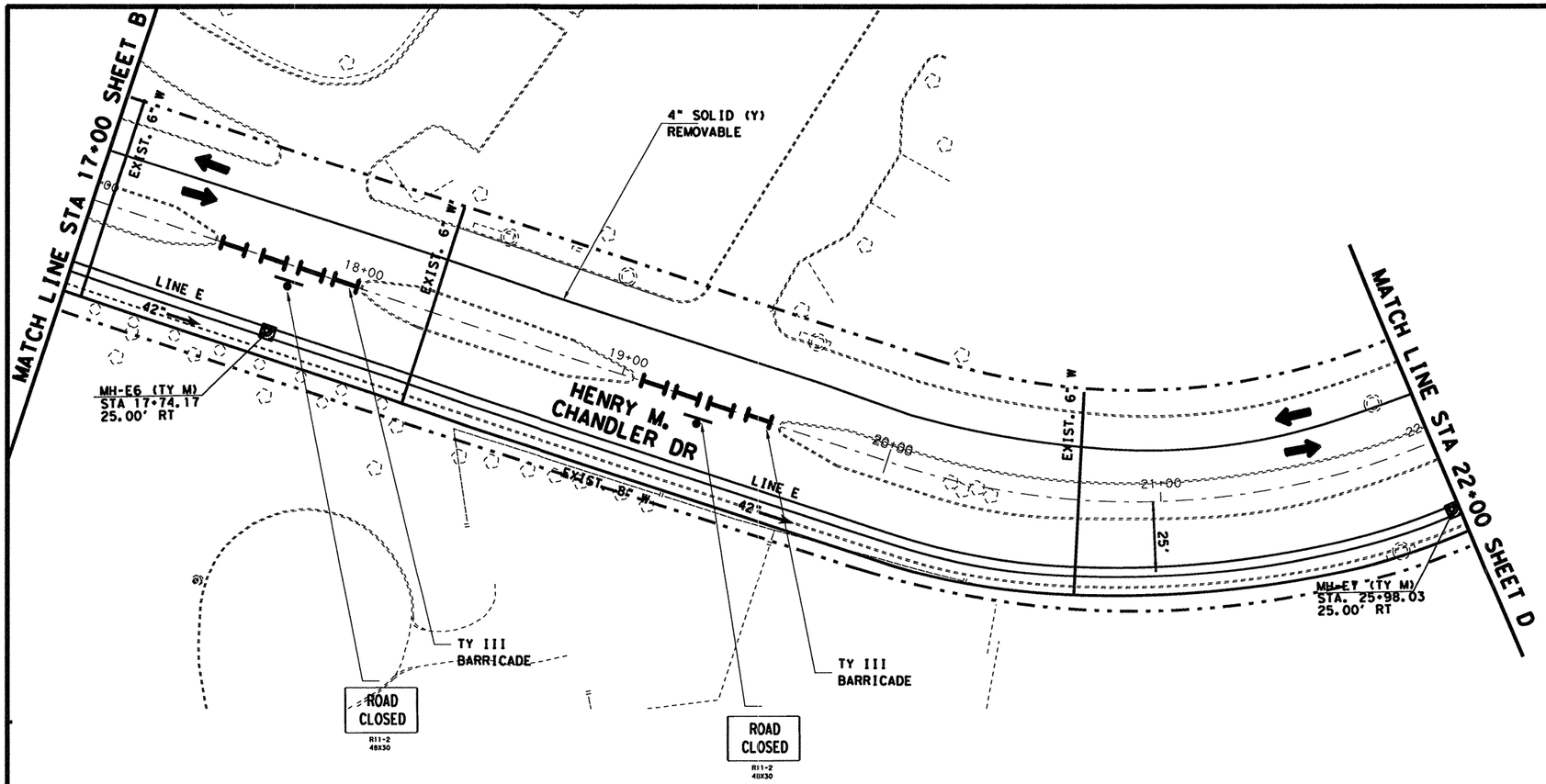


25 0 25 50
HORIZ SCALE IN FEET

2.5 0 2.5 5
VERT SCALE IN FEET

STATE OF TEXAS
JAHOR L. ROY, P.E.
83789
LISENCED
PROFESSIONAL ENGINEER

Jahor Roy 11-8-10

NO.	REVISION	BY	DATE

CP&Y Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

DALLAS DIST.-FM740

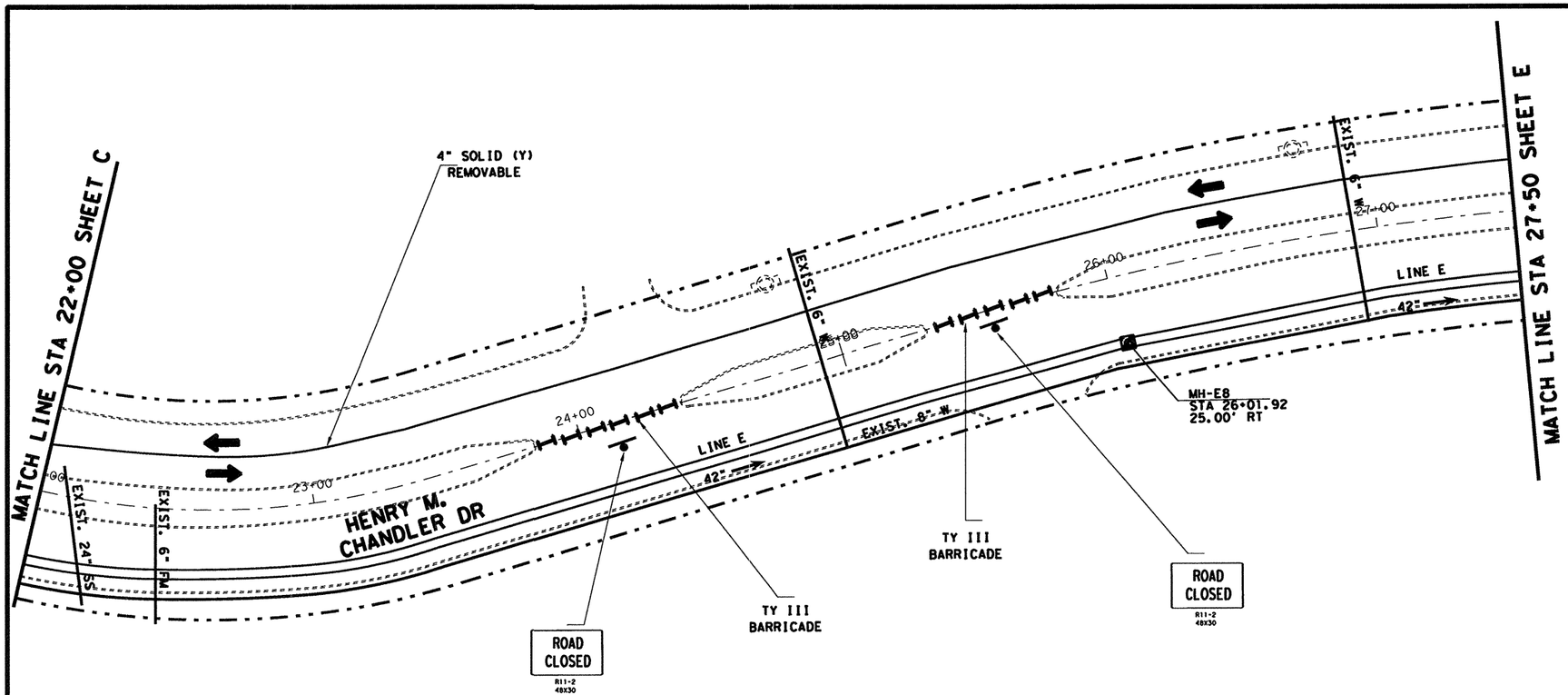
TRAFFIC CONTROL

PHASE 1A

SHEET 3 OF 5

Designed: JCM	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			SHEET NO.
Checked: RRH	6	TEXAS	(SEE TITLE SHEET)			49C
Drawn: GBG	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
Checked: RRH	DALLAS	ROCKWALL	1014	03	039	FM 740

$PLTDRV$ $DATE$ $TIME$ $USERNAME$ $PWFILE$ $PENTBL$



25 0 25 50
HORIZ SCALE IN FEET

2.5 0 2.5 5
VERT SCALE IN FEET

STATE OF TEXAS
JAHOR L. ROY, P.E.
83789
LICENSED
PROFESSIONAL ENGINEER

Jahor Roy 11-8-10

NO.	REVISION	BY	DATE

CP&Y Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

DALLAS DIST.-FM740

TRAFFIC CONTROL

PHASE 1 A

SHEET 4 OF 5

Designed: JCM	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			SHEET NO.
Checked: RRH	6	TEXAS	(SEE TITLE SHEET)			49D
Drawn: GBG	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
Checked: RRH	DALLAS	ROCKWALL	1014	03	039	FM 740

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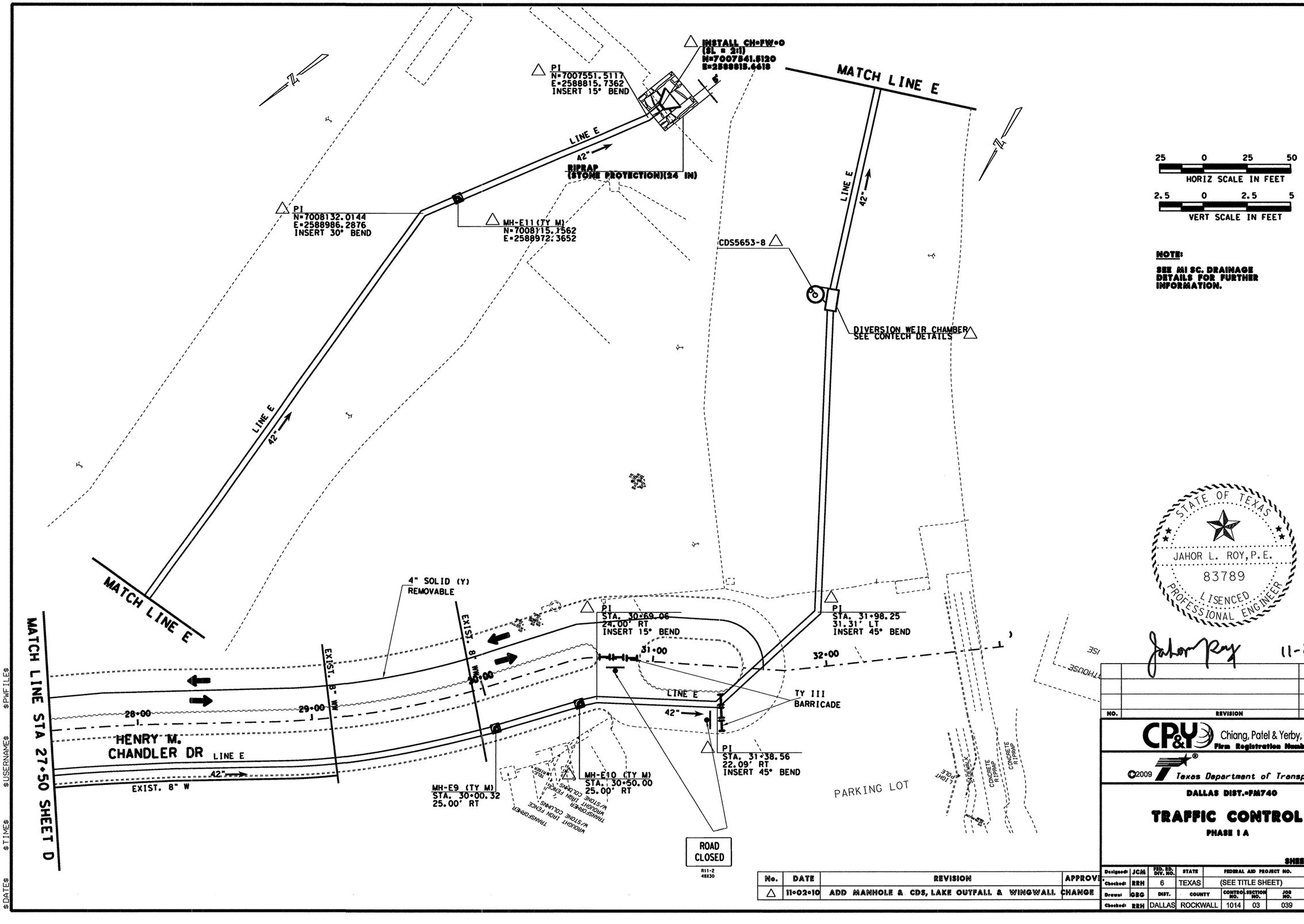

NOTE:

SEE MI SC. DRAINAGE DETAILS FOR FURTHER INFORMATION.

STATE OF TEXAS
JAHOR L. ROY, P.E.
83789
LISENCED
PROFESSIONAL ENGINEER

Jahor Roy 11-8-10

NO.	REVISION	BY	DATE

CP&Y Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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DALLAS DIST.-FM740

TRAFFIC CONTROL

PHASE 1 A

SHEET 5 OF 5

No.	DATE	REVISION	APPROVE
△	11-02-10	ADD MANHOLE & CDS, LAKE OUTFALL & WINGWALL	CHANGE

Designed: JCM	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			SHEET NO.
Checked: RRH	6	TEXAS	(SEE TITLE SHEET)			49E
Drawn: GBG	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
Checked: RRH	DALLAS	ROCKWALL	1014	03	039	FM 740

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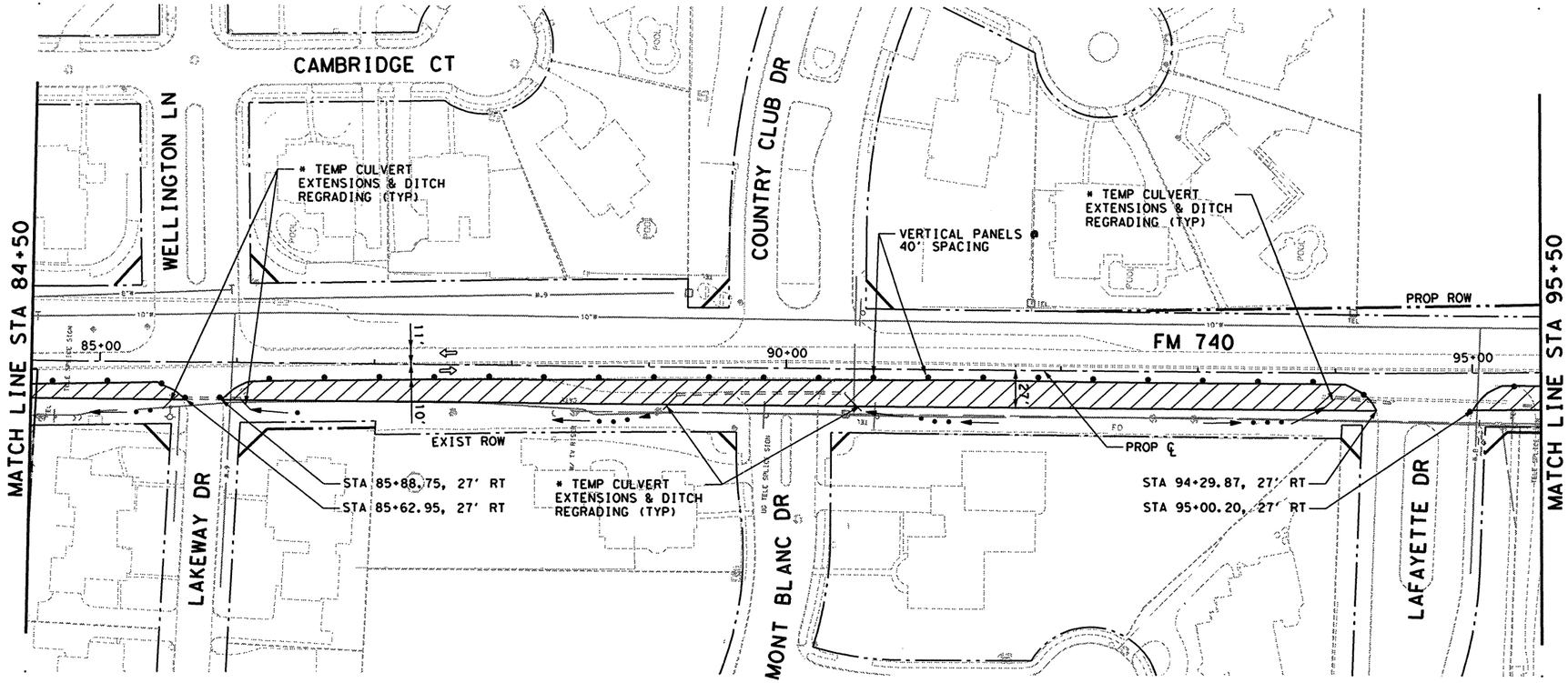

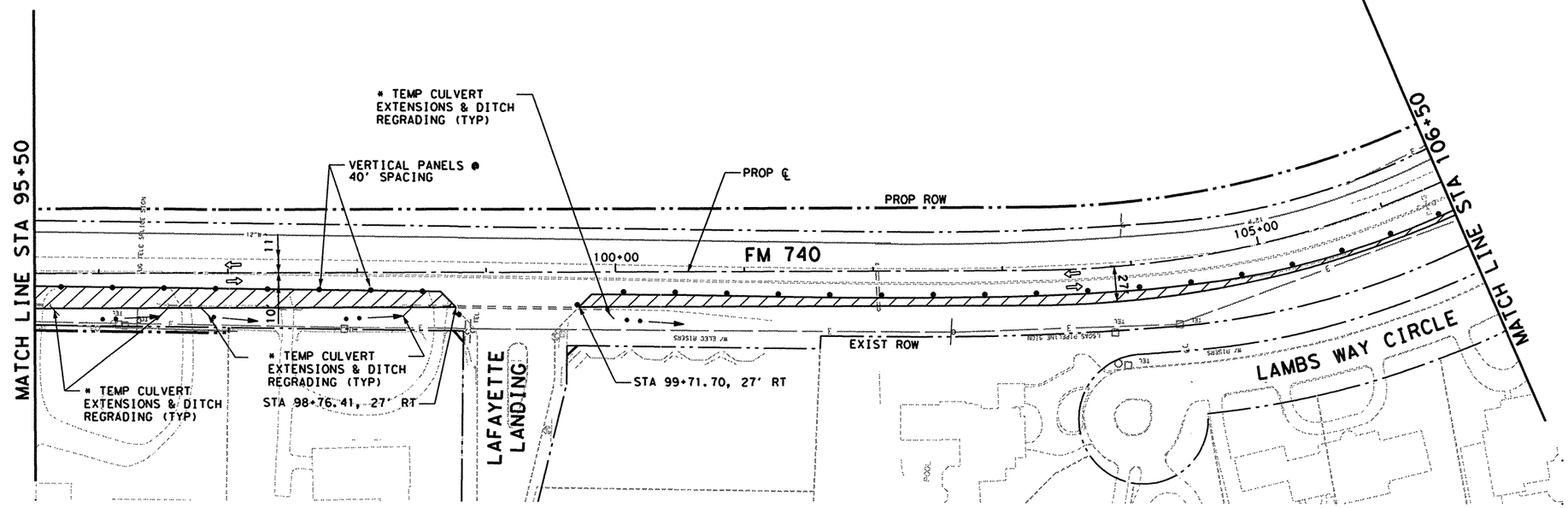

0 25 50 75 100
SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
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- ARROW PANEL SUPPORT OR TRAILER

NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.

* TEMP CULVERT EXTENSION & DITCH REGRADING WILL BE SUBSIDIARY TO ITEM 508 CONSTRUCTION DETOURS.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
4-15-09

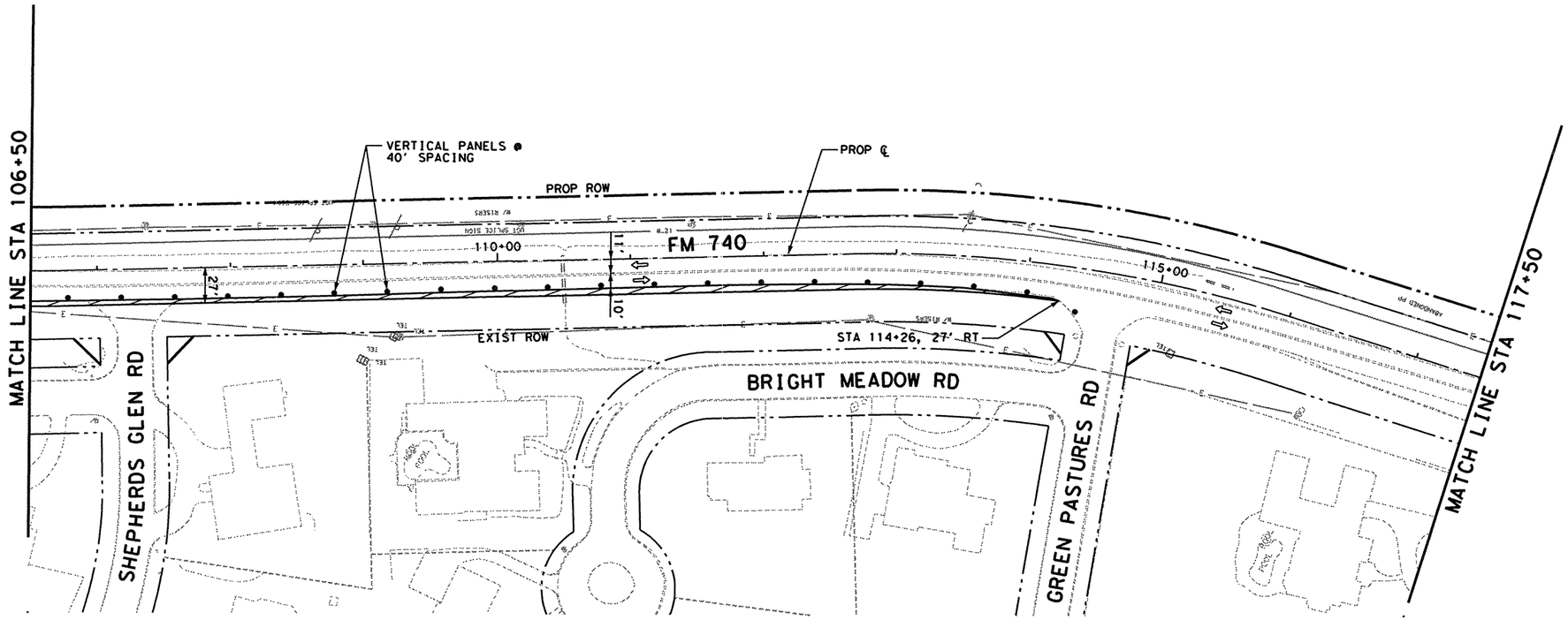
Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

FM 740
TRAFFIC CONTROL PHASE 1
STA 84+50 TO STA 106+50

SCALE: 1"=100' SHEET 4 OF 7

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	50
CHECK	CONTROL	SECTION	JOB	
DAN	1014	03	039	
CHECK				
CVL				



0 25 50 75 100
SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
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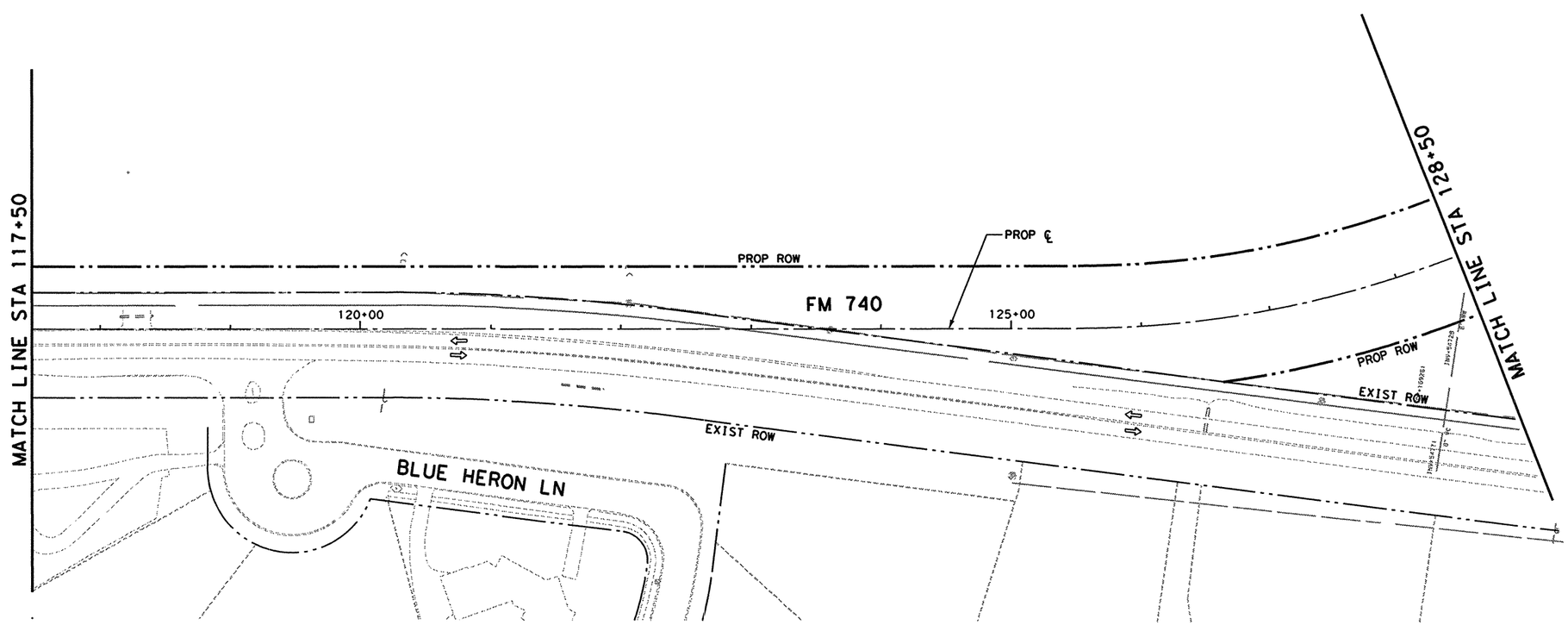
NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.



STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
4-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 1
STA 106+50 TO STA 128+50

SCALE: 1"=100' SHEET 5 OF 7

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	5
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

jporgas
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4/14/2009
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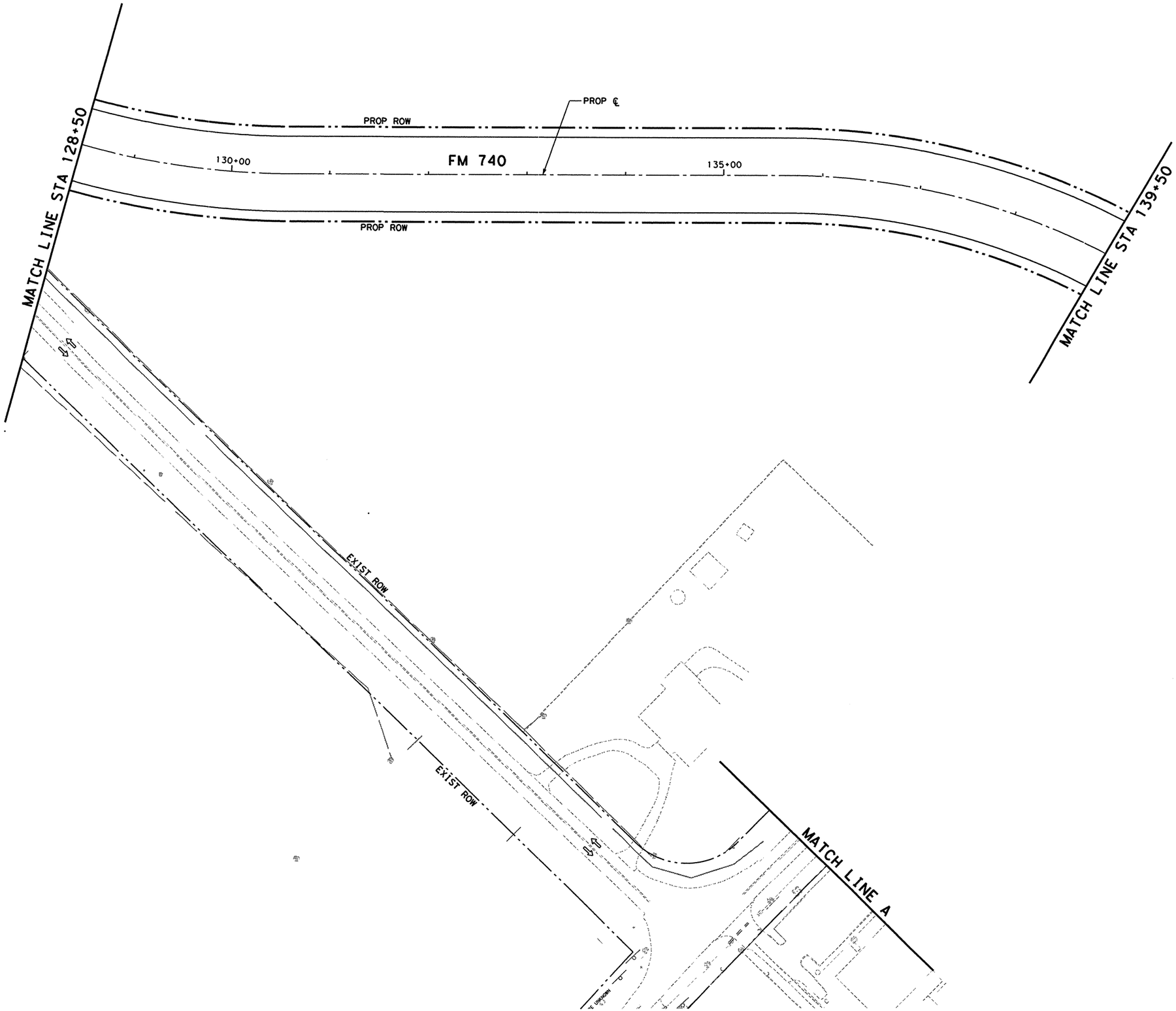

0 25 50 75 100
SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
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NOTE:

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STATE OF TEXAS
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4-17-09

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3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL
PHASE 1
STA 128+50 TO STA 139+50

SCALE: 1"=100' SHEET 6 OF 7

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	52
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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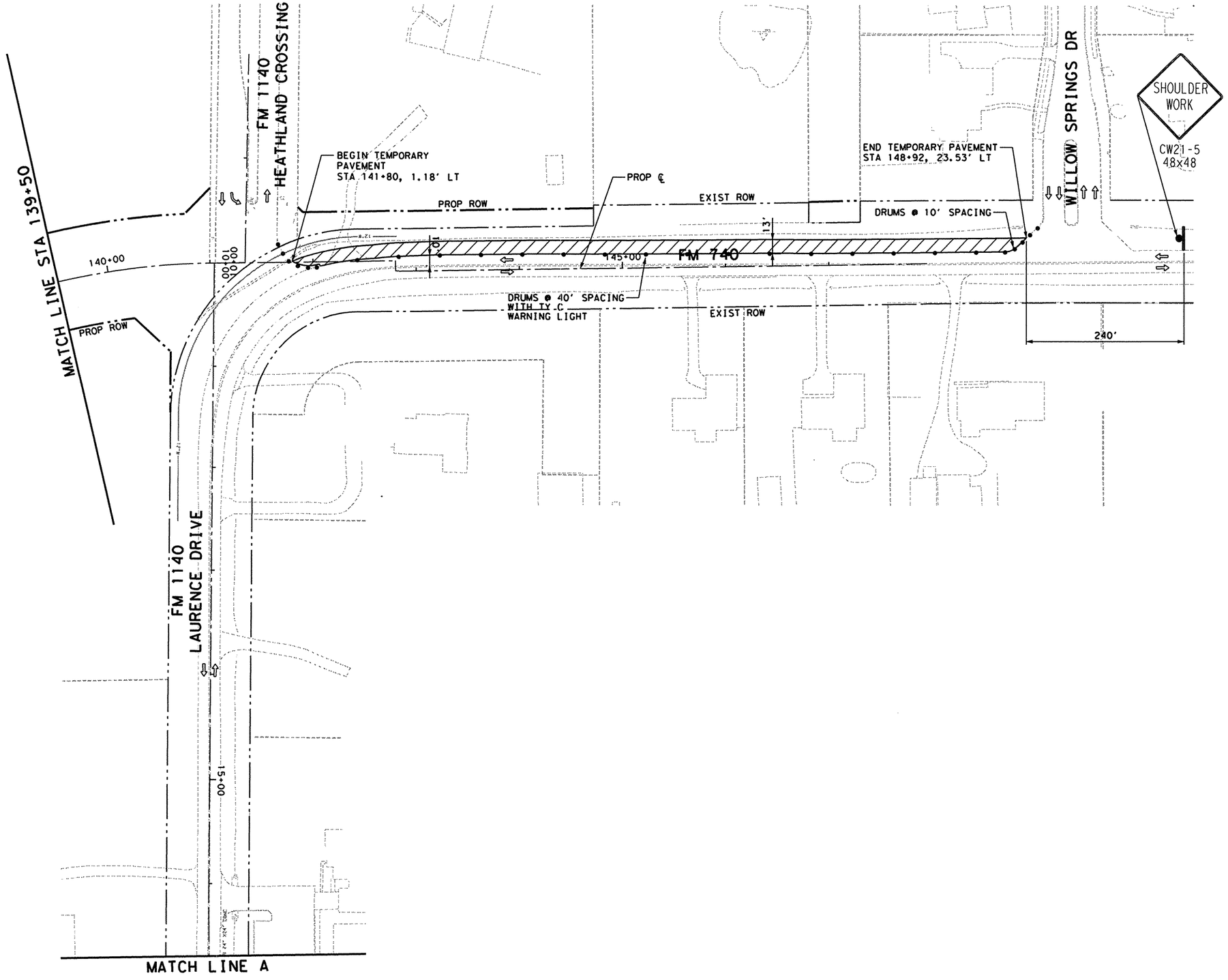


0 25 50 75 100
SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
- LOW PROFILE CONCRETE BARRIER (LPCB)
- TY III BARRICADE
- VERTICAL PANELS USED AS CHANNELIZING DEVICES DIRECTLY BETWEEN TRAVEL LANES AND WORK ZONE TO MAINTAIN 11' (10' MIN) TRAVEL LANES AT ALL TIMES. DRUMS USED IN OTHER AREAS.
- PORTABLE CHANGEABLE MESSAGE SIGN
- ARROW PANEL SUPPORT OR TRAILER

NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
6-30-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

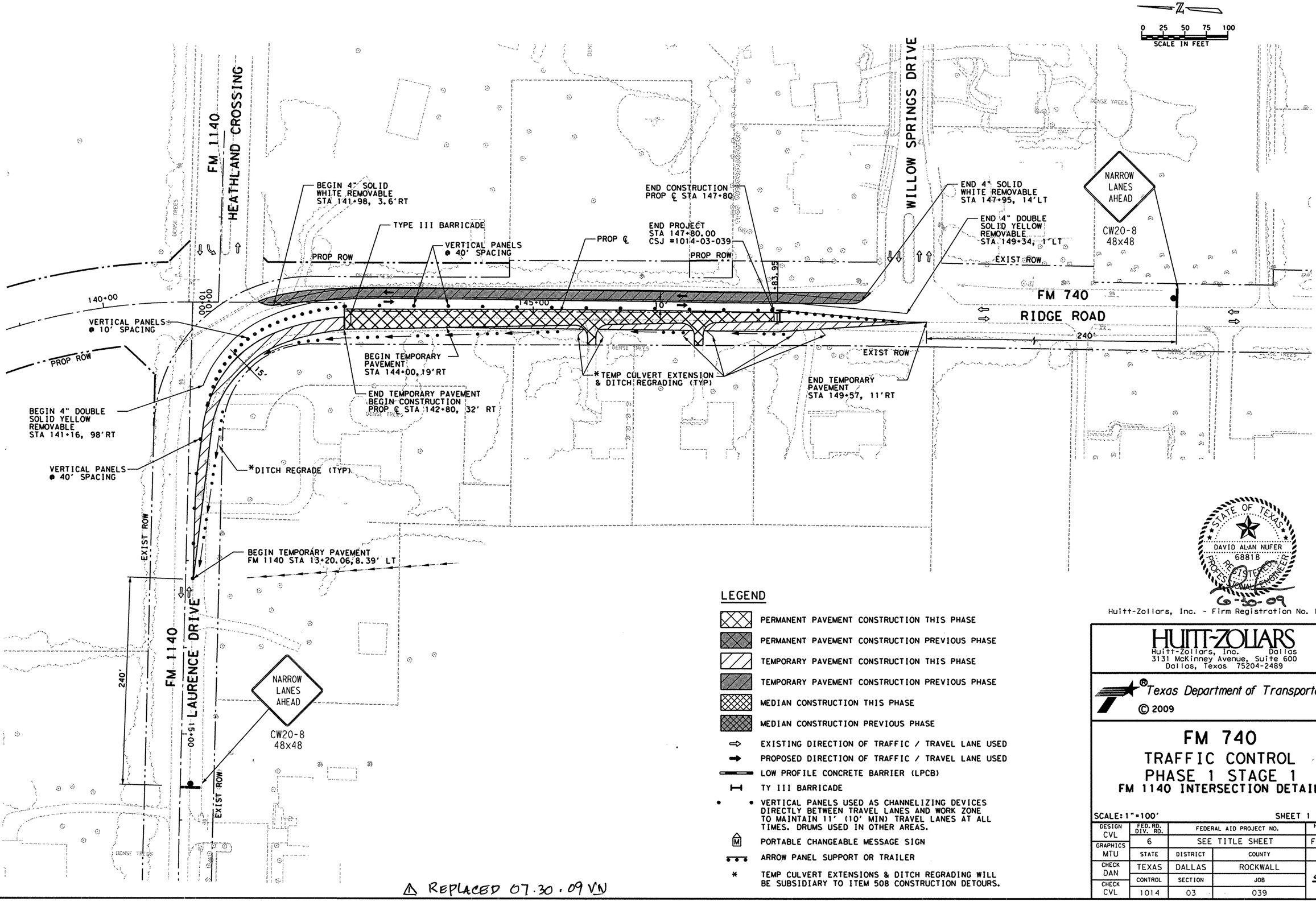
Texas Department of Transportation

FM 740
TRAFFIC CONTROL
PHASE 1
STA 139+50 TO END OF PROJECT

SCALE: 1"=100' SHEET 7 OF 7

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	53
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

⚠ REPLACED 07.30.09 VN



LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
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- ARROW PANEL SUPPORT OR TRAILER
- * TEMP CULVERT EXTENSIONS & DITCH REGRADING WILL BE SUBSIDIARY TO ITEM 508 CONSTRUCTION DETOURS.

⚠ REPLACED 07.30.09 VN

STATE OF TEXAS
DAVID ALAN NUFER
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6-30-09

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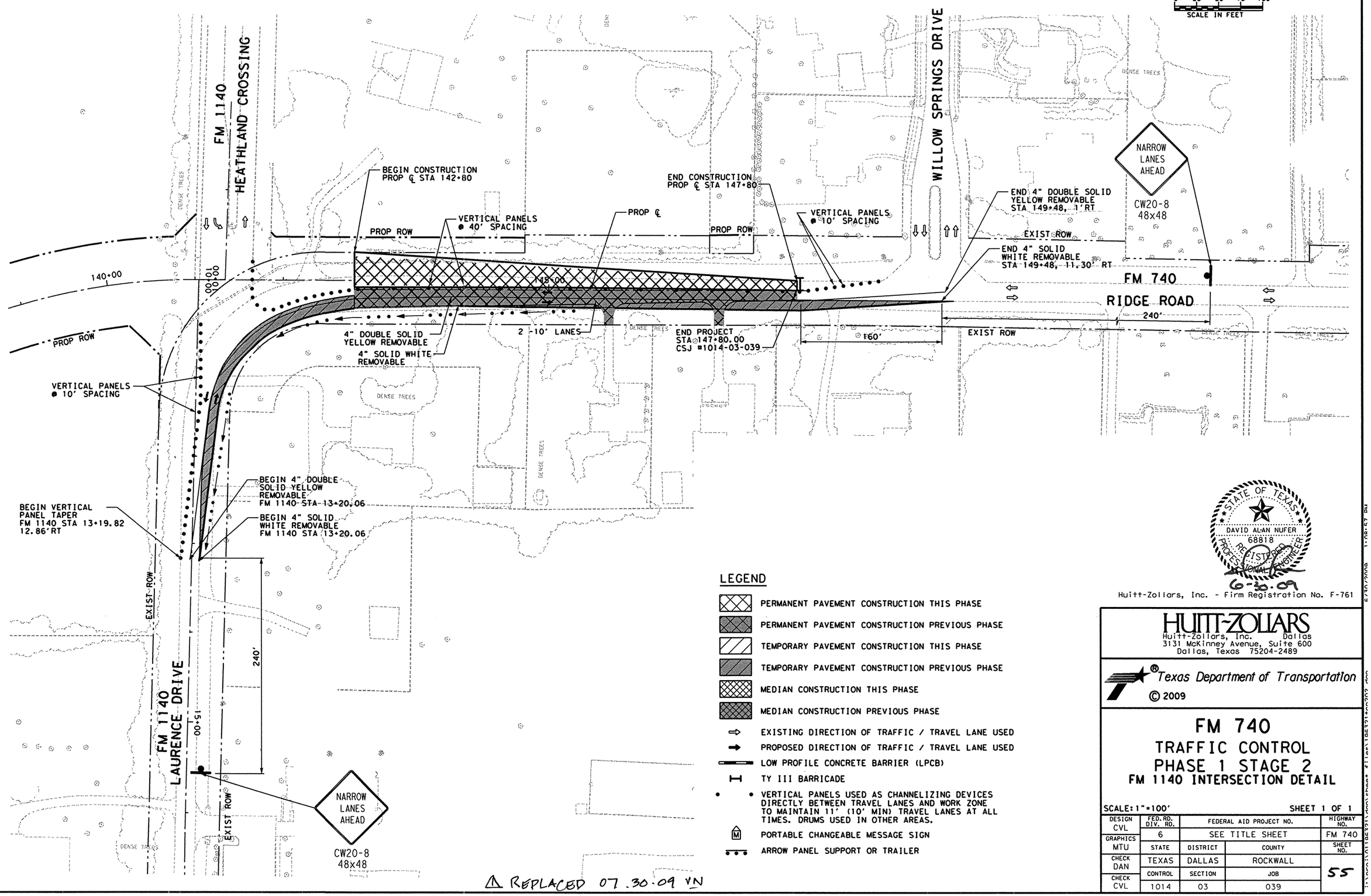
Texas Department of Transportation

FM 740
TRAFFIC CONTROL
PHASE 1 STAGE 1
FM 1140 INTERSECTION DETAIL

SCALE: 1"=100' SHEET 1 OF 1

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	54
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
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⚠ REPLACED 07.30.09 VN

STATE OF TEXAS
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6-30-09

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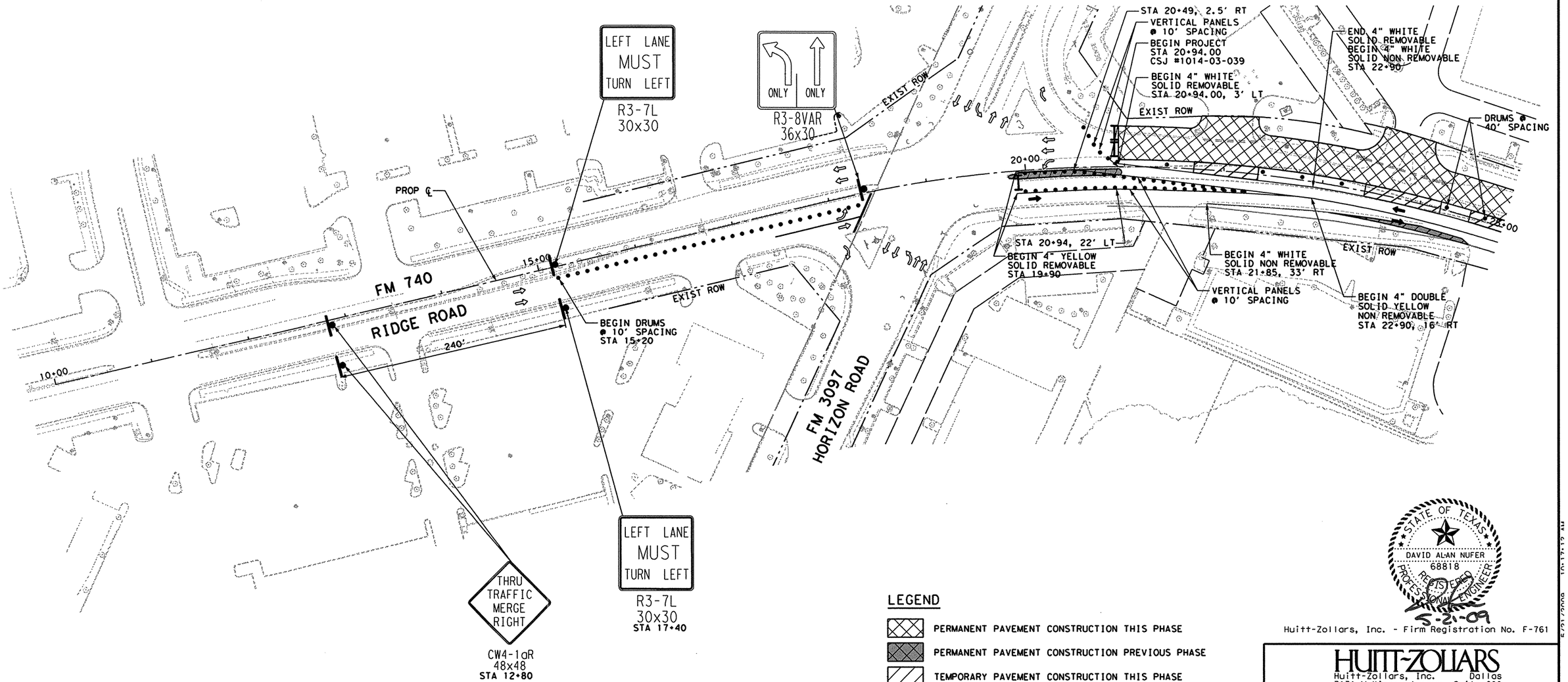
Texas Department of Transportation

FM 740
TRAFFIC CONTROL
PHASE 1 STAGE 2
FM 1140 INTERSECTION DETAIL

SCALE: 1"=100' SHEET 1 OF 1

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	55
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



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- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
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- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
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TEMPORARY PAVEMENT FOR LEVEL-UP BETWEEN EXISTING AND PROPOSED PAVEMENT WILL BE PAY UNDER ITEM 508 CONSTRUCTION DETOURS.

STATE OF TEXAS
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PROFESSIONAL ENGINEER
5-21-09

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Texas Department of Transportation

FM 740
TRAFFIC CONTROL

FM 3097 INTERSECTION DETAIL PHASE 2

SCALE: 1"=100' SHEET 1 OF 1

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	56
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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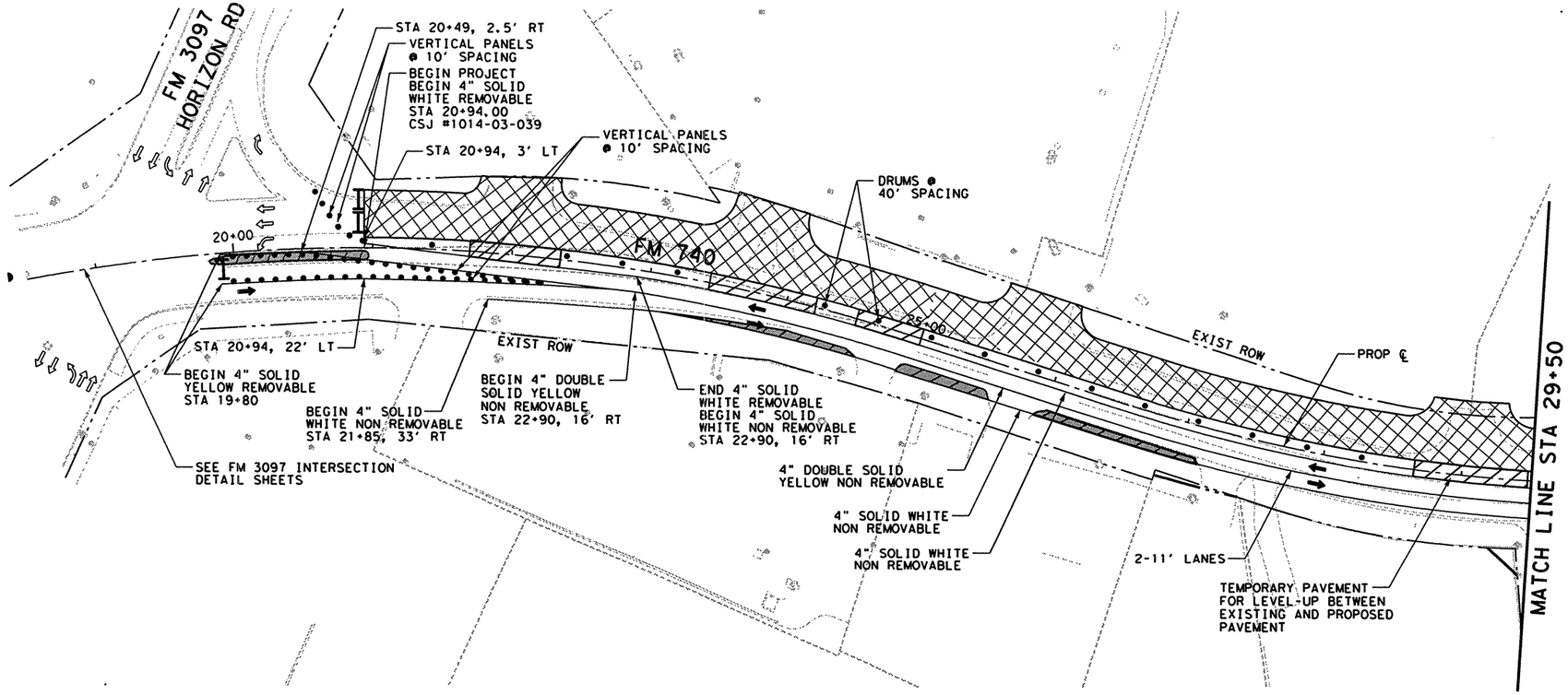

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
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- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
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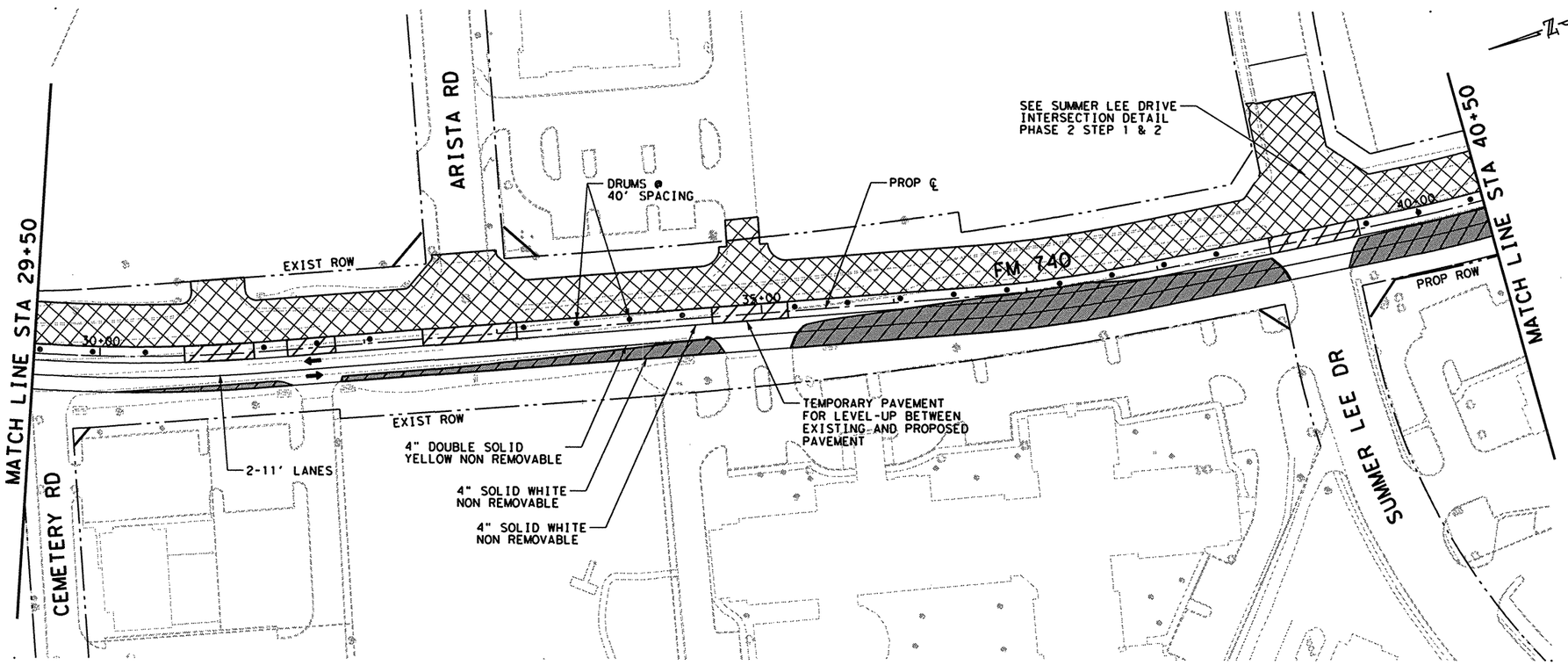
NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.

TEMPORARY PAVEMENT FOR LEVEL-UP BETWEEN EXISTING AND PROPOSED PAVEMENT WILL BE PAY UNDER ITEM 508 CONSTRUCTION DETOURS.



STATE OF TEXAS
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5-21-09

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3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 2
BEGIN PROJECT TO STA 40+50

SCALE: 1"=100' SHEET 1 OF 6

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	57
CHECK	CONTROL	SECTION	JOB	
DAN	1014	03	039	
CHECK				
CVL				

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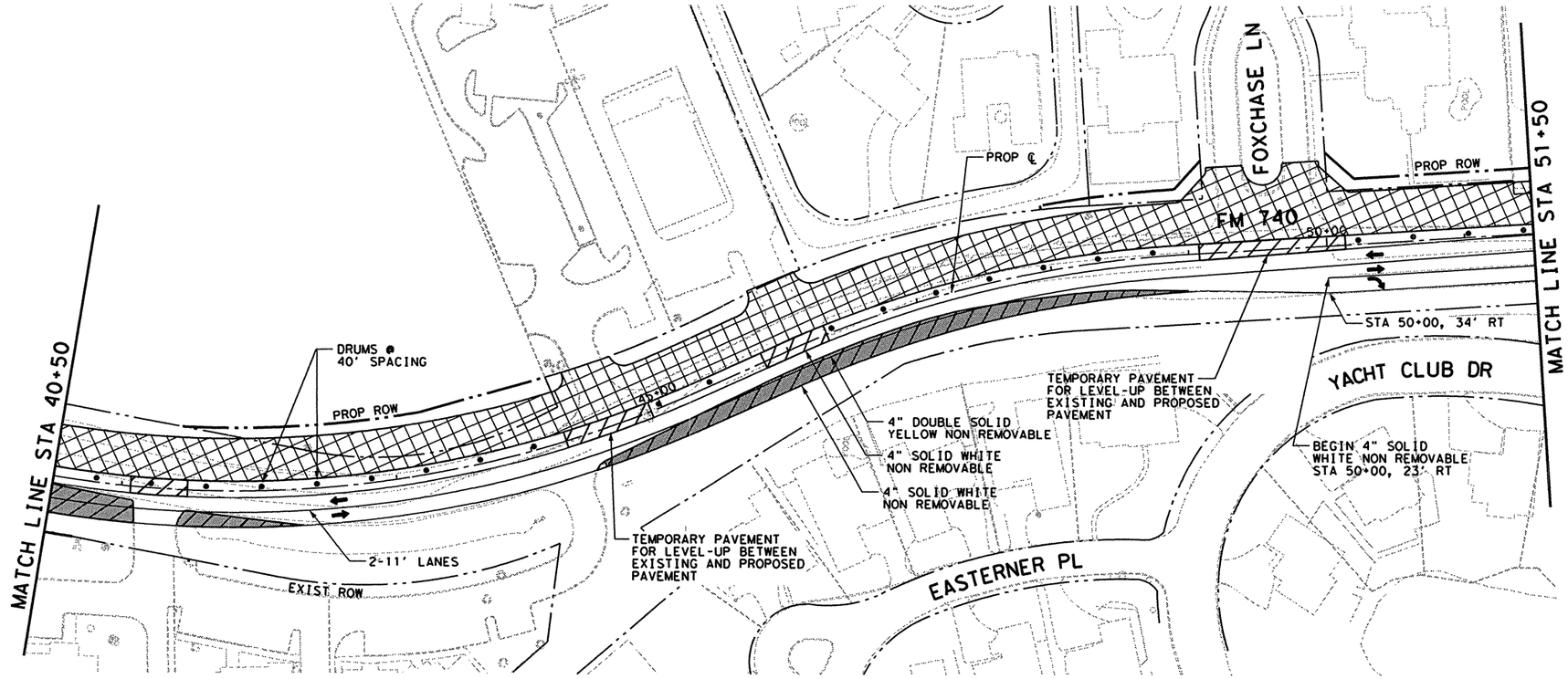

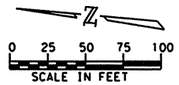

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
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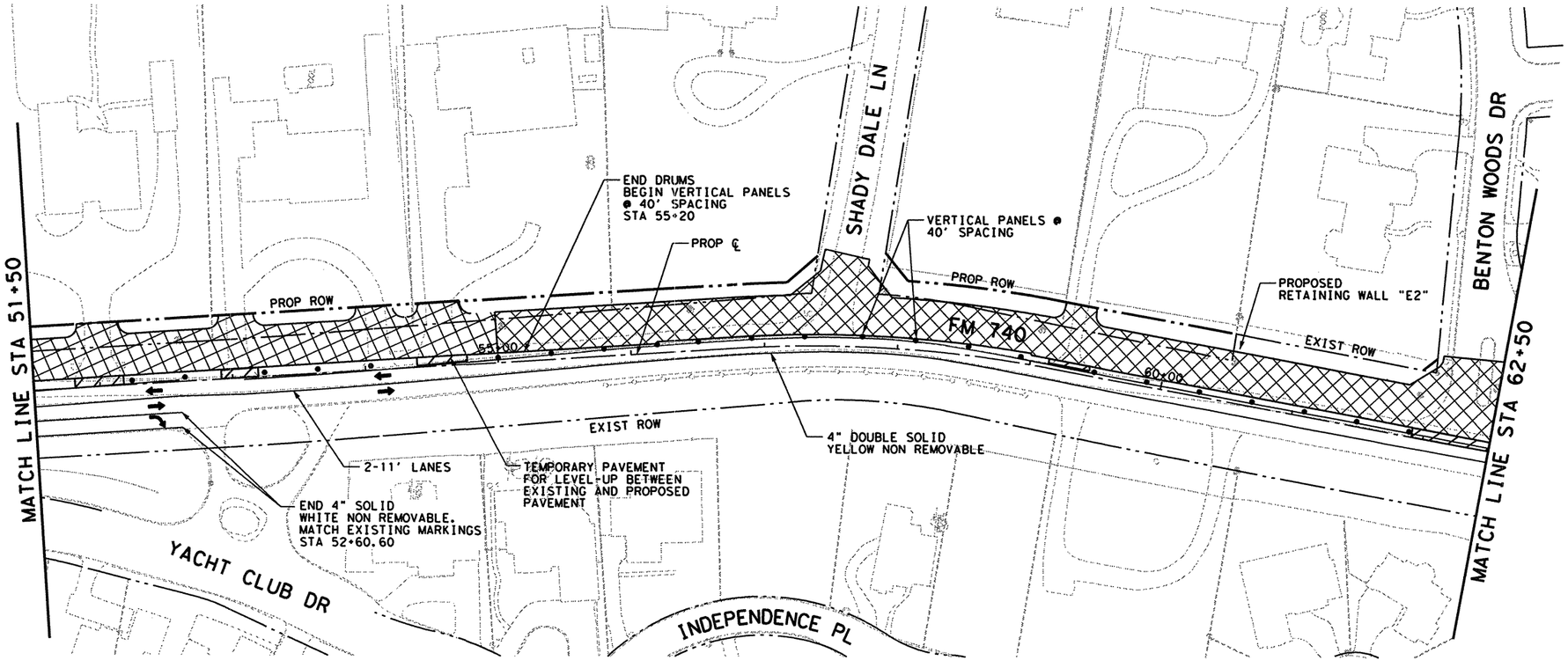
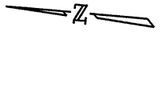
NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.

BENTON WOODS DR SHALL HAVE ACCESS AT ALL TIME WITH A MINIMUM WIDTH.

TEMPORARY PAVEMENT FOR LEVEL-UP BETWEEN EXISTING AND PROPOSED PAVEMENT WILL BE PAY UNDER ITEM 508 CONSTRUCTION DETOURS.





Huitt-Zollars, Inc. - Firm Registration No. F-761

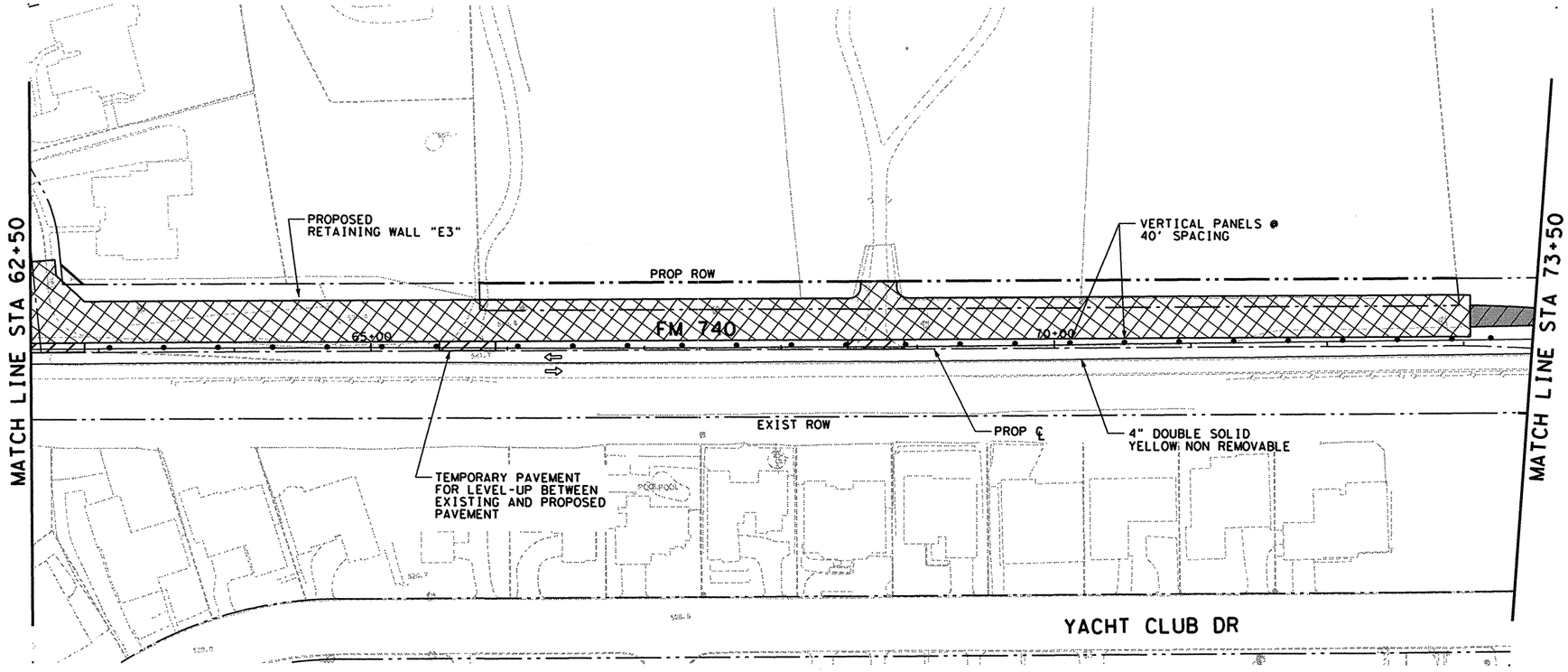
HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

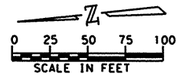
Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 2
STA 40+50 TO STA 62+50

SCALE: 1"=100' SHEET 2 OF 6

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	58
CHECK	CONTROL	SECTION	JOB	
DAN	1014	03	039	
CHECK				
CVL				





LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
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- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
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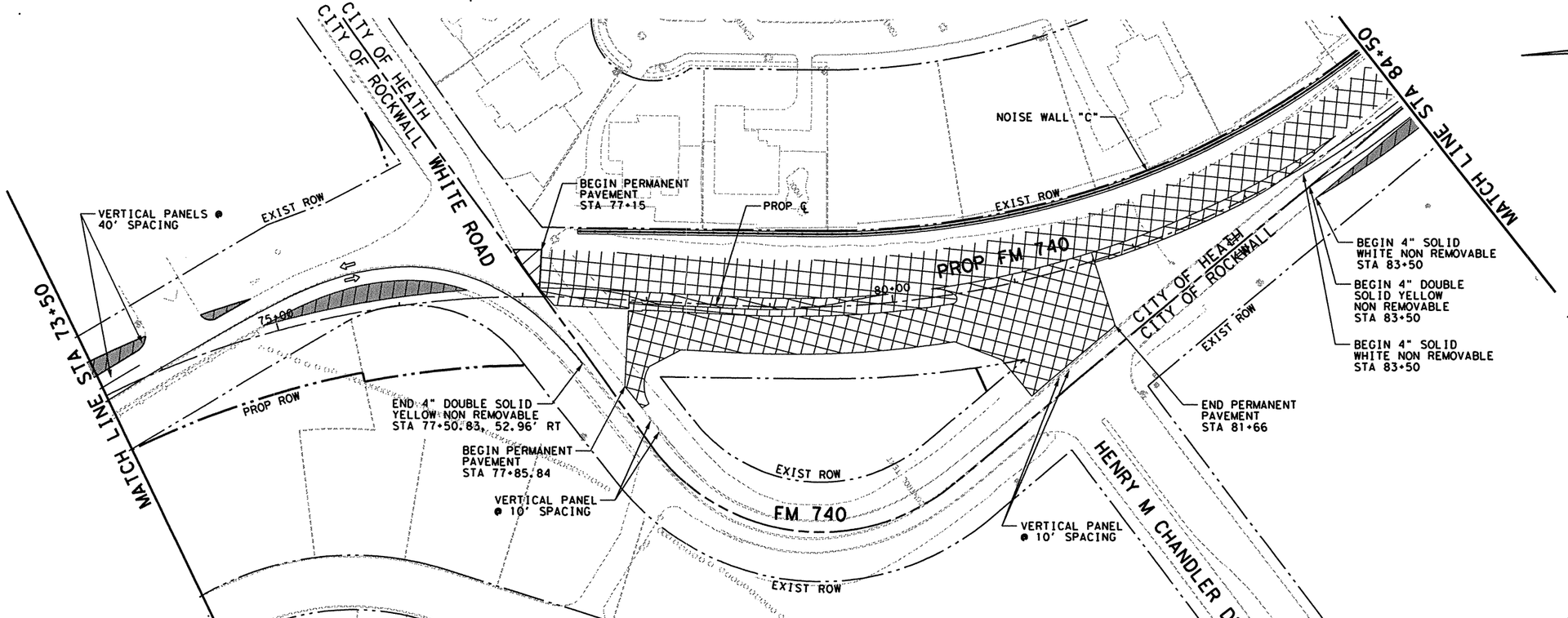
NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.

TEMPORARY PAVEMENT FOR LEVEL-UP BETWEEN EXISTING AND PROPOSED PAVEMENT WILL BE PAY UNDER ITEM 508 CONSTRUCTION DETOURS.



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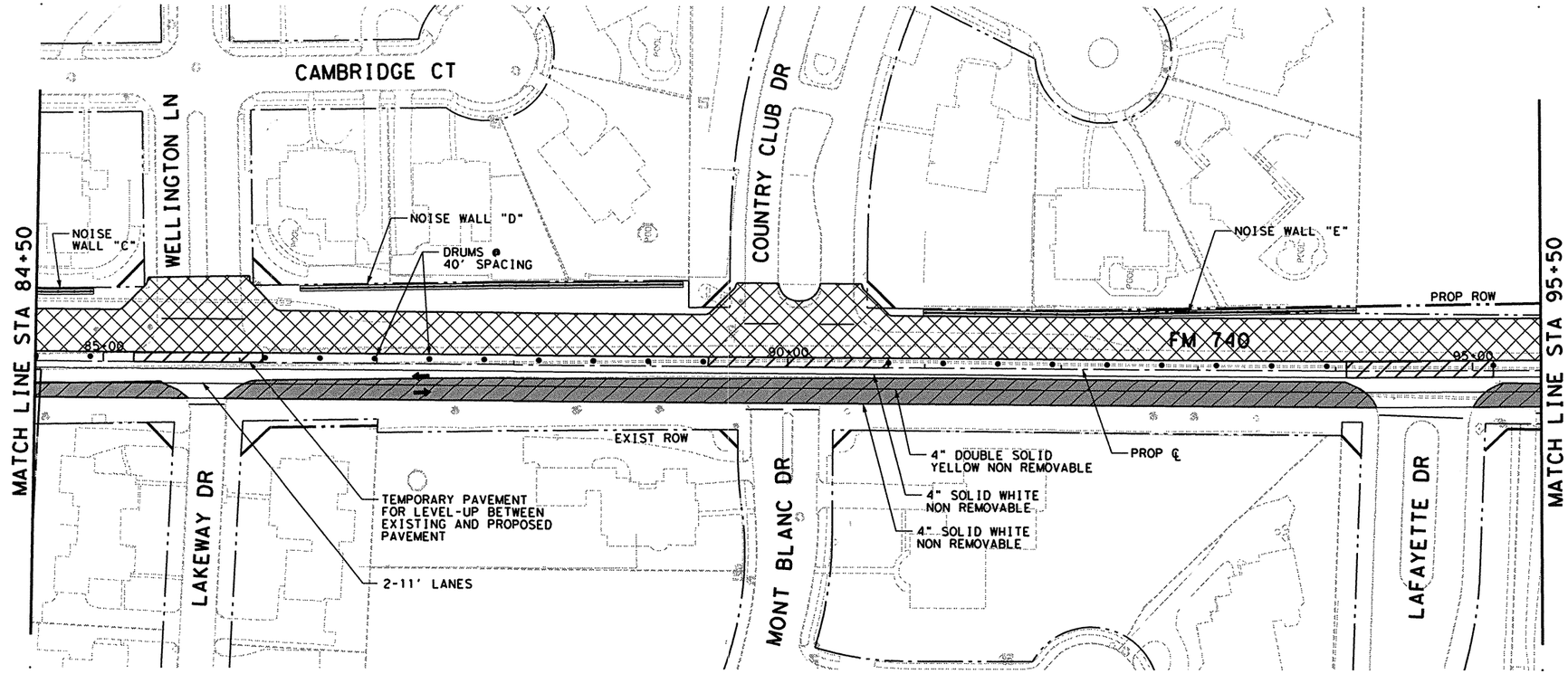
HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 2
STA 62+50 TO STA 84+50

SCALE: 1"=100' SHEET 3 OF 6

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	59
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



0 25 50 75 100
SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
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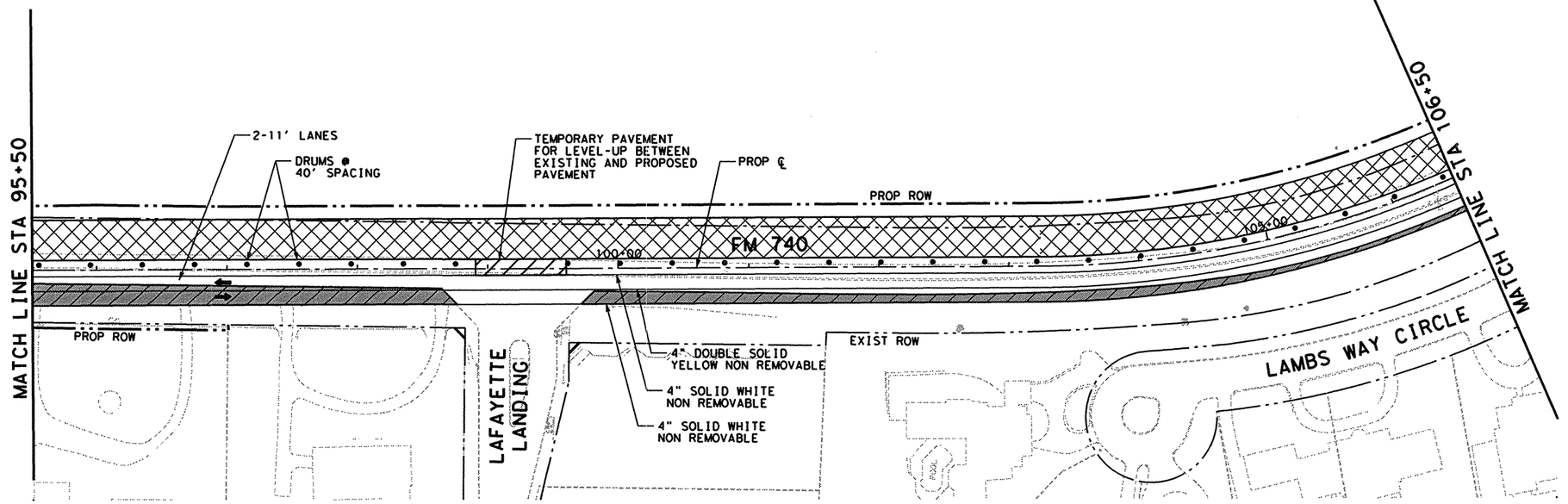
TEMPORARY PAVEMENT FOR LEVEL-UP BETWEEN EXISTING AND PROPOSED PAVEMENT WILL BE PAY UNDER ITEM 508 CONSTRUCTION DETOURS.



STATE OF TEXAS
DAVID ALAN NUFER
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REGISTERED PROFESSIONAL ENGINEER
5-21-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
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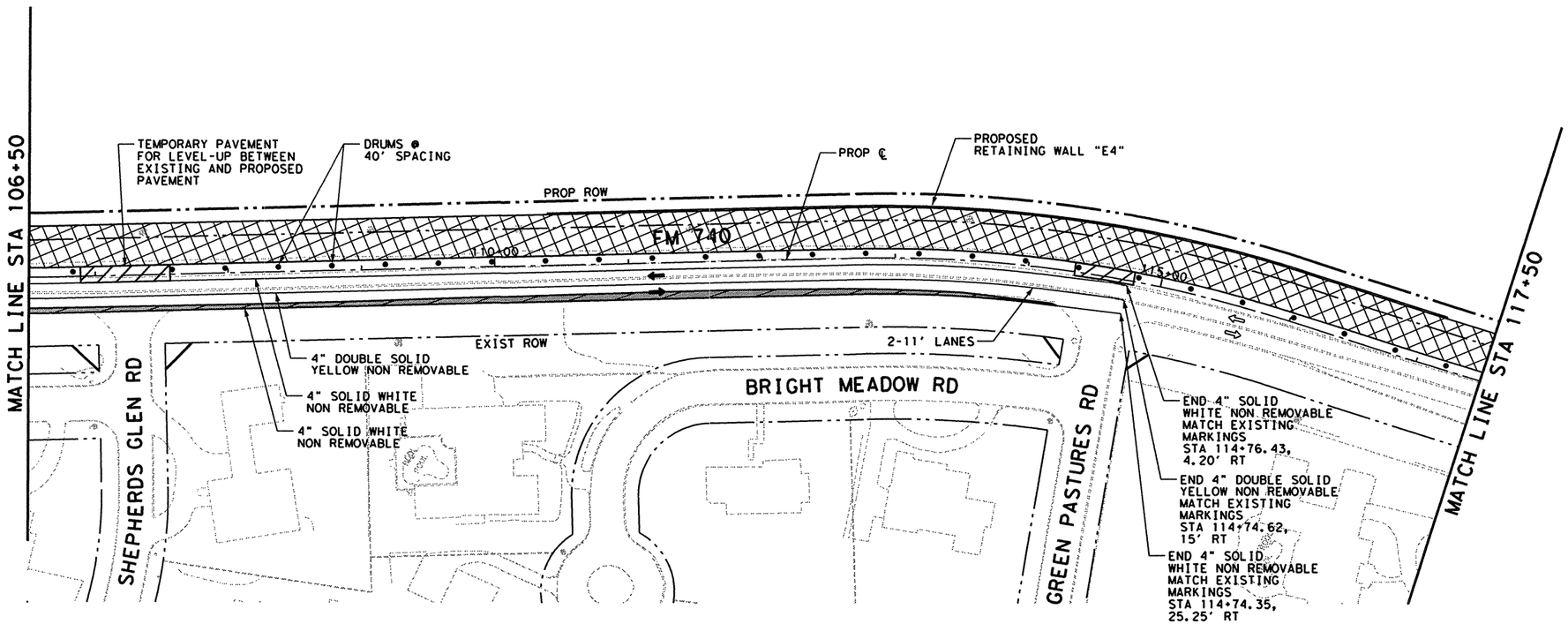
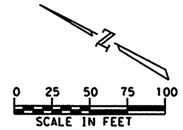
Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 2
STA 84+50 TO STA 106+50

SCALE: 1"=100' SHEET 4 OF 6

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	60
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	





LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
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NOTE:

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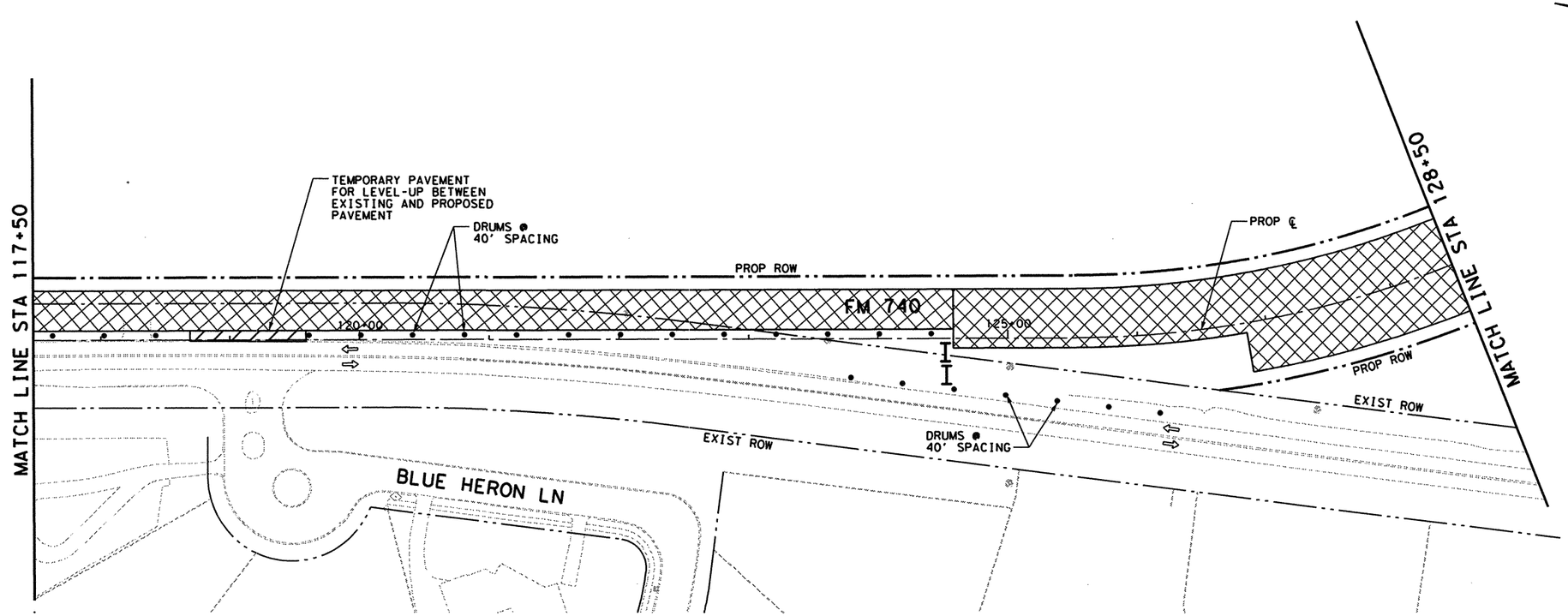
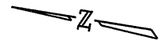
TEMPORARY PAVEMENT FOR LEVEL-UP BETWEEN EXISTING AND PROPOSED PAVEMENT WILL BE PAY UNDER ITEM 508 CONSTRUCTION DETOURS.





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Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 2
STA 106+50 TO STA 128+50

SCALE: 1"=100' SHEET 5 OF 6

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	61
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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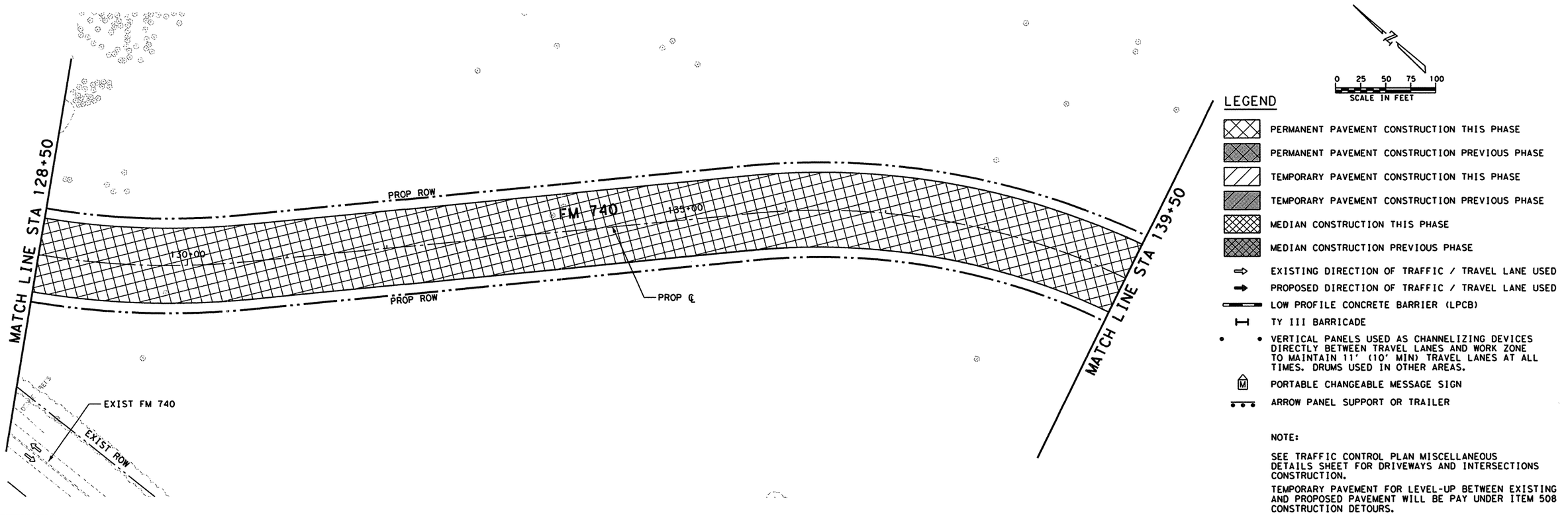


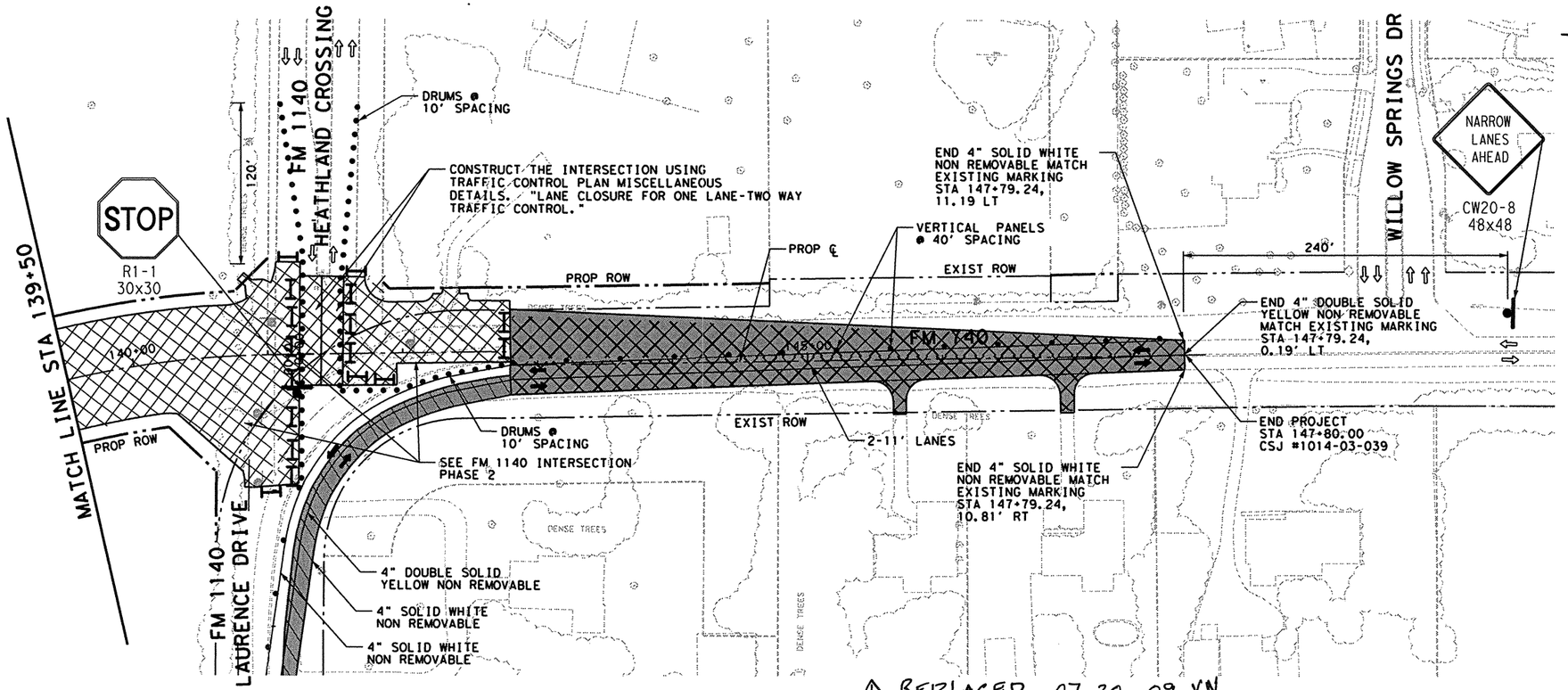
LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
- LOW PROFILE CONCRETE BARRIER (LPCB)
- TY III BARRICADE
- VERTICAL PANELS USED AS CHANNELIZING DEVICES DIRECTLY BETWEEN TRAVEL LANES AND WORK ZONE TO MAINTAIN 11' (10' MIN) TRAVEL LANES AT ALL TIMES. DRUMS USED IN OTHER AREAS.
- PORTABLE CHANGEABLE MESSAGE SIGN
- ARROW PANEL SUPPORT OR TRAILER

NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.

TEMPORARY PAVEMENT FOR LEVEL-UP BETWEEN EXISTING AND PROPOSED PAVEMENT WILL BE PAY UNDER ITEM 508 CONSTRUCTION DETOURS.



△ REPLACED 07.30.09 VN

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
6-30-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 2
STA 128+50 TO END OF PROJECT

SCALE: 1"=100' SHEET 6 OF 6

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	62
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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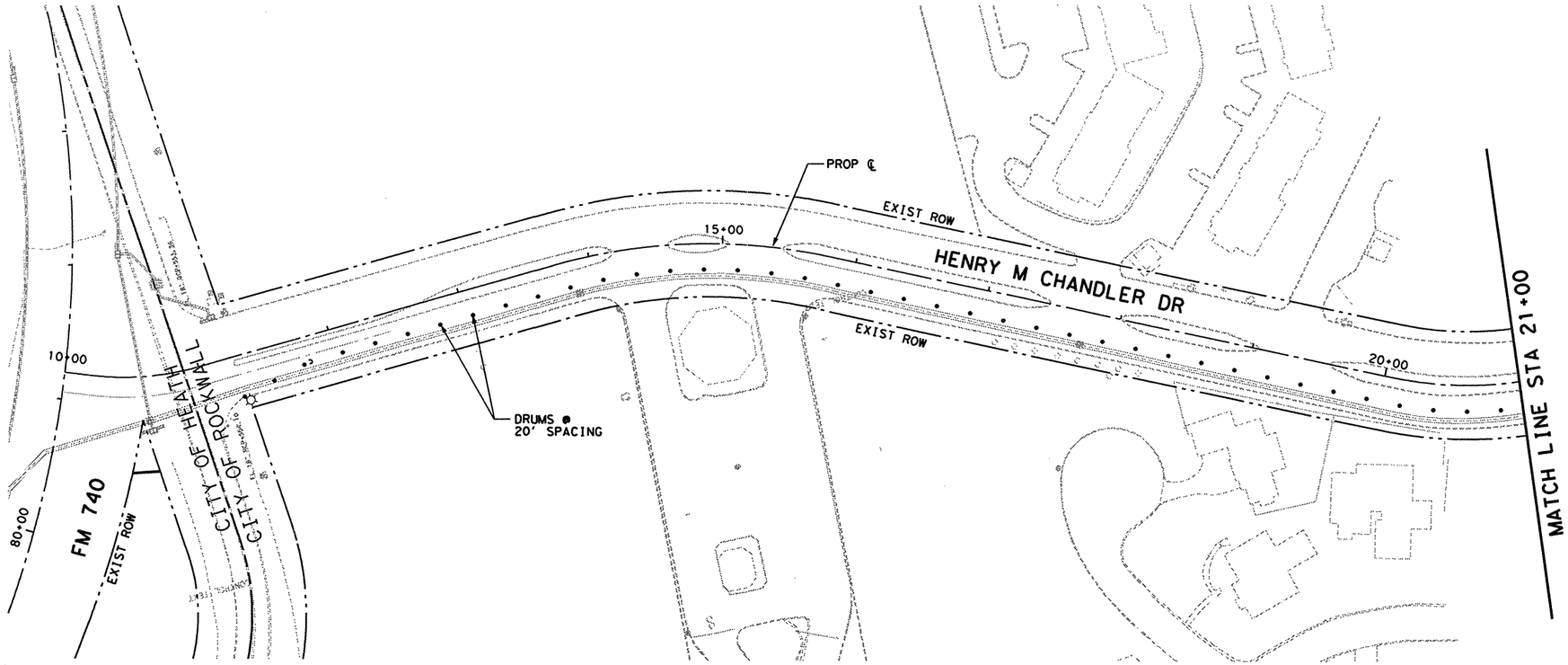

0 25 50 75 100
SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
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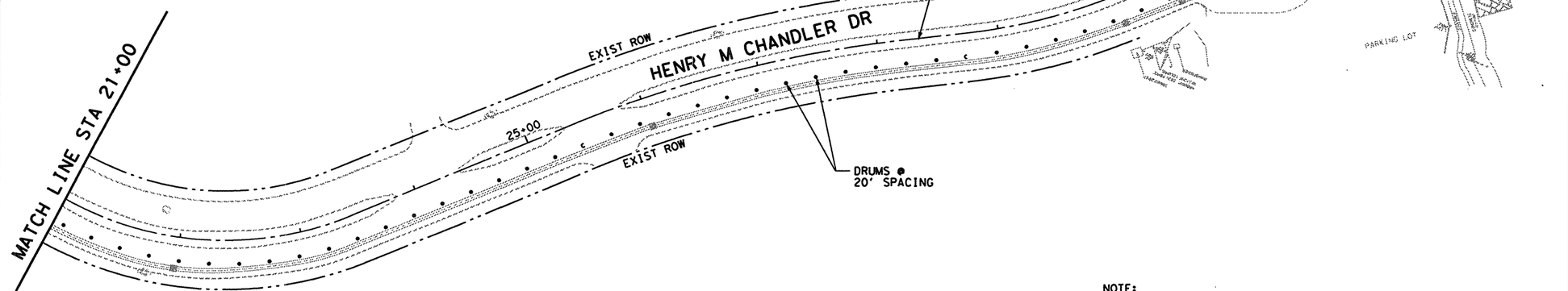
- ARROW PANEL SUPPORT OR TRAILER

NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.



NOTE:

CONTRACTOR SHALL STAGE THE CONSTRUCTION TO MAINTAIN ACCESS TO THIS PARKING LOT AT ALL TIME.

⚠ ADDED 07.30.09 VN

N

PHILLIP D. HANLEY 91815 REGISTERED PROFESSIONAL ENGINEER STATE OF TEXAS
7-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 2
HENRY M CHANDLER DR
STA 10+00 TO STA 33+00

SCALE: 1"=100' SHEET 1 OF 1

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS JP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	62A
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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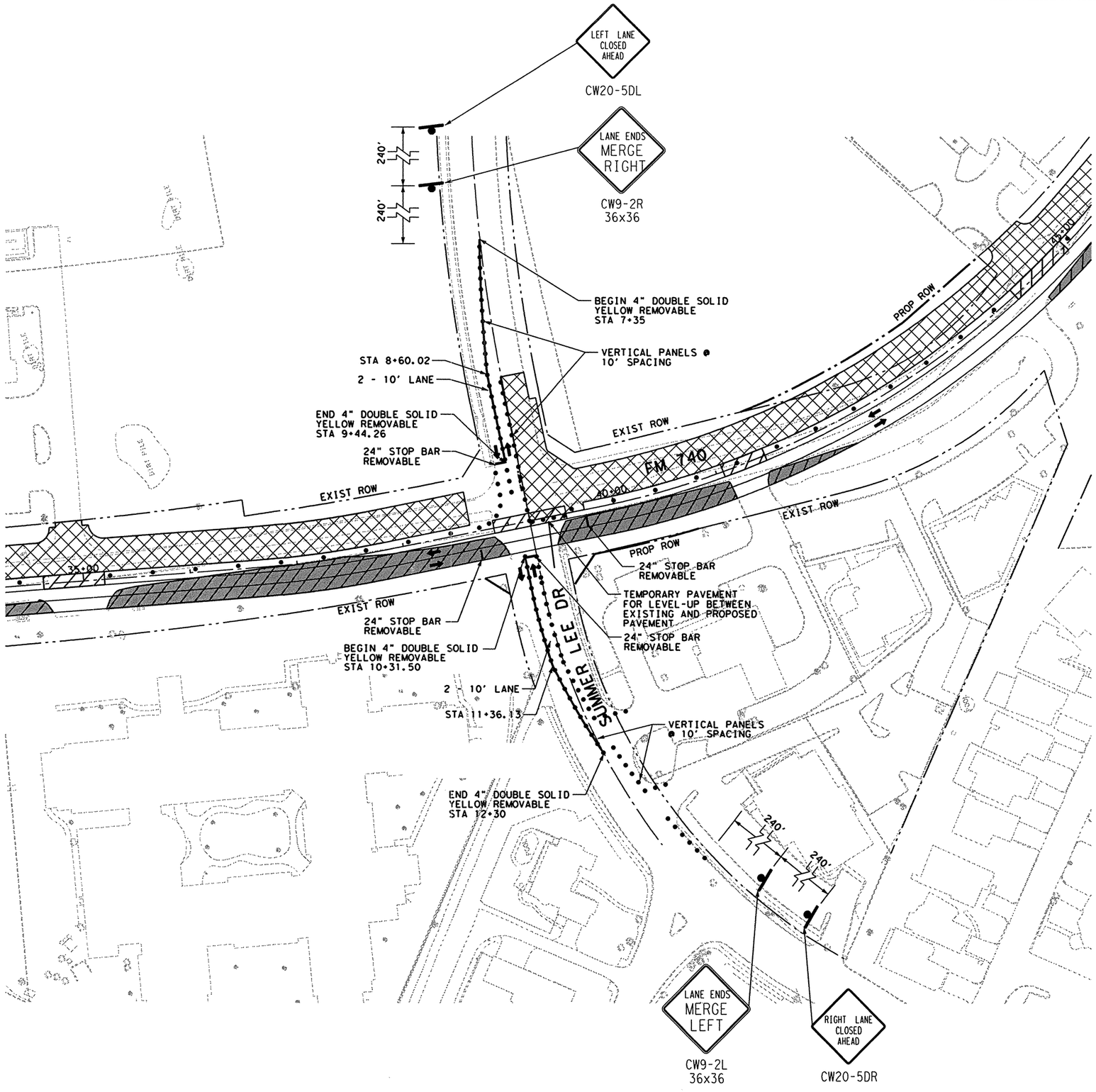

0 25 50 75 100
SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
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- ARROW PANEL SUPPORT OR TRAILER

NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
5-21-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

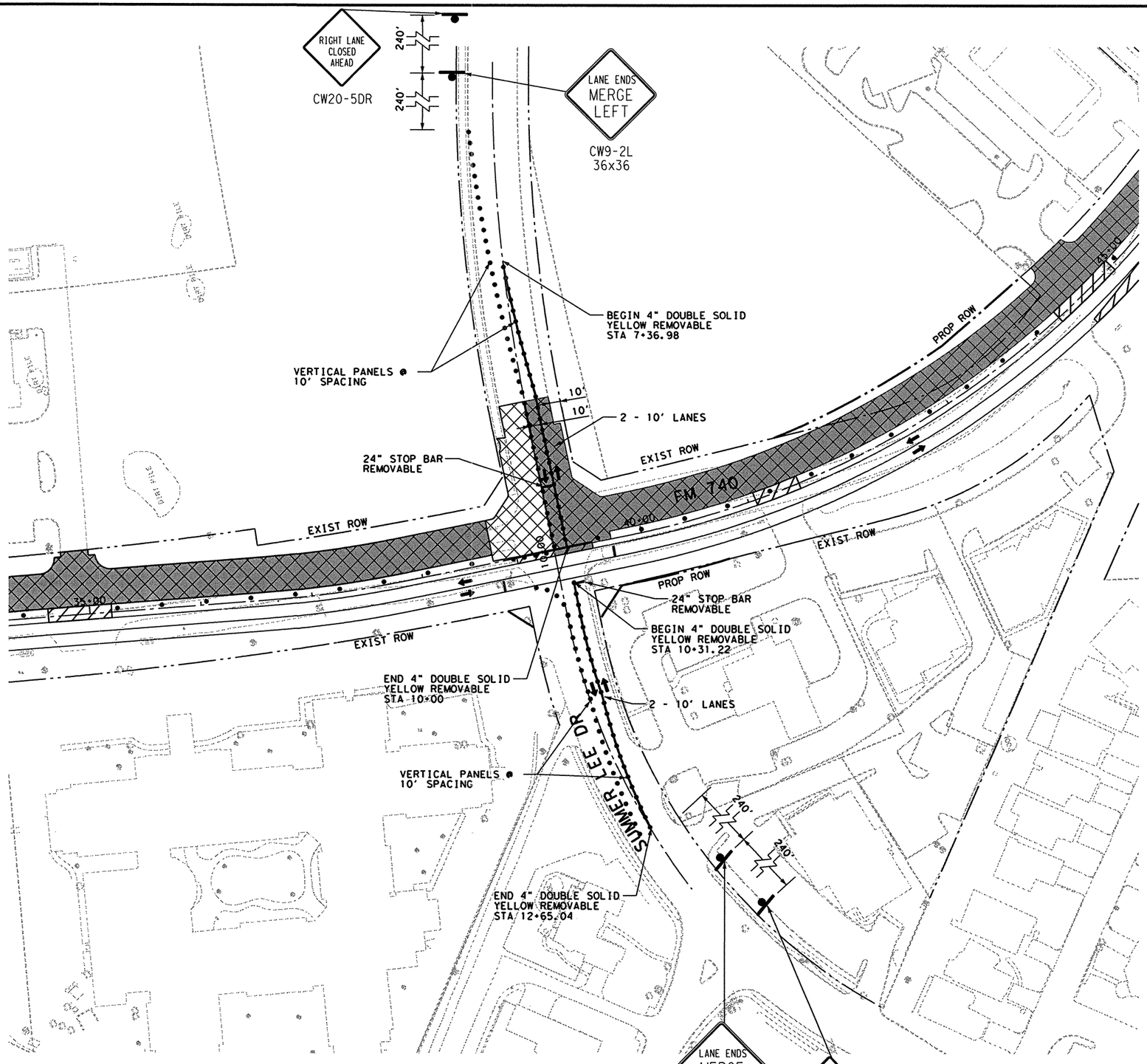
HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL
PHASE 2 STAGE 1
SUMMER LEE DR INTERSECTION DETAIL

SCALE: 1"=100' SHEET 1 OF 1

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	63
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



0 25 50 75 100
SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
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NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
5-21-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

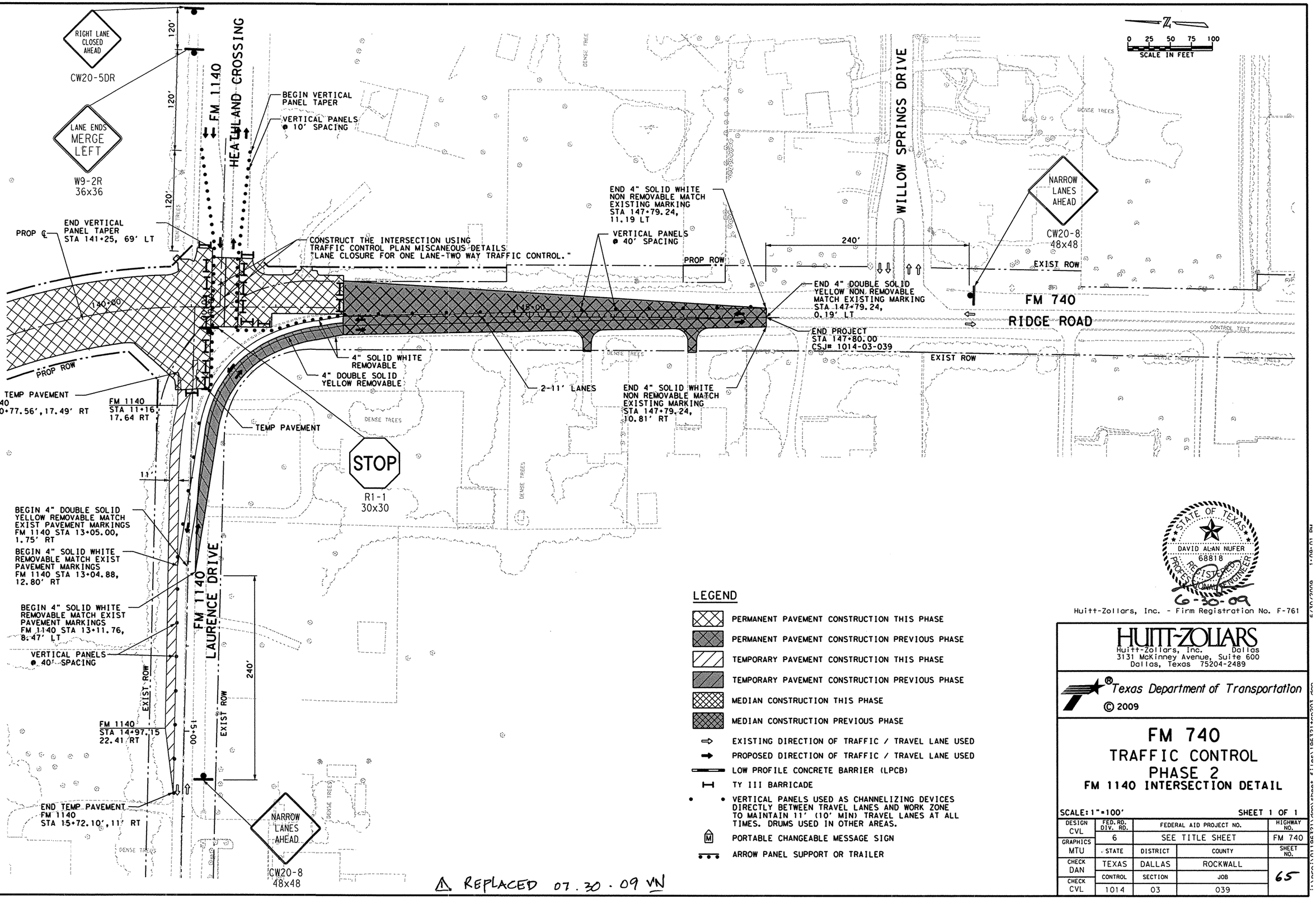
HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL
PHASE 2 STAGE 2
SUMMER LEE DR INTERSECTION DETAIL

SCALE: 1"=100' SHEET 1 OF 1

CVL				
	6	SEE TITLE SHEET		FM 740
MTU				
DAN	TEXAS	DALLAS	ROCKWALL	64
CVL	1014	03	039	



LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
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⚠ REPLACED 07.30.09 VN

STATE OF TEXAS
DAVID ALAN NUFER
68818
PROFESSIONAL ENGINEER
6-30-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

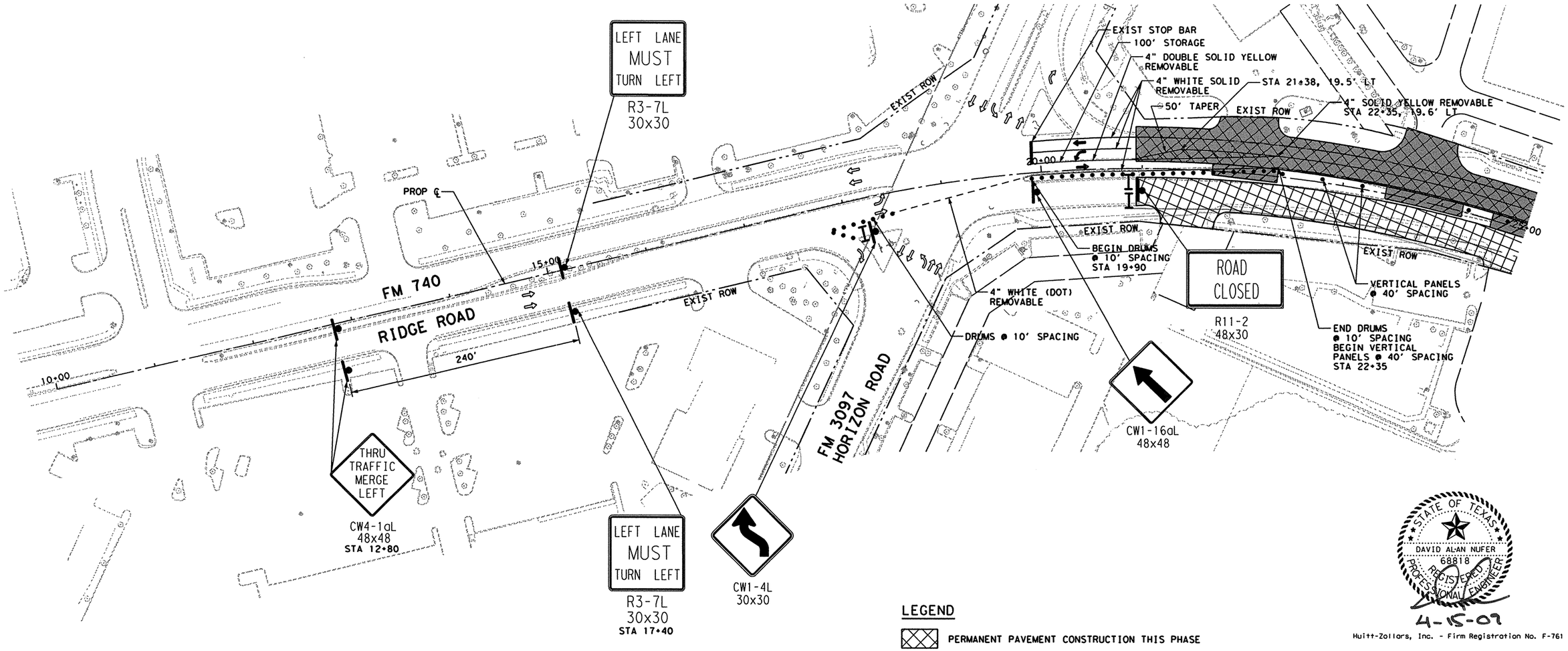
HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 2
FM 1140 INTERSECTION DETAIL

SCALE: 1"=100' SHEET 1 OF 1

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	65
CHECK	CONTROL	SECTION	JOB	
DAN	1014	03	039	
CHECK				
CVL				



LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
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STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
4-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL

FM 3097 INTERSECTION DETAIL PHASE 3

SCALE: 1"=100' SHEET 1 OF 1

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	66
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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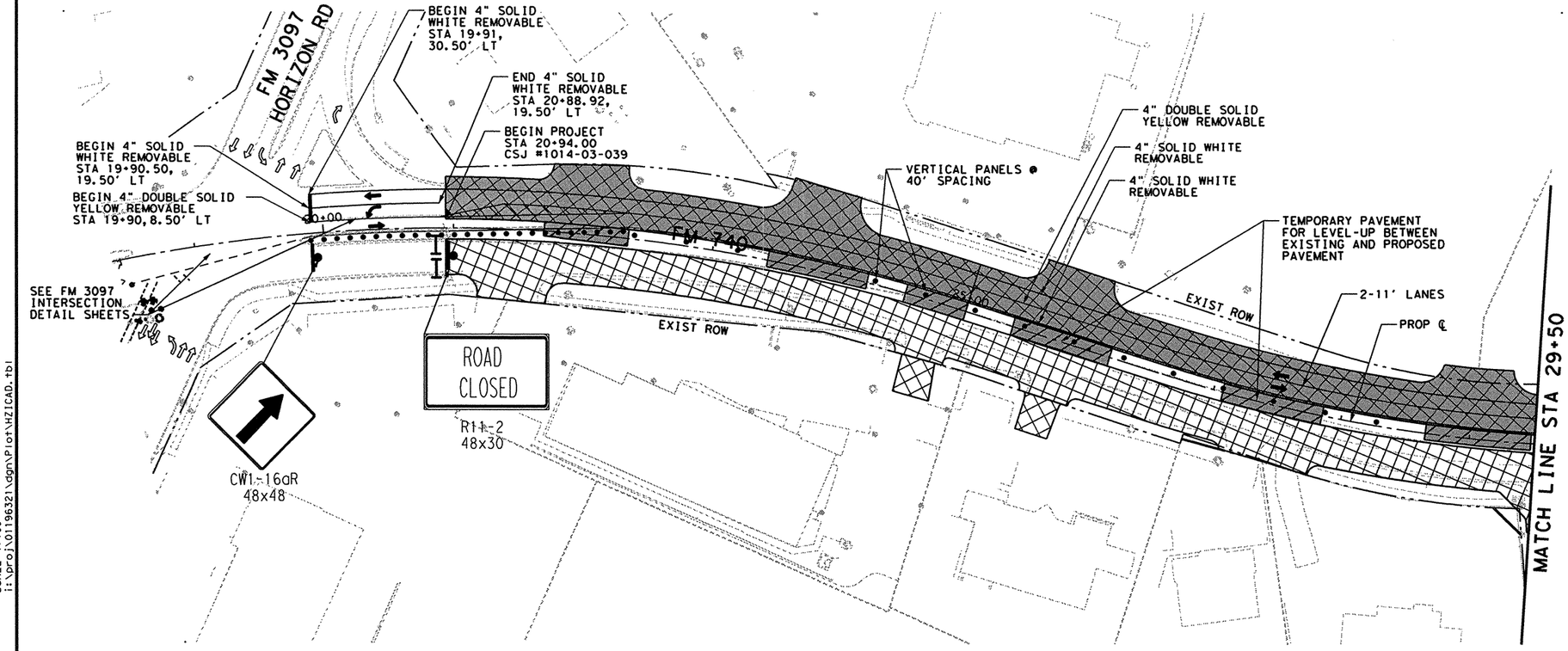

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
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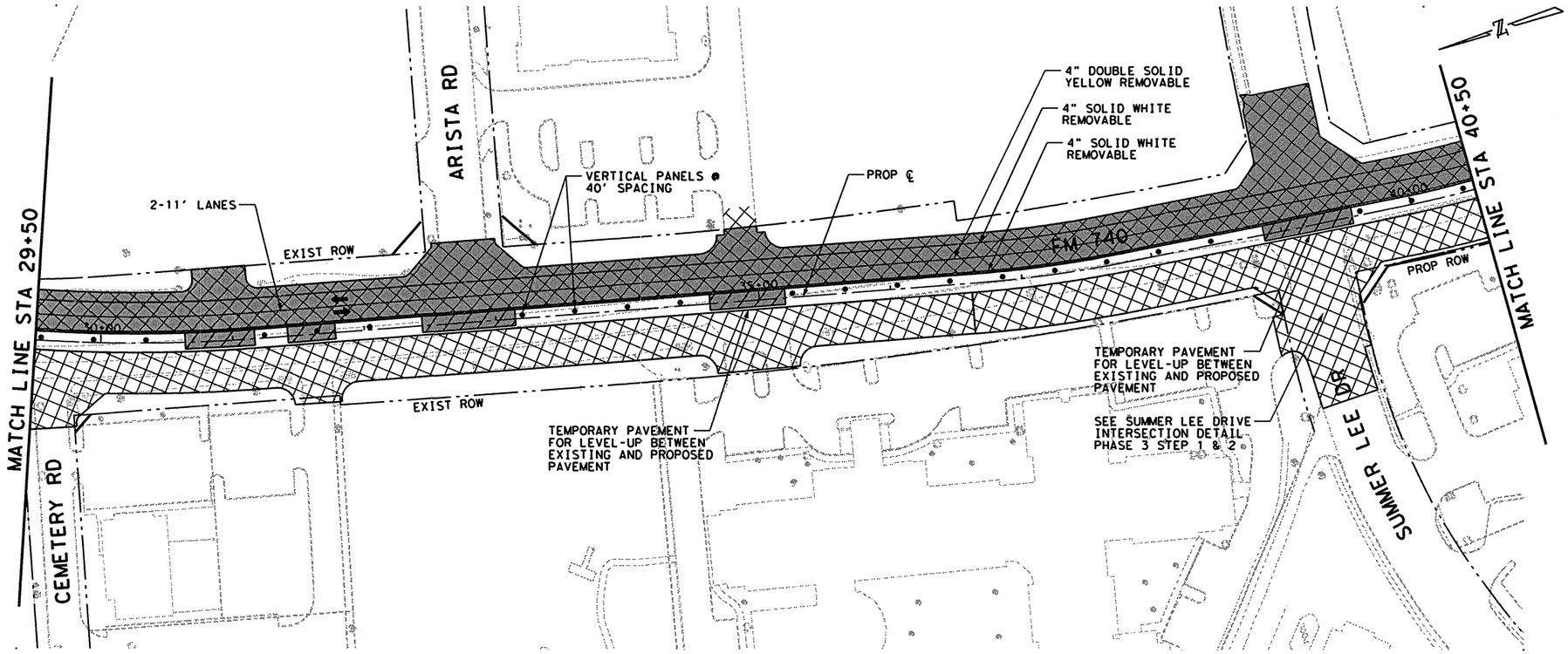
NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.



STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
5-21-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

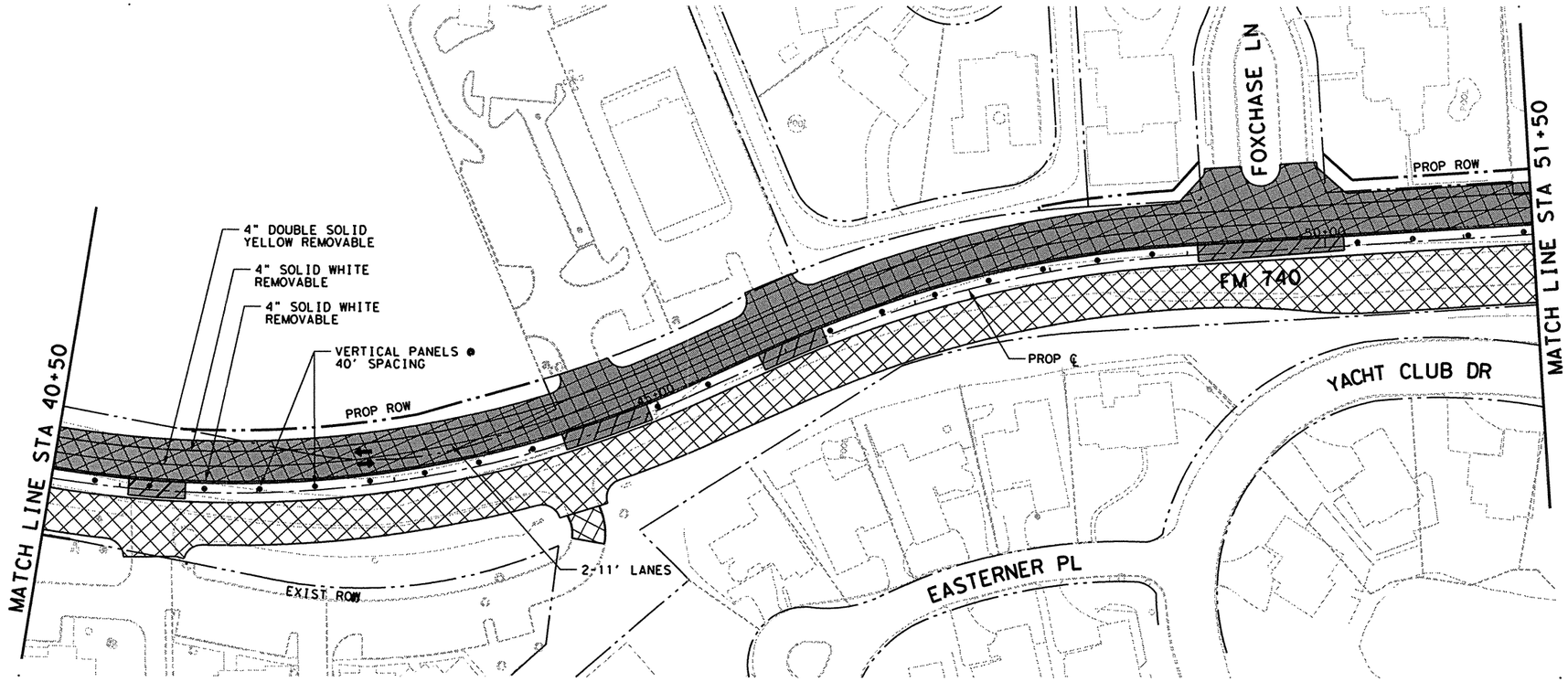
HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 3
BEGIN PROJECT TO STA 40+50

SCALE: 1"=100' SHEET 1 OF 6

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	67
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
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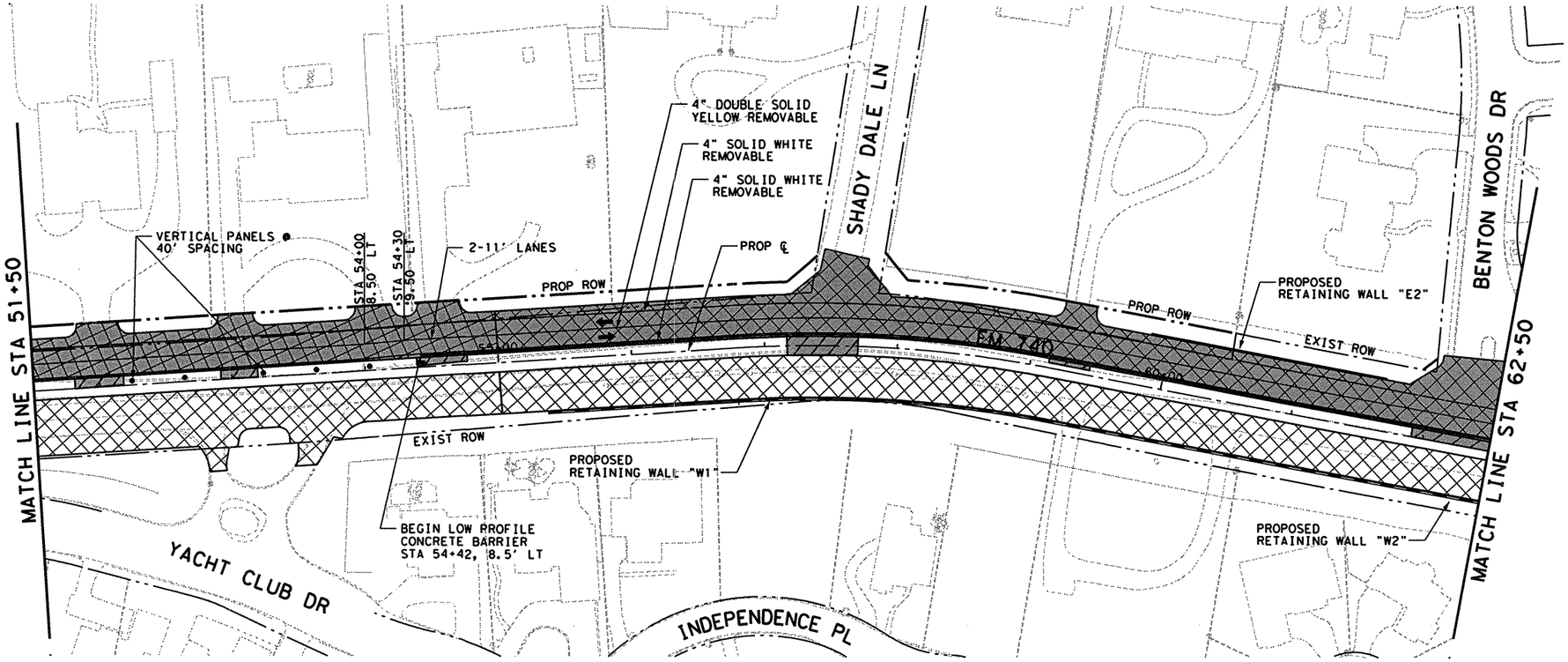
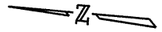
NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.

BENTON WOODS DR SHALL HAVE ACCESS AT ALL TIME WITH A MINIMUM WIDTH.





Huitt-Zollars, Inc. - Firm Registration No. F-761

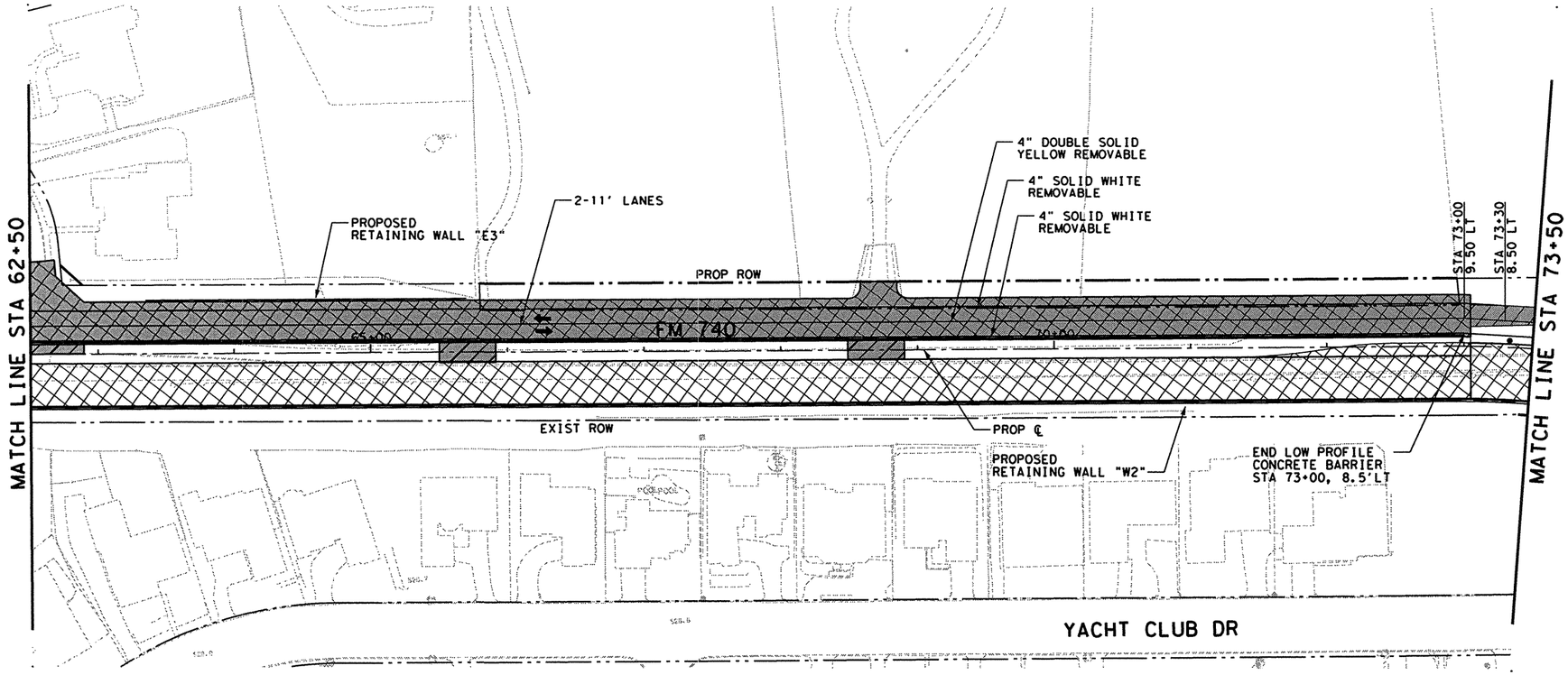
HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

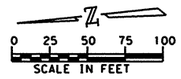
Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 3
STA 40+50 TO STA 62+50

SCALE: 1"=100' SHEET 2 OF 6

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	68
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	





LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
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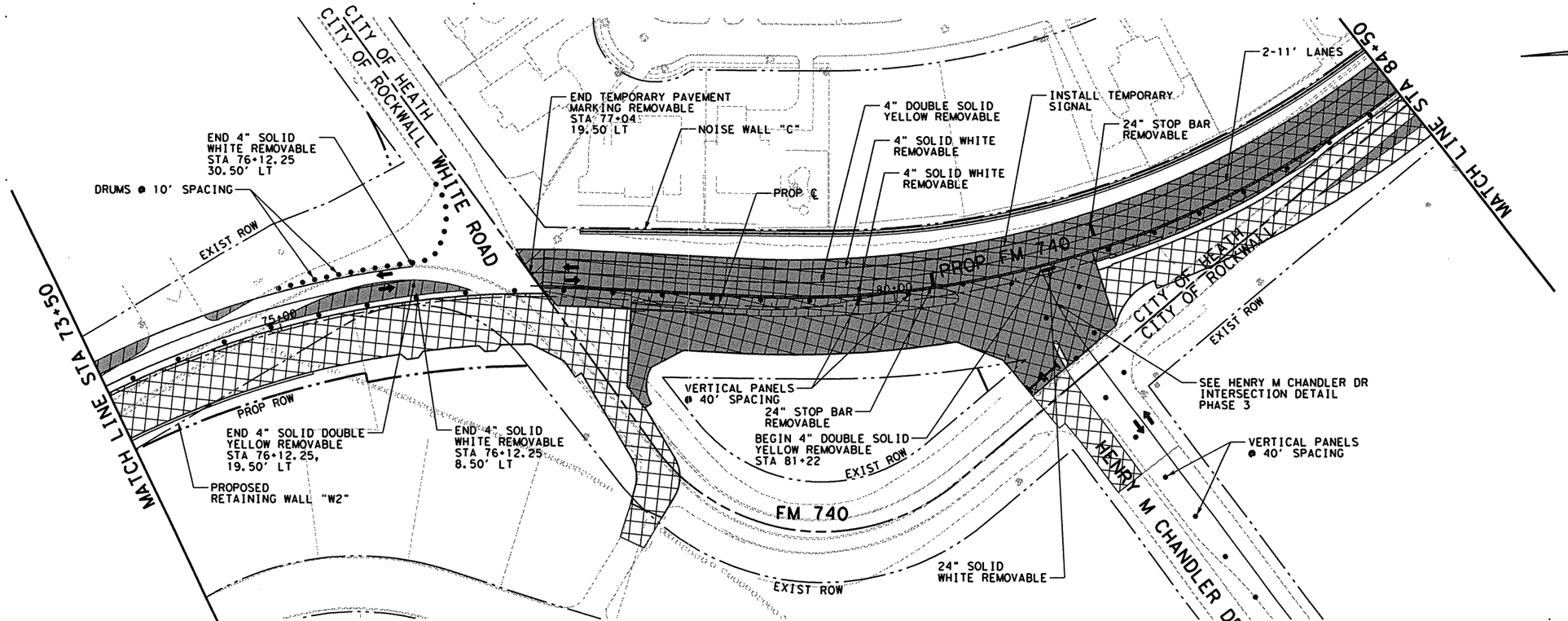
NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.



Huitt-Zollars, Inc. - Firm Registration No. F-761

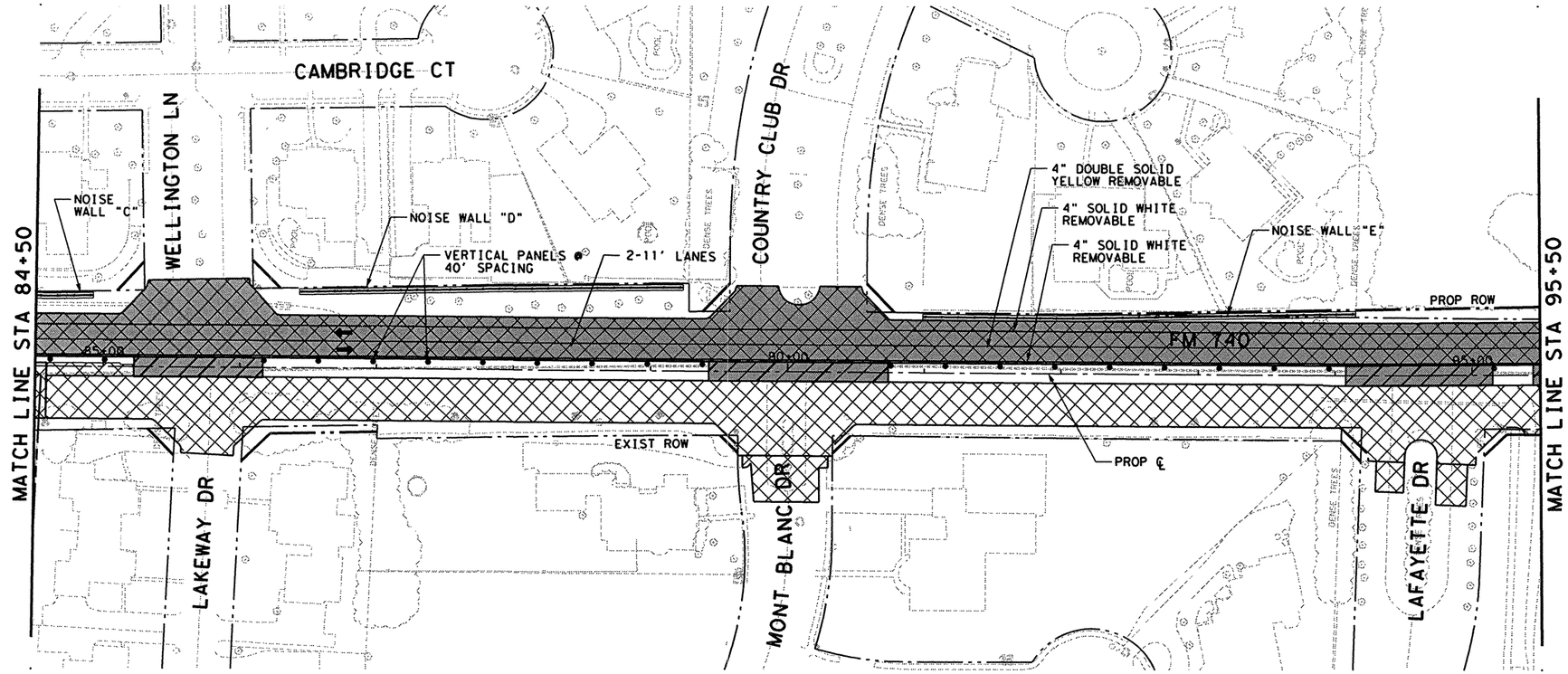
HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 3
STA 62+50 TO STA 84+50

SCALE: 1"=100' SHEET 3 OF 6

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	69
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



0 25 50 75 100
SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
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NOTE:

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STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
5-21-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

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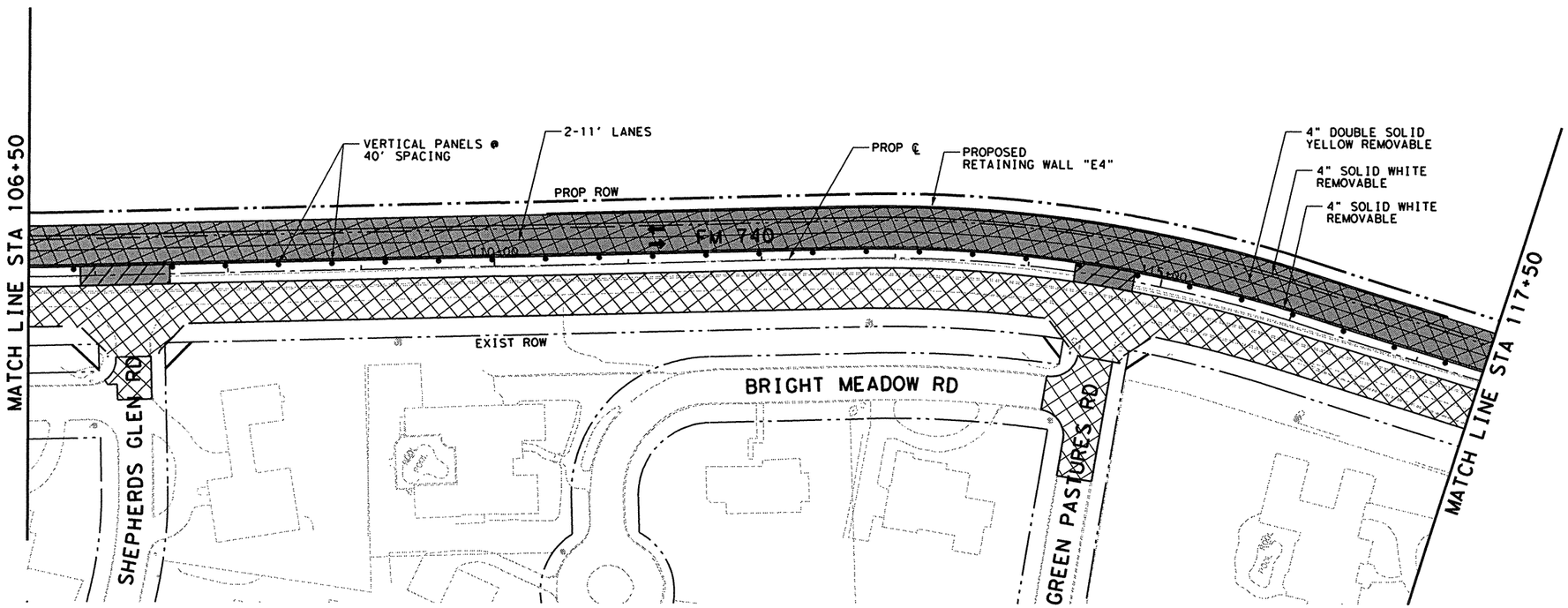
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

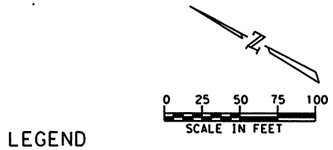
Texas Department of Transportation

FM 740
TRAFFIC CONTROL
PHASE 3
STA 84+50 TO STA 106+50

SCALE: 1"=100' SHEET 4 OF 6

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	70
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	





LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
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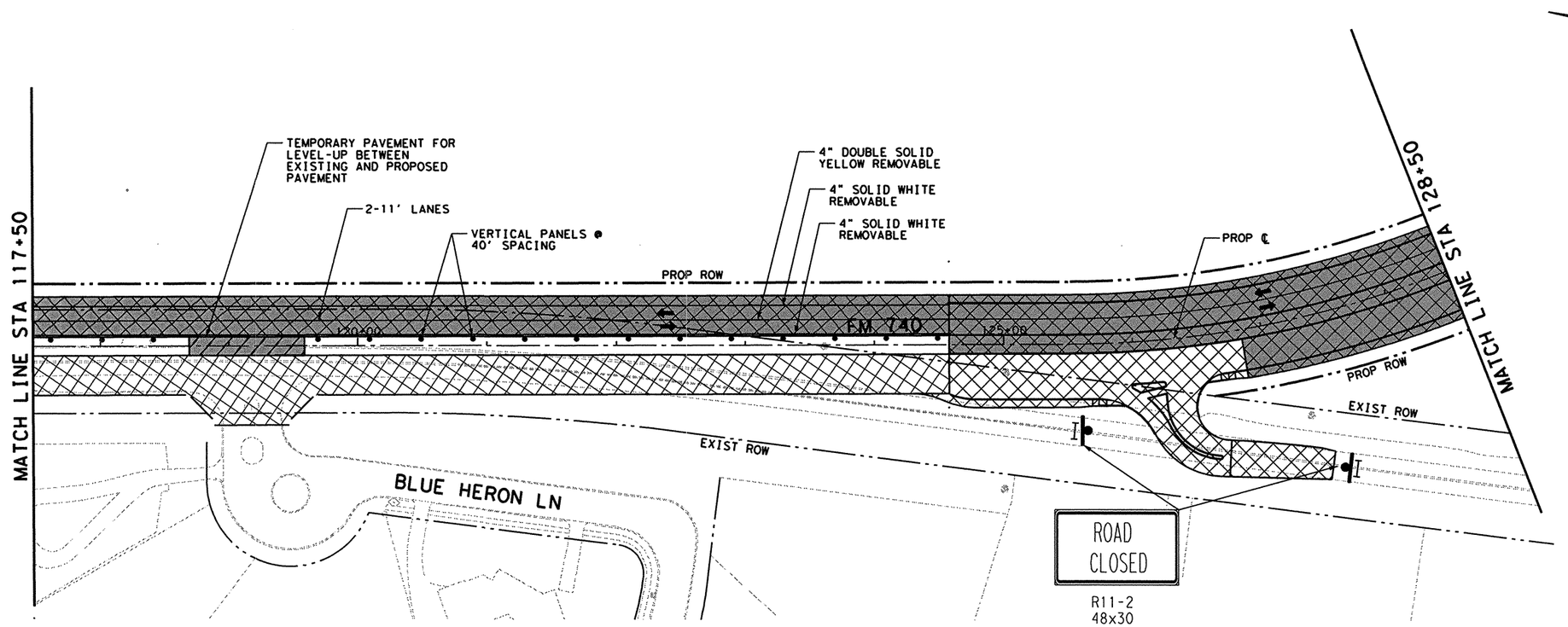
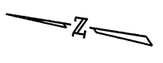
- PORTABLE CHANGEABLE MESSAGE SIGN
- ARROW PANEL SUPPORT OR TRAILER

NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.





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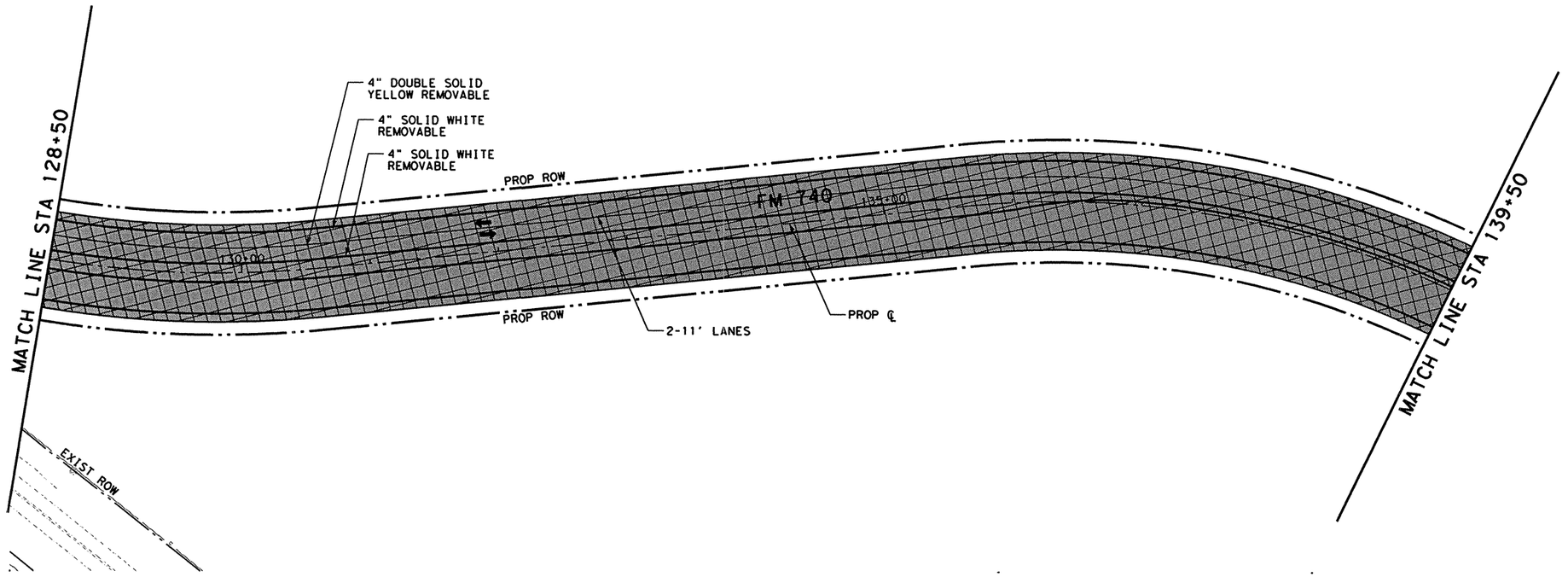
Dallas, Texas 75204-2489

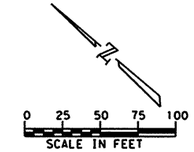
Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 3
STA 106+50 TO STA 128+50

SCALE: 1"=100' SHEET 5 OF 6

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	71
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



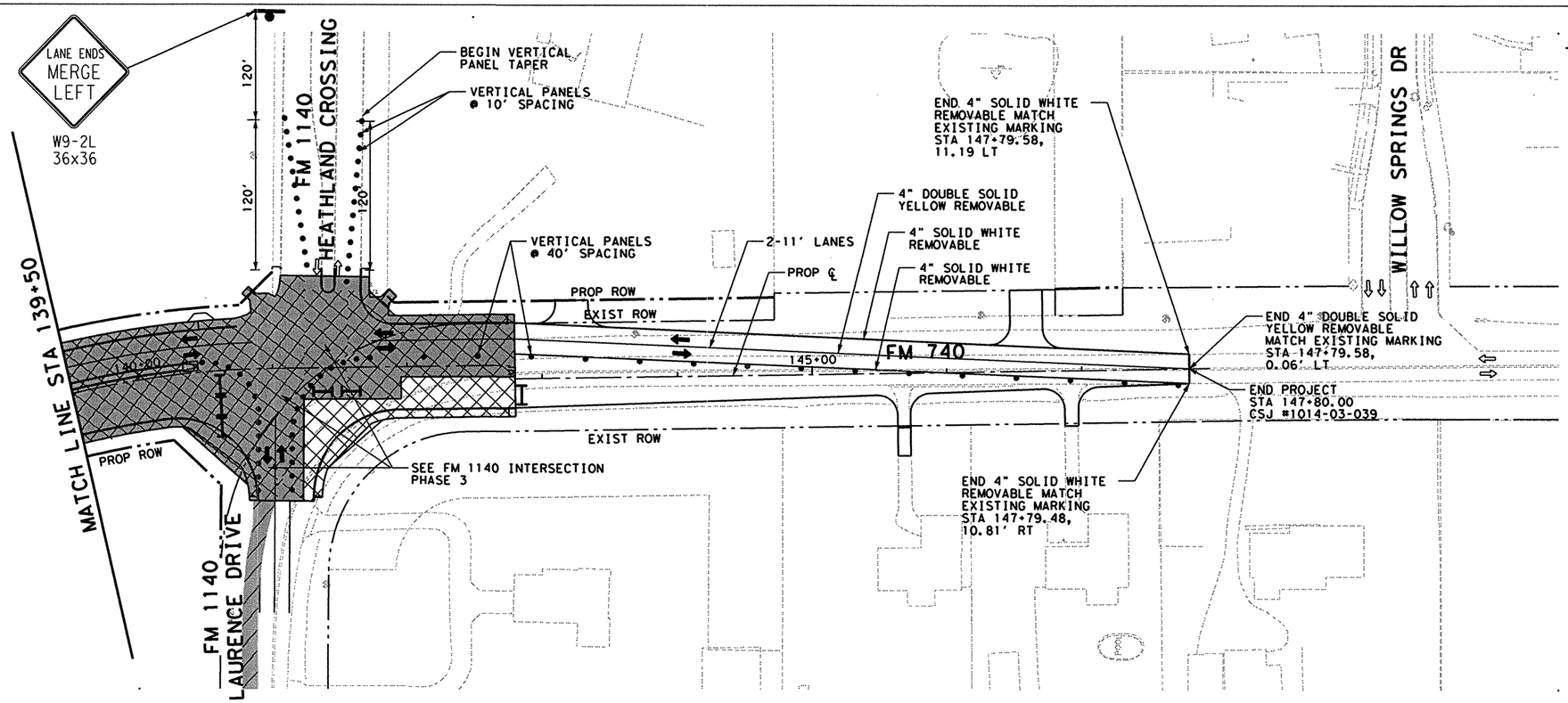


LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
- LOW PROFILE CONCRETE BARRIER (LPCB)
- TY III BARRICADE
- VERTICAL PANELS USED AS CHANNELIZING DEVICES DIRECTLY BETWEEN TRAVEL LANES AND WORK ZONE TO MAINTAIN 11' (10' MIN) TRAVEL LANES AT ALL TIMES. DRUMS USED IN OTHER AREAS.
- PORTABLE CHANGEABLE MESSAGE SIGN
- ARROW PANEL SUPPORT OR TRAILER

NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.



STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
5-21-09

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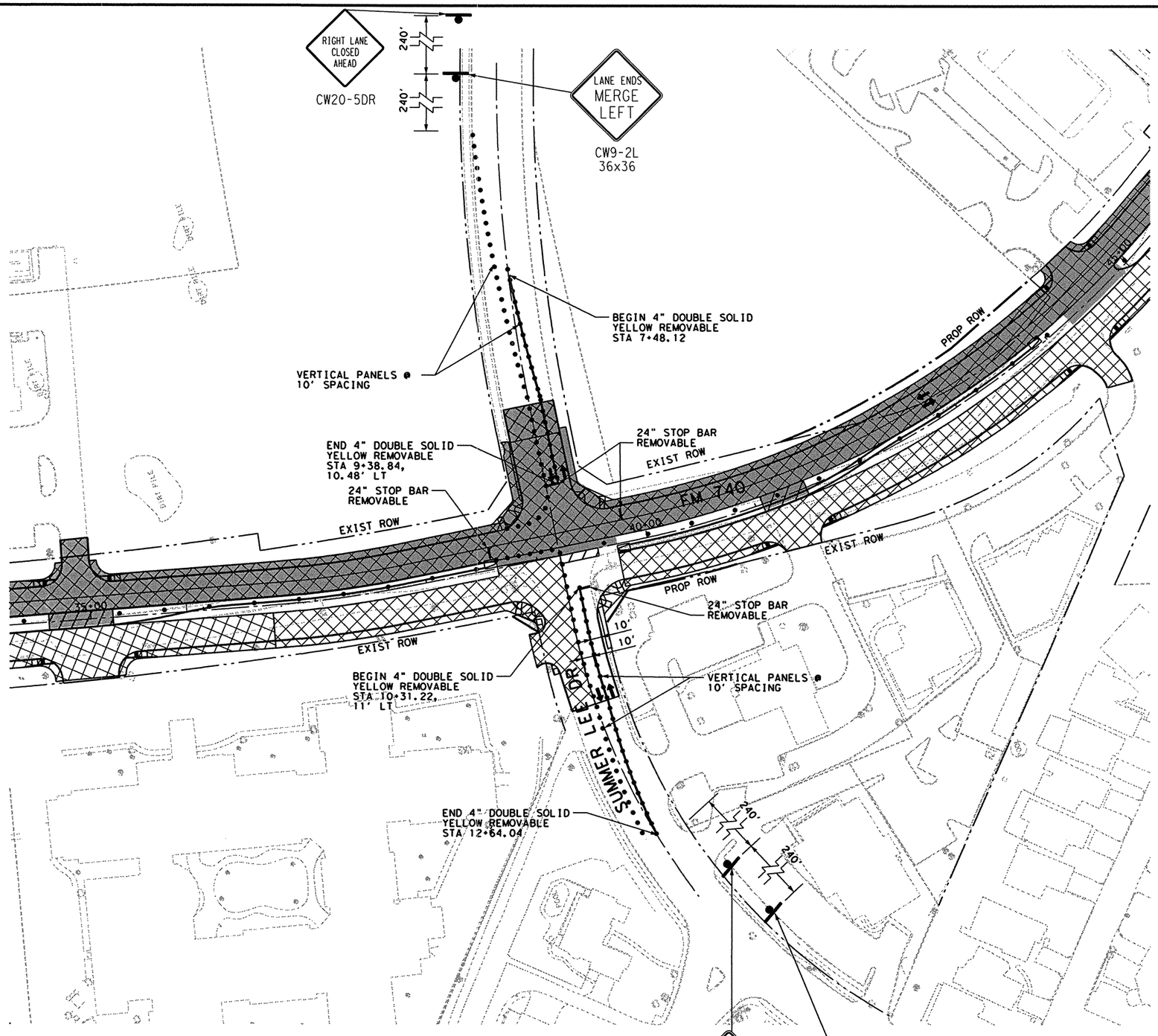
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 3
STA 128+50 TO END OF PROJECT

SCALE: 1"=100' SHEET 6 OF 6

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	72
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



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SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
- LOW PROFILE CONCRETE BARRIER (LPCB)
- TY III BARRICADE
- VERTICAL PANELS USED AS CHANNELIZING DEVICES DIRECTLY BETWEEN TRAVEL LANES AND WORK ZONE TO MAINTAIN 11' (10' MIN) TRAVEL LANES AT ALL TIMES. DRUMS USED IN OTHER AREAS.
- PORTABLE CHANGEABLE MESSAGE SIGN
- ARROW PANEL SUPPORT OR TRAILER

NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.

STATE OF TEXAS
DAVID ALAN NUFER
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5-21-09

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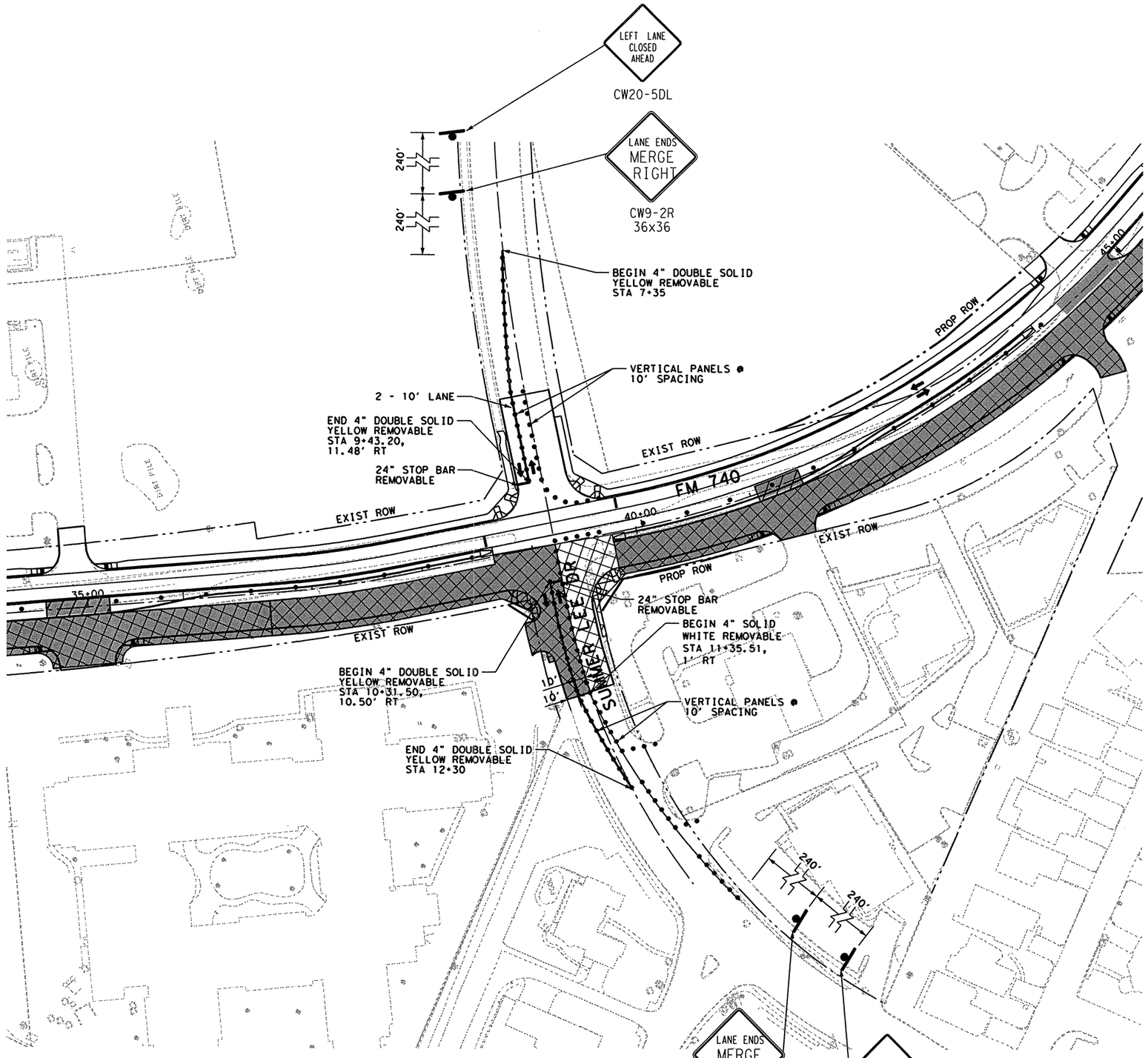
Texas Department of Transportation

FM 740
TRAFFIC CONTROL
PHASE 3 STAGE 1
SUMMER LEE DR INTERSECTION DETAIL

SCALE: 1"=100' SHEET 1 OF 1

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	73
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



0 25 50 75 100
SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
- LOW PROFILE CONCRETE BARRIER (LPCB)
- TY III BARRICADE
- VERTICAL PANELS USED AS CHANNELIZING DEVICES DIRECTLY BETWEEN TRAVEL LANES AND WORK ZONE TO MAINTAIN 11' (10' MIN) TRAVEL LANES AT ALL TIMES. DRUMS USED IN OTHER AREAS.
- PORTABLE CHANGEABLE MESSAGE SIGN
- ARROW PANEL SUPPORT OR TRAILER

NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
5-21-09

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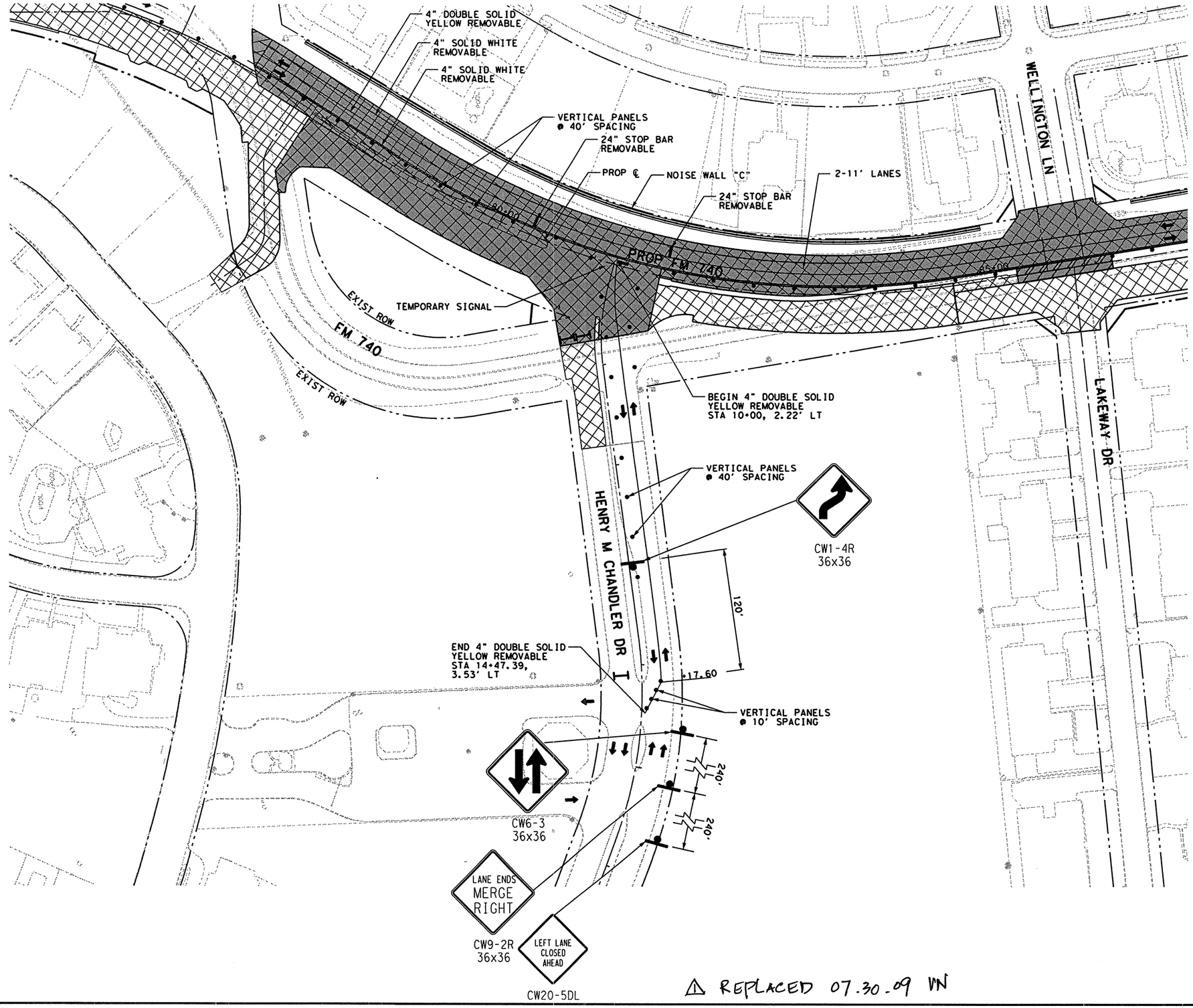
Texas Department of Transportation

FM 740
TRAFFIC CONTROL
PHASE 3 STAGE 2
SUMMER LEE DR INTERSECTION DETAIL

SCALE: 1"=100' SHEET 1 OF 1

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	74
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



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SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
- LOW PROFILE CONCRETE BARRIER (LPCB)
- TY III BARRICADE
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- ARROW PANEL SUPPORT OR TRAILER

NOTE:

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STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
6-30-09

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Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 3
HENRY M. CHANDLER DR INTERSECTION DETAIL

SCALE: 1"=100' SHEET 1 OF 1

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	75
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

⚠ REPLACED 07.30.09 VN

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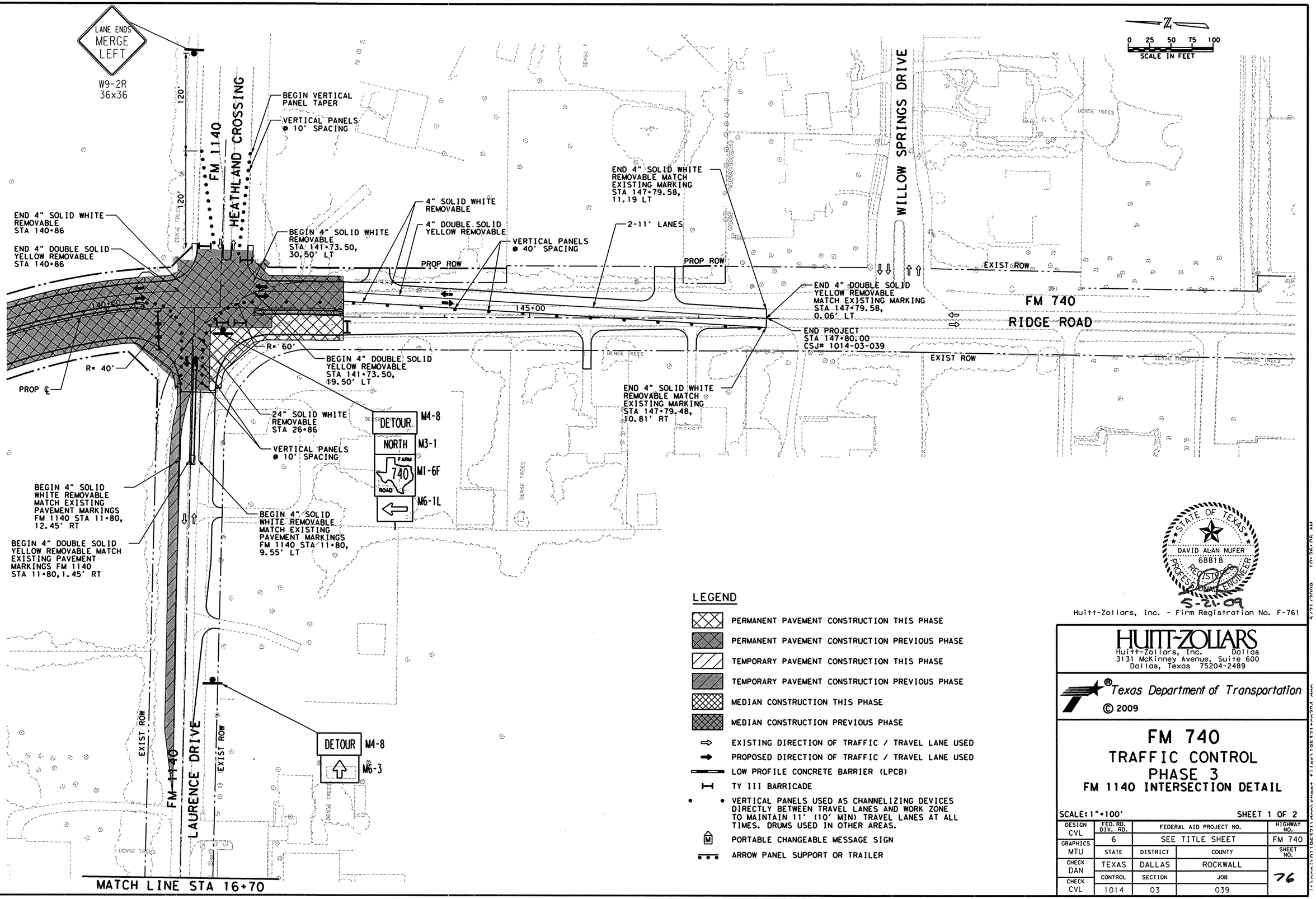

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
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STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
5-21-09

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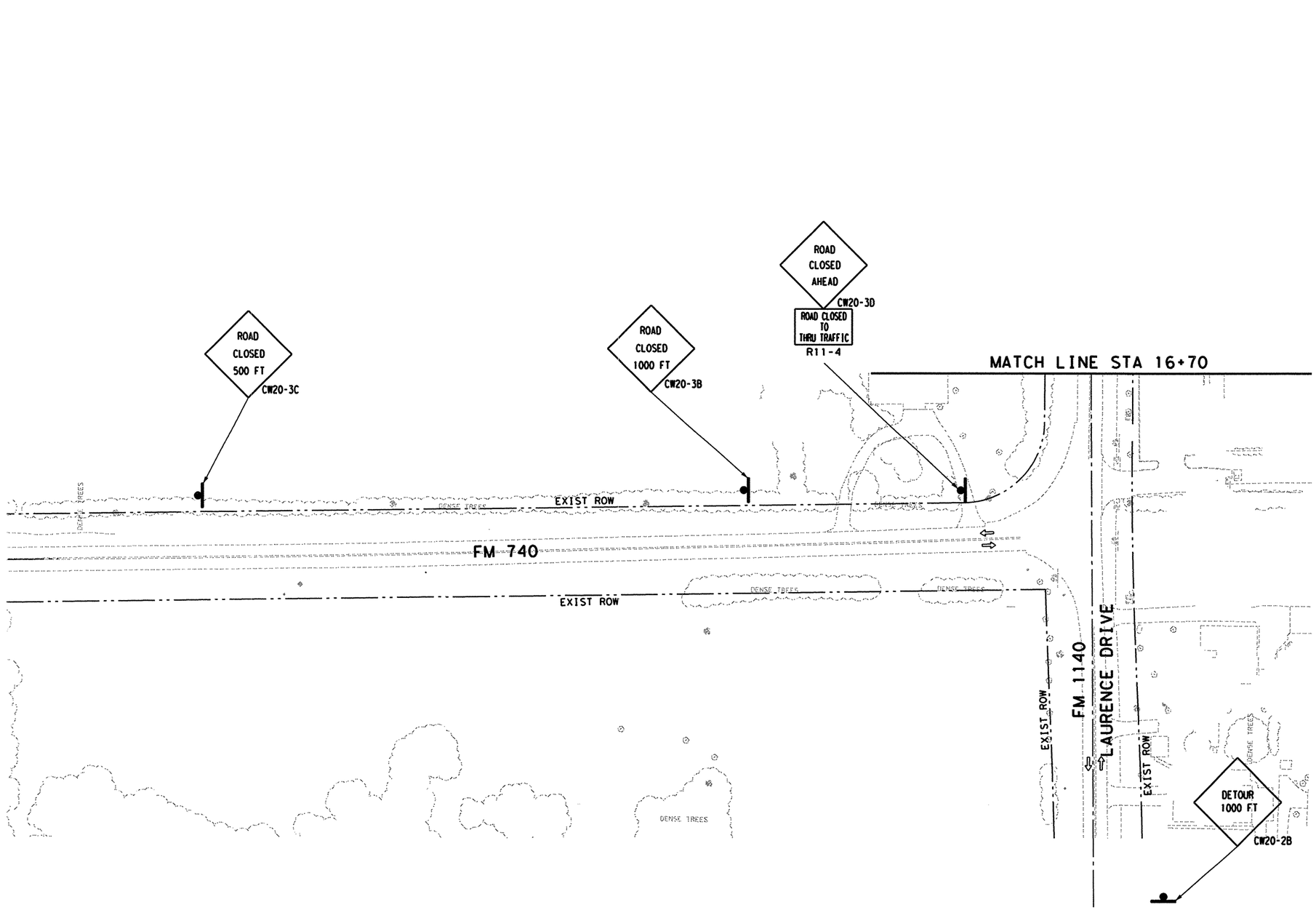
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 3
FM 1140 INTERSECTION DETAIL

SCALE: 1"=100' SHEET 1 OF 2

DESIGN	FED.RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	76
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



0 25 50 75 100
SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
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STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
5-21-09

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HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
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Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL
PHASE 3
FM 1140 INTERSECTION DETAIL

SCALE: 1"=100' SHEET 2 OF 2

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	76A
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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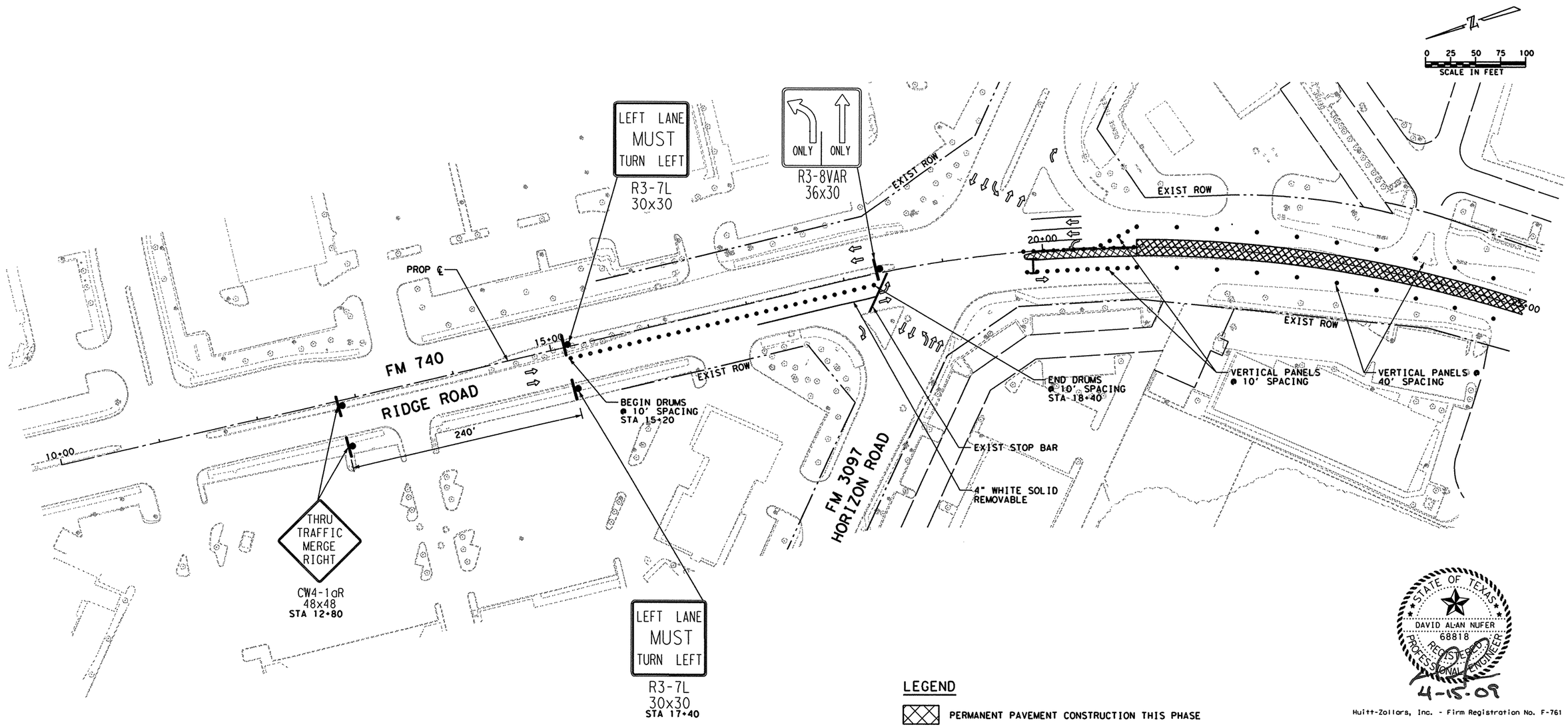

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
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- TY III BARRICADE
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STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
4-15-09

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Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL
PHASE 4
FM 3097 INTERSECTION DETAIL

SCALE: 1"=100' SHEET 1 OF 1

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	77
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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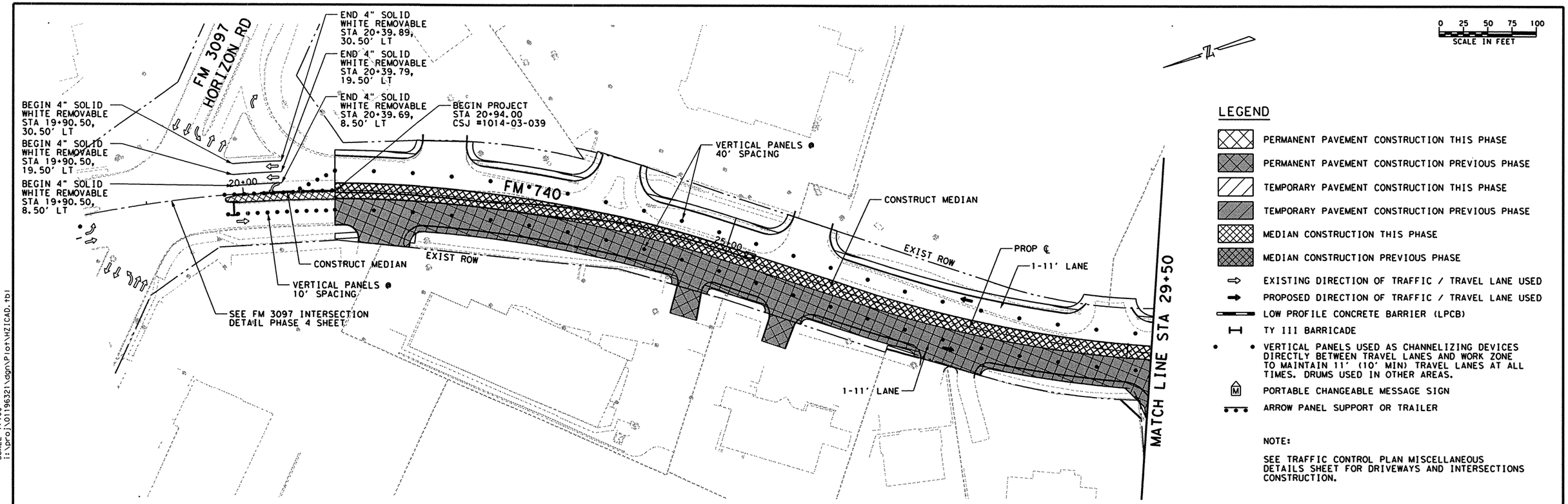

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STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
5-21-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

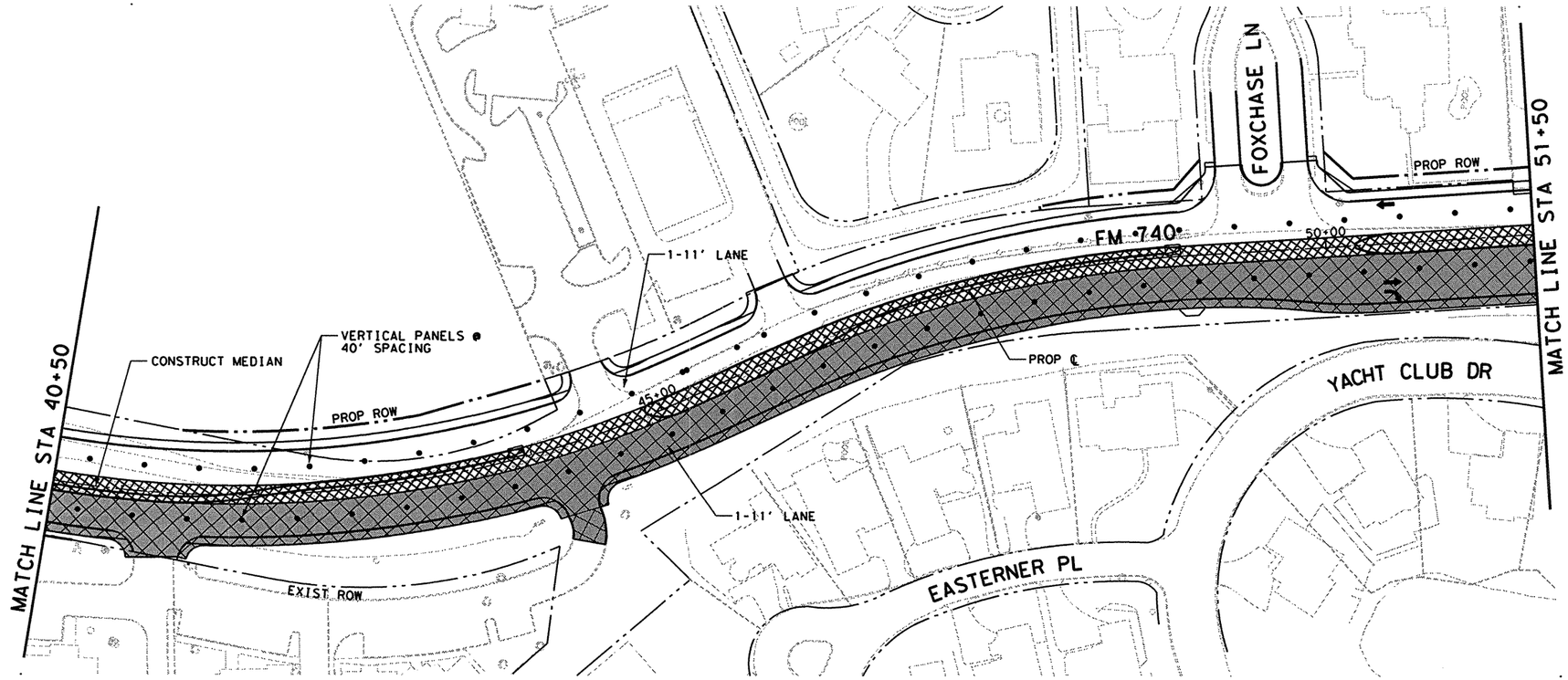
HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

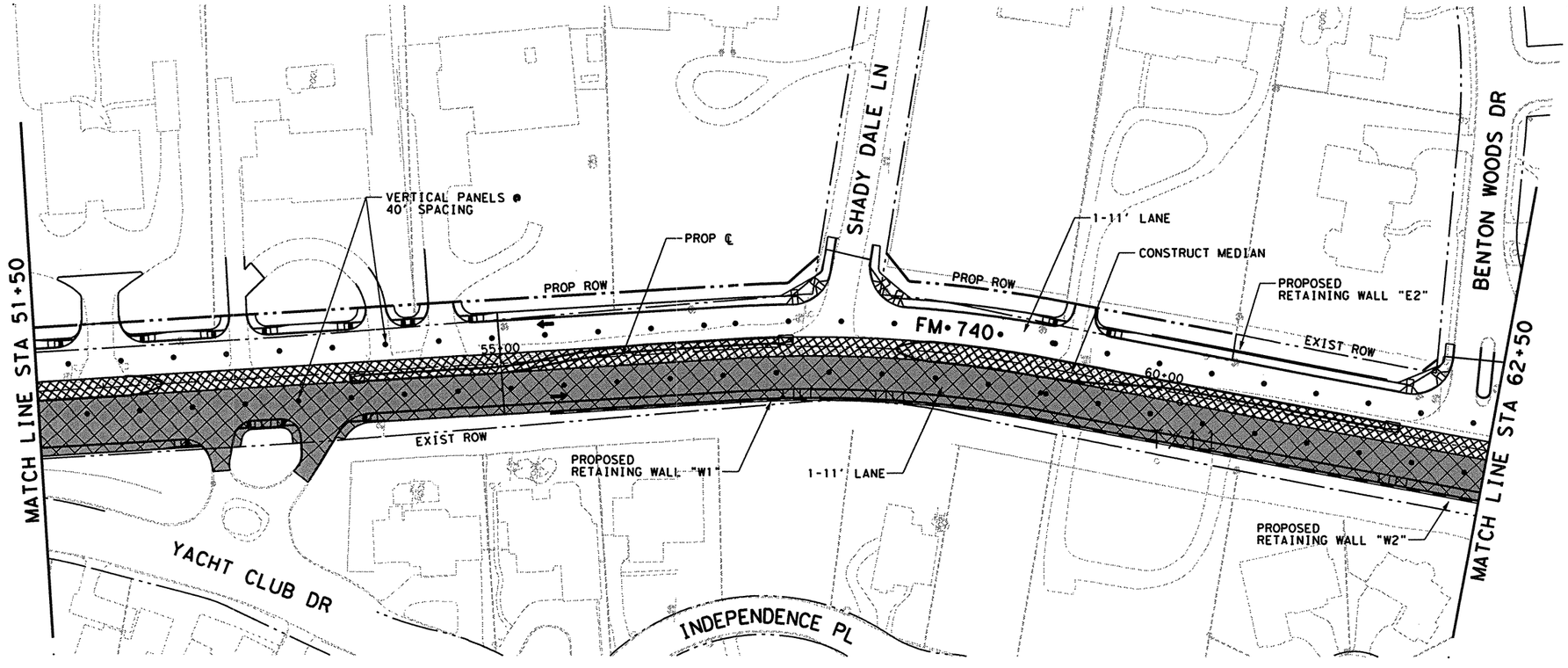
Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 4
BEGIN PROJECT TO STA 40+50

SCALE: 1"=100' SHEET 1 OF 6

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	78
CHECK	CONTROL	SECTION	JOB	
DAN	1014	03	039	
CHECK				
CVL				





0 25 50 75 100
SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
- LOW PROFILE CONCRETE BARRIER (LPCB)
- TY III BARRICADE
- • VERTICAL PANELS USED AS CHANNELIZING DEVICES DIRECTLY BETWEEN TRAVEL LANES AND WORK ZONE TO MAINTAIN 11' (10' MIN) TRAVEL LANES AT ALL TIMES. DRUMS USED IN OTHER AREAS.
- PORTABLE CHANGEABLE MESSAGE SIGN
- ARROW PANEL SUPPORT OR TRAILER

NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.

STATE OF TEXAS
DAVID ALAN NUFER
68818
PROFESSIONAL ENGINEER
5-21-09

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Huitt-Zollars, Inc. Dallas
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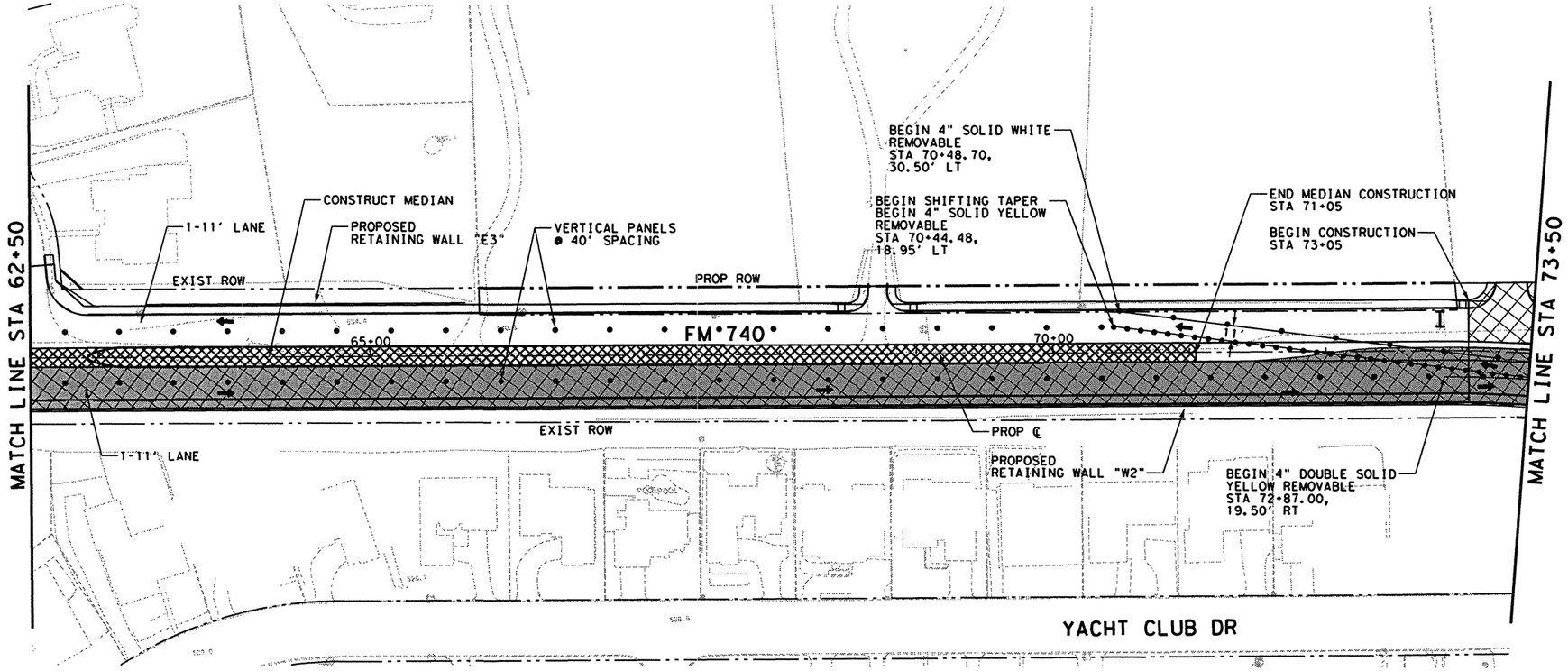
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL PHASE 4
STA 40+50 TO STA 62+50

SCALE: 1"=100' SHEET 2 OF 6

DESIGN	FED.RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	79
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



0 25 50 75 100
SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
- LOW PROFILE CONCRETE BARRIER (LPCB)
- TY III BARRICADE
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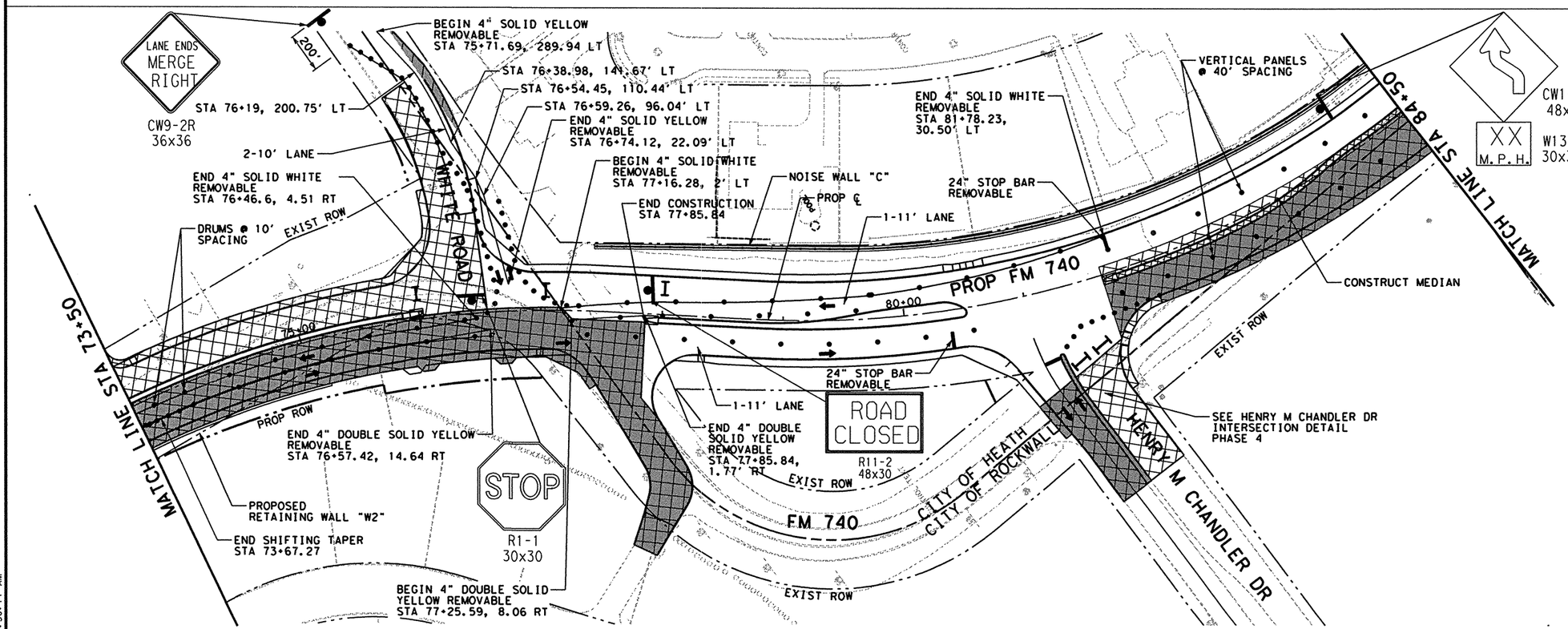
- ARROW PANEL SUPPORT OR TRAILER

NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.



STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
5-21-09

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HUITT-ZOLLARS
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Dallas, Texas 75204-2489

FM 740
TRAFFIC CONTROL PHASE 4
STA 62+50 TO STA 84+50

SCALE: 1"=100' SHEET 3 OF 6

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	80
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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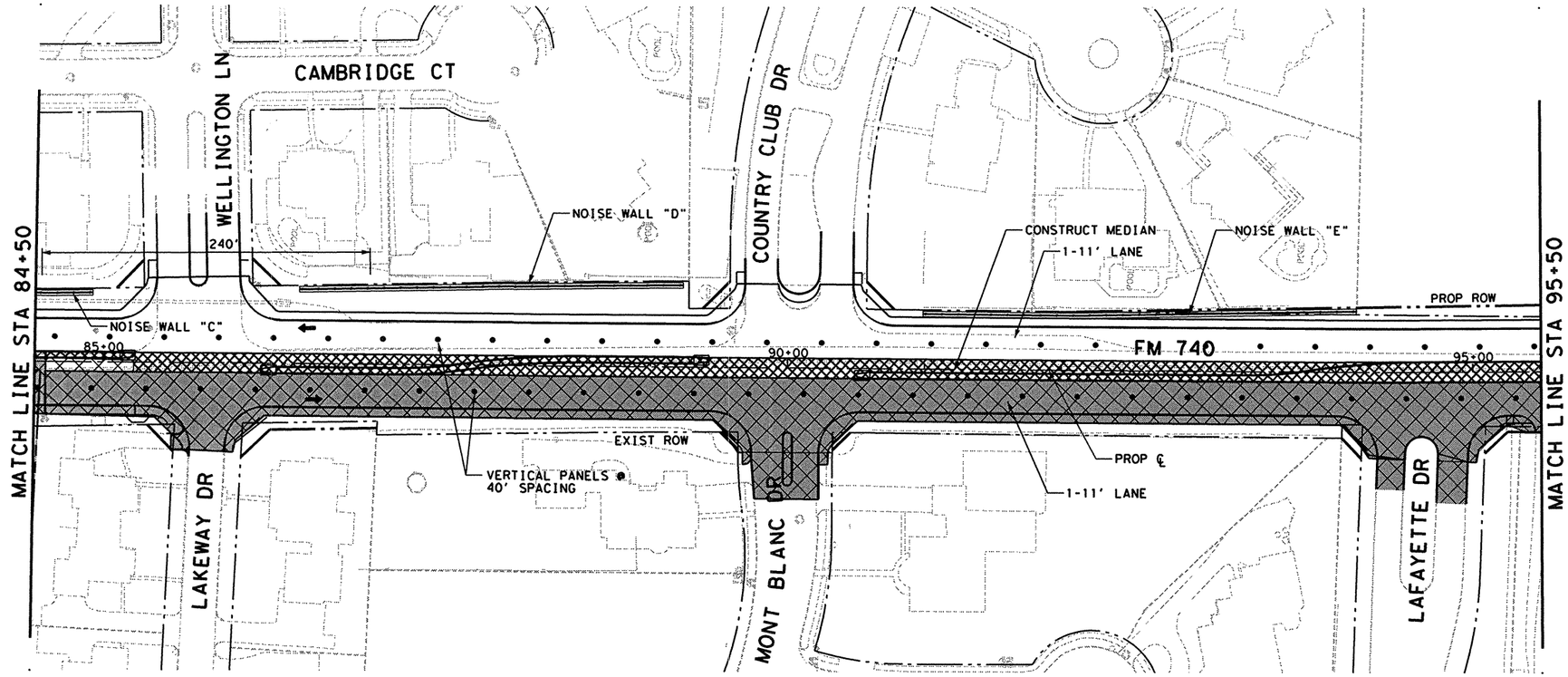

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0 25 50 75 100
SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
- LOW PROFILE CONCRETE BARRIER (LPCB)
- TY III BARRICADE
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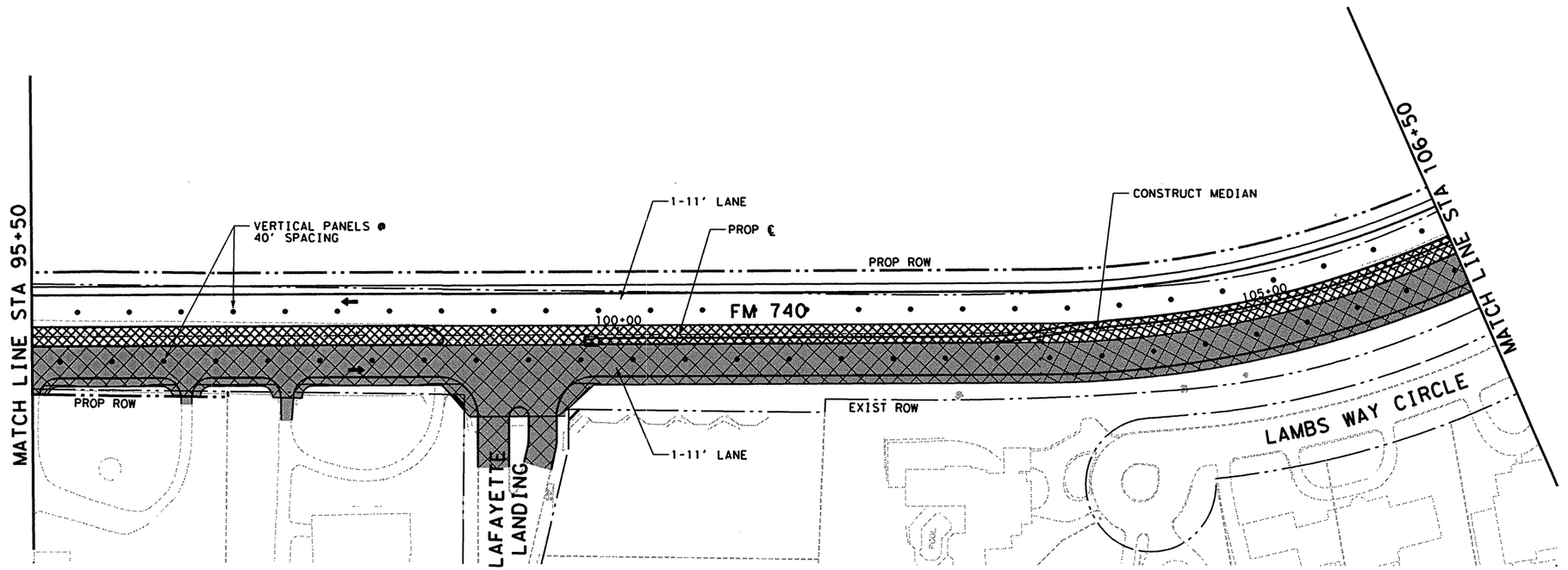
- PORTABLE CHANGEABLE MESSAGE SIGN
- ARROW PANEL SUPPORT OR TRAILER

NOTE:

SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.



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STATE OF TEXAS
DAVID ALAN NUFER
68818
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5-21-09

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FM 740
TRAFFIC CONTROL PHASE 4
STA 84+50 TO STA 106+50

SCALE: 1"=100' SHEET 4 OF 6

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	81
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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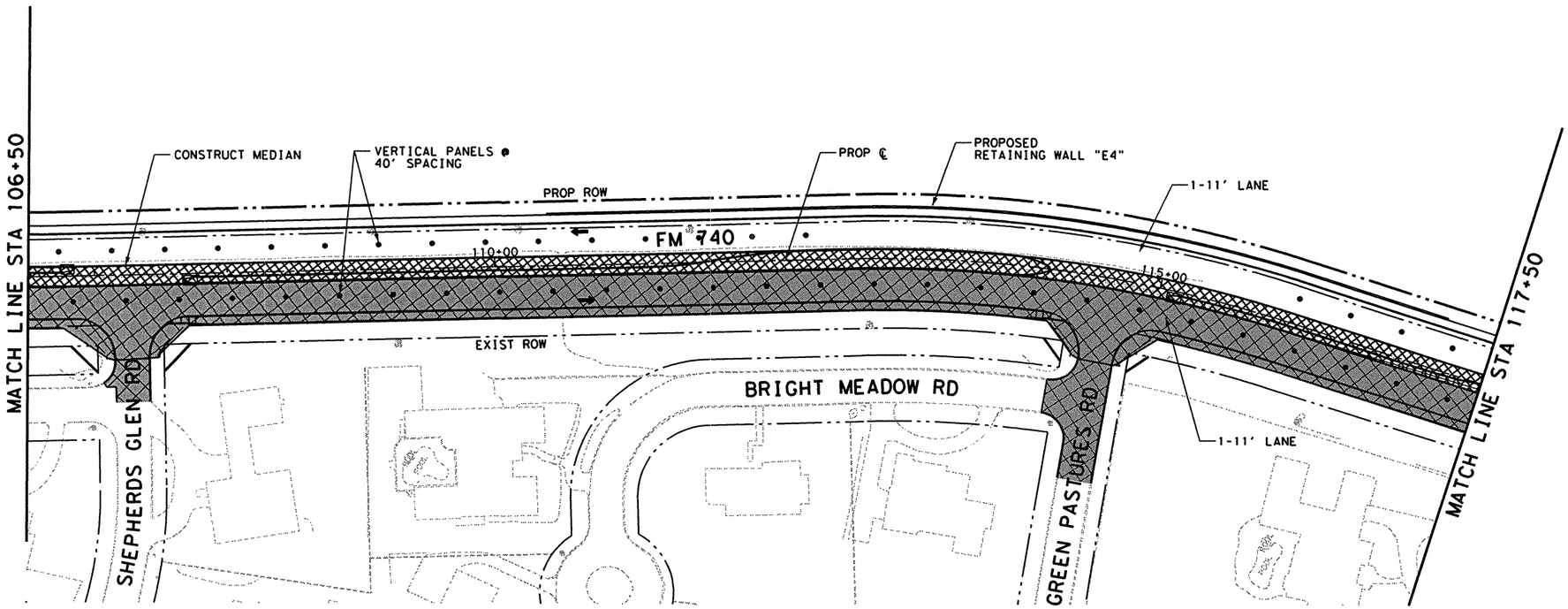

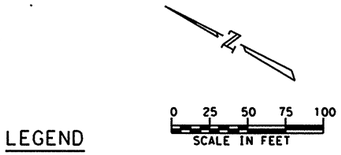

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
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NOTE:

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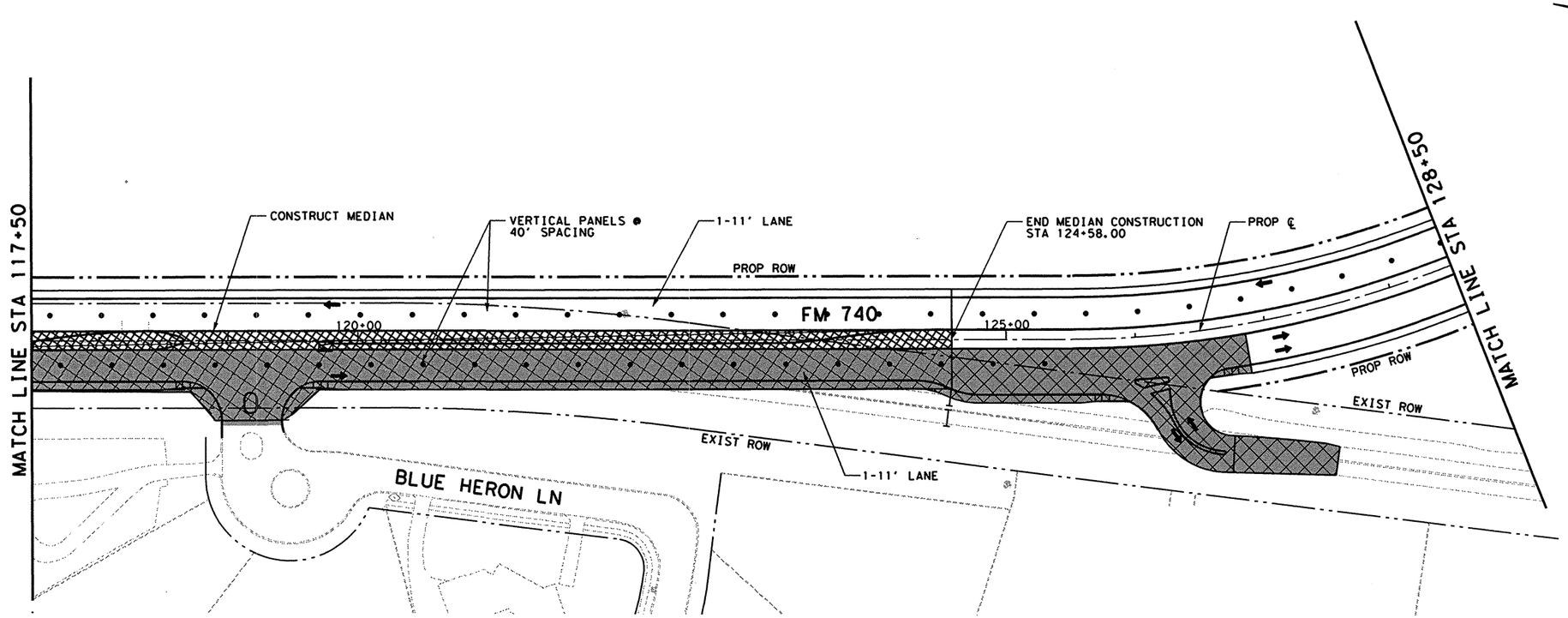

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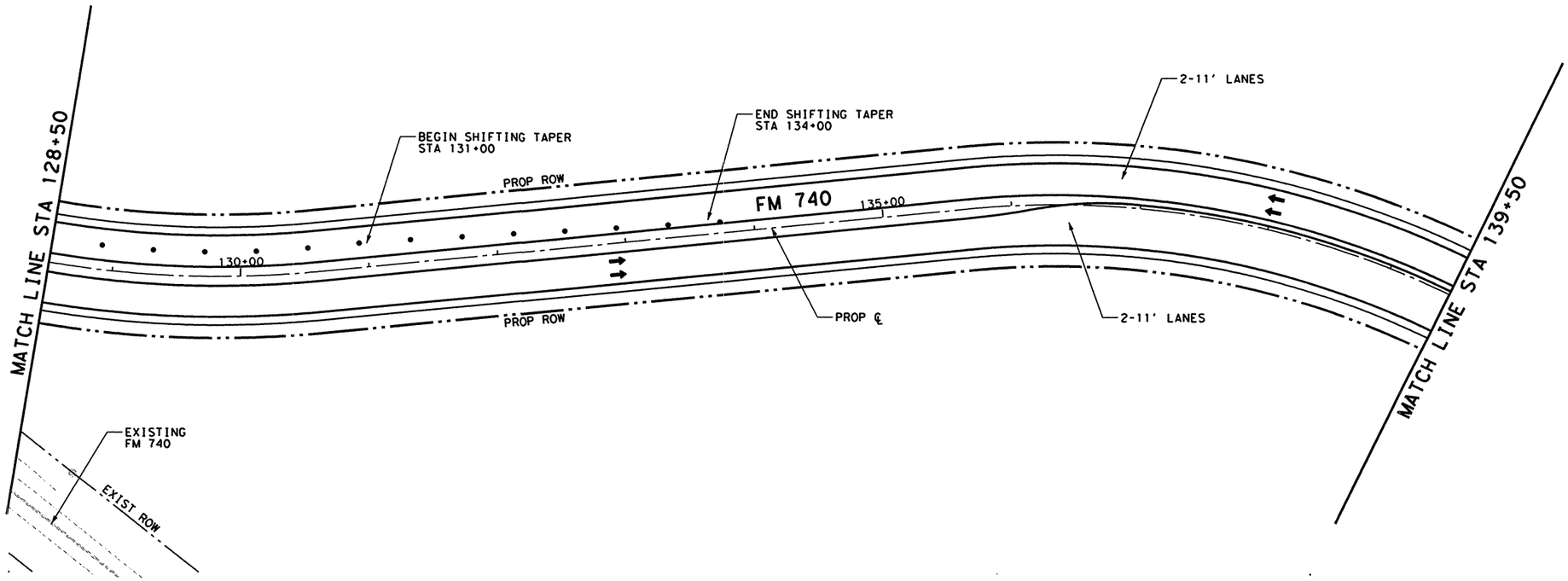
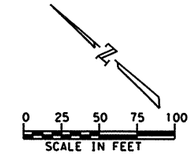
FM 740
TRAFFIC CONTROL PHASE 4
STA 106+50 TO STA 128+50

SCALE: 1"=100' SHEET 5 OF 6

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	82
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	





LEGEND

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- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
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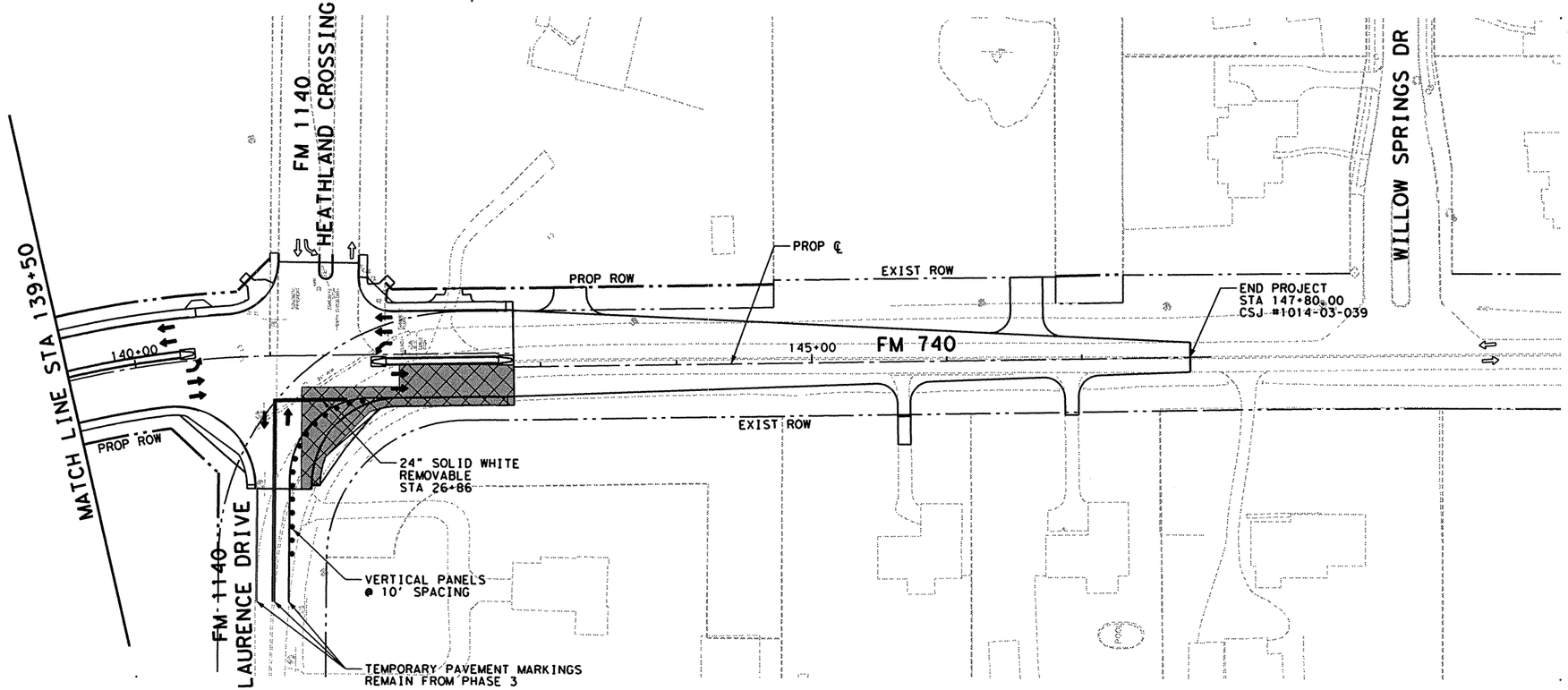
SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.



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68818
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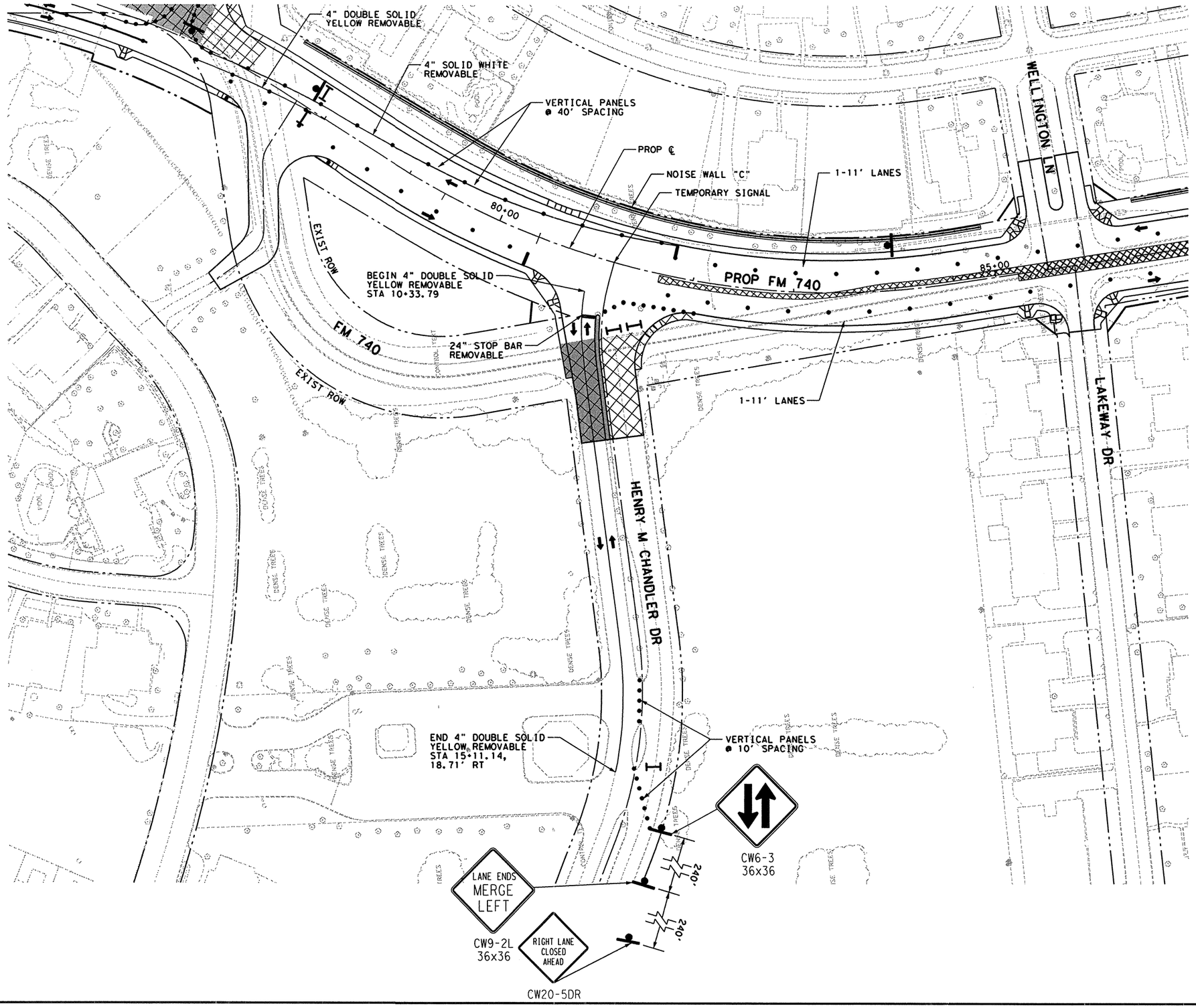
Texas Department of Transportation

FM 740
TRAFFIC CONTROL
PHASE 4
STA 128+50 TO END OF PROJECT

SCALE: 1"=100' SHEET 6 OF 6

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK TCB	TEXAS	DALLAS	ROCKWALL	83
CHECK DAN	CONTROL 1014	SECTION 03	JOB 039	



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SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
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SEE TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS SHEET FOR DRIVEWAYS AND INTERSECTIONS CONSTRUCTION.

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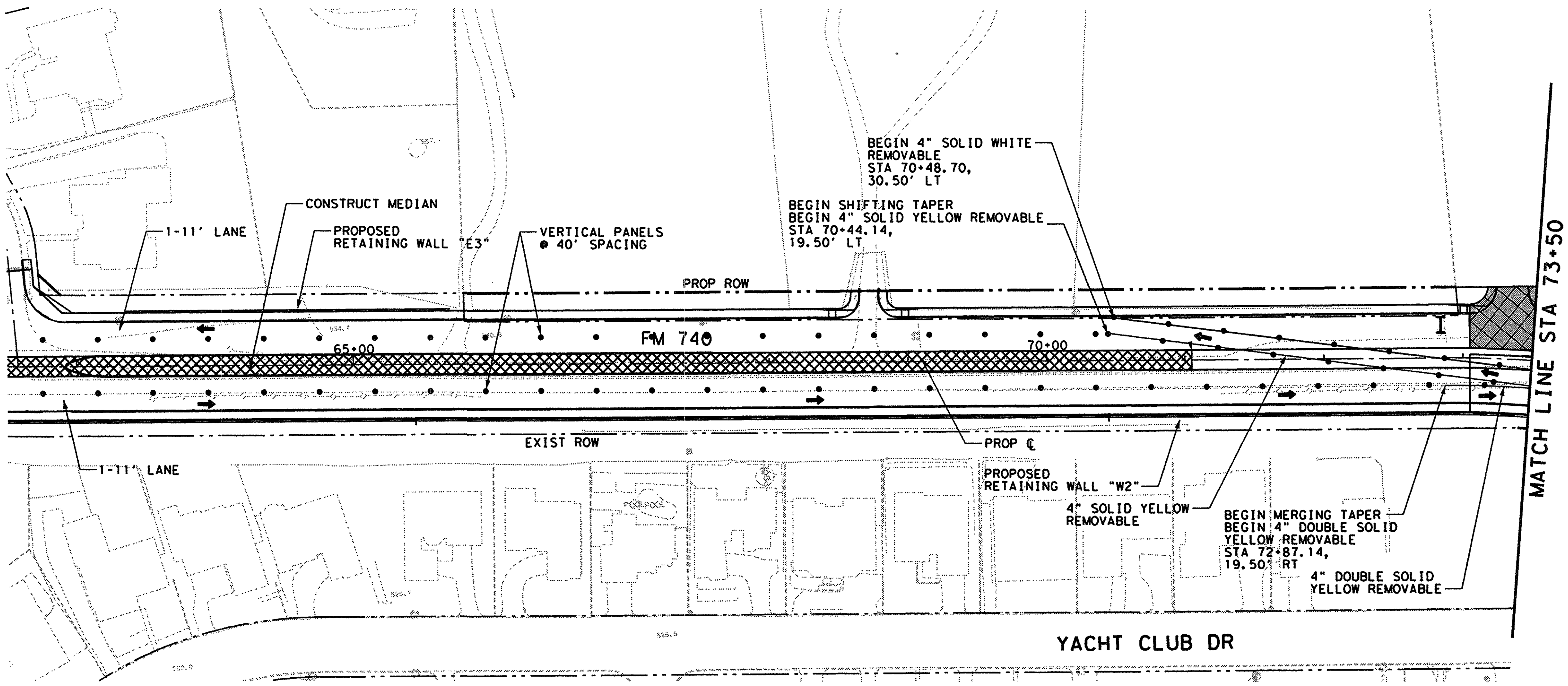
FM 740
TRAFFIC CONTROL PHASE 4
HENRY M. CHANDLER DR INTERSECTION DETAIL

SCALE: 1"=100' SHEET 1 OF 1

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	84
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	



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SCALE IN FEET

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
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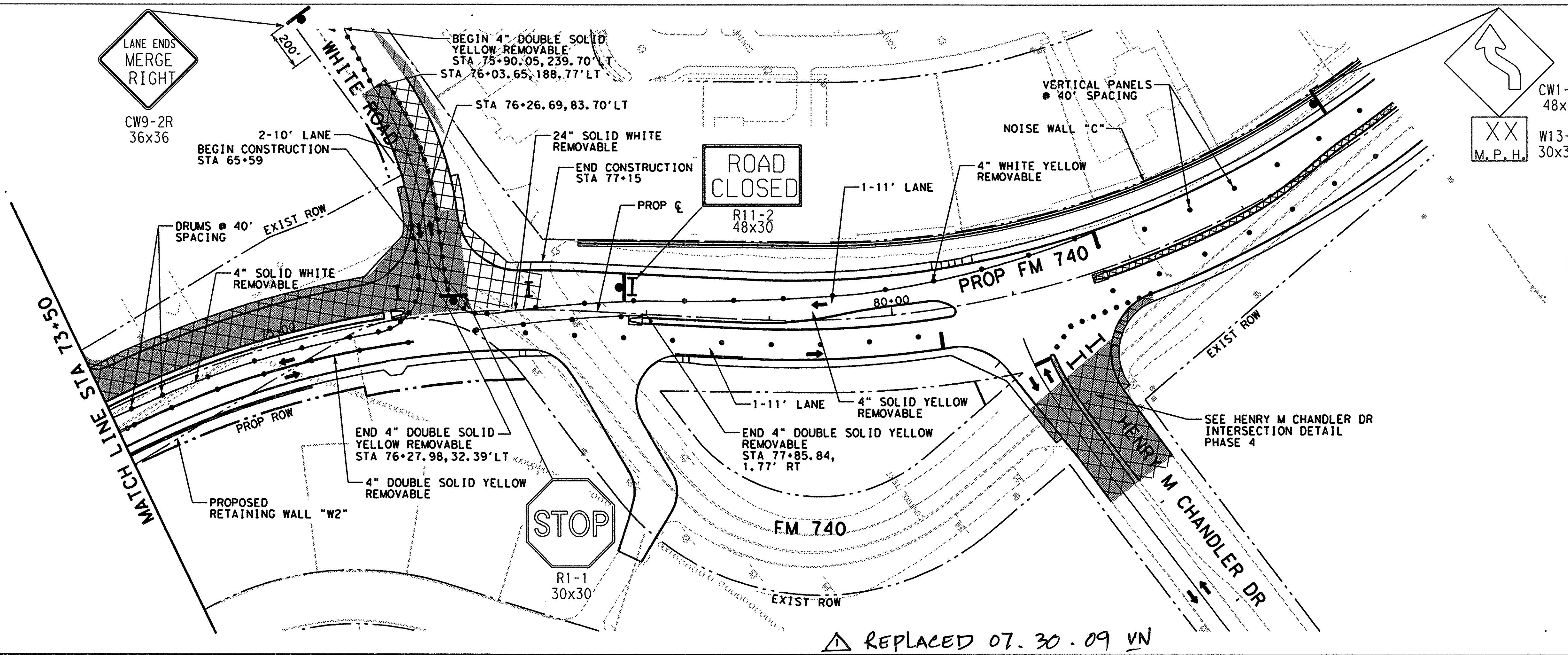

△ REPLACED 07.30.09 VN

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DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
6-30-09

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FM 740
TRAFFIC CONTROL PHASE 5 STAGE 1
STA 62+50 TO STA 84+50

SCALE: 1"=100' SHEET 1 OF 1

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	85
CHECK DAN	CONTROL	SECTION	JOB	
CHECK CVL	1014	03	039	

jparas
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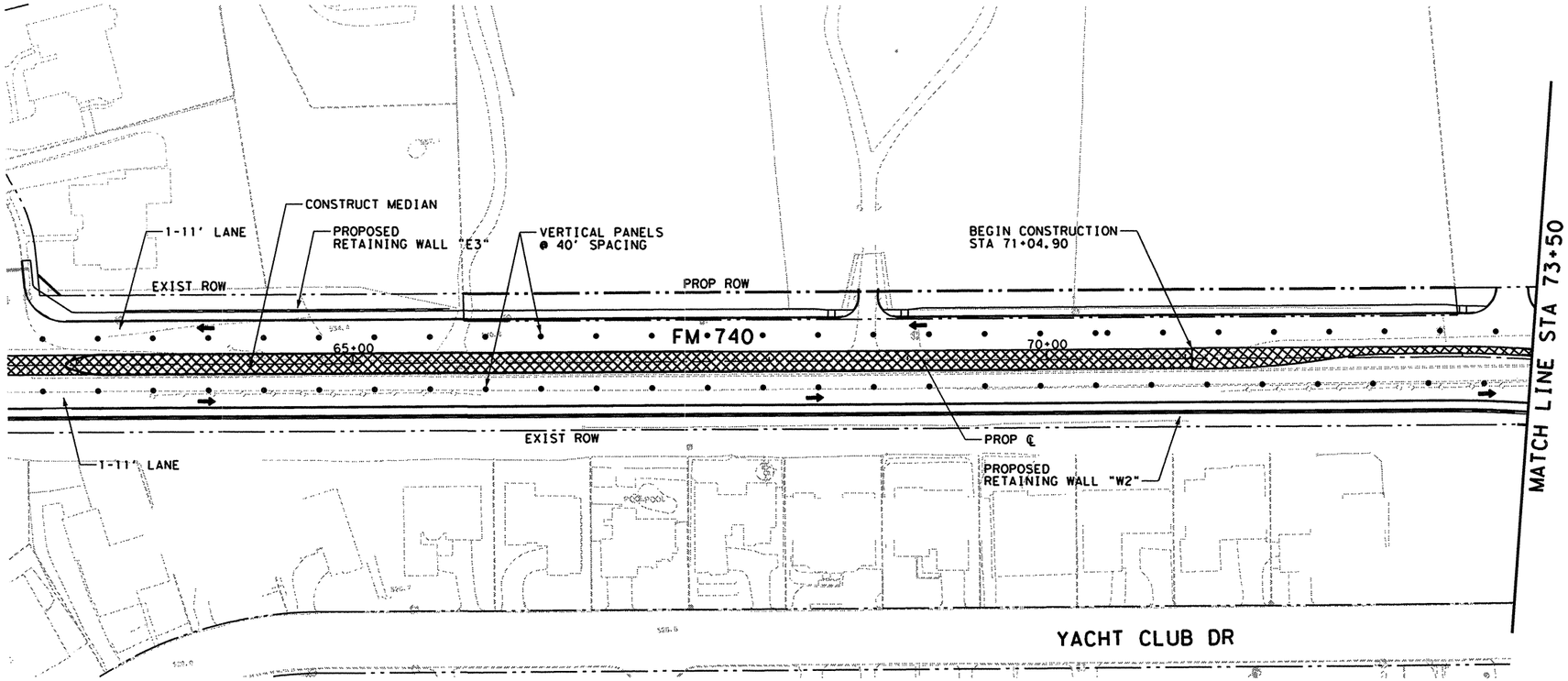

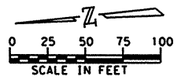

LEGEND

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- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
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NOTE:

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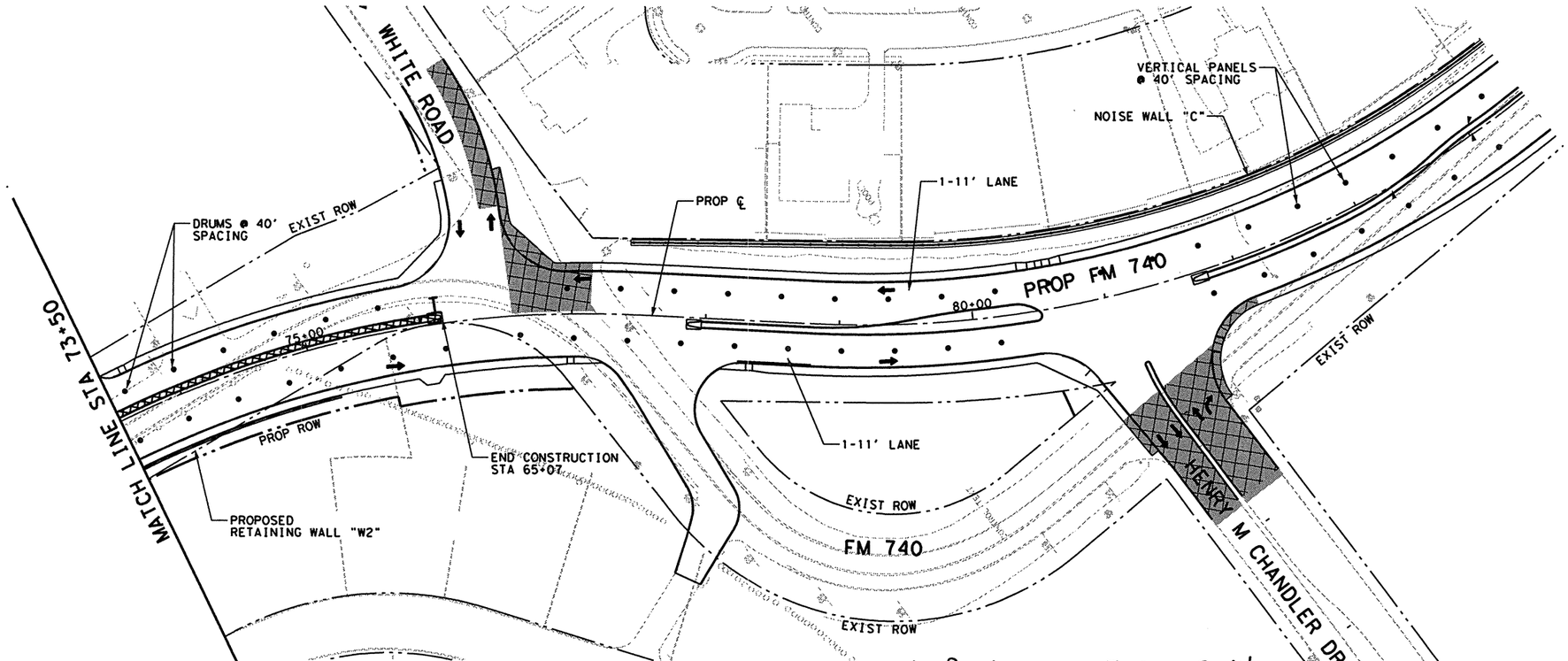
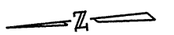


⚠ REPLACED 07.30.09 VN



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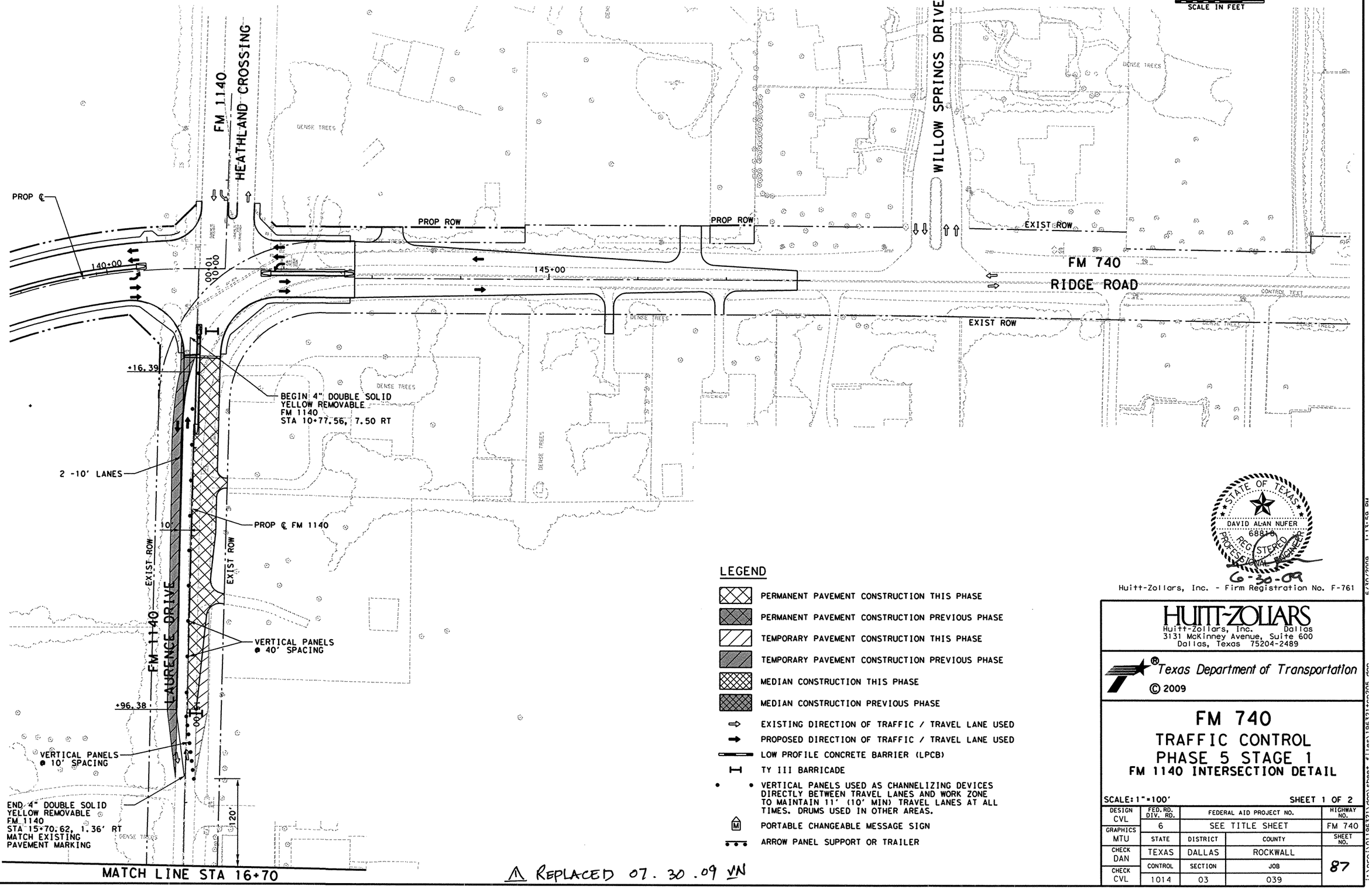
FM 740
TRAFFIC CONTROL
PHASE 5 STAGE 2
STA 62+50 TO STA 84+50

SCALE: 1"=100' SHEET 1 OF 1

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	86
CHECK	CONTROL	SECTION	JOB	
DAN	1014	03	039	
CHECK				
CVL				



LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
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- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
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FM 740
TRAFFIC CONTROL
PHASE 5 STAGE 1
FM 1140 INTERSECTION DETAIL

SCALE: 1"=100' SHEET 1 OF 2

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	87
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

jparas
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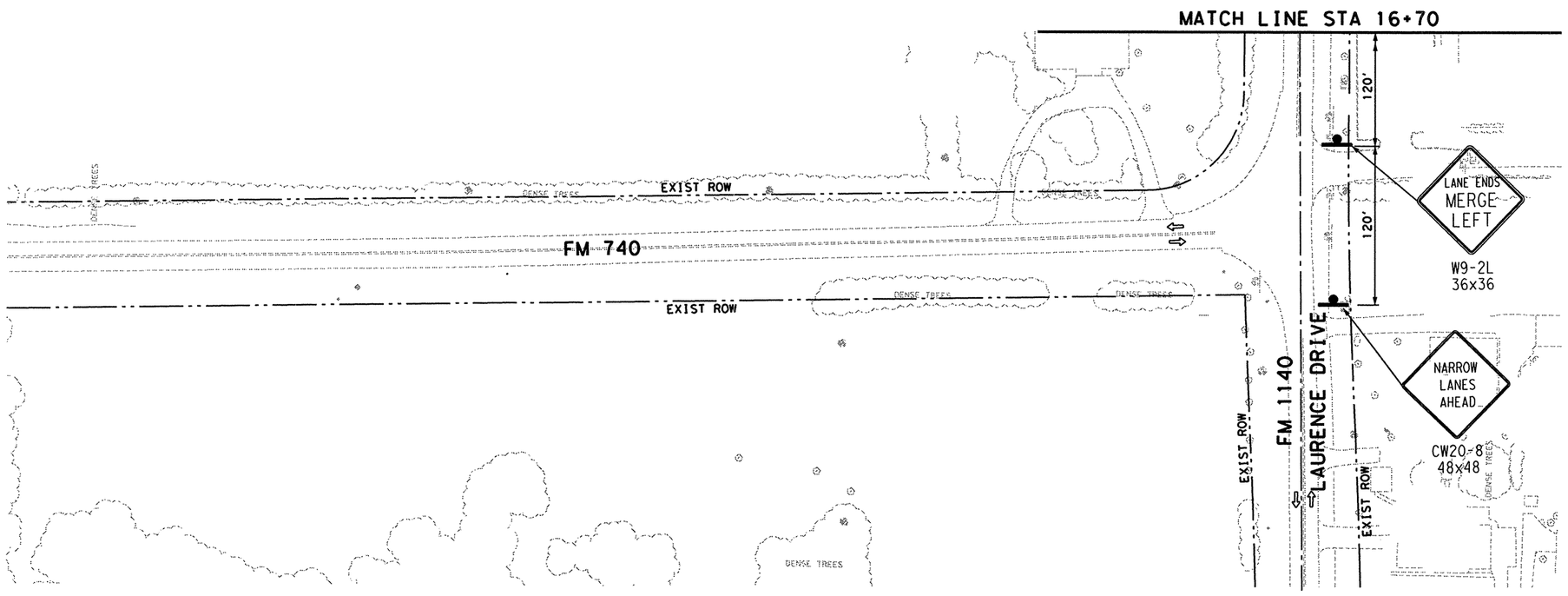

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SCALE IN FEET

LEGEND

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- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
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4-15-09

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FM 740
TRAFFIC CONTROL
PHASE 5 STAGE 1
FM 1140 INTERSECTION DETAIL

SCALE: 1"=100' SHEET 2 OF 2

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	88
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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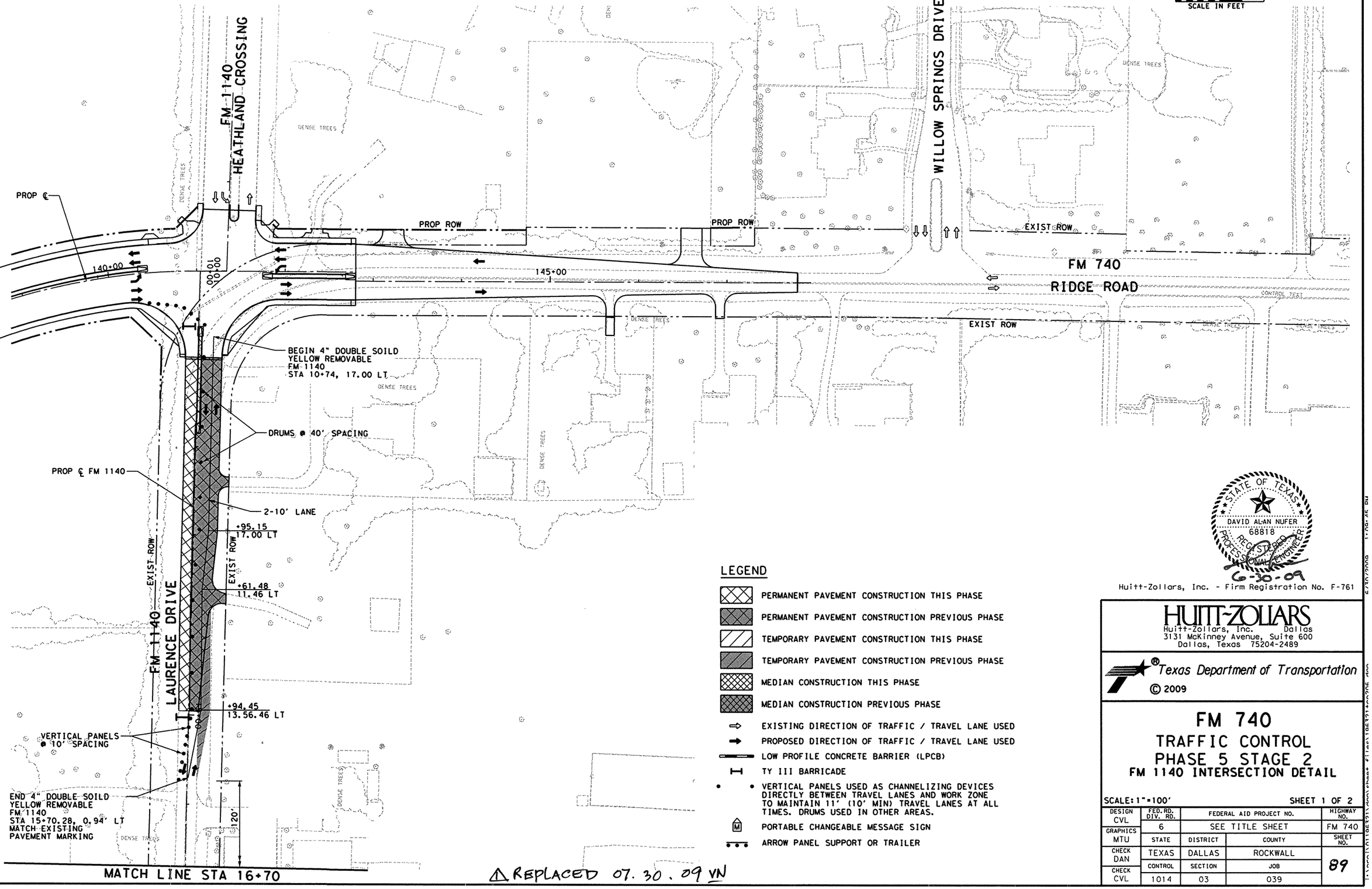

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
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- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
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FM 740
TRAFFIC CONTROL
PHASE 5 STAGE 2
FM 1140 INTERSECTION DETAIL

SCALE: 1"=100' SHEET 1 OF 2

DESIGN	FED.RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	89
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

jparas
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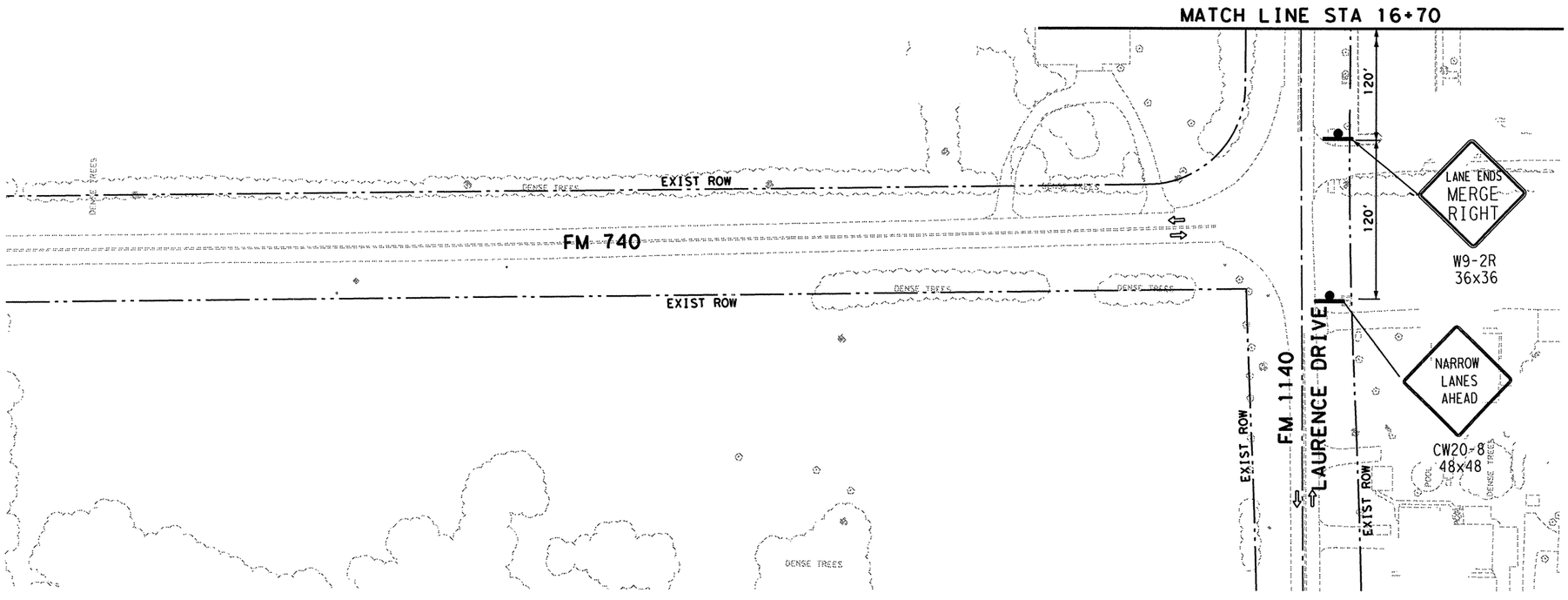

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SCALE IN FEET

LEGEND

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- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
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4-15-09

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FM 740
TRAFFIC CONTROL
PHASE 5 STAGE 2
FM 1140 INTERSECTION DETAIL

SCALE: 1"=100' SHEET 2 OF 2

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	90
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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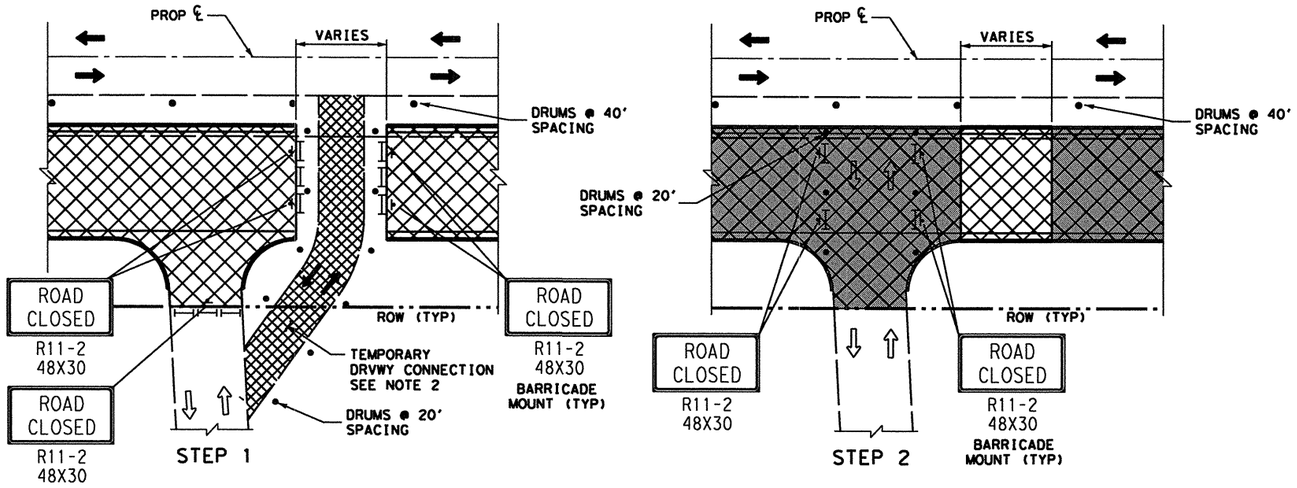
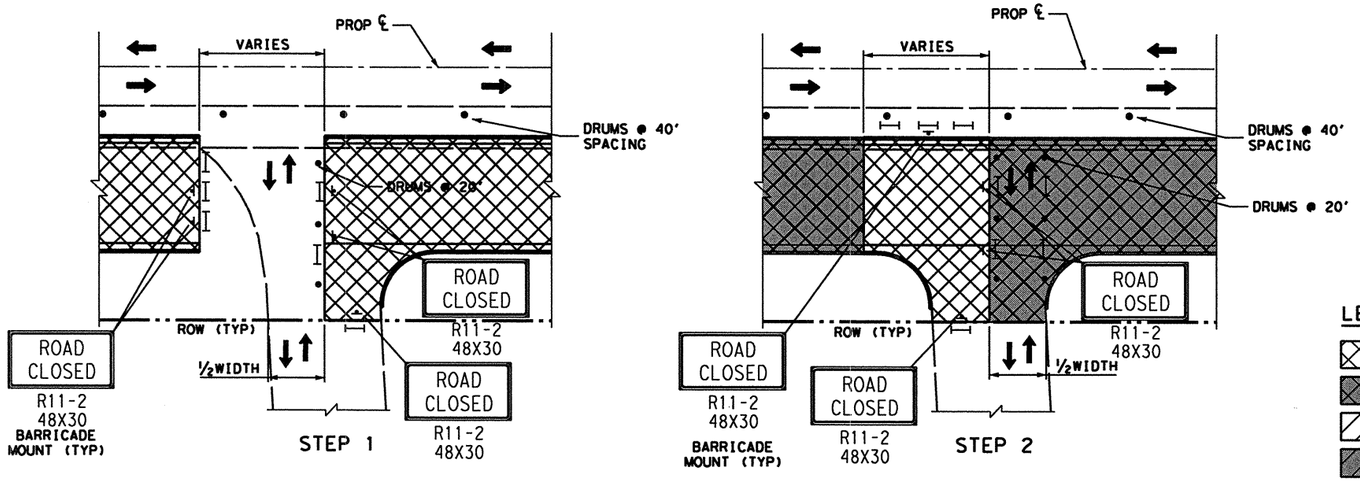


CONSTRUCTION STEPS FOR DRIVEWAYS (LESS THAN 20' WIDE)



CONSTRUCTION STEPS FOR DRIVEWAYS (20' WIDE OR WIDER) OR INTERSECTIONS

SEE NOTE 1

NOTES:

1. CONTRACTOR SHALL MAINTAIN ACCESS AT ALL TIMES TO RESIDENCES OR BUSINESSES THROUGH STAGED CONSTRUCTION OR TEMPORARY DRIVES. THOSE PROPERTIES WITH TWO DRIVES SHOULD BE CONSTRUCTED BY CLOSING AND BUILDING ONE DRIVE WHILE THE OTHER REMAINS OPEN, THEN REVERSING THE PROCEDURE.
2. LETTER OF PERMISSION MUST BE OBTAINED FROM THE PROPERTY OWNER BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.
3. FOR NARROW DRIVEWAYS, THE CONTRACTOR MAY PROVIDE AN ALTERNATE DRIVEWAY OF CRUSHED STONE OR OTHER SUITABLE MATERIAL WITH APPROVAL OF THE ENGINEER, THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE SUBSIDIARY TO ITEM 508 CONSTRUCTION DETOURS.
4. DRIVEWAYS MAY BE CLOSED ONLY WHEN SPECIFICALLY APPROVED BY THE ENGINEER.
5. REFERENCE BC STANDARDS FOR ADDITIONAL CONSTRUCTION SIGNING AND BARRICADE REQUIREMENTS.

LEGEND

- PERMANENT PAVEMENT CONSTRUCTION THIS PHASE
- PERMANENT PAVEMENT CONSTRUCTION PREVIOUS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION THIS PHASE
- TEMPORARY PAVEMENT CONSTRUCTION PREVIOUS PHASE
- MEDIAN CONSTRUCTION THIS PHASE
- MEDIAN CONSTRUCTION PREVIOUS PHASE
- EXISTING DIRECTION OF TRAFFIC / TRAVEL LANE USED
- PROPOSED DIRECTION OF TRAFFIC / TRAVEL LANE USED
- LOW PROFILE CONCRETE BARRIER (LPCB)
- TY III BARRICADE
- VERTICAL PANELS USED AS CHANNELIZING DEVICES DIRECTLY BETWEEN TRAVEL LANES AND WORK ZONE TO MAINTAIN 11' (10' MIN) TRAVEL LANES AT ALL TIMES. DRUMS USED IN OTHER AREAS.
- PORTABLE CHANGEABLE MESSAGE SIGN
- ARROW PANEL SUPPORT OR TRAILER

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
5-21-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
TRAFFIC CONTROL PLAN MISCELLANEOUS DETAILS

SCALE: NONE SHEET 1 OF 1

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	91
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

Barricade and Construction (BC) Standard Sheets General Notes:

1. The Barricade and Construction Standard Sheets (BC sheets) are intended to show typical examples for placement of temporary traffic control devices, construction pavement markings, and typical work zone signs. The information contained in these sheets meet or exceed the requirements shown in the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
2. The development and design of the Traffic Control Plan (TCP) is the responsibility of the Engineer.
3. The Contractor may propose changes to the TCP that are signed and sealed by a licensed professional engineer for approval. The Engineer may develop, sign and seal Contractor proposed changes.
4. The Contractor is responsible for installing and maintaining the traffic control devices as shown in the plans. The Contractor may not move or change the approximate location of any device without the approval of the Engineer.
5. Geometric design of lane shifts and detours should, when possible, meet the applicable design criteria contained in manuals such as the American Association of State Highway and Transportation Officials (AASHTO), "A Policy on Geometric Design of Highways and Streets", the TxDOT "Roadway Design Manual" or engineering judgment.
6. When projects abut, the Engineer(s) may omit the END ROAD WORK, TRAFFIC FINES DOUBLE, and other advance warning signs if the signing would be redundant and the work areas appear continuous to the motorists. If the adjacent project is completed first, the Contractor shall erect the necessary warning signs as shown on these sheets, the TCP sheets or as directed by the Engineer. The BEGIN ROAD WORK NEXT X MILES sign shall be revised to show appropriate work zone distance.
7. The Engineer may require duplicate warning signs on the median side of divided highways where median width will permit and traffic volumes justify the signing.
8. All signs shall be constructed in accordance with the details found in the "Standard Highway Sign Designs for Texas," latest edition. Sign details not shown in this manual shall be shown in the plans or the Engineer shall provide a detail to the Contractor before the sign is manufactured.
9. The temporary traffic control devices shown in the illustrations of the BC sheets are examples. As necessary, the Engineer will determine the most appropriate traffic control devices to be used.
10. As shown on BC(2), the OBEY WARNING SIGNS STATE LAW sign and the WORK ZONE TRAFFIC FINES DOUBLE sign with plaque shall be erected in advance of the CSJ limits. The BEGIN ROAD WORK NEXT X MILES, CONTRACTOR and END ROAD WORK signs shall be erected at or near the CSJ limits.
11. Except for devices required by Note 10, traffic control devices should be in place only while work is actually in progress or a definite need exists.
12. The Engineer has the final decision on the location of all traffic control devices.
13. Inactive equipment and work vehicles, including workers' private vehicles must be parked away from travel lanes. They should be as close to the right-of-way line as possible, or located behind a barrier or guardrail, or as approved by the Engineer.

Worker Safety Apparel Notes:

1. Workers on foot who are exposed to traffic or to construction equipment within the right-of-way shall wear high-visibility safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Apparel" labeled as ANSI 107-2004 standard performance for Class 2 or 3 risk exposure. Class 3 garments should be considered for high traffic volume work areas or night time work.

Only pre-qualified products shall be used. The "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes prequalified products and their sources and may be found on-line at the web address given below or by contacting:

Texas Department of Transportation
Traffic Operations Division - TE
Phone (512) 416-3134

WEB ADDRESSES FOR REFERENCED DOCUMENTS

Compliant Work Zone Traffic Control Devices List (CWZTCD)
http://www.txdot.gov/publications/traffic.htm

Texas Manual on Uniform Traffic Control Devices (TMUTCD)
http://www.txdot.gov/publications/traffic.htm

Standard Highway Sign Designs for Texas (SHSD)
http://www.txdot.gov/publications/traffic.htm

Traffic Engineering Standard Sheets
http://www.txdot.gov/business/disclaim.htm

Material Producer List
http://www.txdot.gov/business/producer*list.htm

Departmental Material Specifications (DMS)
http://www.txdot.gov/services/construction/material*specifications/

Roadway Design Manual
http://www.txdot.gov/services/general*services/manuals.htm

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS

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REVISIONS	STATE DISTRICT	FEDERAL REGION	PROJECT NUMBER			SHEET
4-03 9-07	DALLAS	6	(SEE TITLE SHEET)			92
	COUNTY		CONTROL	SECTION	JOB	HIGHWAY
	ROCKWALL		1014	03	039	FM 740

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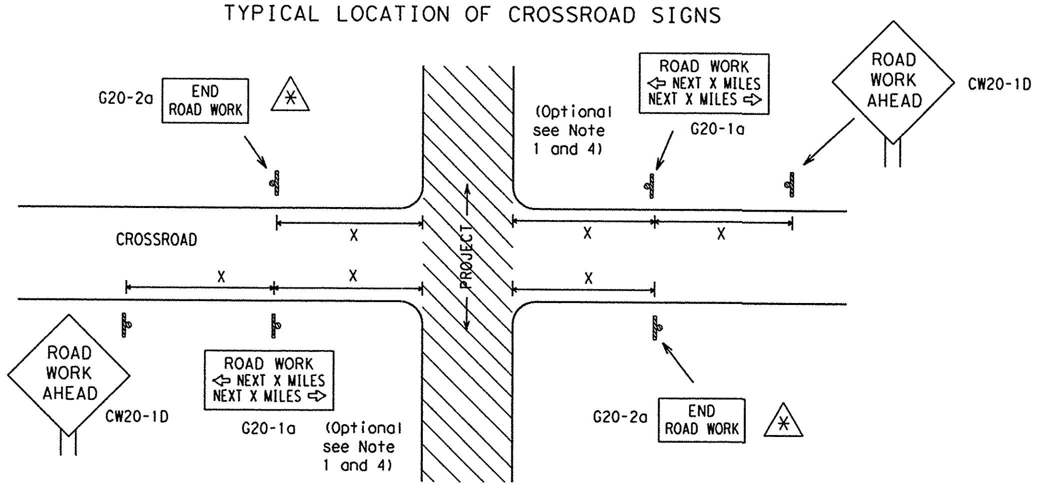
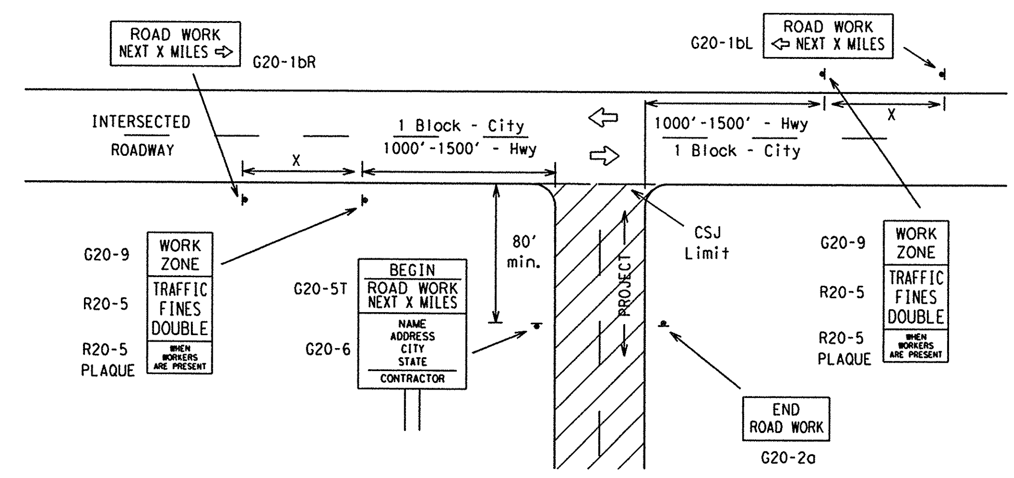
TYPICAL LOCATION OF CROSSROAD SIGNS



(*) May be mounted on back of CW20-1D sign with approval of engineer. (See note 2 below)

1. The typical minimum signing on a crossroad approach should be a CW20-1D ROAD WORK AHEAD sign and a G20-2a END ROAD WORK sign, unless noted otherwise in plans.
2. The Engineer may use the reduced size 36" x 36" ROAD WORK AHEAD (CW20-1D) sign mounted back to back with the reduced size 36" x 18" END ROAD WORK (G20-2a) sign on low volume crossroads (see Note 4 under "Typical Construction Warning Sign Size and Spacing"). See the "Standard Highway Sign Designs for Texas" manual for sign details. The Engineer may omit the advance warning signs on low volume crossroads. The Engineer will determine whether a road is low volume. This information shall be shown in the plans.
3. Based on existing field conditions, the Engineer/Inspector may require additional signs such as FLAGGER AHEAD, LOOSE GRAVEL, or other appropriate signs. When additional signs are required, these signs will be considered part of the minimum requirements. The Engineer/Inspector will determine the proper location and spacing of any sign not shown on the BC sheets, Traffic Control Plan sheets or the Work Zone Standard Sheets.
4. The G20-1a sign shall be required at high volume crossroads to advise motorists of the length of construction in either direction from the intersection. The Engineer will determine whether a roadway is considered high volume.
5. Additional traffic control devices may be shown elsewhere in the plans for higher volume crossroads.
6. When work occurs in the intersection area, appropriate traffic control devices, as shown elsewhere in the plans or as determined by the Engineer/Inspector, shall be in place.

T-INTERSECTION



CSJ LIMITS AT T-INTERSECTION

1. The Engineer will determine the types and location of any additional traffic control devices, such as a flagger and accompanying signs, or other signs, that should be used when work is being performed at or near an intersection.
2. If construction closes the road at a T-intersection the Contractor shall place the G20-6 "Contractor Name" sign behind the Type III Barricades for the road closure (see BC(10) also). The G20-1bL and G20-1bR signs shall be replaced by the detour signing called for in the plans.

TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING [1,5,6]

SIZE

Sign Number or Series	Conventional Road	Expressway/ Freeway
CW20 [4] CW21 CW22 CW23 CW25	48" x 48"	48" x 48"
CW1, CW2, CW7, CW8, CW9, CW11, CW14	36" x 36"	48" x 48"
CW3, CW4, CW5, CW6, CW8-3, CW10, CW12	48" x 48"	48" x 48"

SPACING

Posted Speed	Sign Δ Spacing "X"
MPH	Feet (Apprx.)
30	120
35	160
40	240
45	320
50	400
55	500 [2]
60	600 [2]
65	700 [2]
70	800 [2]
75	900 [2]
80	1000 [2]
*	* [3]

* For typical sign spacings on divided highways, expressways and freeways, see Part 6 of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) typical application diagrams or TCP Standard Sheets.

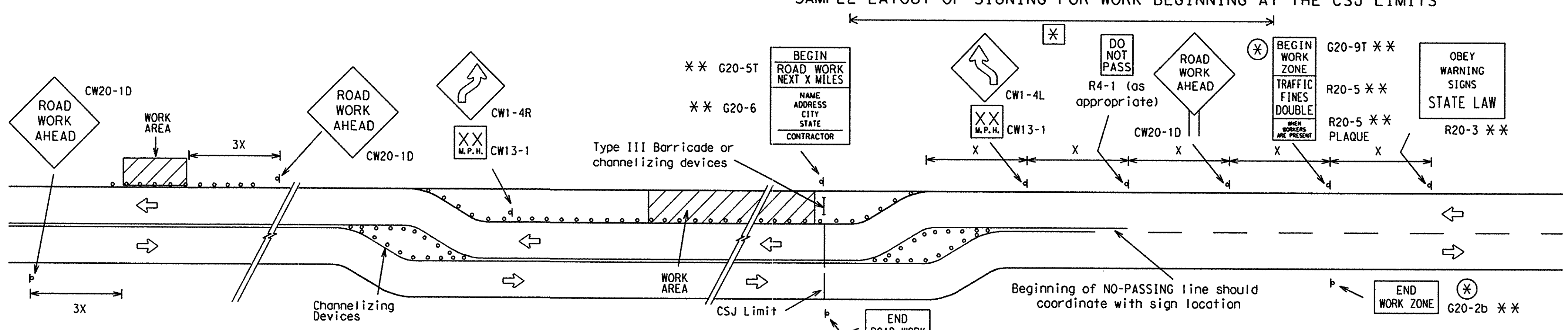
Δ Minimum distance from work area to first Advance Warning sign nearest the work area and/or distance between each additional sign.

General Notes:

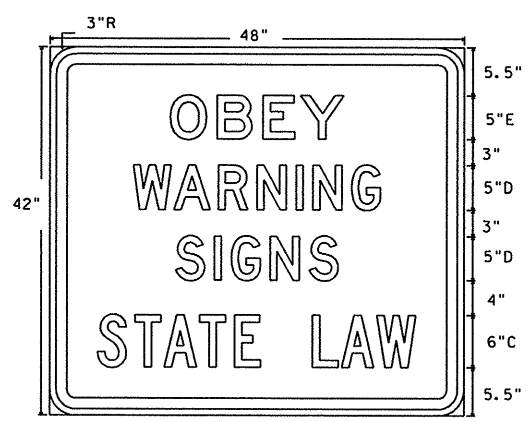
1. Special or larger size signs may be used as necessary.
2. Distance between signs should be increased as required to have 1500 feet advance warning.
3. Distance between signs should be increased as required to have ½ mile or more advance warning.
4. 36" x 36" ROAD WORK AHEAD (CW20-1D) signs may be used on low volume crossroads at the discretion of the Engineer. See Note 2 under "Typical Location of Crossroad Signs".
5. Only diamond shaped warning sign sizes are indicated.
6. See sign size listing in "TMUTCD", Sign Appendix or the "Standard Highway Sign Designs for Texas" manual for complete list of available sign design sizes.

WORK AREAS IN MULTIPLE LOCATIONS WITHIN CSJ LIMITS

SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING AT THE CSJ LIMITS

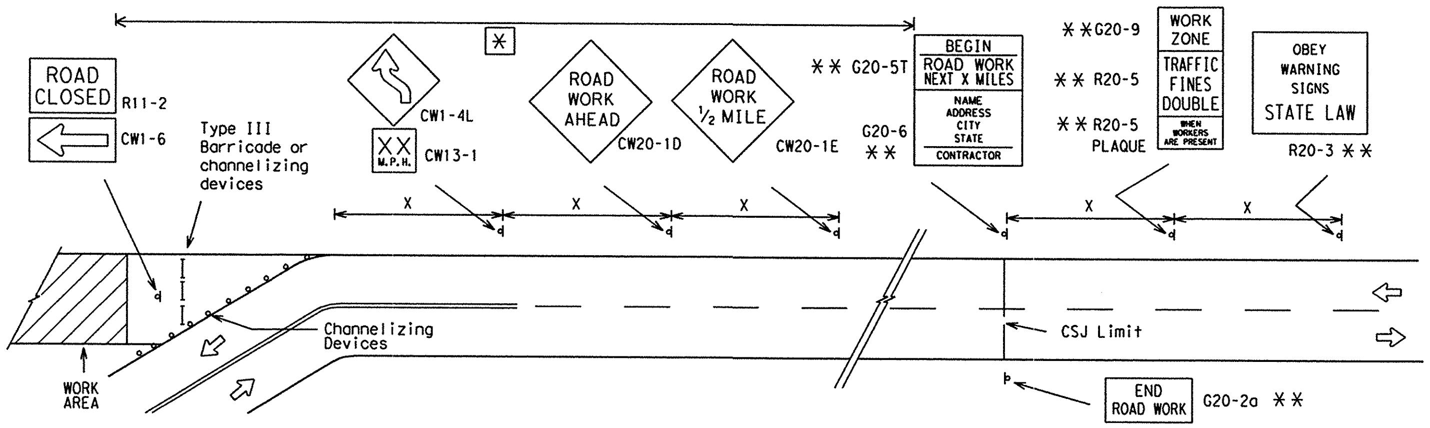


When extended distances occur between minimal work areas, the Engineer/Inspector should ensure additional Road Work Ahead (CW20-1D) signs are placed in advance of these work areas to remind drivers they are still within the project limits. See the applicable TCP sheets for exact location and spacing of signs and channelizing devices.



R20-3
Legend/Border - Black
Background - White

SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING DOWNSTREAM OF THE CSJ LIMITS



NOTES

The Contractor shall determine the appropriate distance to be placed on the G20-1 series signs and G20-5T sign for each specific project. This distance shall replace the "X" and shall be rounded to the nearest whole mile with the approval of the Engineer. No decimals shall be used.

(*) The G20-9T and G20-2b shall be used when advance signs are required outside the CSJ Limits. They inform the motorist of entering or leaving a work zone where traffic fines may double if workers are present.

** Required CSJ Limit signing. See Note 10 on BC(1).

[*] Area for placement of "ROAD WORK AHEAD" sign and other signs or devices as called for on the Traffic Control Plan.

LEGEND

- Sign
- O O Channelizing Devices
- Type III Barricade
- X See Typical Construction Warning Sign Size and Spacing chart or the TMUTCD for sign spacing requirements.

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

BARRICADE AND CONSTRUCTION PROJECT LIMIT STANDARD

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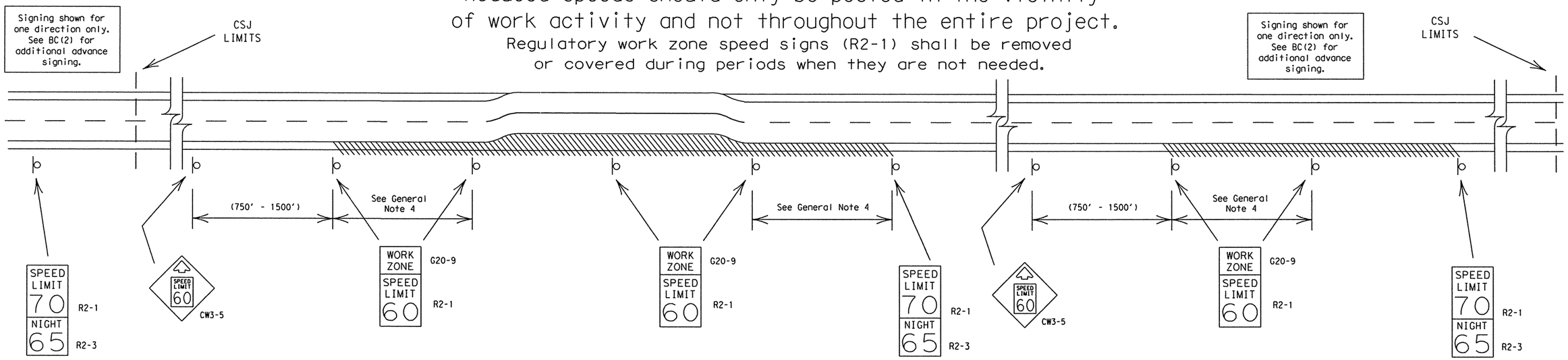
REVISIONS 9-07	STATE DISTRICT: DALLAS	FEDERAL REGION: 6	FEDERAL AID PROJECT: (SEE TITLE SHEET)	SHEET: 93
	COUNTY: ROCKWALL	CONTROL: 1014	SECTION: 03	JOB: 039	HIGHWAY: FM 740

TYPICAL APPLICATION OF WORK ZONE SPEED LIMIT SIGNS

Work zone speed limits shall be regulatory, established in accordance with the "Procedures for Establishing Speed Zones," and approved by the Texas Transportation Commission, or by City Ordinance when within Incorporated City Limits.

Reduced speeds should only be posted in the vicinity of work activity and not throughout the entire project.
Regulatory work zone speed signs (R2-1) shall be removed or covered during periods when they are not needed.



GUIDANCE FOR USE:

LONG/INTERMEDIATE TERM WORK ZONE SPEED LIMITS
This type of work zone speed limit should be included on the design of the traffic control plans when restricted geometrics with a lower design speed are present in the work zone and modification of the geometrics to a higher design speed is not feasible.

Long/Intermediate Term Work Zone Speed Limit signs, when approved as described above, should be posted and visible to the motorist when work activity is present. Work activity may also be defined as a change in the roadway that requires a reduced speed for motorists to safely negotiate the work area, including:

a) rough road or damaged pavement surface
b) substantial alteration of roadway geometrics (diversions)
c) construction detours
d) grade
e) width
f) other conditions readily apparent to the driver

As long as any of these conditions exist, the work zone speed limit signs should remain in place.

SHORT TERM WORK ZONE SPEED LIMITS
This type of work zone speed limit should be included on the design of the traffic control plans when workers or equipment are not behind concrete barrier, when work activity is within 15 feet of pavement edge or actually on the pavement.

Short Term Work Zone Speed Limit signs should be posted and visible to the motorists only when work activity is present. When work activity is not present, signs shall be removed or covered.
(See Removing or Covering on BC(4)).

GENERAL NOTES:

1. Regulatory work zone speed limits should be used only for sections of construction projects where speed control is of major importance.
2. Regulatory work zone speed limit signs shall be placed on supports at a 7 foot minimum mounting height.
3. Speed zone signs are illustrated for one direction of travel and are normally posted for each direction of travel.
4. Frequency of work zone speed limit signs should be:
   40 mph and greater 0.2 to 2 miles
   35 mph and less 0.2 to 1 mile
5. Regulatory speed limit signs shall have black legend and border on a white reflective background (See "Reflective Sheeting" on BC(4)).
6. Fabrication, errection and maintenance of the CW3-5 sign, G20-9 plaque and the R2-1 and R2-3 signs shall not be paid for directly, but shall be considered subsidiary to Item 502.
7. Turning signs from view, laying signs over or down will not be allowed, unless otherwise noted.
8. Techniques that may help reduce traffic speeds include but are not limited to:
   A. Law enforcement.
   B. Flagger stationed next to sign.
   C. Portable changeable message sign (PCMS).
   D. Low-power (drone) radar transmitter.
   E. Speed monitor trailers or signs.
9. Speeds shown on details above are for illustration only.
   Work Zone Speed Limits should only be posted as approved for each project.

# DISPLAYED	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
ACC:	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31
	2	6	10	14	18	22	26	30	34	38	42	46	50	54	58	62
	4	12	20	28	36	44	52	60	68	76	84	92	100	108	116	124
	8	24	40	56	72	88	104	120	136	152	168	184	200	216	232	248
	16	48	80	112	144	176	208	240	272	304	336	368	400	432	464	496
	32	96	160	224	288	352	416	480	544	608	672	736	800	864	928	992

STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION WORK ZONE SPEED LIMIT STANDARD

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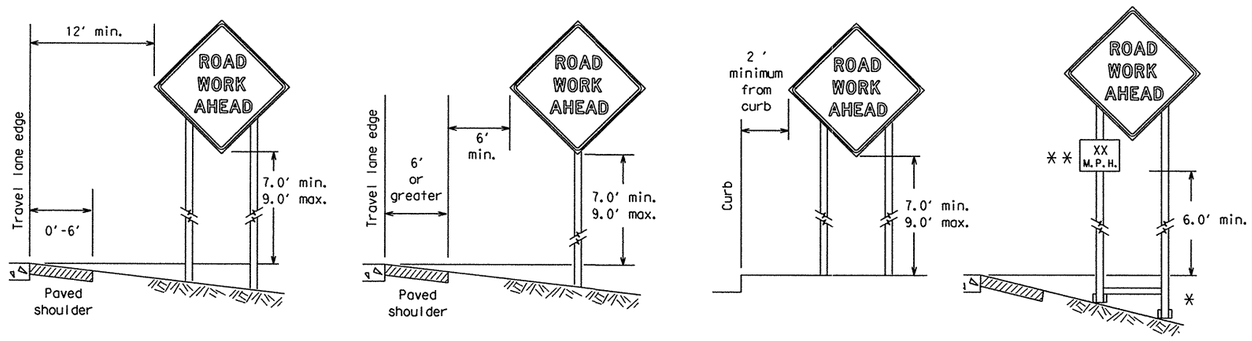
REVISIONS 9-07	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
	DALLAS	6	(SEE TITLE SHEET)	94

COUNTY	CONTROL	SECTION	JOB	HIGHWAY
ROCKWALL	1014	03	039	FM 740

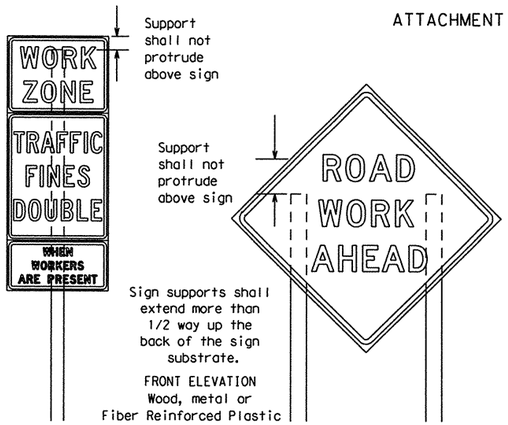
TYPICAL MINIMUM CLEARANCES FOR LONG TERM AND INTERMEDIATE TERM SIGNS

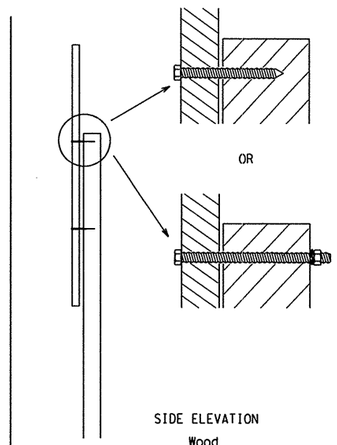


⁎ When placing skid supports on unlevel ground, the leg post lengths must be adjusted so the sign appears straight and plumb. Objects shall NOT be placed under skids as a means of leveling.

⁎⁎ When plaques are placed on dual-leg supports, they should be attached to the upright nearest the travel lane. Supplemental plaques (advisory or distance) should not cover the surface of the parent sign.

ATTACHMENT FOR SIGN SUPPORTS





Attachment to wooden supports will be by bolts and nuts or screws. Use TxDOT's or manufacturer's recommended procedures for attaching sign substrates to other types of sign supports

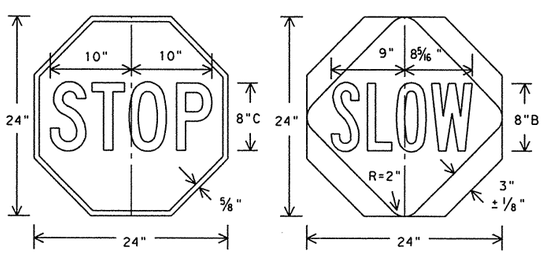
Nails will NOT be allowed.

Each sign shall be attached directly to the sign support. Multiple signs shall not be joined or spliced by any means. Wood supports shall not be extended or repaired by splicing or other means.

Splicing embedded perforated square metal tubing in order to extend post height will only be allowed when the splice is made using four bolts, two above and two below the spice point. Splice must be located entirely behind the sign substrate, not near the base of the support. Splice insert lengths should be at least 5 times nominal post size, centered on the splice and of at least the same guage material.

STOP/SLOW PADDLES

1. STOP/SLOW paddles are the primary method to control traffic by flaggers. The STOP/SLOW paddle size should be 24" x 24" as detailed below.
2. When used at night, the STOP/SLOW paddle shall be retroreflectorized.
3. STOP/SLOW paddles may be attached to a staff with a minimum length of 6' to the bottom of the sign.
4. Any lights incorporated into the STOP or SLOW paddle faces shall only be as specifically described in Section 6E.03 Hand Signaling Devices in the TMUTCD.



CONTRACTOR REQUIREMENTS FOR MAINTAINING PERMANENT SIGNS WITHIN THE PROJECT LIMITS

1. Permanent signs are used to give notice of traffic laws or regulations, call attention to conditions that are potentially hazardous to traffic operations, show route designations, destinations, directions, distances, services, points of interest, and other geographical, recreational, or cultural information. Drivers proceeding through a work zone need the same, if not better route guidance as normally installed on a roadway without construction.
2. When permanent regulatory or warning signs conflict with work zone conditions, remove or cover the permanent signs until the permanent sign message matches the roadway condition.
3. When existing permanent signs are moved and relocated due to construction purposes, they shall be visible to motorists at all times.
4. If existing signs are to be relocated on their original supports, they shall be installed on crashworthy bases as shown on the SMD Standard sheets. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards. This work should be paid for under the appropriate pay item for relocating existing signs.
5. If permanent signs are to be removed and relocated using temporary supports, the Contractor shall use crashworthy supports as shown on the BC sheets or the CWZTCD. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards during construction. This work should be paid for under the appropriate pay item for relocating existing signs.
6. Any sign or traffic control device that is struck or damaged by the Contractor or his/her construction equipment shall be replaced as soon as possible by the Contractor to ensure proper guidance for the motorists. This will be subsidiary to Item 502.

GENERAL NOTES FOR WORK ZONE SIGNS

1. Contractor shall install and maintain signs in a straight and plumb condition and/or as directed by the Engineer.
2. Wooden sign posts shall be painted white.
3. Barricades shall NOT be used as sign supports.
4. Nails shall NOT be used to attach signs to any support.
5. All signs shall be installed in accordance with the plans or as directed by the Engineer. Signs shall be used to regulate, warn, and guide the traveling public safely through the work zone.
6. The Contractor may furnish either the sign design shown in the plans or in the "Standard Highway Sign Designs for Texas" (SHSD). The Engineer/Inspector may require the Contractor to furnish other work zone signs that are shown in the TMUTCD but may have been omitted from the plans. Any variation in the plans shall be documented by written agreement between the Engineer and the Contractor's Responsible Person. All changes must be documented in writing before being implemented. This can include documenting the changes in the Inspector's TxDOT diary and having both the Inspector and Contractor initial and date the agreed upon changes.
7. The Contractor shall furnish sign supports listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD). The Contractor shall install the sign support in accordance with the manufacturer's recommendations. If there is a question regarding installation procedures, the Contractor shall furnish the Engineer a copy of the manufacturer's installation recommendations so the Engineer can verify the correct procedures are being followed.
8. The Contractor is responsible for installing signs on approved supports and replacing signs with damaged or cracked substrates and/or damaged or marred reflective sheeting as directed by the Engineer/Inspector.
9. Identification markings may be shown only on the back of the sign substrate. The maximum height of letters and/or company logos used for identification shall be 1 inch.
10. The Contractor shall replace damaged wood posts. New or damaged wood sign posts shall not be spliced.

DURATION OF WORK (as defined by the "Texas Manual on Uniform Traffic Control Devices" Part 6)

1. The types of sign supports, sign mounting height, the size of signs, and the type of sign substrates can vary based on the type of work being performed. The Engineer is responsible for selecting the appropriate size sign for the type of work being performed. The Contractor is responsible for ensuring the sign support, sign mounting height and substrate meets manufacturer's recommendations in regard to crashworthiness and duration of work requirements.
   a. Long-term stationary - work that occupies a location more than 3 days.
   b. Intermediate-term stationary - work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than one hour.
   c. Short-term stationary - daytime work that occupies a location for more than 1 hour in a single daylight period.
   d. Short, duration - work that occupies a location up to 1 hour.
   e. Mobile - work that moves continuously or intermittently (stopping for up to approximately 15 minutes.)

SIGN MOUNTING HEIGHT

1. The bottom of Long-term/Intermediate-term signs shall be at least 7 feet, but not more than 9 feet, above the paved surface, except as shown for supplemental plaques mounted below other signs.
2. The bottom of Short-term/Short Duration signs shall be a minimum of 1 foot above the pavement surface but no more than 2 feet above the ground.
3. Long-term/Intermediate-term Signs may be used in lieu of Short-term/Short Duration signing.
4. Short-term/Short Duration signs shall be used only during daylight and shall be removed at the end of the workday. or raised to appropriate Long-term/Intermediate sign height.
5. Regulatory signs shall be mounted at least 7 feet, but not more than 9 feet, above the paved surface regardless of work duration.

SIZE OF SIGNS

1. The Engineer may allow the use of smaller size construction warning signs on secondary roads or city streets where speeds are low if the sign size is listed as an option on the "Typical Construction Warning Sign Size and Spacing" chart shown on BC(2).
2. The Contractor shall furnish the sign sizes shown in plans, the BC Sheets, the TCP sheets or as directed by the Engineer.

SIGN SUBSTRATES

1. The Contractor shall ensure the sign substrate is installed in accordance with the manufacturer's recommendations for the type of sign support that is being used. The CWZTCD lists each substrate that can be used on the different types and models of sign supports.
2. "Mesh" type materials are NOT an approved sign substrate, regardless of the tightness of the weave.
3. All wooden individual sign panels fabricated from 2 or more pieces shall have one or more plywood cleat, 1/2" thick by 6" wide, fastened to the back of the sign and extending fully across the sign. The cleat shall be attached to the back of the sign using wood screws that do not penetrate the face of the sign panel. The screws shall be placed on both sides of the splice and spaced at 6" centers. The Engineer may approve other methods of splicing the sign face.

REFLECTIVE SHEETING

1. All signs shall be retroreflective and constructed of sheeting meeting the color and retro-reflectivity requirements of DMS-8300 for rigid signs or DMS-8310 for roll-up signs. The web address for DMS specifications is shown on BC(1).
2. White sheeting, meeting the requirements of DMS-8300 Type C (High Specific Intensity), shall be used for signs with a white background.
3. Orange sheeting, meeting the requirements of DMS-8300 Type E (Fluorescent Prismatic), shall be used for rigid signs with orange backgrounds.

SIGN LETTERS

1. All sign letters and numbers shall be clear, and open rounded type uppercase alphabet letters as approved by the Federal Highway Administration (FHWA) and as published in the "Standard Highway Sign Design for Texas" manual. Signs, letters and numbers shall be of first class workmanship in accordance with Department Standards and Specifications.

REMOVING OR COVERING

1. When sign messages may be confusing or do not apply, the signs shall be removed or completely covered.
2. Long-term stationary or intermediate stationary signs installed on square metal tubing may be turned away from traffic 90 degrees when the sign message is not applicable. This type of sign support meets the crashworthiness standards regardless of the direction of impact. This technique may not be used for signs installed in the median of divided highways or near any intersections where the sign may be seen from approaching traffic.
3. Signs installed on wooden skids shall not be turned at 90 degree angles to the roadway. These signs should be removed or completely covered when not required.
4. When signs are covered, the material used shall be opaque, such as heavy mil black plastic, or other materials which will cover the entire sign face and maintain their opaque properties under automobile headlights at night, without damaging the sign sheeting.
5. Burlap shall NOT be used to cover signs.
6. Duct tape or other adhesive material shall NOT be affixed to a sign face. These materials can damage the retroreflectivity of sheeting.
7. Signs and anchor stubs shall be removed and holes backfilled upon completion of work.

SIGN SUPPORT WEIGHTS

1. Where sign supports require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand is recommended.
2. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight.
3. Rock, concrete, iron, steel or other solid objects shall not be permitted for use as sign support weights.
4. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs.
5. Sandbags shall be made of a durable material that tears upon vehicular impact.
6. Rubber (such as tire inner tubes) shall NOT be used for sandbags.
7. Rubber ballasts designed for channelizing devices should not be used for ballast on portable sign supports. Sign supports designed and manufactured with rubber bases may be used when shown on the CWZTCD list.
8. Sandbags shall only be placed along or laid over the base supports of the traffic control device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners. Sandbags shall be placed along the length of the skids to weigh down the sign support.
9. Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION TEMPORARY SIGN NOTES STANDARD

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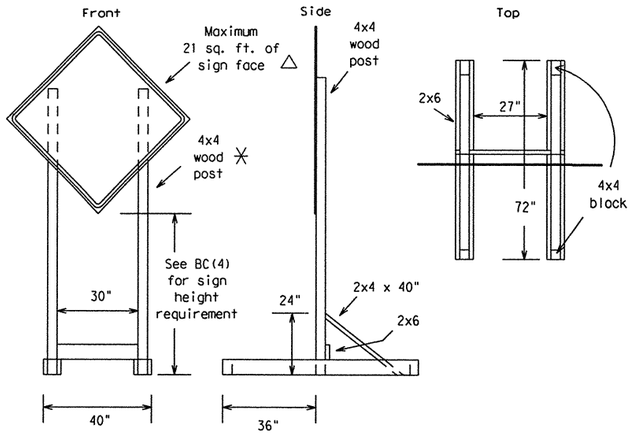
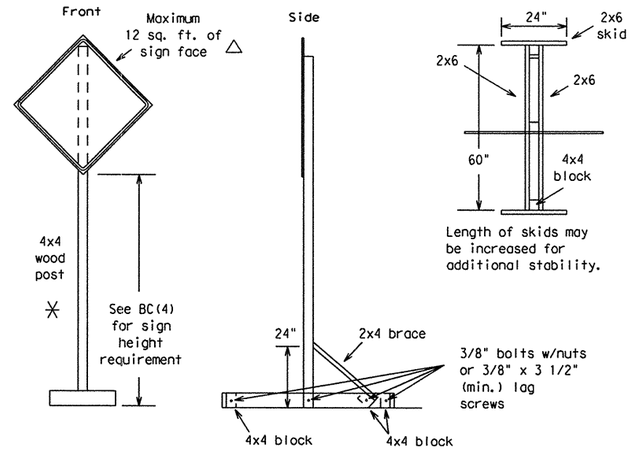
© TxDOT 11-4-02			DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
REVISIONS 9-07	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT			SHEET
	DALLAS	6	(SEE TITLE SHEET)			95
	COUNTY		CONTROL	SECTION	JOB	HIGHWAY
	ROCKWALL		1014	03	039	FM 740

ACC:
DISPLAYED
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

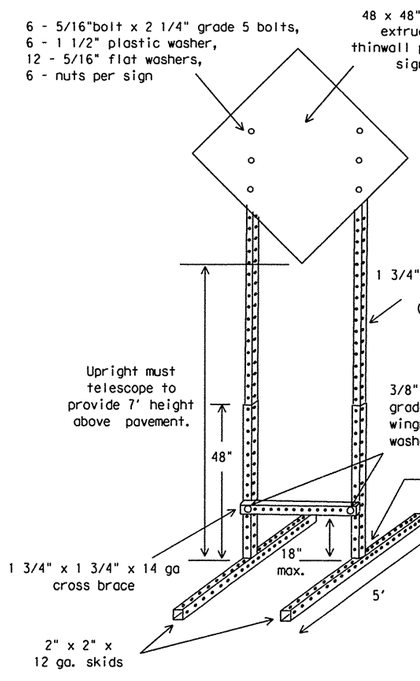
SKID MOUNTED WOOD SIGN SUPPORTS

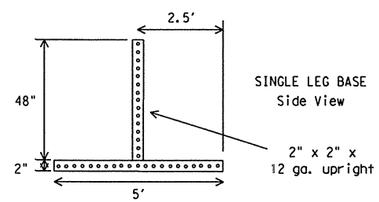
LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS □

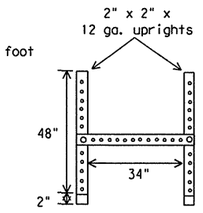


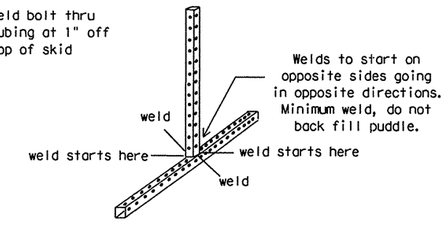


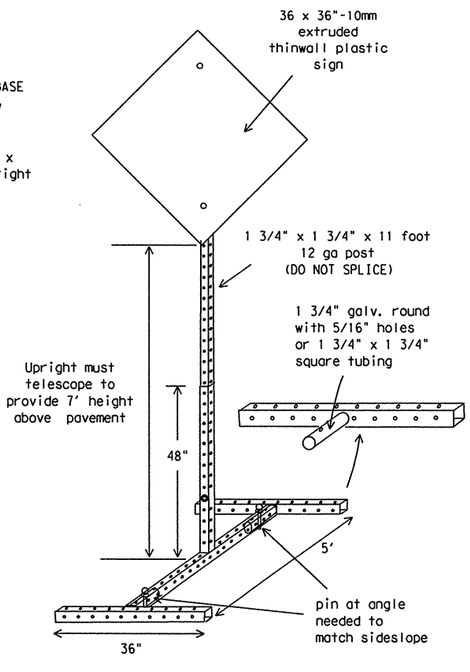
SKID MOUNTED PERFORATED SQUARE STEEL TUBING SIGN SUPPORTS





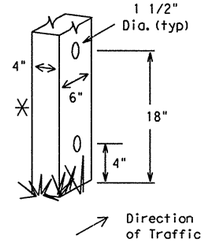






WEDGE ANCHORS

Both steel and plastic Wedge Anchor Systems as shown on the SMD Standard Sheets may be used as temporary sign supports for signs up to 10 square feet of sign face. They may be set in concrete or in sturdy soils if approved by the Engineer. (See web address for "Traffic Engineering Standard Sheets" on BC(1)).



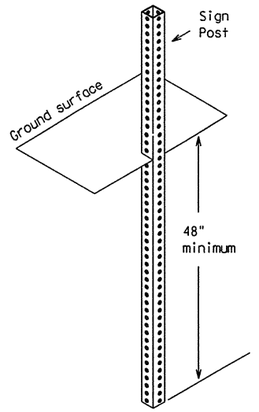
WOOD POST SYSTEM FOR GROUND MOUNTED SIGN SUPPORTS

Nominal Post Size	No. of Posts	Maximum Sq. feet of Sign Face	Minimum Soil Embedment	Drilled Hole(s) Required
4 x 4	1	12	36"	NO
4 x 4	2	21	36"	NO
4 x 6	1	21	36"	YES
4 x 6	2	36	36"	YES

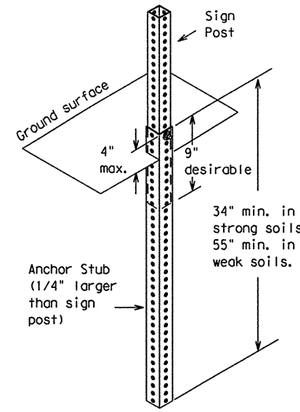
GROUND MOUNTED SIGN SUPPORTS

Refer to the CWZTCD and the manufacturer's installation procedure for each type sign support. The maximum sign square footage shall adhere to the manufacturer's recommendation. Two post installations can be used for larger signs.

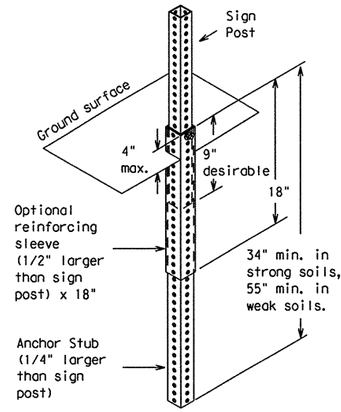
PERFORATED SQUARE METAL TUBING



OPTION 1
(Direct Embedment)



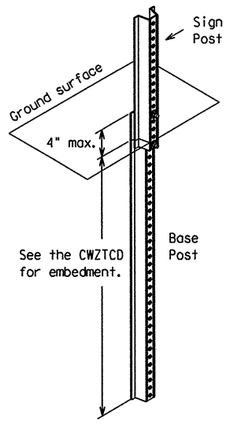
OPTION 2
(Anchor Stub)



OPTION 3
(Anchor Stub and Reinforcing Sleeve)

WING CHANNEL

Lap-splice/base bolted anchor



GENERAL NOTES

1. Nails may be used in the assembly of wooden sign supports, but 3/8" bolts with nuts or 3/8" x 3 1/2" lag screws must be used on every joint for final connection.
2. More details of approved Long/Intermediate and Short Term supports can be found on the CWZTCD list. See BC(1) for website location.
3. No more than 2 sign posts shall be placed within a 7 ft. circle, except for specific materials noted on the CWZTCD List.
4. When project is completed, all sign supports and foundations shall be removed from the project site. This will be considered subsidiary to Item 502.

□ See BC(4) for definition of "Work Duration."

✳ Wood sign posts MUST be one piece. Splicing will NOT be allowed. Posts shall be painted white.

△ See the CWZTCD for the type of sign substrate that can be used for each approved sign support.

STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT STANDARD

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© TxDOT 11-4-02		DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
REVISIONS 9-07	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT		SHEET
	DALLAS	6	(SEE TITLE SHEET)		96
COUNTY		CONTROL	SECTION	JOB	HIGHWAY
ROCKWALL		1014	03	039	FM 740

ACC:																
DISPLAYED	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	

PORTABLE CHANGEABLE MESSAGE SIGNS

1. The Engineer/Inspector shall approve all messages used on portable changeable message signs (PCMS).
2. Messages on PCMS should contain no more than 8 words (about four to eight characters per word), not including simple words such as "TO," "FOR," "AT," etc.
3. Messages should consist of a single phase, or two phases that alternate. Three-phase messages are not allowed. Each phase of the message should convey a single thought, and must be understood by itself.
4. Use the word "EXIT" to refer to an exit ramp on a freeway; i.e., "EXIT CLOSED." Do not use the term "RAMP."
5. Always use the route or interstate designation (IH, US, SH, FM) along with the number when referring to a roadway.
6. When in use the bottom of a stationary PCMS message panel should be a minimum 7 feet above the roadway, where possible.
7. The message term "WEEKEND" should be used only if the work is to start on Saturday morning and end by Sunday evening at midnight. Actual days and hours of work should be displayed on the PCMS if work is to begin on Friday evening and/or continue into Monday morning.
8. The Engineer/Inspector may select one of two options which are available for displaying a two-phase message on a PCMS. Each phase may be displayed for either four seconds each or for three seconds each.
9. Do not "flash" messages or words included in a message. The message should be steady burn or continuous while displayed.
10. Do not present redundant information on a two-phase message; i.e., keeping two lines of the message the same and changing the third line.
11. Do not use the word "Danger" in message.
12. Do not display the message "LANES SHIFT LEFT" or "LANES SHIFT RIGHT" on a PCMS. Drivers do not understand the message.
13. Do not display messages that scroll horizontally or vertically across the face of the sign.
14. The following table lists abbreviated words and two-word phrases that are acceptable for use on a PCMS. Both words in a phrase must be displayed together. Words or phrases not on this list should not be abbreviated.
15. PCMS character height should be at least 18 inches for trailer mounted units. They should be visible from at least 1/2 (.5) mile and the text should be legible from at least 720 feet. Truck mounted units must have a character height of 10 inches and must be legible from at least 400 feet.
16. Each line of text should be centered on the message board rather than left or right justified.
17. If disabled, the PCMS should default to an illegible display that will not alarm motorists and will only be used to alert workers that the PCMS has malfunctioned. A pattern such as a series of horizontal solid bars is appropriate.

Word or Phrase	Abb.	Word or Phrase	Abb.
Access Road	ACCS RD	Major	MAJ
Air Quality	AIR QLTY	Miles	MI
Alternate	ALT	Miles Per Hour	MPH
Avenue	AVE	Minor	MNR
Best Route	BEST RTE	Monday	MON
Boulevard	BLVD	Normal	NORM
Bridge	BRDG	North	N
Cannot	CANT	Northbound	(route) N
Center	CNTR	Parking	PKING
Construction Ahead	CONST AHEAD	Parking Lot	PRK LOT
Detour Route	DETOUR RTE	Road	RD
Do Not	DONT	Right Lane	RGT LN
East	E	Saturday	SAT
Eastbound	(route) E	Service Road	SERV RD
Emergency	EMER	Shoulder	SHLDR
Emergency Vehicle	EMER VEH	Slippery	SLIP
Entrance, Enter	ENT	South	S
Express Lanes	EXP LANE	Southbound	(route) S
Expressway	EXPWY	Speed	SPD
XXXX Feet	XXXX FT	Street	ST
Fog Ahead	FOG AHD	Sunday	SUN
Freeway	FRWY, FWY	Telephone	PHONE
Freeway Blocked	FWY BLKD	Temporary	TEMP
Friday	FRI	Thursday	THURS
Hazardous Driving	HAZ DRIVING	To Downtown	TO DWNTN
Hazardous Material	HAZMAT	Traffic	TRAF
High-Occupancy Vehicle	HOV	Travelers	TRVLRS
Highway	HWY	Tuesday	TUES
Hours	HR	Time Minutes	TIME MIN
Information	INFO	Upper Level	UPPR LVL
It Is	ITS	Vehicle	VEH
Junction	JCT	Warning	WARN
Left	LFT	Wednesday	WED
Left Lane	LFT LN	Weight Limit	WT LIMIT
Lane Closed	LN CLSD	West	W
Lower Level	LOWR LVL	Westbound	(route) W
Maintenance	MAINT	Will Not	WONT
		Roadway designation #	IH-number, US-number, SH-number, FM-number

WHEN NOT IN USE, REMOVE THE PCMS FROM THE RIGHT-OF-WAY OR PLACE THE PCMS BEHIND BARRIER OR GUARDRAIL WITH SIGN PANEL TURNED PARALLEL TO TRAFFIC

RECOMMENDED PHASES AND FORMATS FOR PCMS MESSAGES DURING ROADWORK ACTIVITIES

(The Engineer may approve other messages not specifically covered here.)

Phase 1: Condition Lists

Road/Lane/Ramp Closure List

FREEWAY CLOSED X MILE	FRONTAGE ROAD CLOSED
ROAD CLOSED AT SH XXX	SHOULDER CLOSED XXX FT
ROAD CLSD AT FM XXXX	RIGHT LN CLOSED XXX FT
RIGHT X LANES CLOSED	RIGHT X LANES OPEN
CENTER LANE CLOSED	DAYTIME LANE CLOSURES
NIGHT LANE CLOSURES	I-XX SOUTH EXIT CLOSED
VARIOUS LANES CLOSED	EXIT XXX CLOSED X MILE
EXIT CLOSED	RIGHT LN TO BE CLOSED
MALL DRIVEWAY CLOSED	X LANES CLOSED TUE - FRI
XXXXXXXX BLVD CLOSED	

Other Condition List

ROADWORK XXX FT	ROAD REPAIRS XXXX FT
FLAGGER XXXX FT	LANE NARROWS XXXX FT
RIGHT LN NARROWS XXXX FT	TWO-WAY TRAFFIC XX MILE
MERGING TRAFFIC XXXX FT	CONST TRAFFIC XXX FT
LOOSE GRAVEL XXXX FT	UNEVEN LANES XXXX FT
DETOUR X MILE	ROUGH ROAD XXXX FT
ROADWORK PAST SH XXXX	ROADWORK NEXT FRI-SUN
BUMP XXXX FT	US XXX EXIT X MILES
TRAFFIC SIGNAL XXXX FT	LANES SHIFT *

* LANES SHIFT in Phase 1 must be used with STAY IN LANE in Phase 2.

Phase 2: Possible Component Lists

Action to Take/Effect on Travel List

MERGE RIGHT	FORM X LINES RIGHT
DETOUR NEXT X EXITS	USE XXXXX RD EXIT
USE EXIT XXX	USE EXIT I-XX NORTH
STAY ON US XXX SOUTH	USE I-XX E TO I-XX N
TRUCKS USE US XXX N	WATCH FOR TRUCKS
WATCH FOR TRUCKS	EXPECT DELAYS
EXPECT DELAYS	PREPARE TO STOP
REDUCE SPEED XXX FT	END SHOULDER USE
USE OTHER ROUTES	WATCH FOR WORKERS
STAY IN LANE *	

Location List

AT FM XXXX
BEFORE RAILROAD CROSSING
NEXT X MILES
PAST US XXX EXIT
XXXXXXX TO XXXXXXX
US XXX TO FM XXXX

Warning List

SPEED LIMIT XX MPH
MAXIMUM SPEED XX MPH
MINIMUM SPEED XX MPH
ADVISORY SPEED XX MPH
RIGHT LANE EXIT
USE CAUTION
DRIVE SAFELY
DRIVE WITH CARE

** Advance Notice List

TUE-FRI XX AM- X PM
APR XX-XX X PM-X AM
BEGINS MONDAY
BEGINS MAY XX
MAY X-X XX PM - XX AM
NEXT FRI-SUN
XX AM TO XX PM
NEXT TUE AUG XX
TONIGHT XX PM- XX AM

* LANES SHIFT in Phase 1 must be used with STAY IN LANE in Phase 2.

** See Application Guidelines Note 6.

Application Guidelines

1. Only 1 or 2 phases are to be used on a PCMS.
2. The 1st phase (or both) should be selected from the "Road/Lane/Ramp Closure List" and the "Other Condition List".
3. A 2nd phase can be selected from the "Action to Take/Effect on Travel, Location, General Warning, or Advance Notice Phase Lists".
4. A Location Phase is necessary only if a distance or location is not included in the first phase selected.
5. If two PCMS are used in sequence, they must be separated by a minimum of 1000 ft. Each PCMS shall be limted to two phases, and should be understandable by themselves.
6. For advance notice, when the current date is within seven days of the actual work date, calendar days should be replaced with days of the week. Advance notification should typically be for no more than one week prior to the work

Wording Alternatives

1. The words RIGHT, LEFT and ALL can be interchanged as appropriate.
2. Roadway designations IH, US, SH, FM and LP can be interchanged as appropriate.
3. EAST, WEST, NORTH and SOUTH (or abbreviations E, W, N and S) can be interchanged as appropriate.
4. Highway names and numbers replaced as appropriate.
5. ROAD, HIGHWAY and FREEWAY can be interchanged as needed.
6. AHEAD may be used instead of distances if necessary.
7. FT and MI, MILE and MILES interchanged as appropriate.
8. AT, BEFORE and PAST interchanged as needed.
9. Distances or AHEAD can be eliminated from the message if a location phase is used.

PCMS SIGNS WITHIN THE R.O.W. SHALL BE BEHIND GUARDRAIL OR CONCRETE BARRIER OR SHALL HAVE A MINIMUM OF FOUR (4) PLASTIC DRUMS PLACED PERPENDICULAR TO TRAFFIC ON THE UPSTREAM SIDE OF THE PCMS.

FULL MATRIX PCMS SIGNS

1. When Full Matrix PCMS signs are used, the character height and legibility/visibility requirements shall be maintained as listed in Note 15 under "PORTABLE CHANGEABLE MESSAGE SIGNS" above.
2. When symbol signs, such as the CW20-7a Flagger Symbol, are represented graphically on the Full Matrix PCMS sign and, with the approval of the Engineer, it shall maintain the legibility/visibility requirement listed above.
3. When symbol signs are represented graphically on the Full Matrix PCMS, they shall only supplement the use of the static sign represented, and shall not substitute for, or replace that sign.
4. A full matrix PCMS may be used to simulate a flashing arrow panel provided it meets the visibility, flash rate and dimming requirements on BC(7), for the same size arrow.

STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) STANDARD

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DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT

REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
9-07	DALLAS	6	(SEE TITLE SHEET)	97

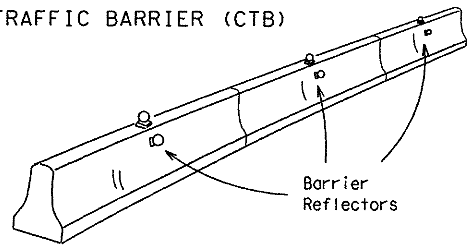
COUNTY	CONTROL	SECTION	JOB	HIGHWAY
ROCKWALL	1014	03	039	FM 740

ACC:
USPLAYED
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

BARRIER REFLECTORS FOR CONCRETE TRAFFIC BARRIER AND ATTENUATORS

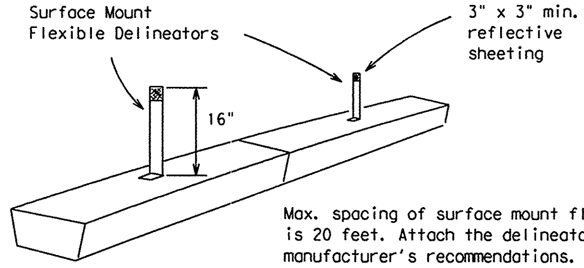
1. Barrier Reflectors shall be prequalified, and conform to the color and reflectivity requirements of DMS-8600. A list of prequalified Barrier Reflectors (Type C Delineators) can be found at the Material Producer List web address shown on BC(1).
2. Color of Barrier Reflectors shall be as specified in the TMUTCD. The cost of the reflectors shall be considered subsidiary to Item 502.

CONCRETE TRAFFIC BARRIER (CTB)



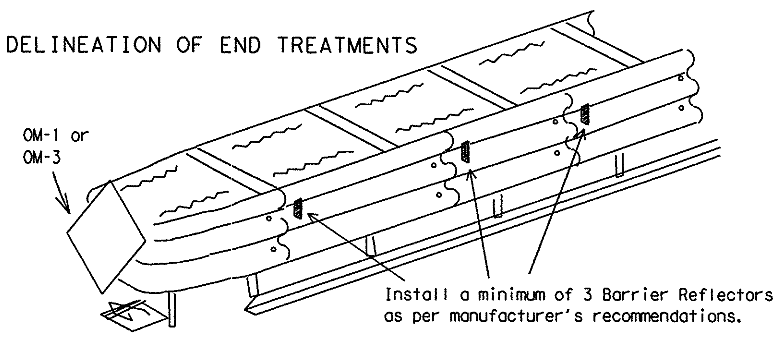
3. Where traffic is on one side of the CTB, two (2) Barrier Reflectors shall be mounted in approximately the midsection of each section of CTB. An alternate mounting location is uniformly spaced at one end of each CTB. This will allow for attachment of a barrier grapple without damaging the reflector. The Barrier Reflector mounted on the side of the CTB shall be located directly below the reflector mounted on top of the barrier, as shown in the detail above.
4. Where CTB separates two-way traffic, three barrier reflectors shall be mounted on each section of CTB. The reflector unit on top shall have two yellow reflective faces (Bi-Directional)while the reflectors on each side of the barrier shall have one yellow reflective face, as shown in the detail above.
5. When CTB separates traffic traveling in the same direction, no barrier reflectors will be required on top of the CTB.
6. Barrier Reflector units shall be yellow or white in color to match the edgeline being supplemented. Yellow Barrier Reflectors shall be made with Type E Fluorescent Prismatic Yellow Retroreflective Sheeting. White reflectors shall be made with Type D White Prismatic sheeting.
7. Maximum spacing of Barrier Reflectors is forty (40) feet.
8. Pavement markers or temporary flexible-reflective roadway marker tabs shall NOT be used as CTB delineation.
9. Attachment of Barrier Reflectors to CTB shall be per manufacturer's recommendations.
10. Missing or damaged Barrier Reflectors shall be replaced as directed by the Engineer.
11. Single slope barriers shall be delineated as shown on the above detail.

LOW PROFILE CONCRETE BARRIER (LPCB)



Max. spacing of surface mount flexible delineators is 20 feet. Attach the delineators as per manufacturer's recommendations.

DELINEATION OF END TREATMENTS



	APPROACHING TRAFFIC	
	BOTH SIDES	ONE SIDE
DELINEATION	OM-1	OM-3 or Vertical Panel

END TREATMENTS FOR CTB'S USED IN WORK ZONES

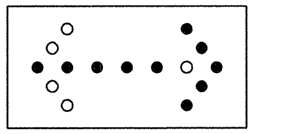
End treatments used on CTB's in work zones shall meet crashworthy standards as defined in the National Cooperative Highway Research Report 350. Refer to the CWZTCD List for approved end treatments and manufacturers.

TYPICAL FLASHING ARROW PANEL

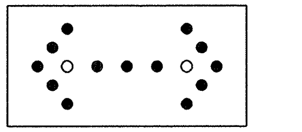
Arrow Panels may be located behind channelizing devices in place for a shoulder taper or merging taper, otherwise they shall be delineated with four (4) channelizing devices placed perpendicular to traffic on the upstream side of traffic.

1. The Flashing Arrow Panel should be used for all lane closures on multi-lane roadways, or slow moving maintenance or construction activities on the travel lanes.
2. Flashing Arrow Panels should not be used on two-lane, two-way roadways, detours, diversions or work on shoulders unless the "CAUTION" display (see detail below) is used.
3. The Engineer/Inspector shall choose all appropriate signs, barricades and/or other traffic control devices that should be used in conjunction with the Flashing Arrow Panel.
4. The Flashing Arrow Panel should be able to display the following symbols:

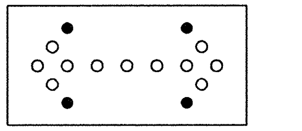
Flashing RIGHT (LEFT) ARROW

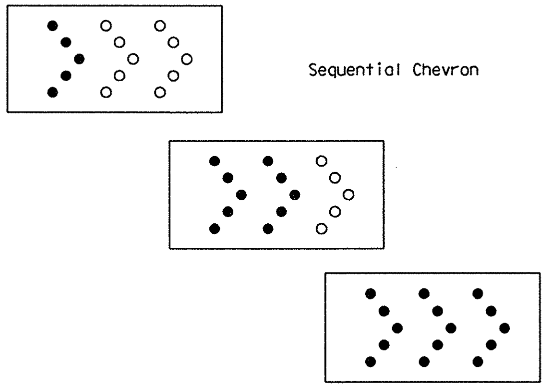


Flashing DOUBLE ARROW



Flashing CAUTION





Sequential Chevron

5. The "CAUTION" display consists of four corner lamps flashing simultaneously.
6. The straight line caution display is NOT ALLOWED.
7. The Flashing Arrow Panel shall be capable of minimum 50 percent dimming from rated lamp voltage. The flashing rate of the lamps shall not be less than 25 nor more than 40 flashes per minute.
8. Minimum lamp "on time" shall be approximately 50 percent for the flashing arrow and equal intervals of 25 percent for each sequential phase of the flashing chevron.
9. The sequential arrow display is NOT ALLOWED.
10. The flashing arrow display is the TxDOT standard; however, the sequential Chevron display may be used during daylight operations.

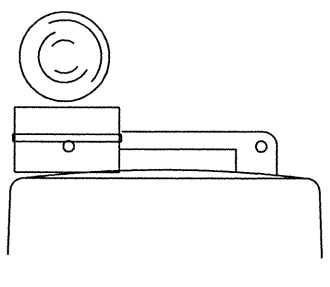
REQUIREMENTS

TYPE	MINIMUM SIZE	MINIMUM NUMBER OF PANEL LAMPS	MINIMUM VISIBILITY DISTANCE
B	30 x 60	13	3/4 mile
C	48 x 96	15	1 mile

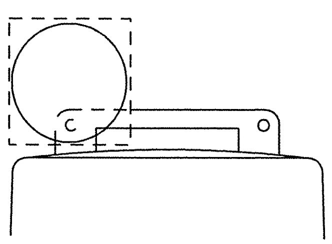
ATTENTION: Flashing Arrow Panels shall be equipped with automatic dimming devices.

WHEN NOT IN USE, REMOVE THE ARROW PANEL FROM THE RIGHT-OF-WAY OR PLACE THE ARROW PANEL BEHIND CONCRETE TRAFFIC BARRIER OR GUARDRAIL.

11. The Flashing Arrow Panel shall be mounted on a vehicle, trailer or other suitable support.
12. A Flashing Arrow Panel SHALL NOT BE USED to laterally shift traffic.
13. A full matrix PCMS may be used to simulate a Flashing Arrow Panel provided it meets visibility, flash rate and dimming requirements on this sheet for the same size arrow.
14. Minimum mounting height of trailer mounted arrow panels should be 7 feet from roadway to bottom of panel.



Type C Warning Light or approved substitute mounted adjacent to the travel way.



Warning reflector may be round or square.Must have a reflective surface area of at least 30 square inches

WARNING LIGHTS

1. Warning lights shall meet the requirements of the TMUTCD.
2. Warning lights shall NOT be installed on barricades.
3. Type A-Low Intensity Flashing Warning Lights are commonly used with drums. They are intended to warn of or mark a potentially hazardous area. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "FL". The Type A Warning Lights shall not be used with signs manufactured with Type E Sheeting (Fluorescent Prismatic) meeting the requirements of Departmental Material Specification DMS-8300.
4. Type-C and Type D 360 degree Steady Burn Lights are intended to be used in a series for delineation to supplement other traffic control devices. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "SB".
5. The Engineer/Inspector or the plans shall specify the location and type of warning lights to be installed on the traffic control devices.
6. When required by the Engineer, the Contractor shall furnish a copy of the warning lights certification. The warning light manufacturer will certify the warning lights meet the requirements of the latest ITE Purchase Specifications for Flashing and Steady-Burn Warning Lights.
7. When used to delineate curves, Type-C and Type D Steady Burn Lights should only be placed on the outside of the curve, not the inside.

WARNING LIGHTS MOUNTED ON PLASTIC DRUMS

1. Type A flashing warning lights are intended to warn drivers that they are approaching or are in a potentially hazardous area.
2. Type A random flashing warning lights are not intended for delineation and shall not be used in a series.
3. A series of sequential flashing warning lights placed on channelizing devices to form a merging taper may be used for delineation. If used, the successive flashing of the sequential warning lights should occur from the beginning of the taper to the end of the merging taper in order to identify the desired vehicle path. The rate of flashing for each light shall be 65 flashes per minute, plus or minus 10 flashes.
4. Type C and D steady-burn warning lights are intended to be used in a series to delineate the edge of the travel lane on detours, on lane changes, on lane closures, and on other similar conditions.
5. Type A, Type C and Type D warning lights shall be installed at locations as detailed on other sheets in the plans.
6. Warning lights shall not be installed on a drum that has a sign, chevron or vertical panel.
7. The maximum spacing for warning lights on drums should be identical to the channelizing device spacing.

WARNING REFLECTORS MOUNTED ON PLASTIC DRUMS AS A SUBSTITUTE FOR TYPE C (STEADY BURN) WARNING LIGHTS

1. A warning reflector or approved substitute may be mounted on a plastic drum as a substitute for a Type C, steady burn warning light at the discretion of the Contractor unless otherwise noted in the plans.
2. The warning reflector shall be yellow in color and shall be manufactured using a sign substrate approved for use with plastic drums listed on the CWZTCD.
3. The warning reflector shall have a minimum retroreflective surface area (one-side) of 30 square inches.
4. Round reflectors shall be fully reflectorized, including the area where attached to the drum.
5. Square substrates must have a minimum of 30 square inches of reflectorized sheeting. They do not have to be reflectorized where it attaches to the drum.
6. The side of the warning reflector facing approaching traffic shall have sheeting meeting the color and retroreflectivity requirements for DMS 8300-Type D (Non-fluorescent Prismatic).
7. When used near two-way traffic, both sides of the warning reflector shall be reflectorized.
8. The warning reflector should be mounted on the side of the handle nearest approaching traffic.
9. The maximum spacing for warning reflectors should be identical to the channelizing device spacing requirements.

TRUCK-MOUNTED ATTENUATORS

1. Truck-mounted attenuators (TMA) used on TxDOT facilities must meet the requirements outlined in the National Cooperative Highway Research Report No. 350 (NCHRP 350).
2. Refer to the CWZTCD for the requirements of Level 2 or Level 3 TMAs.
3. Refer to the dates shown in the CWZTCD to ensure that the TMA meets the age requirements and the crashworthiness criteria established by the Federal Highway Administration (FHWA) for TMAs.
4. Refer to the CWZTCD for a list of approved TMAs.
5. TMAs are required on freeways unless otherwise noted in the plans.
6. A TMA should be used anytime that it can be positioned approximately 30 to 100 feet in advance of the area of crew exposure without adversely affecting the work performance.
7. The only reason a TMA should not be required is when a work area is spread down the roadway and the work crew is an extended distance from the TMA.

STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION ARROW PANEL, REFLECTORS, WARNING LIGHTS & ATTENUATOR STANDARD

BC(7)-07

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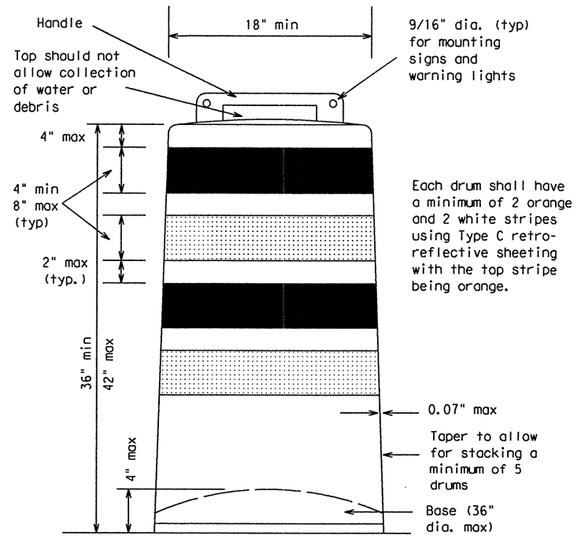
REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
9-07	DALLAS	6	(SEE TITLE SHEET)	98
COUNTY	CONTROL	SECTION	JOB	HIGHWAY
ROCKWALL	1014	03	039	FM 740



GENERAL NOTES

1. For long term stationary work zones on freeways, drums shall be used as the primary channelizing device.
2. For intermediate term stationary work zones on freeways, drums should be used as the primary channelizing device but may be replaced in tangent sections by vertical panels, or 42" two-piece cones. In tangent sections one-piece cones may be used with the approval of the Engineer but only if personnel are present on the project at all times to maintain the cones in proper position and location.
3. For short term stationary work zones on freeways, drums are the preferred channelizing device but may be replaced in tapers, transitions and tangent sections by vertical panels, two-piece cones ar one-piece cones as approved by the Engineer.
4. Drums and all related items shall comply with the requirements of the current version of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
5. Drums, bases, and related materials shall exhibit good workmanship and shall be free from objectionable marks or defects that would adversely affect their appearance or serviceability.
6. The Contractor shall have a maximum of 24 hours to replace any plastic drums identified for replacement by the Engineer/Inspector. The replacement device must be an approved device.

GENERAL DESIGN REQUIREMENTS

Prequalified plastic drums shall meet the following requirements:

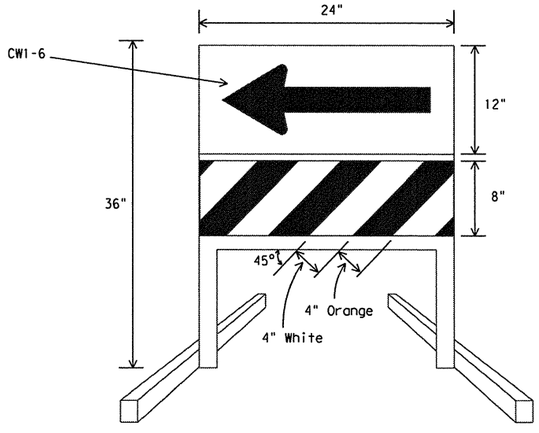
1. Plastic drums shall be a two-piece design; the "body" of the drum shall be the top portion and the "base" shall be the bottom.
2. The body and base shall lock together in such a manner that the body separates from the base when impacted by a vehicle traveling at a speed of 20 MPH or greater but prevents accidental separation due to normal handling and/or air turbulence created by passing vehicles.
3. Plastic drums shall be constructed of lightweight flexible, and deformable materials. The Contractor shall NOT use metal drums or single piece plastic drums as channelization devices or sign supports.
4. Drums shall present a profile that is a minimum of 18 inches in width at the 36 inch height when viewed from any direction. The height of drum unit (body installed on base) shall be a minimum of 36 inches and a maximum of 42 inches.
5. The top of the drum shall have a built-in handle for easy pickup and shall be designed to drain water and not collect debris. The handle shall have a minimum of two widely spaced 9/16 inch diameter holes to allow attachment of a warning light, warning reflector unit or approved compliant sign.
6. The exterior of the drum body shall have a minimum of four alternating orange and white retroreflective circumferential stripes not less than 4 inches nor greater than 8 inches in width. Any non-reflectorized space between any two adjacent stripes shall not exceed 2 inches in width.
7. Bases shall have a maximum width of 36 inches, a maximum height of 4 inches, and a minimum of two footholds of sufficient size to allow base to be held down while separating the drum body from the base.
8. Plastic drums shall be constructed of ultra-violet stabilized, orange, high-density polyethylene (HDPE) or other approved material.
9. Drum body shall have a minimum unballasted weight of 7.7 lbs. and maximum unballasted weight of 11 lbs. The wall of the drum body shall be a minimum of 0.07 inch in thickness. Weight of any drum supplied shall not vary more than 0.5 lb. from that of the prequalified sample.
10. Drum and base shall be marked with manufacturer's name and model number.

RETROREFLECTIVE SHEETING

1. The stripes used on drums shall be constructed of sheeting meeting the color and retroreflectivity requirements of Departmental Materials Specification DMS-8300, "Flat Surface Reflective Sheeting." High Specific Intensity (Type C) retroreflective sheeting shall be supplied unless otherwise specified in the plans.
2. The sheeting shall be suitable for use on and shall adhere to the drum surface such that, upon vehicular impact, the sheeting shall remain adhered in-place and exhibit no delaminating, cracking, or loss of retroreflectivity other than that loss due to abrasion of the sheeting surface.

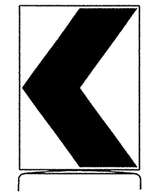
BALLAST

1. Unballasted bases shall be large enough to hold up to 50 lbs. of sand. This base, when filled with the ballast material, should weigh between 35 lbs (minimum) and 50 lbs (maximum). The ballast may be sand in one to three sandbags separate from the base, sand in a sand-filled plastic base, or other ballasting devices as approved by the Engineer. Stacking of sandbags will be allowed, however height of sandbags above pavement surface may not exceed 12 inches.
2. Bases with built-in ballast shall weigh between 40 lbs. and 50 lbs. Built-in ballast can be constructed of an integral crumb rubber base or a solid rubber base.
3. The ballast shall not be heavy objects, water, or any material that would become hazardous to motorists, pedestrians, or workers when the drum is struck by a vehicle.
4. When used in regions susceptible to freezing, drums shall have drainage holes in the bottoms so that water will not collect and freeze becoming a hazard when struck by a vehicle.
5. Ballast shall not be placed on top of drums.
6. Adhesives may be used to secure base of drums to pavement.

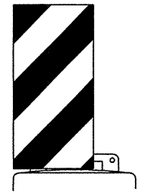


DIRECTION INDICATOR BARRICADE

1. The Direction Indicator Barricade may be used in tapers, transitions, and other areas where specific directional guidance to drivers is necessary.
2. If used, the Direction Indicator Barricade should be used in series to direct the driver through the transition and into the intended travel lane.
3. The Direction Indicator Barricade shall consist of One-Direction Large Arrow (CW1-6) sign in the size shown with a black arrow on a background of Type E Fluoprescent Prismatic Orange above a rail with Type C High Specific Intensity retroreflective sheeting in alternation 4" white and orange stripes sloping downward at an angle of 45 degrees in the direction road users are to pass.
4. Double arrows on the Direction Indicator Barricade will not be allowed.
5. Approved manufacturers are shown on the CWZTCD List. Ballast shall be as approved by the manufacturers instructions.



18" x 24" Sign
(Maximum Sign Dimension)
Chevron CW1-8, Opposing Traffic Lane Divider, Driveway sign D70a, Keep Right R4 series or other signs as approved by Engineer



12" x 24"
Vertical Panel
mount with diagonals sloping down towards travel way

Plywood, Aluminum or Metal sign substrates shall NOT be used on plastic drums

SIGNS, CHEVRONS, AND VERTICAL PANELS MOUNTED ON PLASTIC DRUMS

1. Signs used on plastic drums shall be manufactured using substrates listed on the CWZTCD.
2. Chevrons and other work zone signs with an orange background shall be manufactured with Type E (Fluorescent Prismatic) sheeting meeting the color and retroreflectivity requirements of DMS-8300, "Sign Face Material," unless otherwise specified in the plans.
3. Vertical Panels shall be manufactured with orange and white sheeting meeting the requirements of DMS-8300 Type C (High Specific Intensity). Diagonal stripes on Vertical Panels shall slope down toward the intended traveled lane.
4. Other sign messages (text or symbolic) may be used as approved by the Engineer. Sign dimensions shall not exceed 18 inches in width or 24 inches in height.
5. Signs shall be installed using a 1/2 inch bolt (nominal) and nut, two washers, and one locking washer for each connection.
6. Mounting bolts and nuts shall be fully engaged and adequately torqued. Bolts should not extend more than 1/2 inch beyond nuts.
7. Chevrons may be placed on drums on the outside of curves, on merging tapers or on shifting tapers. When used in these locations they may be placed on every drum or spaced not more than on every third drum. A minimum of three (3) should be used at each location called for in the plans.
8. R9-9, R9-10, R9-11 and R9-11a Sidewalk Closed signs which are 24 inches wide may be mounted on plastic drums, with approval of the Engineer.

ACC:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	

STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES STANDARD

8 of 12 BC(8)-07

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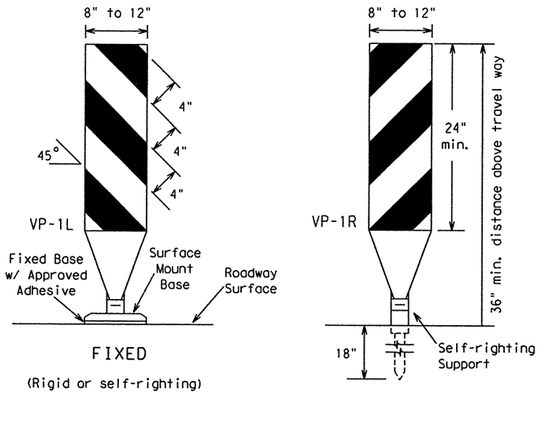
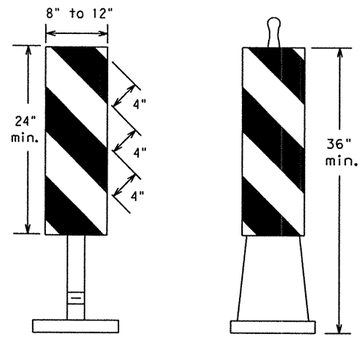
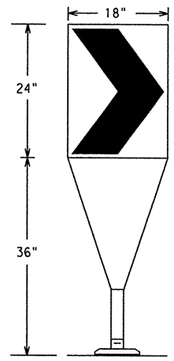
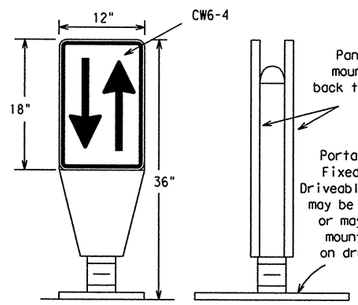
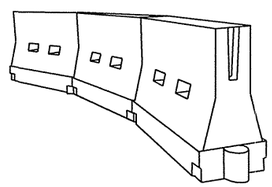
REVISIONS 4-03 9-07	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT			SHEET
	DALLAS	6	(SEE TITLE SHEET)			9A
	COUNTY		CONTROL	SECTION	JOB	HIGHWAY
	ROCKWALL		1014	03	039	FM 740

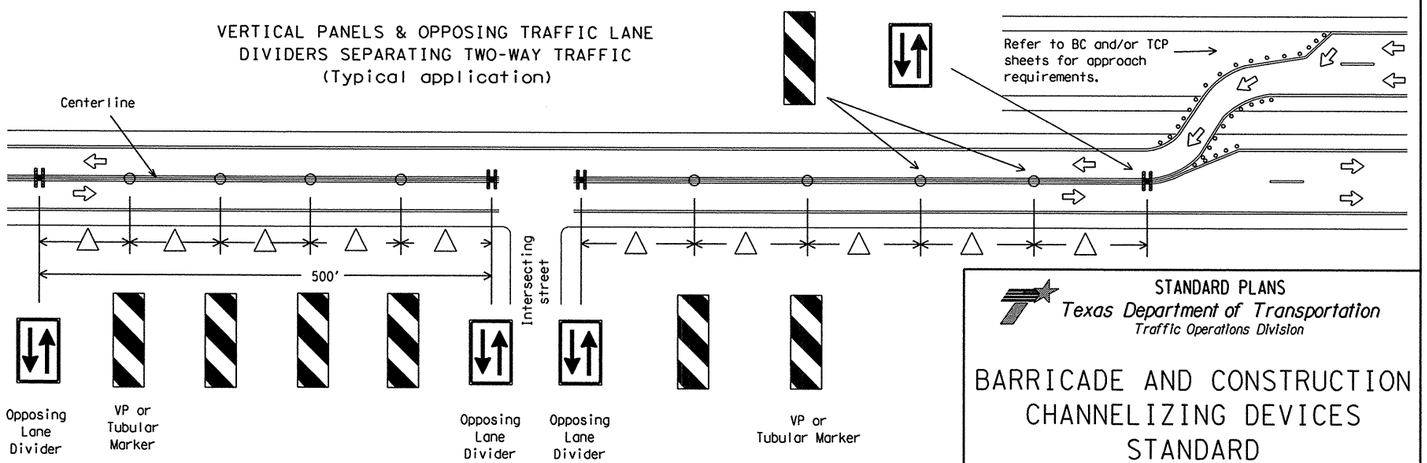












ACC:

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	

CHANNELIZING DEVICES

VERTICAL PANELS (VPs)

PORTABLE

1. Vertical Panels (VP's) are normally used to channelize traffic or divide opposing lanes of traffic.
2. VP's may be used in daytime or nighttime situations. They may be used at the edge of shoulder drop-offs and other areas such as lane transitions where positive daytime and nighttime delineation is required. The Engineer/Inspector shall refer to the Roadway Design Manual Appendix B "Treatment of Pavement Drop-offs in Work Zones" for additional guidelines on the use of VP's for drop-offs.
3. VP's should be mounted back to back if used at the edge of cuts adjacent to two-way two lane roadways. Stripes are to be reflective orange and reflective white and should always slope downward toward the travel lane.
4. VP's used on expressways and freeways or other high speed roadways, shall have a minimum of 270 square inches of retroreflective area facing traffic.
5. Self-righting supports are available with portable base. See "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
6. Sheeting for the VP's shall be retroreflective Type C (High Specific Intensity) conforming to Departmental Material Specification DMS-8300, unless noted otherwise.
7. Where the height of reflective material on the vertical panel is greater than 36 inches, a panel stripe of 6 inches shall be used.

CHEVRONS

Fixed Base w/ Approved Adhesive
(Driveable Base, or Flexible Support can be used)

1. The chevron shall be a vertical rectangle with a minimum size of 12 by 18 inches.
2. Chevrons are intended to give notice of a sharp change of alignment with the direction of travel and provide additional emphasis and guidance for vehicle operators with regard to changes in horizontal alignment of the roadway.
3. Chevrons, when used, shall be erected on the outside of a sharp curve or turn, or on the far side of an intersection. They shall be in line with and at right angles to approaching traffic. Spacing should be such that the motorist always has three in view, until the change in alignment eliminates its need.
4. To be effective, the chevron should be visible for at least 500 feet.
5. Chevrons shall be orange with a black nonreflective legend. Sheeting for the chevron shall be retroreflective Type E (Fluorescent Prismatic) conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall be black vinyl non-reflective decal sheeting meeting the requirements of DMS-8300.
6. For Long Term Stationary use on tapers or transitions on freeways and divided highways self-righting chevrons may be used to supplement plastic drums but not to replace plastic drums.

GENERAL NOTES:

1. Work Zone channelizing devices illustrated on this sheet may be installed in close proximity to traffic and are suitable for use on high or low speed roadways. The Engineer/Inspector shall ensure that spacing and placement is uniform and in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
2. Channelizing devices shown on this sheet may have a driveable, fixed or portable base. The requirement for self-righting channelizing devices must be specified in the General Notes or other plan sheets.
3. Channelizing devices on self-righting supports should be used in work zone areas where channelizing devices are frequently impacted by errant vehicles or vehicle related wind gusts making alignment of the channelizing devices difficult to maintain. Locations of these devices shall be detailed elsewhere in the plans. These devices shall conform to the TMUTCD and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
4. The Contractor shall maintain devices in a clean condition and replace damaged, nonreflective, faded, or broken devices and bases as required by the Engineer/Inspector. The Contractor shall be required to maintain proper device spacing and alignment.
5. Portable bases shall be fabricated from virgin and/or recycled rubber. The portable bases shall weigh approximately 35 lbs.
6. Pavement surfaces shall be prepared in a manner that ensures proper bonding between the adhesives, the fixed mount bases and the pavement surface. Adhesives shall be prepared and applied according to the manufacturer's recommendations.
7. The installation and removal of channelizing devices shall not cause detrimental effects to the final pavement surfaces, including pavement surface discoloration or surface integrity. Driveable bases shall not be permitted on final pavement surfaces. The Engineer/Inspector shall approve all application and removal procedures of fixed bases.
8. Examples on this sheet are commonly used channelizing devices in work zones. For other devices, refer to the CWZTCD.

Posted Speed	Formula	Minimum Desirable Taper Lengths ✱✱			Suggested Maximum Spacing of Channelizing Devices	
		10′ Offset	11′ Offset	12′ Offset	On a Taper	On a Tangent
30	$L = \frac{WS^2}{60}$	150′	165′	180′	30′	60′-75′
35		205′	225′	245′	35′	70′-90′
40		265′	295′	320′	40′	80′-100′
45	L=WS	450′	495′	540′	45′	90′-110′
50		500′	550′	600′	50′	100′-125′
55		550′	605′	660′	55′	110′-140′
60		600′	660′	720′	60′	120′-150′
65		650′	715′	780′	65′	130′-165′
70		700′	770′	840′	70′	140′-175′
75		750′	825′	900′	75′	150′-185′
80		800′	880′	960′	80′	160′-195′

✱✱Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.)
S=Posted Speed (MPH)

OPPOSING TRAFFIC LANE DIVIDERS (OTLD)

1. Opposing Traffic Lane Dividers (OTLD) are delineation devices designed to convert a normal one-way roadway section to two-way operation. OTLD's are used on temporary centerlines. The upward and downward arrows on the sign's face indicate the direction of traffic on either side of the divider. The base is secured to the pavement with an adhesive or rubber weight to minimize movement caused by a vehicle impact or wind gust.
2. The OTLD may be used in combination with simple tubular markers or VPs.
3. Spacing between the OTLD shall not exceed 500 feet. Tubular markers or VPs placed between the OTLD's should not exceed 100 foot spacing.
4. The OTLD shall be orange with a black non-reflective legend. Sheeting for the OTLD shall be retroreflective Type E (Fluorescent Prismatic) conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall be black vinyl non-reflective decal sheeting meeting the requirements of DMS-8300.

HOLLOW OR WATER BALLASTED SYSTEMS USED AS LONGITUDINAL CHANNELIZING DEVICES OR BARRIERS

LONGITUDINAL CHANNELIZING DEVICES

1. Longitudinal channelizing devices are crashworthy, lightweight, deformable devices that are highly visible, have good target value and can be connected together. They are not designed to contain or redirect a vehicle on impact.
2. Longitudinal channelizing devices may be used instead of a line of cones or drums.
3. Longitudinal channelizing devices shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. Longitudinal channelizing devices should not be used to provide positive protection for obstacles, pedestrians or workers.
5. Longitudinal channelizing devices shall be retroreflective, or supplemented with retroreflective delineation as required for temporary barriers on BC(7)-07.

WATER BALLASTED SYSTEMS USED AS BARRIERS

1. Water ballasted systems used as barriers shall not be used solely to channelize road users, but also to protect the work space per the appropriate NCHRP 350 crashworthiness requirements based on roadway speed and barrier application.
2. Water ballasted systems used to channelize vehicular traffic shall be supplemented with retroreflective delineation or channelizing devices to improve daytime/nighttime visibility. They may also be supplemented with pavement markings.
3. Water ballasted systems used as barriers shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. Water ballasted systems used as barriers should not be used for a merging taper except in low speed (less than 45 MPH) urban areas. When used on a taper in a low speed urban area, the taper shall be delineated and the taper length should be designed to optimize road user operations considering the available geometric conditions.
5. When water ballasted systems used as barriers have blunt ends exposed to traffic, they should be attenuated as per manufacturer recommendations or flared to point outside the clear zone.

If used to channelize pedestrians, longitudinal channelizing devices or water ballasted systems must have a continuous detectable bottom for users of long canes and the top of the unit shall be not less than 32 inches in height.

VERTICAL PANELS & OPPOSING TRAFFIC LANE DIVIDERS SEPARATING TWO-WAY TRAFFIC

(Typical application)

△ Spacing between the VP's or tubular markers shall not exceed 100 feet. On roadways with speeds less than 45 MPH, spacing between the tubular markers or VP's shall be as shown on the channelizing spacing table shown on this page. If the table shows spacing greater than 100 feet based on the roadway speed, then use a maximum of 100 feet spacing between the tubular markers or VP's. Every fifth channelizing device shall be an OTLD, except when the OLTD must be spaced closer to accomodate an intersection. Spacing between the OTLD shall not exceed 500 feet.

STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES STANDARD

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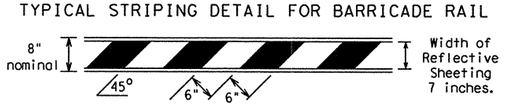
REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT			SHEET
9-07	DALLAS	6	(SEE TITLE SHEET)			100
	COUNTY		CONTROL	SECTION	JOB	HIGHWAY
	ROCKWALL		1014	03	039	FM 740

TYPE III BARRICADES

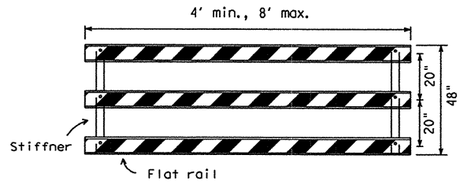
1. Refer to the Compliant Work Zone Traffic Control Devices List (CWZTCD) for details of the Type III Barricades and a list of all materials used in the construction of Type III Baricades.
2. Type III Barricades shall be used at each end of construction projects closed to all traffic.
3. Barricades extending across a roadway should have stripes that slope downward in the direction toward which traffic must turn in detouring. When both right and left turns are provided, the chevron striping may slope downward in both directions from the center of the barricade. Where no turns are provided at a closed road striping should slope downward in both directions toward the center of roadway.
4. Striping of rails, for the right side of the roadway, should slope downward to the left. For the left side of the roadway, striping should slope downward to the right.
5. Identification markings may be shown only on the back of the barricade rails. The maximum height of letters and/or company logos used for identification shall be 1".
6. Barricades shall not be placed parallel to traffic unless an adequate clear zone is provided.
7. Warning lights shall NOT be installed on barricades.
8. Where barricades require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand is recommended. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight. Sand bags shall not be stacked in a manner that covers any portion of a barricade rails reflective sheeting. Rock, concrete, iron, steel or other solid objects will NOT be permitted. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall not be used for sandbags. Sandbags shall only be placed along or upon the base supports of the device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners.
9. Sheeting for barricades shall be retroreflective Type C (High Specific Intensity) conforming to Departmental Material Specfication DMS-8300 unless otherwise noted.

Barricades shall NOT be used as a sign support.

TYPICAL STRIPING DETAIL FOR BARRICADE RAIL



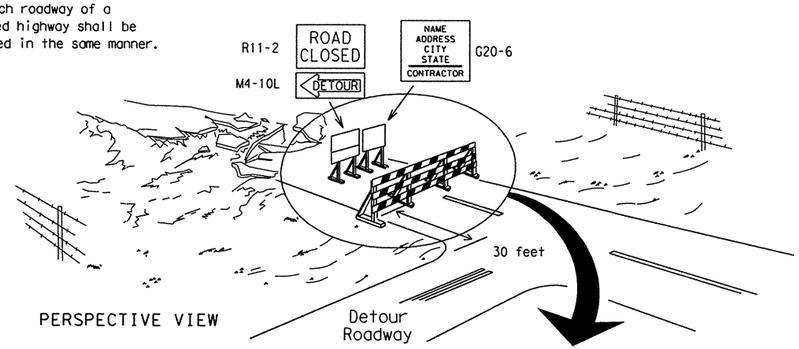
TYPICAL PANEL DETAIL FOR SKID OR POST TYPE BARRICADES



Stiffner may be inside or outside of support, but no more than 2 stiffeners shall be allowed on one barricade.

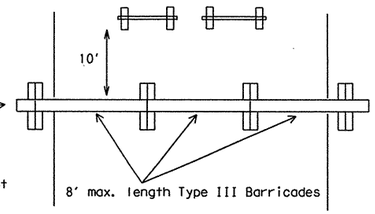
TYPE III BARRICADE (POST AND SKID) TYPICAL APPLICATION

Each roadway of a divided highway shall be barricaded in the same manner.



PERSPECTIVE VIEW

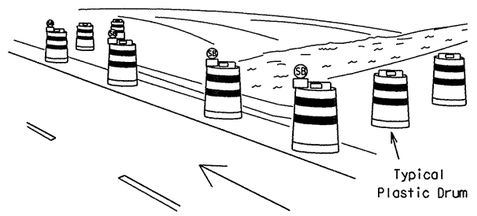
The three rails on Type III barricades shall be reflectorized orange and reflective white stripes on one side facing one-way traffic and both sides for two-way traffic.
Barricade striping should slant downward in the direction of detour.



PLAN VIEW

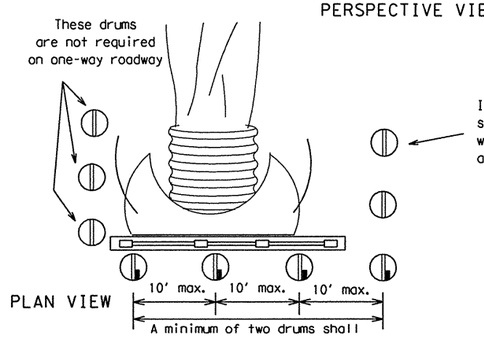
1. Signs should be mounted on independent supports at a 7 foot mounting height in center of roadway. The signs should be a minimum of 10 feet behind Type III Barricades.
2. Advance signing shall be as specified elsewhere in the plans.

CULVERT WIDENING OR OTHER ISOLATED WORK WITHIN THE PROJECT LIMITS



PERSPECTIVE VIEW

1. Where positive redirectional capability is provided, drums may be omitted.
2. Plastic construction fencing may be used with drums for safety as required in the plans.
3. Vertical Panels on flexible support may be substituted for drums when the shoulder width is less than 4 feet.
4. When the shoulder width is greater than 12 feet, steady-burn lights may be omitted if drums are used.
5. Drums must extend the length of the culvert widening.



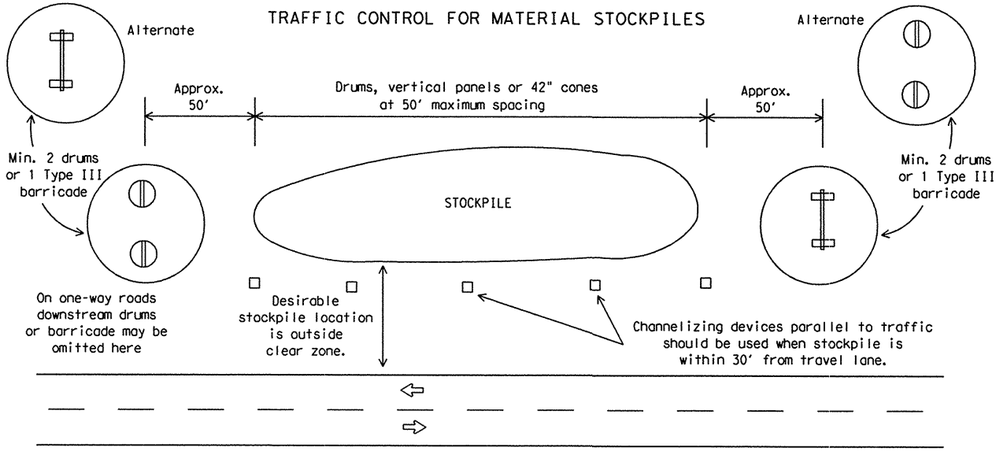
PLAN VIEW

Increase number of plastic drums on the side of approaching traffic if the crown width makes it necessary. (minimum of 2 and maximum of 4 drums)

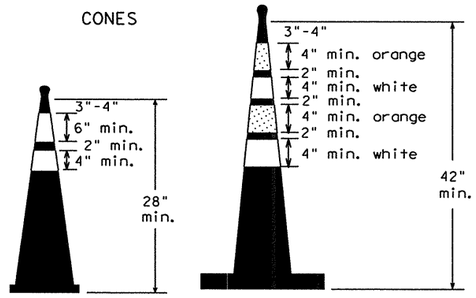
Legend

- Plastic drum
- Plastic drum with steady burn light or yellow warning reflector
- SB — Steady burn warning light or yellow warning reflector

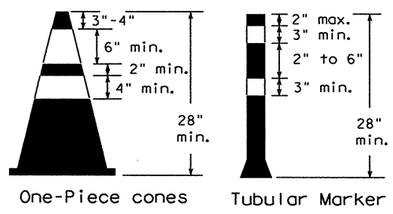
TRAFFIC CONTROL FOR MATERIAL STOCKPILES



CONES



Two-Piece cones

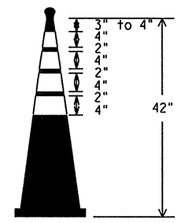


One-Piece cones Tubular Marker

28" Cones shall have a minimum weight of 9 1/2 lbs.

42" 2-piece cones shall have a minimum weight of 30 lbs. including base.

1. Traffic cones and tubular markers shall be a minimum of 28 inches in height when used either on freeways or at nighttime.
2. Cones or tubular markers shall be predominantly orange, fluorescent red-orange, or fluorescent yellow-orange. They should be kept clean and bright for maximum visibility.
3. Cones used only for daytime operations do not require the reflectorized bands.
4. Cones and tubular markers used for nighttime operations shall be reflectorized. Reflectorized material shall have a smooth, sealed outer surface that displays the same approximate color during the day and night. The reflectorized bands shall be retroreflective Type C (High Specific Intensity) conforming to Departmental Material Specification DMS-8300, unless otherwise noted.
5. When used at night, appropriate personnel shall ensure that cones and tubular markers remain in their proper location and in an upright position.
6. Reflectorization of 28"cones shall consist of a minimum 6 inch band placed at least 3 inches but not more than 4 inches from the top, supplemented by a minimum 4 inch band spaced a minimum of 2 inches below the 6 inch band.
7. Reflectorization of 42" cones shall be provided by alternating 4 to 6" orange and white stripes with orange on top.
8. Reflectorization of tubular markers shall be a minimum of two 3 inch bands placed a maximum of 2 inches from the top with a maximum of 6 inches between bands.
9. One-piece cones or tubular markers are generally suitable for temporary usage (up to 8 hours) with other channelization devices such as vertical panels, drums or two-piece cones for long term usage. Care should be taken to ensure they remain in their proper location and in an upright position.
10. Cones or tubular markers used on each project shall be of the same size and shape.
11. The handle may be designed as a hook or other shape, fabricated from non-rigid materials similar to the cone material, and may extend up to a maximum of 8 inches above the top of cone. Length of the handle shall not be considered with regard to the overall height of the cone.



EDGELINE CHANNELIZER

1. This device is intended only for use in place of a vertical panel to channelize traffic by indicating the edge of the travel lane. It is not intended to be used in transitions or tapers.
2. This device shall not be used to separate lanes of traffic (opposing or otherwise) or warn of objects.
3. This device is based on a 42 inch, two-piece cone with an alternate striping pattern: four 4 inch retroreflective bands, with an approximate 2 inch gap between bands. The color of the band should correspond to the color of the edgeline (yellow for left edgeline, white for right edgeline) for which the device is substituted or for which it supplements. The reflectorized bands shall be retroreflective Type C encapsulated bead (High Specific Intensity) conforming to Departmental Material Specification DMS-8300, unless otherwise noted.
4. The base must weigh a minimum of 30 lbs.

ACC:

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W																

PLAYED

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1																																
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4																																

STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES STANDARD

10 of 12 BC(10)-07

© TxDOT 11-4-02	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT

REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
9-07	DALLAS	6	(SEE TITLE SHEET)	

COUNTY	CONTROL	SECTION	JOB	HIGHWAY
ROCKWALL	1014	03	039	FM 740

WORK ZONE PAVEMENT MARKINGS

GENERAL

1. The Contractor shall be responsible for maintaining work zone and existing pavement markings, in accordance with the standard specifications and special provisions, on all roadways open to traffic within the CSJ limits unless otherwise stated in the plans.
2. Color, patterns and dimensions shall be in conformance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
3. Additional supplemental pavement marking details may be found in the plans or specifications.
4. Pavement markings shall be installed in accordance with the TMUTCD and as shown on the plans.
5. When short term markings are required on the plans, short term markings shall conform with the TMUTCD, the plans and details as shown on the Standard Plan Sheet WZ(STPM).
6. When standard pavement markings are not in place and the roadway is opened to traffic, DO NOT PASS signs shall be erected to mark the beginning of the sections where passing is prohibited and PASS WITH CARE signs at the beginning of sections where passing is permitted.
7. All work zone pavement markings shall be installed in accordance with Item 662, "Work Zone Pavement Markings."

RAISED PAVEMENT MARKERS

1. Raised pavement markers are to be placed according to the patterns on BC(12).
2. All raised pavement markers used for work zone markings shall meet the requirements of Item 672, "RAISED PAVEMENT MARKERS" and Departmental Material Specification DMS-4200 or DMS-4300.

PREFABRICATED PAVEMENT MARKINGS

1. Removable prefabricated pavement markings shall meet the requirements of DMS-8241.
2. Non-removable prefabricated pavement markings (foil back) shall meet the requirements of DMS-8240.

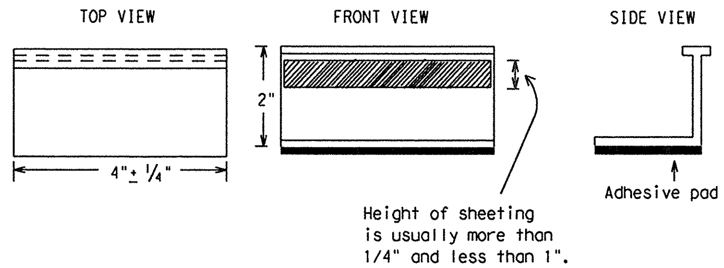
MAINTAINING WORK ZONE PAVEMENT MARKINGS

1. The Contractor will be responsible for maintaining work zone pavement markings within the work limits.
2. Work zone pavement markings shall be inspected in accordance with the frequency and reporting requirements of work zone traffic control device inspections as required by Form 599.
3. The markings should provide a visible reference for a minimum distance of 300 feet during normal daylight hours and 160 feet when illuminated by automobile low-beam headlights at night, unless sight distance is restricted by roadway geometrics.
4. Markings failing to meet this criteria within the first 30 days after placement shall be replaced at the expense of the Contractor as per Specification Item 662.

REMOVAL OF PAVEMENT MARKINGS

1. Pavement markings that are no longer applicable, could create confusion or direct a motorist toward or into the closed portion of the roadway, shall be removed or obliterated before the roadway is opened to traffic.
2. The above shall not apply to detours in place for less than two weeks, where flaggers and/or sufficient channelizing devices are used in lieu of markings to outline the detour route.
3. Pavement markings shall be removed to the fullest extent possible, so as not to leave a discernable marking. This shall be by any method approved by TxDOT Specification Item 677 for "Eliminating Existing Pavement Markings and Markers".
4. The removal of pavement markings may require resurfacing or seal coating portions of the roadway.
5. Subject to the approval of the Engineer, any method that proves to be successful on a particular type pavement may be used.
6. Blast cleaning may be used but will not be required unless specifically shown in the plans.
7. Over-painting of the markings SHALL NOT BE permitted.
8. Removal of raised pavement markers shall be as directed by the Engineer.
9. Removal of existing pavement markings and markers will be paid for directly in accordance with Item 677, "ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS," unless otherwise stated in the plans.
10. Black-out marking tape may be used to cover conflicting existing markings for periods less than two weeks when approved by the Engineer.

Temporary Flexible-Reflective Roadway Marker Tabs



STAPLES OR NAILS SHALL NOT BE USED TO SECURE TEMPORARY FLEXIBLE-REFLECTIVE ROADWAY MARKER TABS TO THE PAVEMENT SURFACE

1. Temporary flexible-reflective roadway marker tabs used as guidemarks shall meet the requirements of DMS-8242.
2. Tabs detailed on this sheet are to be inspected and accepted by the Engineer or designated representative. Sampling and testing is not normally required, however at the option of the Engineer, either "A" or "B" below may be imposed to assure quality before placement on the roadway.
   A. Select five (5) or more tabs at random from each lot or shipment and submit to the Construction Division, Materials and Pavement Section to determine specification compliance.
   B. Select five (5) tabs and perform the following test. Affix five (5) tabs at 24 inch intervals on an asphaltic pavement in a straight line. Using a medium size passenger vehicle or pickup, run over the markers with the front and rear tires at a speed of 35 to 40 miles per hour, four (4) times in each direction. No more than one (1) out of the five (5) reflective surfaces shall be lost or displaced as a result of this test.
3. Small design variances may be noted between tab manufacturers.
4. See Standard Sheet WZ(STPM) for tab placement on new pavements. See Standard Sheet TCP(7-1) for tab placement on seal coat work.

Raised Pavement Markers used as Guidemarks

1. Raised pavement markers used as guidemarks shall be from the approved product list, and meet the requirements of DMS-4200.
2. All temporary construction raised pavement markers provided on a project shall be of the same manufacturer.
3. Adhesive for guidemarks shall be bituminous material hot applied or butyl rubber pad for all surfaces, or thermoplastic for concrete surfaces.

Guidemarks shall be designated as:
YELLOW - (two amber reflective surfaces with yellow body).
WHITE - (one silver reflective surface with white body).

DEPARTMENTAL MATERIAL SPECIFICATIONS

PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
TRAFFIC BUTTONS	DMS-4300
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
PREFABRICATED PAVEMENT MARKINGS-PERMANENT	DMS-8240
PREFABRICATED PAVEMENT MARKINGS-REMOVABLE	DMS-8241
TEMPORARY FLEXIBLE-REFLECTIVE ROADWAY MARKER TABS	DMS-8242

A list of prequalified reflective raised pavement markers, non-reflective traffic buttons, roadway marker tabs and other pavement markings can be found at the Material Producer List web address shown on BC(1).

STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS STANDARD

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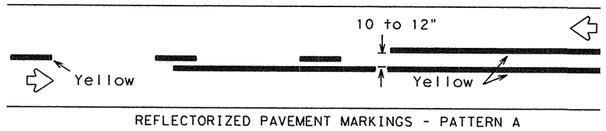
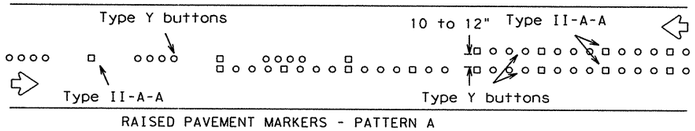
©TxDOT February 1998	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
REVISIONS 2-98, 1-02, 11-02, 9-07	STATE DISTRICT: DALLAS	FEDERAL REGION: 6	FEDERAL AID PROJECT: (SEE TITLE SHEET)	SHEET: 102
COUNTY: ROCKWALL	CONTROL: 1014	SECTION: 03	JOB: 039	HIGHWAY: FM 740

PAVEMENT MARKING PATTERNS

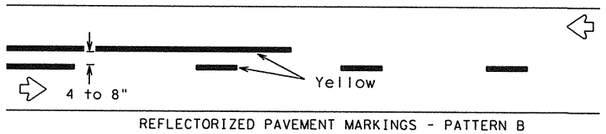
CENTER LINE & NO-PASSING ZONE BARRIER LINES FOR TWO-LANE, TWO-WAY HIGHWAYS



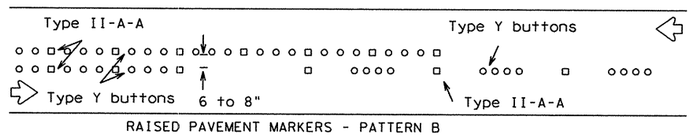
REFLECTORIZED PAVEMENT MARKINGS - PATTERN A



RAISED PAVEMENT MARKERS - PATTERN A



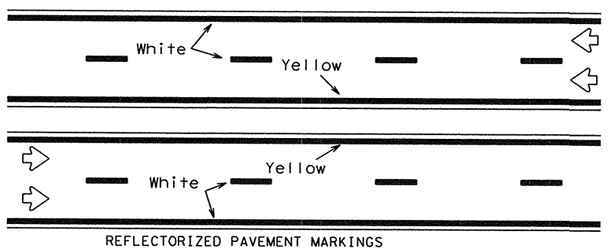
REFLECTORIZED PAVEMENT MARKINGS - PATTERN B



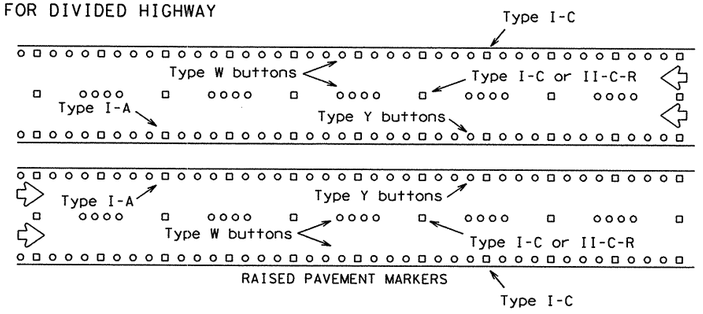
RAISED PAVEMENT MARKERS - PATTERN B

Pattern A is the TXDOT Standard, however Pattern B may be used if approved by the Engineer.
Prefabricated markings may be substituted for reflectorized pavement markings.

EDGE & LANE LINES FOR DIVIDED HIGHWAY



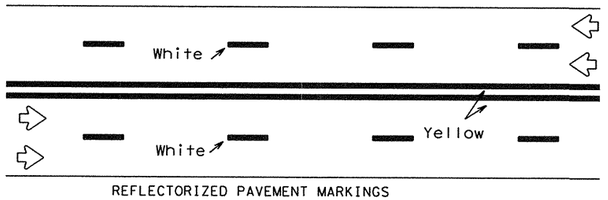
REFLECTORIZED PAVEMENT MARKINGS



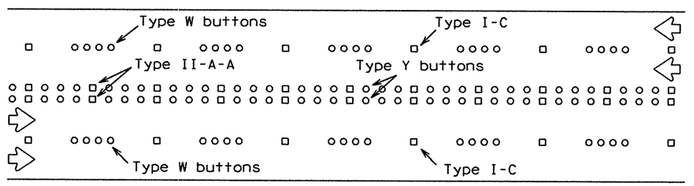
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

LANE & CENTER LINES FOR MULTILANE UNDIVIDED HIGHWAYS



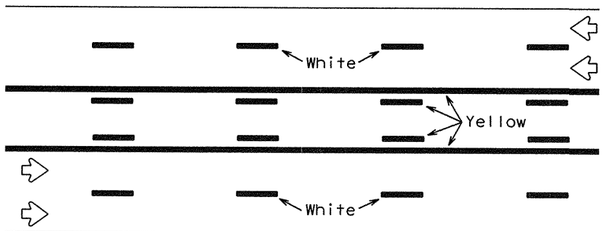
REFLECTORIZED PAVEMENT MARKINGS



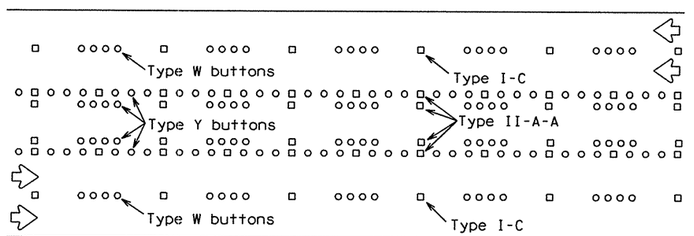
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

TWO-WAY LEFT TURN LANE



REFLECTORIZED PAVEMENT MARKINGS



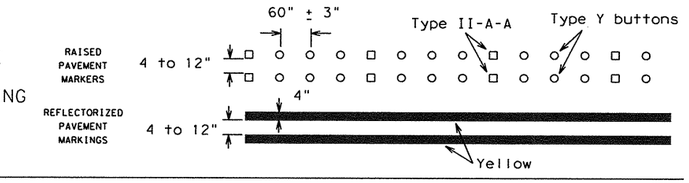
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

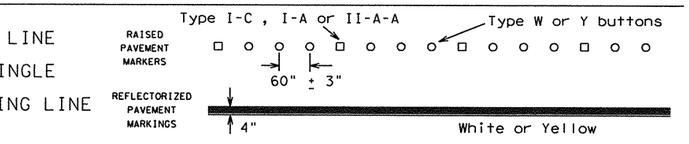
STANDARD WORK ZONE PAVEMENT MARKINGS DETAILS

SOLID LINES

DOUBLE NO-PASSING LINE

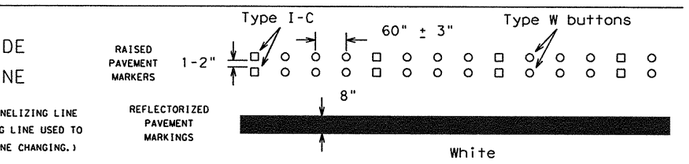


EDGE LINE OR SINGLE NO-PASSING LINE



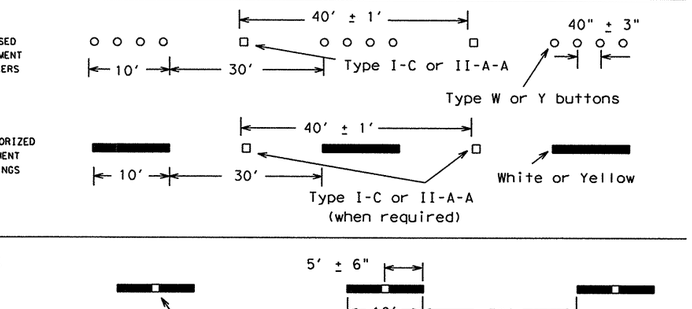
WIDE LINE

(FOR LEFT TURN CHANNELIZING LINE OR CHANNELIZING LINE USED TO DISCOURAGE LANE CHANGING.)



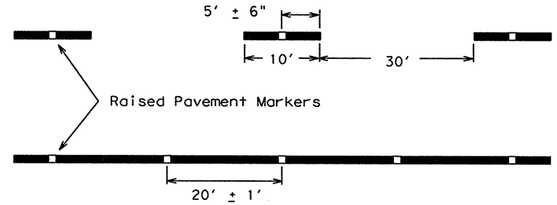
BROKEN LINE

(FOR CENTER LINE OR LANE LINE.)



REMOVABLE MARKINGS WITH RAISED PAVEMENT MARKERS

If raised pavement markers are used to supplement REMOVABLE markings, the markers shall be applied to the top of the tape at the approximate mid length of tape used for broken lines or at 20 foot spacing for solid lines. This allows an easier removal of raised pavement markers and tape.



Centerline only - not to be used on edge lines

Raised pavement markers used as standard pavement markings shall be from the approved products list and meet the requirements of Item 672 "RAISED PAVEMENT MARKERS."

ACC:

ELS DISPLAYED																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
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33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63		

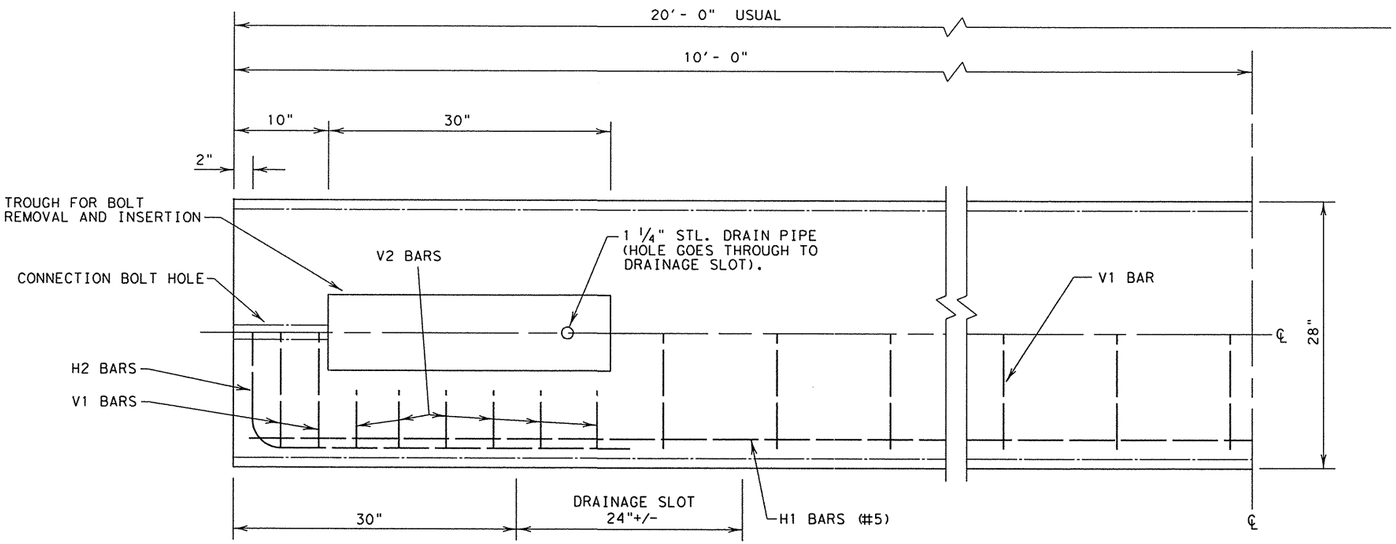
STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS STANDARD

12 of 12 BC(12)-07

DW: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT

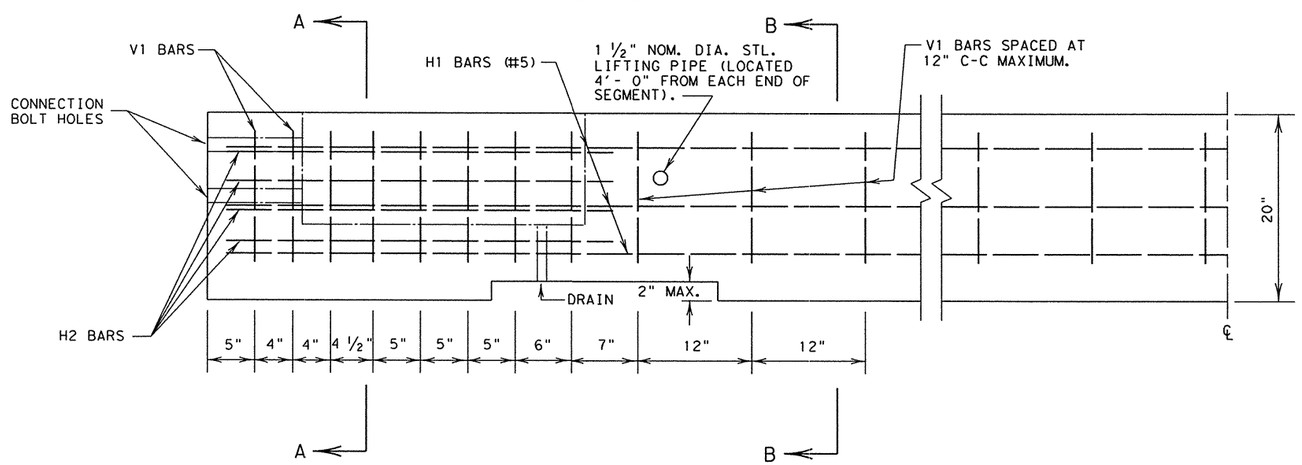
REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT			SHEET
1-97	DALLAS	6	(SEE TITLE SHEET)			103
2-98	COUNTY		CONTROL	SECTION	JOB	HIGHWAY
11-02	ROCKWALL		1014	03	039	FM 740
9-07						



NOTE: CONCRETE ON BOTTOM HALF OF PLAN VIEW IS REMOVED IN ORDER TO SHOW DETAILS

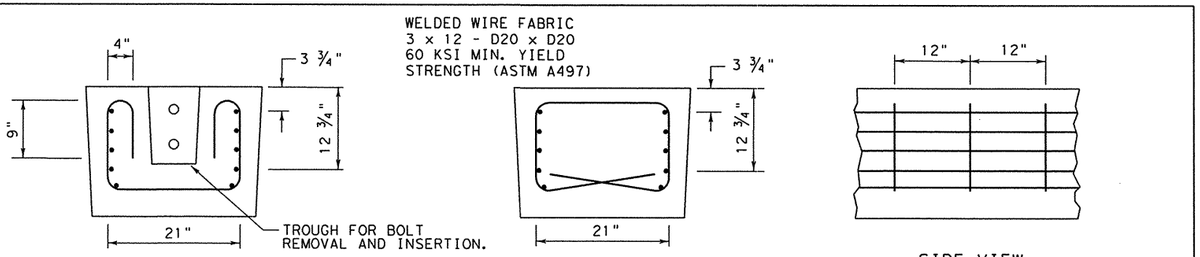
PLAN VIEW - TYPE 1

(SYMMETRICAL ABOUT CENTER LINES)



ELEVATION - TYPE 1

(SYMMETRICAL ABOUT CENTER LINES)



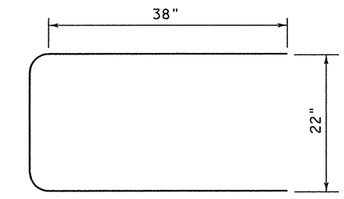
SECTION A-A

SECTION B-B

SIDE VIEW

NOTE: THIS FABRIC OPTION CAN BE USED IN PLACE OF V1, V2 AND H1 BARS. THE H2 BARS SPECIFIED ARE STILL REQUIRED.

WELDED WIRE FABRIC OPTIONAL REINFORCING

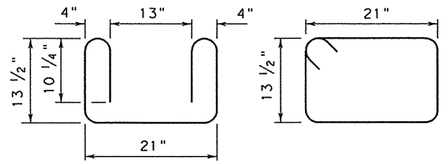


H2 BAR (#5)

(GRADE 60 MIN.)

NOTE: H2 REBAR IS TO BE BENT AT A 3" RADIUS.

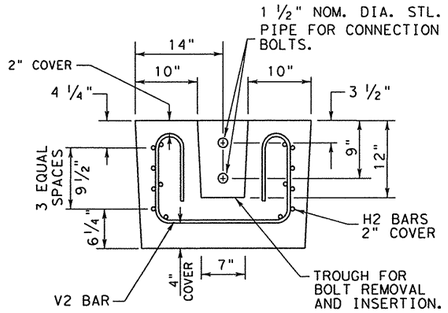
NOTE: ALL BENDING OF SHEAR REBAR IS AT A 2" RADIUS, UNLESS SPECIFIED OTHERWISE.



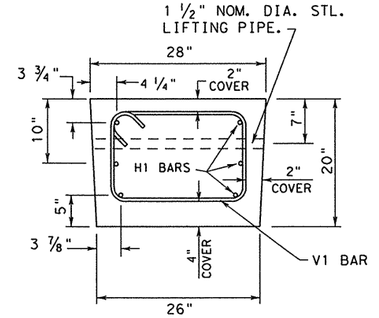
V2 BAR (#4)

V1 BAR (#4)

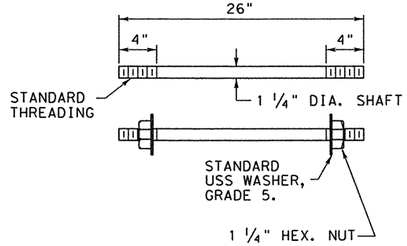
REINFORCING STEEL DETAILS



SECTION A-A



SECTION B-B



CONNECTION BOLT

FOR CONTRACTORS INFORMATION ONLY

(TYPE 1) APPROX. QUANTITIES 20 FT. SECTION		
CONCRETE	CY	2.6
REINFORCING STEEL	LBS	330
TOTAL BARRIER WT.	LBS	11000

GENERAL NOTES

1. BARRIER LENGTH SHALL BE 20 FEET (+/- 1 INCH) UNLESS OTHERWISE SPECIFIED IN THE PLANS.
2. ALL CONCRETE, REINFORCEMENT, ANCHOR BOLTS, BLOCKING, ETC., AS SHOWN ARE CONSIDERED AS PART OF THE BARRIER FOR PAYMENT.
3. ALL CONCRETE SHALL BE CLASS A, C, OR H, UNLESS OTHERWISE SPECIFIED.
4. ALL REINFORCING STEEL SHALL BE GRADE 40, UNLESS OTHERWISE SPECIFIED.
5. CHAMFER ALL EDGES ¾ INCH, AS DIRECTED BY THE ENGINEER.
6. STEEL PIPE SHALL BE HOT DIP GALVANIZED IN CONFORMANCE TO ASTM DESIGNATION A123. BOLTS, NUTS AND WASHERS SHALL BE HOT-DIP GALVANIZED TO ASTM DESIGNATION A153.
7. BOLTS SHALL CONFORM TO ASTM A36. NUTS SHALL CONFORM TO A307 REQUIREMENTS AND SHALL BE TAPPED OR CHASED AFTER GALVANIZING. BOLTS AND NUTS SHALL HAVE CLASS 2A AND 2B FIT TOLERANCES.
8. THE BARRIER SHOULD BE LIGHT IN COLOR AND SHOULD BE SUPPLEMENTED BY DELINEATION AS DETAILED ELSEWHERE IN THE PLANS.

Texas Department of Transportation
Design Division (Roadway)

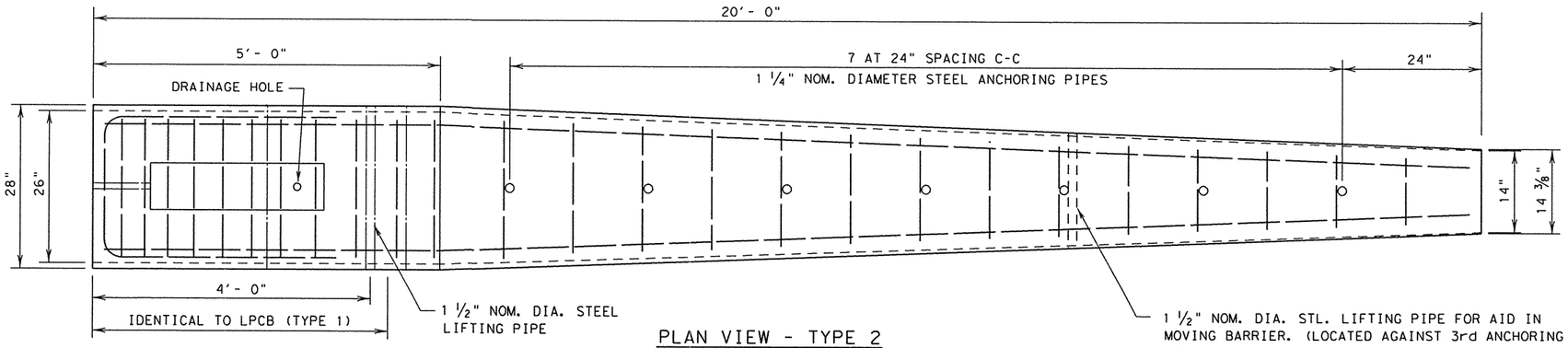
LOW PROFILE CONCRETE BARRIER

(PORTABLE AND PRECAST)

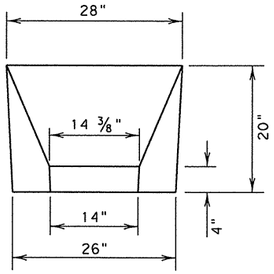
LPCB(1)-92

SHEET 1 OF 2

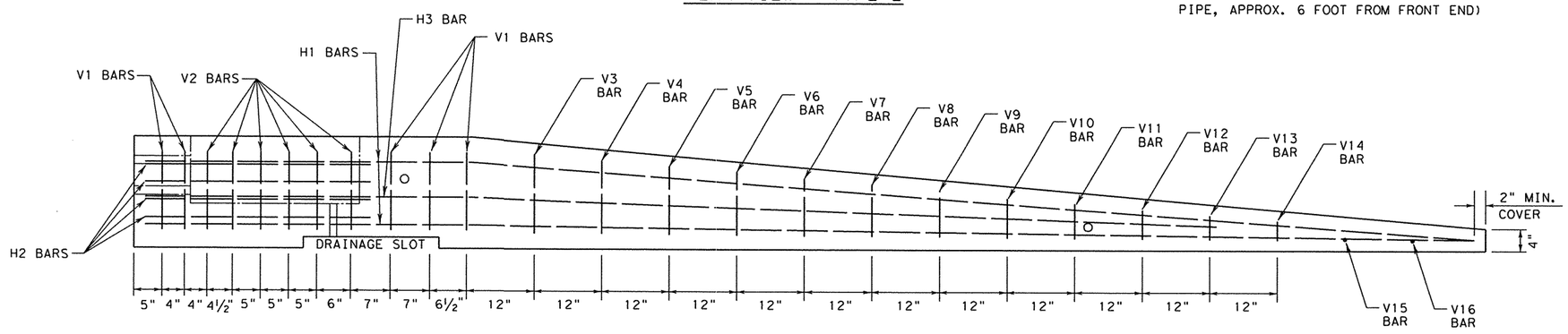
FILE: lpcb192.dgn	DN:	CK:	DW:	CK:	
©TxDOT September 1992	DISTRICT	FEDERAL AID PROJECT			SHEET
REVISIONS	DALLAS	(SEE TITLE SHEET)			164
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	ROCKWALL		1014	03	039	FM 740



PLAN VIEW - TYPE 2



APPROACH VIEW

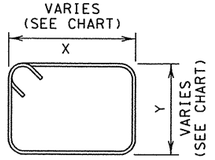


ELEVATION - TYPE 2

NOTE: ANCHORING PIPES NOT SHOWN IN ELEVATION.

GENERAL NOTES

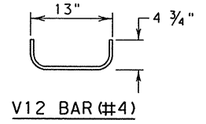
1. TYPE 2 BARRIER SHALL BE USED AS AN END TREATMENT FOR TYPE 1 BARRIER WHEN APPROPRIATE.
2. THE ANCHORAGE PINS ARE ALL THE SAME LENGTH AND ARE INTENDED TO BE DRIVEN FLUSH WITH THE TOP OF THE BARRIER SURFACE.
3. THE BENDS IN THE H3 AND H1 BARS ARE SLIGHT, NO FORMAL BEND IS NECESSARY.
4. TYPE 2 BARRIER MUST BE LIFTED FROM REAR FIRST TO PREVENT CRACKING OF SLOPED SECTION.
5. SEE SHEET 1 OF 2 FOR ADDITIONAL INFORMATION.



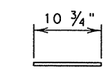
V 3-11 BARS (#4)

BAR (#4)	X (IN.)	Y (IN.)
V3 BAR	20 ¼	14 ½
V4 BAR	19 ½	13 ½
V5 BAR	18 ½	12 ¼
V6 BAR	17 ½	11 ¼
V7 BAR	17	10 ¼
V8 BAR	16 ¼	9
V9 BAR	15 ½	8
V10 BAR	14 ½	7
V11 BAR	13 ¾	6

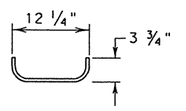
NOTE: ALL BENDING OF SHEAR REBAR IS AT A 2" RADIUS, UNLESS SPECIFIED OTHERWISE.



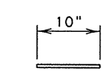
V12 BAR (#4)



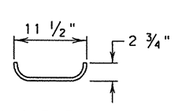
V15 BAR (#4)



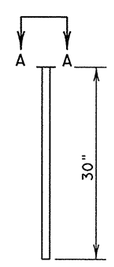
V13 BAR (#4)



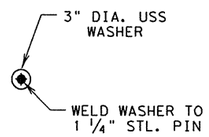
V16 BAR (#4)



V14 BAR (#4)



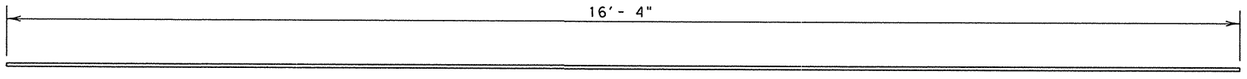
ANCHORING PIN
(1 ¼"DIA., A36 STL.)



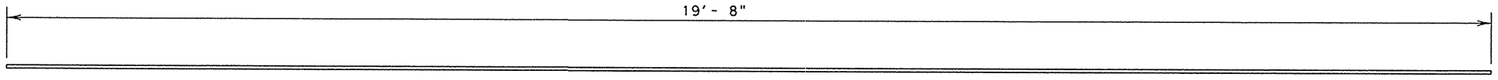
A-A
(HEAD OF ANCHORING PIN)

FOR CONTRACTORS INFORMATION ONLY

(TYPE 2) APPROX. QUANTITIES	20 FT. SECTION	
CONCRETE	CY	1.65
REINFORCING STEEL	LBS	240
TOTAL BARRIER WT.	LBS	7000



H3 BARS (#5)
(GRADE 60)



H1 BARS (#5)
(GRADE 60)

Texas Department of Transportation
Design Division (Roadway)

LOW PROFILE CONCRETE BARRIER

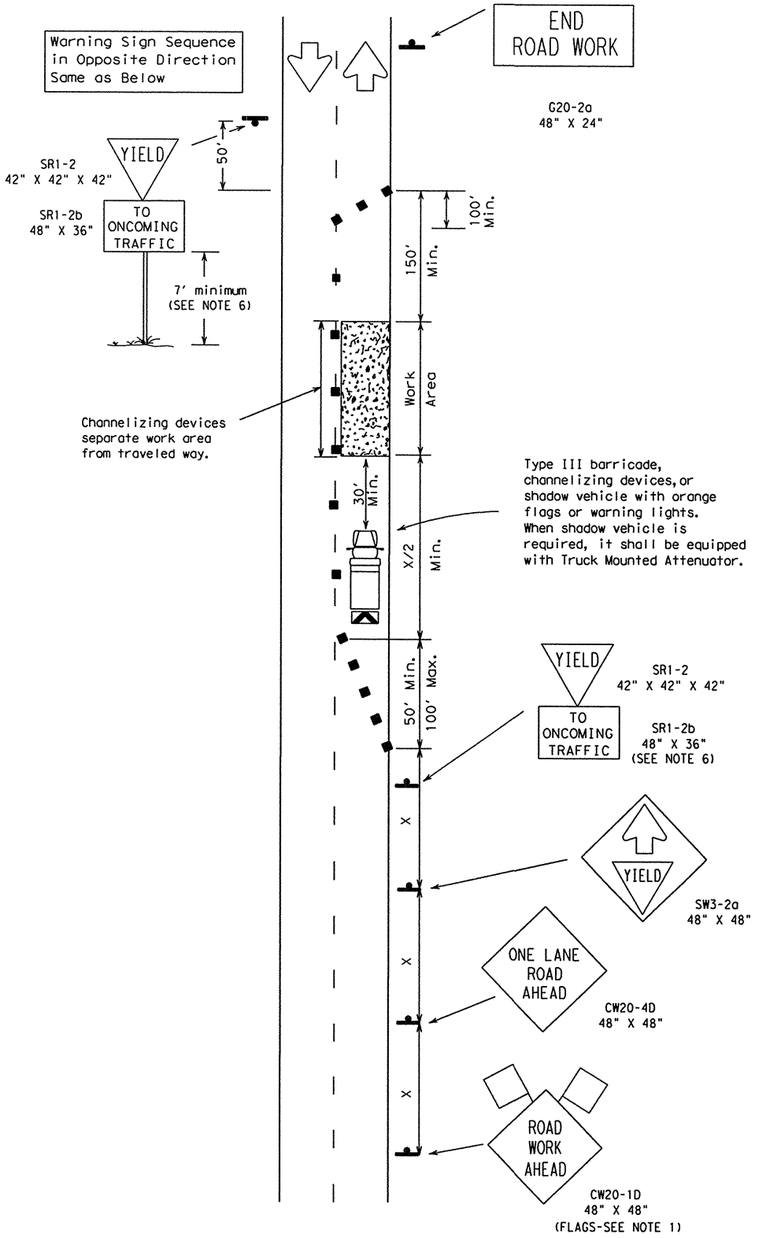
(PORTABLE AND PRECAST)

LPCB(2)-92

SHEET 2 OF 2

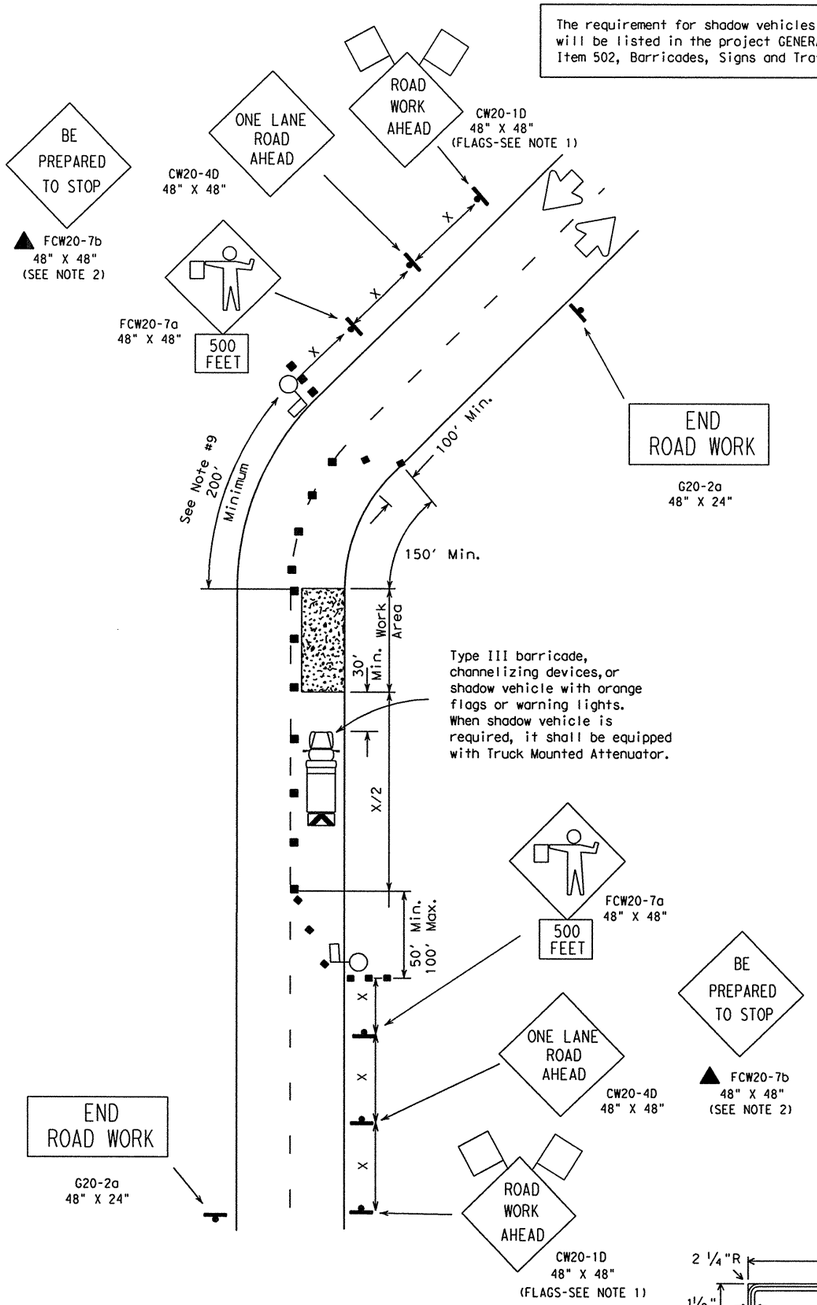
FILE: lpcb192.dgn	DN:	CK:	DW:	CK:	
©TxDOT September 1992	DISTRICT	FEDERAL AID PROJECT			SHEET
REVISIONS	DALLAS	(SEE TITLE SHEET)			
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	ROCKWALL		1014	03	039	FM 740

LEVELS DELINEATED



TCP (1-2a)

One Lane Closed
Adequate Field of View



TCP (1-2b)

One Lane Closed
Inadequate Field of View

LEGEND

Type III Barricade ■■ Channelizing Devices Flag
Heavy Work Vehicle Truck Mounted Attenuator
Trailer Mounted Flasing Arrow Panel (M) Portable Changeable Message Sign
Flagger Sign Post

Posted Speed*	Formula	Minimum Desirable Taper Lengths** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Device On a Taper	On a Tangent	Minimum Sign Spacing X Distance
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'-75'	120'
35		205'	225'	245'	35'	70'-90'	160'
40		265'	295'	320'	40'	80'-100'	240'
45	L=WS	450'	495'	540'	45'	90'-110'	320'
50		500'	550'	600'	50'	100'-125'	400'
55		550'	605'	660'	55'	110'-140'	500'
60		600'	660'	720'	60'	120'-150'	*600'
65		650'	715'	780'	65'	130'-165'	*700'
70		700'	770'	840'	70'	140'-175'	*800'

* Conventional Roads Only

** Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.) S=Posted Speed (MPH)

TYPICAL USAGE:				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES:

1. Flags attached to signs are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
3. The BE PREPARED TO STOP sign may be installed after the ONE LANE ROAD AHEAD sign, but proper sign spacing shall be maintained.
4. ROAD WORK AHEAD sign may be repeated if the visibility of the work zone is less than 1500'.

TCP(1-2a)

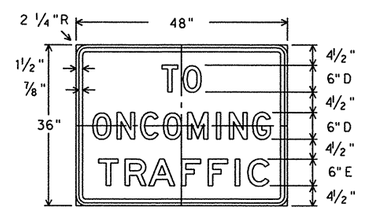
5. YIELD sign traffic control may be used on projects with approaches that have adequate sight distance. For projects in urban areas, work zones should be no longer than one half city block. In rural areas on roadways with less than 4000 ADT, work areas should be no longer than 400'.
6. YIELD TO ONCOMING TRAFFIC sign shall be placed on a support at a 7' minimum mounting height.

TCP(1-2b)

7. Flaggers should use two-way radios or other methods of communication to control traffic.
8. Length of work area should be based on the ability of flaggers to communicate.
9. Distance along curve of work area should be adequate length for motorists to identify and react to flagger signals.

Only pre-qualified products shall be used. A list of compliant products and their sources may be obtained by writing or faxing:

Standards Engineer
Traffic Operations Division - TE
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701-2483
Phone (512) 416-3335
Fax (512) 416-3161
E-mail TRF-STANDARD@mailgw.dot.state.tx.us



SR1-2b
48" x 36"

Letters - Black
Background - White
Reflective

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

TRAFFIC CONTROL PLAN

TCP(1-2)-98

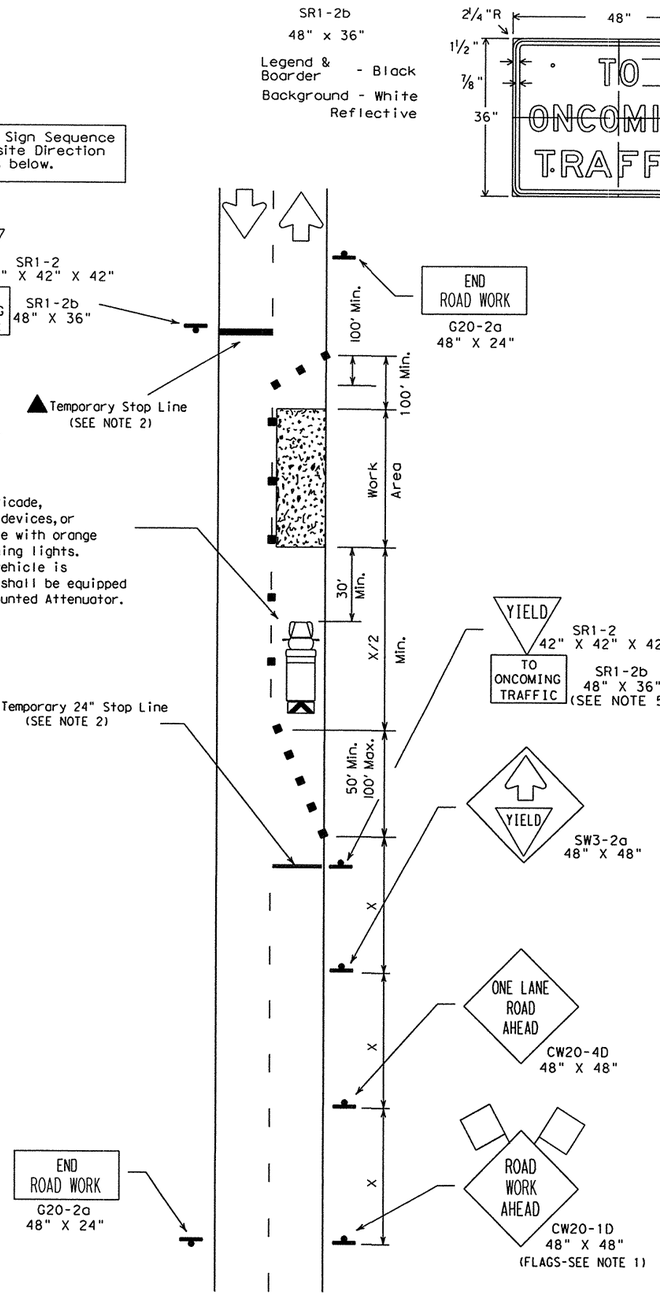
©TxDOT December 1985	DN: - LR	CK: - MT	DW: - DN	CK: - MT	REG NO.:

REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
4-90	DALLAS	6	(SEE TITLE SHEET)	106
2-94	COUNTY		CONTROL / SECTION / JOB	HIGHWAY
1-97	ROCKWALL		1014 / 03 / 039	FM 740
4-98				

DN:
CK:
DW:
CK:

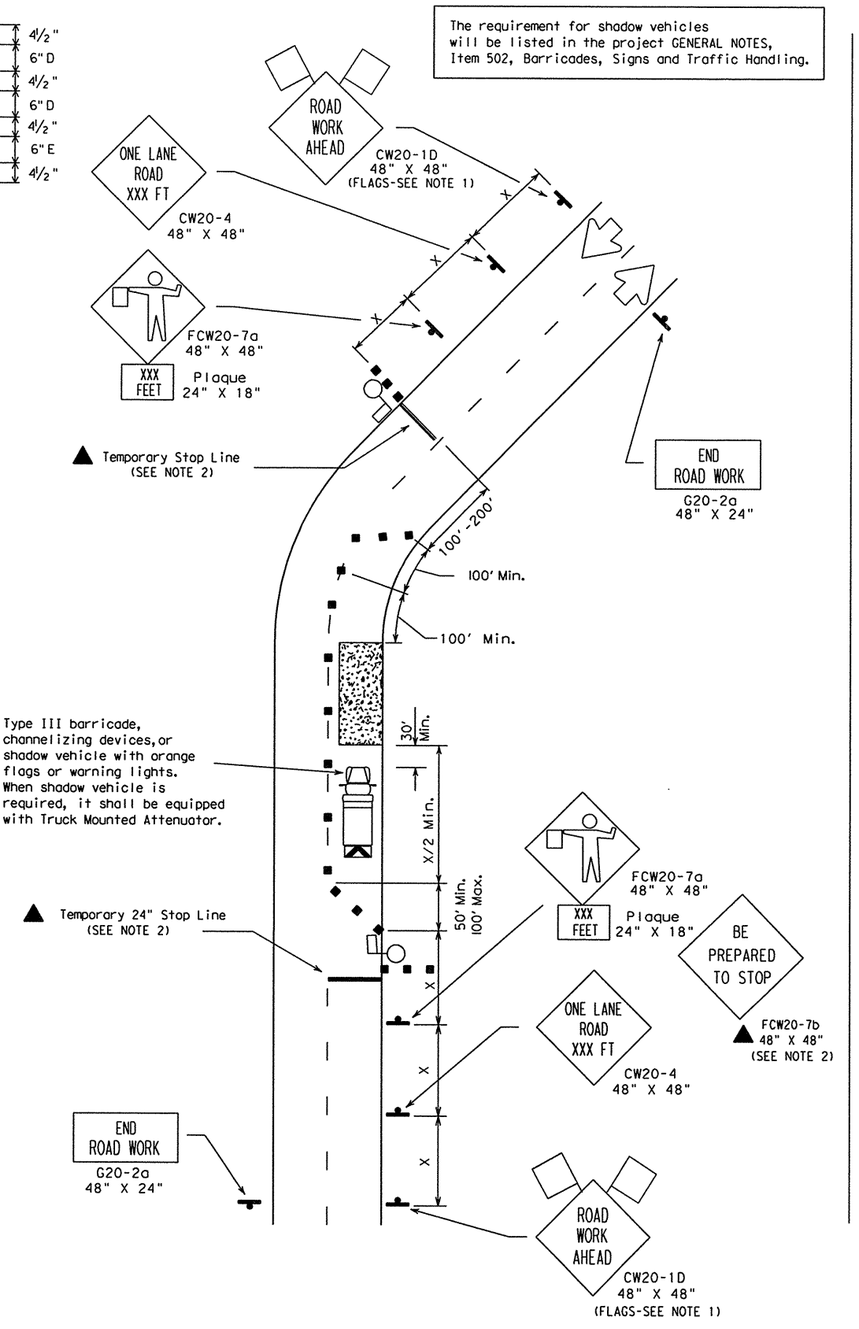
DATE:
ACC:
FILE:

LEVELS
1 2 3 4 5 6 7 8
1 11 21 31 41 51 61
2 12 22 32 42 52 62
3 13 23 33 43 53 63
4 14 24 34 44 54 64
5 15 25 35 45 55 65
6 16 26 36 46 56 66
7 17 27 37 47 57 67
8 18 28 38 48 58 68
9 19 29 39 49 59 69
10 20 30 40 50 60 70



TCP (2-2a)

2-Lane Roadway Without Paved Shoulders
One Lane Closed
Adequate Field of View



TCP (2-2b)

2-Lane Roadway Without Paved Shoulders
One Lane Closed
Inadequate Field of View

LEGEND

Type III Barricade ■ ■ Channelizing Devices Flag
Heavy Work Vehicle Truck Mounted Attenuator
Trailer Mounted Flasing Arrow Panel (M) Portable Changeable Message Sign
Flagger Sign Post

Posted Speed ✳	Formula	Minimum Desirable Taper Lengths ✳✳ 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Device On a Taper	On a Tangent	Minimum Sign Spacing X Distance
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'-75'	120'
35		205'	225'	245'	35'	70'-90'	160'
40		265'	295'	320'	40'	80'-100'	240'
45	L=WS	450'	495'	540'	45'	90'-110'	320'
50		500'	550'	600'	50'	100'-125'	400'
55		550'	605'	660'	55'	110'-140'	500'
60		600'	660'	720'	60'	120'-150'	✳600'
65		650'	715'	780'	65'	130'-165'	✳700'
70		700'	770'	840'	70'	140'-175'	✳800'

✳ Conventional Roads Only

✳✳ Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.) S=Posted Speed (MPH)

TYPICAL USAGE:				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	

GENERAL NOTES:

1. Flags attached to signs are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
3. The BE PREPARED TO STOP sign may be installed after the ONE LANE ROAD XXX FT sign, but proper sign spacing shall be maintained.
4. YIELD sign traffic control may be used on projects with approaches that have adequate sight distance. For projects in urban areas, work zones should be no longer than one half city block. In rural areas on roadways with less than 4000 ADT and work areas should be no longer than 400'.
5. YIELD TO ONCOMING TRAFFIC sign shall be placed on a support at a 7' minimum mounting height.
6. Flaggers should use two-way radios or other methods of communication to control traffic.
7. Length of work area should be based on the ability of flaggers to communicate.
8. For intermediate term situations, when it is not feasible to remove and restore pavement markings, the channelization must be made dominant by using a very close spacing. This is especially important in locations of conflicting information, such as where traffic is directed over a double yellow centerline. In such locations a maximum channelizing device spacing of 10 feet is recommended. The 10 foot channelizing device spacing recommendation is intended for the area of conflicting information and not the entire work zone.

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

TRAFFIC CONTROL PLAN

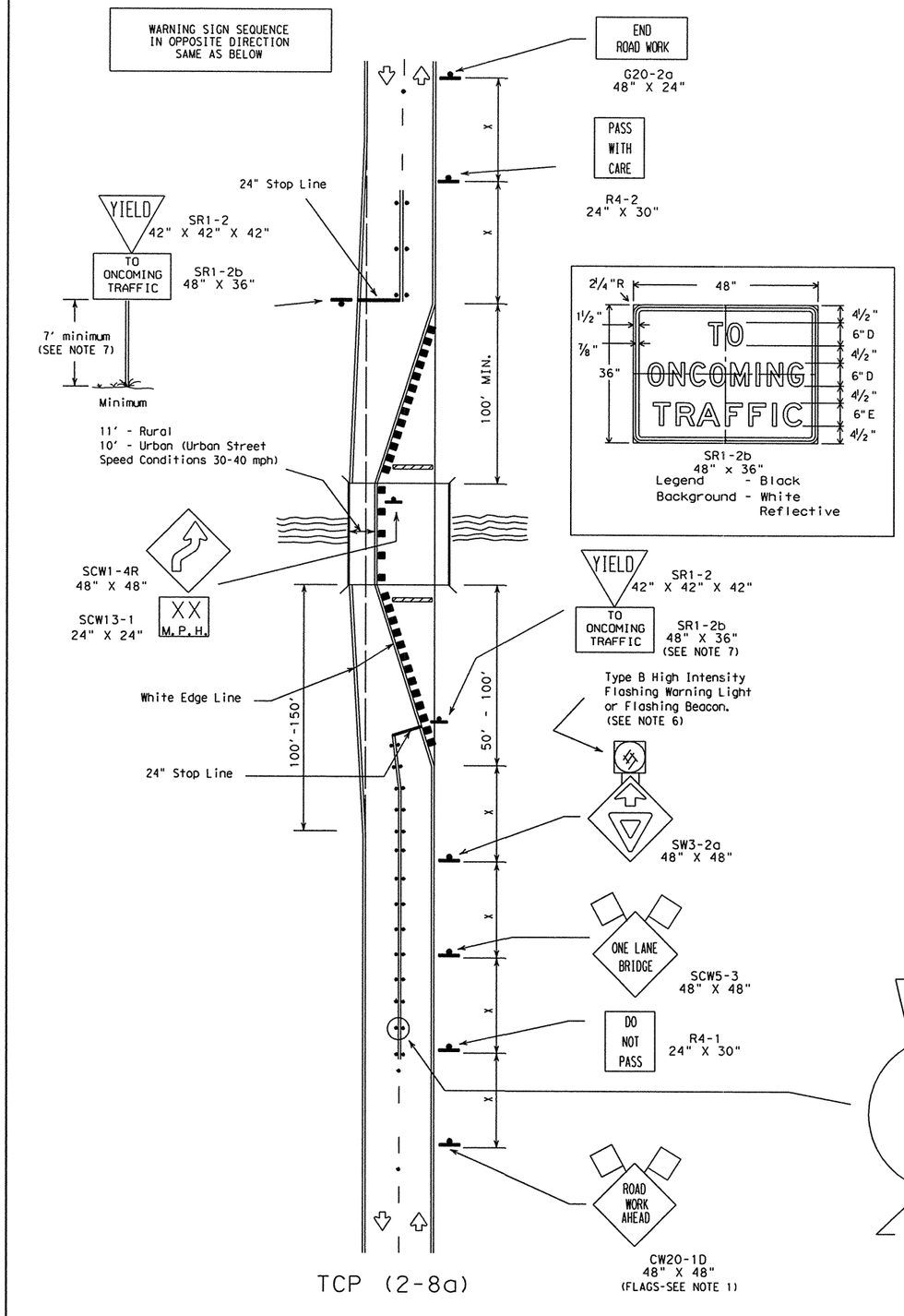
TCP(2-2)-03

DN: LR	CK: MT	DW: DN	CK: MT	MEG NO.:

REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
8-95	DALLAS	6	(SEE TITLE SHEET)	101
1-97				
4-98	COUNTY	CONTROL	SECTION	JOB	HIGHWAY
3-03	ROCKWALL	1014	03	039	FM 740

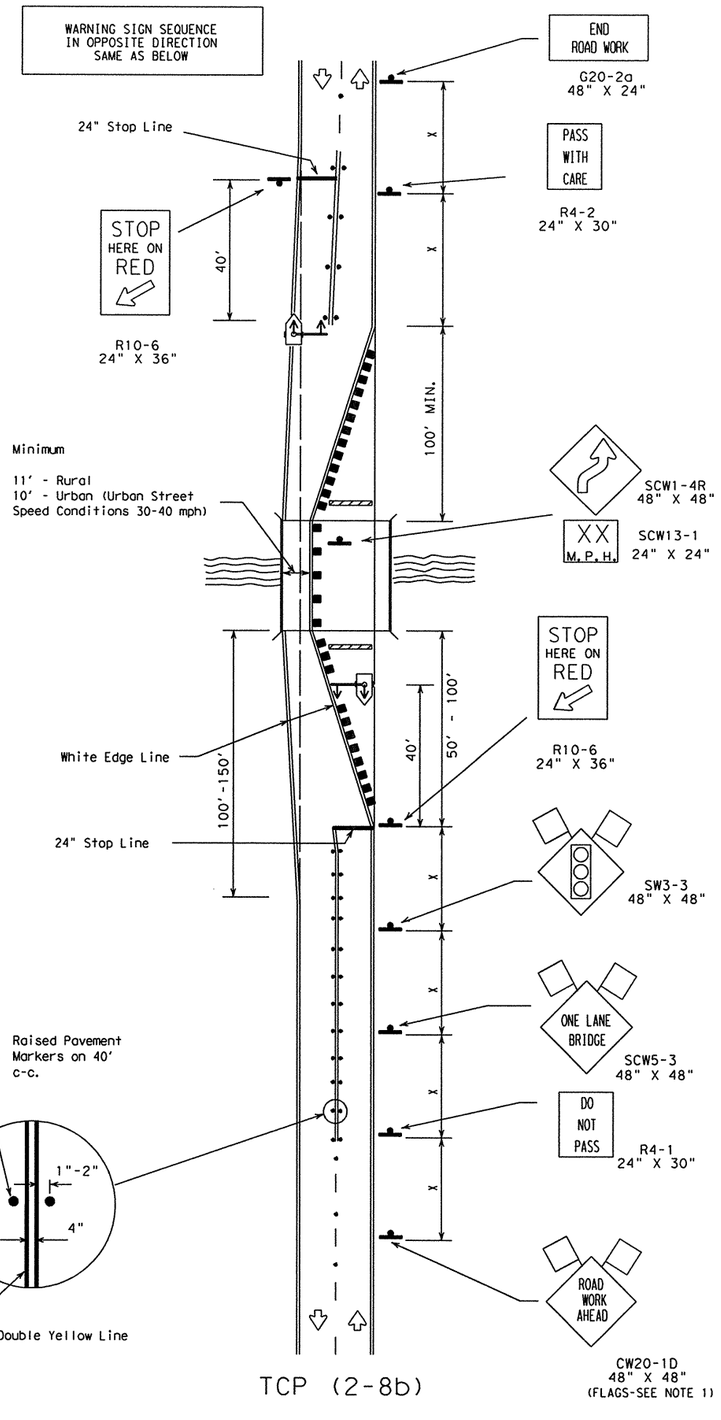
LEVELS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

DATE:
ACC:
FILE:



TCP (2-8a)

Two-Way Traffic Control
With Yield Signs



TCP (2-8b)

Two-Way Traffic Control
With Traffic Signal

LEGEND

Type III Barricade ■ ■ Channelizing Devices Flag

Flagger Sign Post Temporary or Portable Traffic Signals

• • • Raised Pavement Markers Type II-A-A (40' spacing)

Posted Speed ✳	Formula	Minimum Desirable Taper Lengths ✳✳ 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Device On a Taper	On a Tangent	Minimum Sign Spacing X Distance
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'-75'	120'
35		205'	225'	245'	35'	70'-90'	160'
40		265'	295'	320'	40'	80'-100'	240'
45	L=WS	450'	495'	540'	45'	90'-110'	320'
50		500'	550'	600'	50'	100'-125'	400'
55		550'	605'	660'	55'	110'-140'	500'
60		600'	660'	720'	60'	120'-150'	✳600'
65		650'	715'	780'	65'	130'-165'	✳700'
70		700'	770'	840'	70'	140'-175'	✳800'

✳ Conventional Roads Only

✳✳ Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.) S=Posted Speed (MPH)

TYPICAL USAGE:				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
			✓	✓

GENERAL NOTES:

1. Unless otherwise stated in the plans, flags attached to signs are REQUIRED.
2. Advance Warning signing shown for one direction.
3. Raised reflective pavement markers shall be placed 40' c-c on centerline between ROAD WORK AHEAD signs and stop lines.
4. For intermediate term situations, when it is not feasible to remove and restore pavement markings, the channelization must be made dominant by using a very close spacing. This is especially important in locations of conflicting information, such as where traffic is directed over a double yellow centerline. In such locations a maximum channelizing device spacing of 10 feet is recommended. The 10 foot channelizing device spacing recommendation is intended for the area of conflicting information and not the entire work zone.

TCP (2-8a)

5. Traffic control by YIELD AHEAD symbol signs for one lane two-way traffic control operations should be limited to structures less than 400' long and roadways with less than 4000 ADT. Portable traffic signals should be used on other roadways.
6. If power is available, a flashing beacon should be attached to the YIELD AHEAD symbol sign for emphasis.
7. YIELD and TO ONCOMING TRAFFIC signs and other regulatory signs shall be installed at 7' minimum mounting height.

TCP (2-8b)

8. A list of approved Portable Traffic Signals can be found on compliant products list.

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

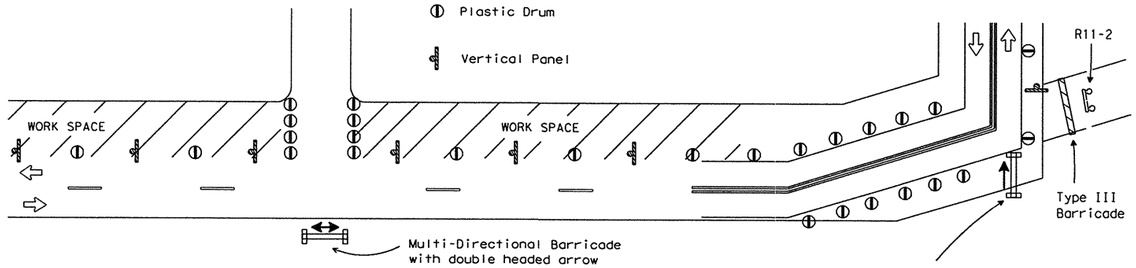
TRAFFIC CONTROL PLAN

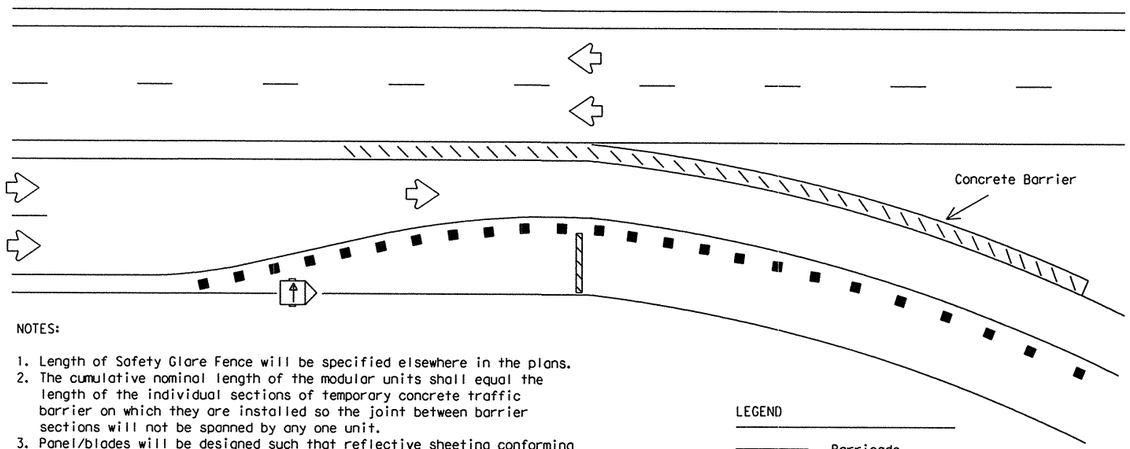
TCP(2-8)-03

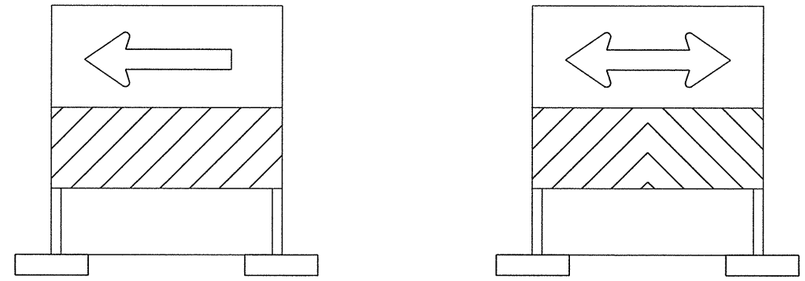
©TxDOT December 1985	DN:-LR	CK:-MT	DW:-DN	CK:-DM	MSG NO.:
REVISIONS 8-95 1-97 4-98 3-03	STATE DISTRICT: DALLAS	FEDERAL REGION: 6	FEDERAL AID PROJECT: (SEE TITLE SHEET)		SHEET: 168
COUNTY: ROCKWALL		CONTROL: 1014	SECTION: 03	JOB: 039	HIGHWAY: FM 740

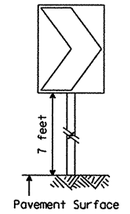
LEVELS
1 2 3 4 5 6 7 8
9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24
25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56
57 58 59 60 61 62 63

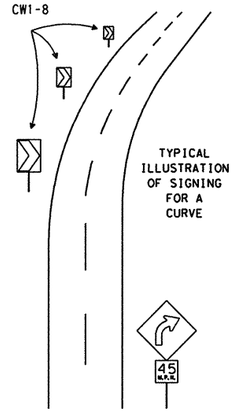
DATE:
ACC:
FILE:
DN:
CK:
DW:
CK:

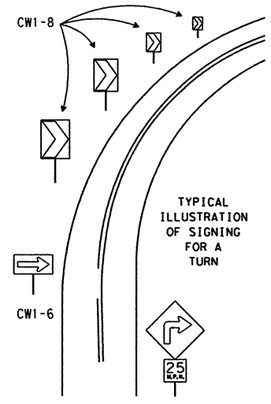


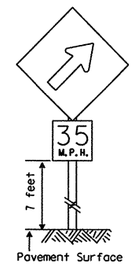


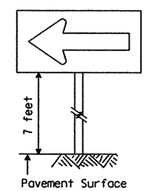












CHANNELIZING DEVICES FOR URBAN ROADWAY TYPE PROJECT

For spacing between devices, see BC(8).
Use self-righting supports in areas where there is a high potential for channelizing devices to be struck.

MULTI-DIRECTIONAL BARRICADE

1. Multi-directional barricade shall not be used for lane closures.
2. May be used for sharp changes in alignment, or across roadway from stem of "T" intersection.
3. Typically used for Intermediate Term Stationary, Short Term Stationary or Short Duration work zone operations.
4. See the CWZTCD List for approved designs.

BARRIER DELINEATION WITH SAFETY GLARE FENCE

NOTES:

1. Length of Safety Glare Fence will be specified elsewhere in the plans.
2. The cumulative nominal length of the modular units shall equal the length of the individual sections of temporary concrete traffic barrier on which they are installed so the joint between barrier sections will not be spanned by any one unit.
3. Panel/blades will be designed such that reflective sheeting conforming with Departmental Material Specification DMS-8300, Flat Surface Reflective Sheeting, Type C (High Specific Intensity), minimum size of 2 inches by 12 inches can be attached to the edge of the panel/blade. The sheeting shall be attached to one panel/blade per section of concrete barrier not to exceed a spacing of 30 feet. Barrier reflectors are not necessary when panel/blades are installed.
4. Moduler Glare Screens for head light barrier shall meet the requirements of DMS-8610.

LEGEND

▨	Barricade
■ ■	Channelizing devices
⇕	Trailer mounted flashing arrow panel
\ \ \ \	Safety glare fence

USAGE OF CW1-6, ECW1-6a AND CW1-8 SIGNS

CW1-8

The CHEVRON sign (CW1-8) may be used to replace roadside delineation on curves or used in transitions or tapers.

ECW1-6a

An UPWARD SLOPING ARROW sign (ECW1-6a) is intended to be used to indicate the beginning of a curve or transition. It should be preceded with an appropriate curve sign when needed, and should not be used throughout the curve or transition. Advisory speed plaque is optional.

CW1-6

A LARGE ARROW sign (CW1-6) is intended to be used to give notice of a sharp change in alignment (turn) in the direction of travel. It should be preceded with an appropriate advance construction warning turn sign.

NOTES:

1. CW1-6, ECW1-6a & CW1-8 signs shall be mounted on fixed supports.
2. Chevrons, when used, shall be erected on the outside of a sharp curve or turn, or on the far side of an intersection. They shall be in line with and at right angles to approaching traffic. Spacing should be such that the motorist always has three in view, until the change in alignment eliminates its need.
3. For two-way traffic, use same arrangement of signs on outside of curve for each direction of travel.
4. Appropriate advance warning CURVE or TURN sign with Advisory Speed plaque should be used when needed.

Only pre-qualified products shall be used. A copy of the "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources and may be obtained by contacting:

Standards Engineer
Traffic Operations Division - TE
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701-2483
Phone (512) 416-3120
Fax (512) 416-3299

Instructions to locate the "CWZTCD" on TxDOT website are:

Start at website - www.dot.state.tx.us
Click on "About TxDOT",
Click on "Organizational Chart",
Click on Traffic Operations Box,
Click on "Compliant Work Zone Traffic Control Devices",
Click on "View PDF".
This site is printable.

PREQUALIFICATION PROCEDURES ARE OBTAINED FROM:

CONSTRUCTION DIVISION-MATERIALS AND TESTS SECTION
TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT)
125 EAST 11th STREET
AUSTIN, TX 78701-2483

DEPARTMENTAL MATERIAL SPECIFICATIONS

FLAT SURFACE REFLECTIVE SHEETING	DMS-8300
DELINEATORS AND OBJECT MARKERS	DMS-8600
MODULER GLARE SCREENS	DMS-8610

COLOR	USAGE	SIGN SHEETING
ORANGE	BACKGROUND	TYPE E (FLUORESCENT PRISMATIC)
WHITE	BACKGROUND	TYPE C (HIGH SPECIFIC INTENSITY)
BLACK	LEGEND & BORDERS	VINYL NON-REFLECTIVE SHEETING

REFER TO THE BC SHEETS FOR SHEETING REQUIREMENT ON CHANNELIZING DEVICES.

The five categories of work duration and their time at a location shall be:

A. Long-term stationary is work that occupies a location more than 3 days.

B. Intermediate-term stationary is work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than 1 hour.

C. Short-term stationary is daytime work that occupies a location for more than 1 hour, but less than 12 hours.

D. Short duration is work that occupies a location up to 1 hour.

E. Mobile is work that moves intermittently or continuously.

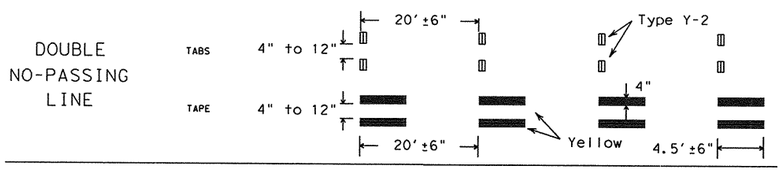
STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

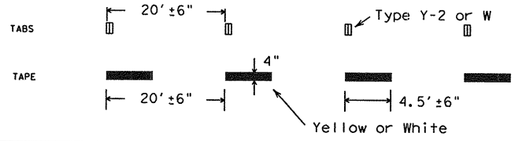
TRAFFIC CONTROL PLAN
TYPICAL DETAILS

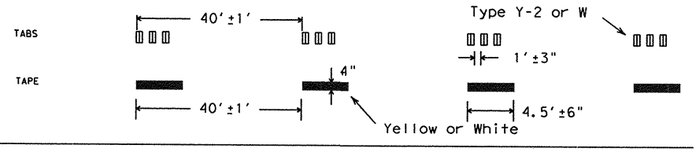
WZ(TD)-03

©TxDOT February 1998	DN:-LR	CK:-DTN	DW:-DN	CK:-GB	NEG NO.:

REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT			SHEET
4-98 3-03	DALLAS	6	(SEE TITLE SHEET)			109
	COUNTY		CONTROL	SECTION	JOB	HIGHWAY
	ROCKWALL		1014	03	039	FM 740







WORK ZONE SHORT TERM PAVEMENT MARKINGS DETAILS

NOTES:

1. Short term pavement markings may be prefabricated markings (stick down tape) or temporary flexible-reflective roadway marker tabs unless otherwise specified elsewhere in plans.
2. Short term pavement markings shall NOT be used to simulate edge lines.
3. Dimensions indicated on this sheet are typical and approximate. Variations in size and height may occur between markers or devices made by manufacturers, by as much as 1/4 inch, unless otherwise noted.
4. Temporary flexible-reflective roadway marker tabs will require normal maintenance replacement when used on roadways with an ADT per lane of up to 7500 vehicles with no more than 10% truck mix. When roadways exceed these values, additional maintenance replacement of devices should be planned.
5. No segment of roadway open to traffic shall remain without permanent pavement markings for a period greater than 14 calendar days. The Contractor will be responsible for maintaining short term pavement markings until permanent pavement markings are in place. When the Contractor is responsible for placement of permanent pavement markings, no segment of roadway shall remain without permanent pavement markings for a period greater than 14 calendar days unless weather conditions prohibit placement. Permanent pavement markings shall be placed as soon as weather permits.
6. For two lane, two-way roadways, DO NOT PASS signs shall be erected to mark the beginning of sections where passing is prohibited and PASS WITH CARE signs shall be erected to mark the beginning of sections where passing is permitted. Signs shall be in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) and may be used to indicate the limits of no-passing zones for up to 14 calendar days. Permanent pavement markings should then be placed.
7. For low volume two lane, two-way roadways of 4000 ADT or less, no-passing lines may be omitted when approved by the Engineer. DO NOT PASS and PASS WITH CARE signs shall be erected (see note 6).

TEMPORARY FLEXIBLE-REFLECTIVE ROADWAY MARKER TABS (TABS)

1. Temporary flexible-reflective roadway marker tabs detailed on this sheet will be designated Type Y-2 (two amber reflective surfaces with yellow body); Type Y (one amber reflective surface with yellow body); and Type W (one white or silver reflective surface with white body). Additional details may be found on BC(10).
2. Tabs shall meet requirements of Departmental Material Specification DMS-8242.
3. When dry, tabs shall be visible for a minimum distance of 200 feet during normal daylight hours and when illuminated by automobile low-beam head light at night, unless sight distance is restricted by roadway geometrics.
4. No two consecutive tabs nor four tabs per 1000 feet of line shall be missing or fail to meet the visual performance requirements of Note 3.

REMOVABLE - PREFABRICATED PAVEMENT MARKINGS

1. Removable prefabricated pavement markings shall meet the requirements of DMS-8241. A list of prequalified products can be found at the following web site:
ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/pdf/pavemark.pdf

NON REMOVABLE - PREFABRICATED PAVEMENT MARKINGS

1. Non-removable prefabricated pavement markings (foil back) shall meet the requirements of DMS-8240 or the TXDOT Purchase Specification No. 550-74-89. A list of prequalified products and a copy of the TXDOT Purchase Specifications can be found at web sites:
ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/pdf/pavement.pdf
ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/pdf/tss/tss377.pdf

RAISED PAVEMENT MARKERS

1. All raised pavement markers used for work zone markings shall meet the requirements of Item 672, "RAISED PAVEMENT MARKERS" and Departmental Material Specification DMS-4200.
2. A list of prequalified reflective raised pavement markers can be found at the following web site:
ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/pdf/dms4200preq.pdf

WORK ZONE SHORT TERM PAVEMENT MARKINGS PATTERNS

If raised pavement markers are used to supplement REMOVABLE short term markings, the markers shall be applied to the top of the tape at the approximate mid length of the tape. This allows an easier removal of raised markers and tape.

DEPARTMENT MATERIAL SPECIFICATIONS	
PREFABRICATED PAVEMENT MARKINGS-PERMANENT	DMS-8240
PREFABRICATED PAVEMENT MARKINGS-REMOVABLE	DMS-8241
TEMPORARY FLEXIBLE-REFLECTIVE ROADWAY MARKER TABS	DMS-8242
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200

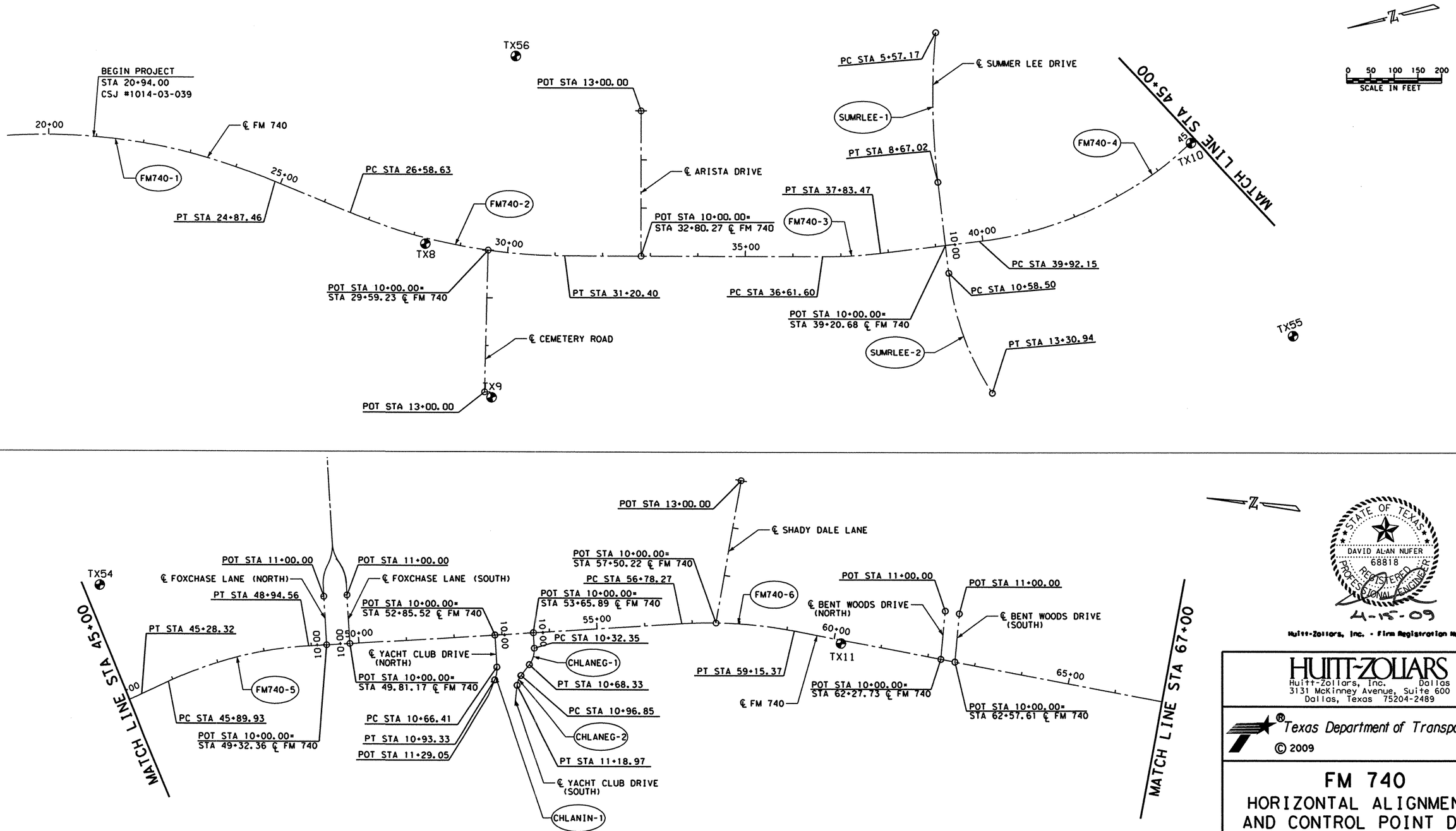
STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

WORK ZONE SHORT TERM PAVEMENT MARKINGS

WZ(STPM)-03

DN: - LR	CK: -	DW: - DN	CK: - MT	NEG NO.:

REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT			SHEET
1-97 3-03	DALLAS	6	(SEE TITLE SHEET)			110
	COUNTY		CONTROL	SECTION	JOB	HIGHWAY
	ROCKWALL		1014	03	039	FM 740



NOTE:

1. ALL BEARINGS ARE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, NORTH CENTRAL ZONE, NAD 83. ALL DISTANCES AND COORDINATES ARE ADJUSTED TO SURFACE USING THE TXDOT DALLAS COUNTY COMBINED SURFACE ADJUSTMENT FACTOR OF 1.000136506.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
4-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

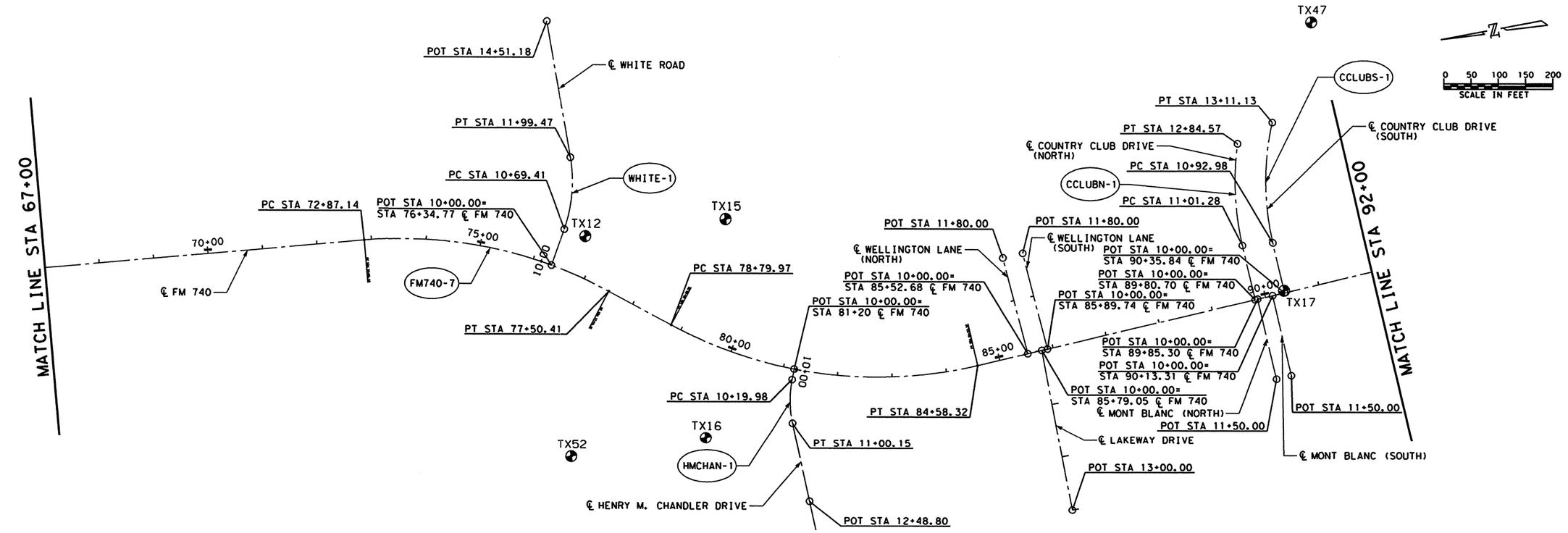
HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
HORIZONTAL ALIGNMENT AND CONTROL POINT DATA

SCALE: 1"=200' SHEET 1 OF 6

DESIGN	FED.RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	111
CHECK	CONTROL	SECTION	JOB	
CVL	1014	03	039	
CHECK				
DAN				



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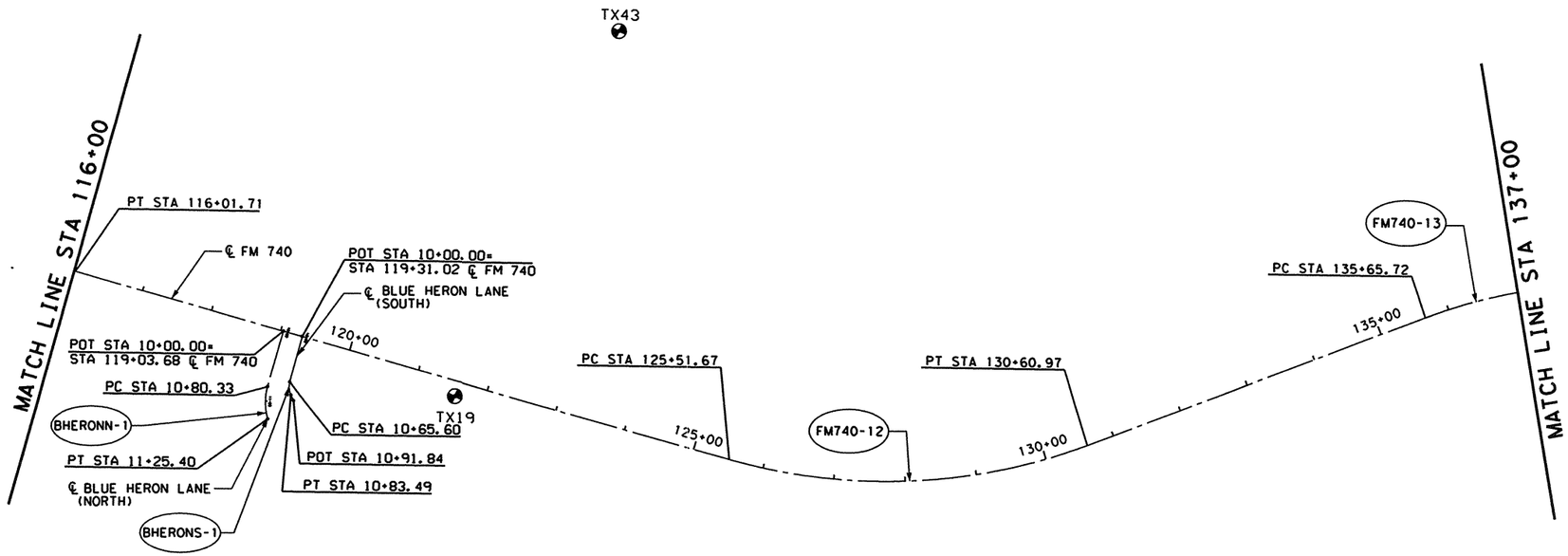
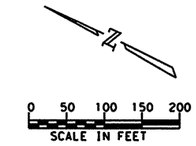
Texas Department of Transportation

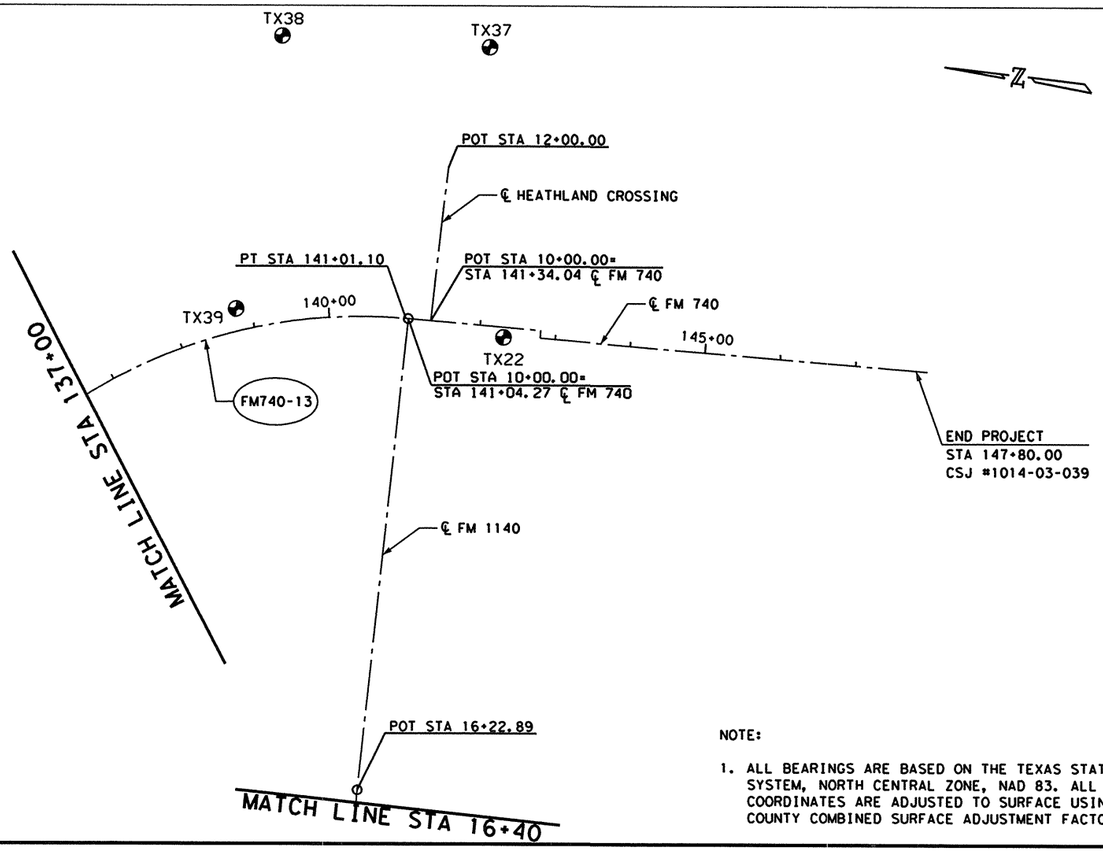
FM 740
HORIZONTAL ALIGNMENT AND CONTROL POINT DATA

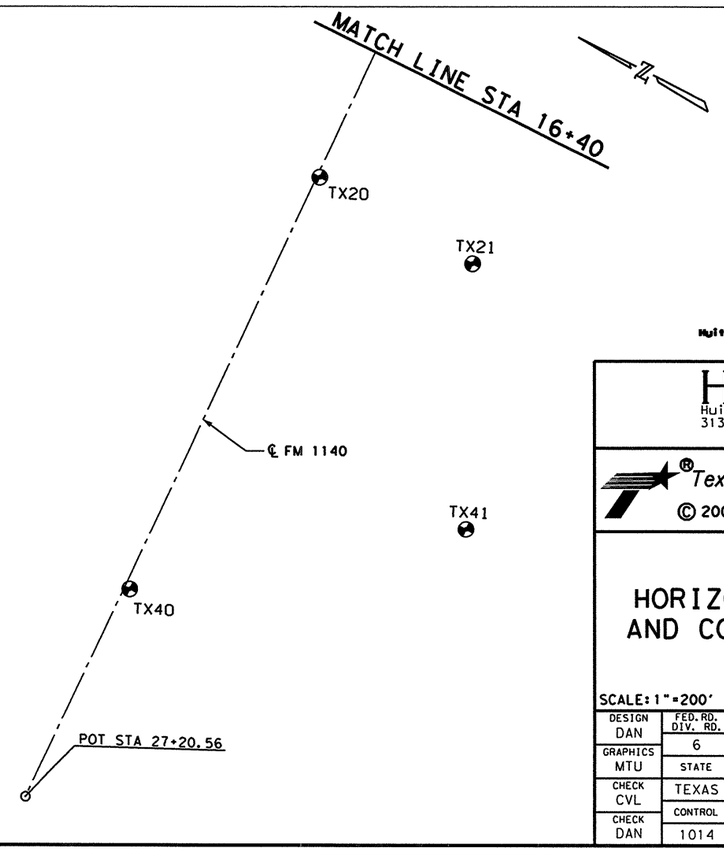
SCALE: 1"=200' SHEET 2 OF 6

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	112
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	









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HORIZONTAL ALIGNMENT AND CONTROL POINT DATA

SCALE: 1"=200' SHEET 3 OF 6

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	113
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

FM 740

CURVE					N	E
	POT 10+00.00				7,015,333.1561	2,591,626.4917
		S 6° 30' 01" W				
FM740-1	PC 17+93.00	D 4° 28' 34"			7,014,545.2548	2,591,536.7160
	PI 21+49.00	Δ 31° 05' 08" RT	T 356.00'		7,014,191.5391	2,591,496.4127
	PT 24+87.46	R 1,280.00'	L 694.46'		7,013,909.4271	2,591,279.2675
		S 37° 35' 09" W				
FM740-2	PC 26+58.63	D 4° 46' 29"			7,013,773.7819	2,591,174.8597
	PI 28+92.41	Δ 22° 02' 53" LT	T 233.78'		7,013,588.5271	2,591,032.2667
	PT 31+20.40	R 1,200.00'	L 461.77'		7,013,363.2930	2,590,969.6431
		S 15° 32' 17" W				
FM740-3	PC 36+61.60	D 5° 43' 46"			7,012,841.8721	2,590,824.6683
	PI 37+22.61	Δ 6° 58' 56" LT	T 61.01'		7,012,783.0949	2,590,808.3260
	PT 37+83.47	R 1,000.00'	L 121.86'		7,012,722.7671	2,590,799.2499
		S 8° 33' 21" W				
FM740-4	PC 39+92.15	D 7° 09' 43"			7,012,516.4021	2,590,768.2032
	PI 42+70.74	Δ 38° 23' 59" LT	T 278.59'		7,012,240.9144	2,590,726.7572
	PT 45+28.32	R 800.00'	L 536.16'		7,011,999.2719	2,590,865.3941
		S 29° 50' 39" E				
FM740-5	PC 45+89.93	D 6° 59' 14"			7,011,945.8243	2,590,896.0584
	PI 47+44.03	Δ 21° 17' 07" RT	T 154.09'		7,011,812.1681	2,590,972.7407
	PT 48+94.56	R 820.00'	L 304.63'		7,011,659.7926	2,590,995.6729
		S 8° 33' 31" E				
FM740-6	PC 56+78.27	D 5° 58' 06"			7,010,884.8188	2,591,112.3049
	PI 57+97.43	Δ 14° 09' 05" RT	T 119.16'		7,010,766.9851	2,591,130.0387
	PT 59+15.37	R 960.00'	L 237.11'		7,010,648.3915	2,591,118.4257
		S 5° 35' 34" W				
FM740-7	PC 72+87.14	D 7° 09' 43"			7,009,283.1557	2,590,984.7385
	PI 75+25.47	Δ 33° 10' 44" RT	T 238.33'		7,009,045.9601	2,590,961.5117
	PT 77+50.41	R 800.00'	L 463.27'		7,008,860.1464	2,590,812.2651
		S 38° 46' 18" W				
FM740-8	PC 78+79.97	D 7° 09' 43"			7,008,759.1332	2,590,731.1306
	PI 81+82.43	Δ 41° 25' 16" LT	T 302.46'		7,008,523.3183	2,590,541.7228
	PT 84+58.32	R 800.00'	L 578.35'		7,008,221.1785	2,590,555.7043
		S 2° 38' 58" E				
FM740-9	PC 93+91.24	D 1° 00' 00"			7,007,289.2507	2,590,598.8292
	PI 94+27.16	Δ 0° 43' 06" LT	T 35.92'		7,007,253.3691	2,590,600.4896
	PT 94+63.08	R 5,730.00'	L 71.84'		7,007,217.5111	2,590,602.5997
		S 3° 22' 04" E				
FM740-10	PC 103+24.26	D 7° 09' 43"			7,006,357.8161	2,590,653.1902
	PI 105+02.20	Δ 25° 04' 47" LT	T 177.94'		7,006,180.1830	2,590,663.6434
	PT 106+74.44	R 800.00'	L 350.18'		7,006,023.7284	2,590,748.4062
		S 28° 26' 51" E				
FM740-11	PC 112+66.32	D 5° 43' 46"			7,005,503.3193	2,591,030.3496
	PI 114+35.60	Δ 19° 12' 59" RT	T 169.29'		7,005,354.4747	2,591,110.9895
	PT 116+01.71	R 1,000.00'	L 335.39'		7,005,187.3819	2,591,138.1458
		S 9° 13' 52" E				
FM740-12	PC 125+51.67	D 7° 09' 43"			7,004,249.7232	2,591,290.5364
	PI 128+15.28	Δ 36° 28' 33" LT	T 263.61'		7,003,989.5240	2,591,332.8246
	PT 130+60.97	R 800.00'	L 509.30'		7,003,805.4354	2,591,521.5130
		S 45° 42' 25" E				
FM740-13	PC 135+65.72	D 8° 11' 06"			7,003,452.9530	2,591,882.8028
	PI 138+47.27	Δ 43° 49' 16" RT	T 281.55'		7,003,256.3397	2,592,084.3289
	PT 141+01.10	R 700.00'	L 535.38'		7,002,974.9437	2,592,093.5938
		S 1° 53' 09" E				
	POT 142+80.00				7,002,796.1383	2,592,099.4809
	SHIFT: 10.00' RT AT STA 142+80.00					
	POT 142+80.00				7,002,795.8092	2,592,089.4863
	POT 147+80				7,002,296.0800	2,592,105.9398

CEMETERY ROAD

CURVE					N	E
	POT 10+00.00				7,013,515.2121	2,591,023.0997
		N 73° 13' 27" W				
	POT 13+00.00				7,013,601.8001	2,590,735.8667

ARISTA DRIVE

CURVE					N	E
	POT 10+00.00				7,013,209.2651	2,590,926.8177
		S 74° 36' 34" E				
	POT 13+00.00				7,013,129.6461	2,591,216.0607

SUMMER LEE DRIVE

CURVE					N	E
		N 69° 26' 55" W				
SUMRLEE-1	PC 5+57.17	D 3° 52' 17"			7,012,489.5807	2,591,209.7012
	PI 7+12.66	Δ 11° 59' 44" LT	T 155.50'		7,012,544.1677	2,591,064.0998
	PT 8+67.02	R 1,480.00'	L 309.86'		7,012,567.3014	2,590,910.3326
		N 81° 26' 39" W				
SUMRLEE-2	PC 10+58.50	D 9° 32' 57"			7,012,595.7881	2,590,720.9837
	PI 11+97.11	Δ 26° 00' 57" LT	T 138.61'		7,012,616.4090	2,590,583.9186
	PT 13+30.94	R 600.00'	L 272.44'		7,012,574.8212	2,590,451.6971
		S 72° 32' 24" W				

FOXCHASE LANE (NORTH)

CURVE					N	E
	POT 10+00.00				7,011,622.4179	2,591,001.2977
		N 81° 26' 29" E				
	POT 11+00.00				7,011,637.3001	2,591,100.1841

FOXCHASE LANE (SOUTH)

CURVE					N	E
	POT 10+00.00				7,011,574.1514	2,591,008.5617
		N 81° 26' 29" E				
	POT 11+00.00				7,011,589.0336	2,591,107.4481

YACHT CLUB DRIVE (NORTH)

CURVE					N	E
		S 81° 26' 29" W				
CHLANIN-1	PI 10+80.10	D 95° 29' 34.68"			7,011,261.2730	2,590,974.6444
	PC 10+66.41	Δ 25° 42' 42" RT	T 13.69'		7,011,263.3108	2,590,988.1850
	PT 10+93.33	R 60'	L 26.93'		7,011,265.3114	2,590,961.5603
		N 72° 50' 49" W				
	POT 11+29.05				7,011,275.8437	2,590,927.4368

YACHT CLUB DRIVE (SOUTH)

CURVE					N	E
		S 81° 26' 29" W				
CHLANEG-1	PI 10+51.16	D 114° 35' 29.61"			7,011,186.1029	2,591,015.2268
	PC 10+32.35	Δ 41° 13' 30" RT	T 18.81'		7,011,188.9017	2,591,033.8236
	PT 10+68.33	R 50'	L 35.98'		7,011,196.2534	2,590,999.3952
		N 57° 20' 01.31" W				
CHLANEG-2	PI 11+08.20	D 143° 14' 22.02"			7,011,217.7735	2,590,965.8309
	PC 10+96.85	Δ 31° 41' 02" LT	T 11.35'		7,011,211.6472	2,590,975.3860
	PT 11+18.97	R 40'	L 22.12'		7,011,217.9681	2,590,954.4820
		N 89° 01' 03" W				
	POT 11+61.22				7,011,218.6925	2,590,912.2401

NOTE:

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STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
4-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
HORIZONTAL ALIGNMENT AND CONTROL POINT DATA

SCALE: NTS SHEET 4 OF 6

DESIGN	FED.RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	114
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

SHADY DALE LANE

CURVE				N	E
	POT 10+00.00			7,010,813.3361	2,591,120.3377
		S 84° 54' 17" E			
	POT 13+00.00			7,010,786.6921	2,591,419.1517

BENTON WOODS DRIVE (NORTH)

CURVE				N	E
	POT 10+00.00			7,010,337.5267	2,591,087.9851
		S 89° 41' 44" E			
	POT 11+00.00			7,010,336.9953	2,591,187.9837

BENTON WOODS DRIVE (SOUTH)

CURVE				N	E
	POT 10+00.00			7,010,307.7877	2,591,085.0729
		S 89° 38' 18" E			
	POT 11+00.00			7,010,307.1565	2,591,185.0710

WHITE ROAD

CURVE				N	E
	POT 10+00.00			7,008,955.2138	2,590,877.9228
		S 59° 30' 37" E			
(WHITE-1) PC	10+69.41	D 22° 55' 06"		7,008,919.9987	2,590,937.7307
PI	11+35.95	Δ 29° 48' 32" LT	T 66.54'	7,008,886.2371	2,590,995.0699
PT	11+99.47	R 250.00'	L 130.07'	7,008,885.4463	2,591,061.6057
		S 89° 19' 09" E			
	POT 14+51.18			7,008,882.4551	2,591,313.2927

HENRY M. CHANDLER DRIVE

CURVE				N	E
	POT 10+00.00			7,008,552.4069	2,590,610.9283
		N 68° 25' 10" W			
(HMCHAN-1) PC	10+19.98	D 28° 38' 52"		7,008,559.7554	2,590,592.3498
PI	10+60.61	Δ 22° 58' 04" LT	T 40.63'	7,008,574.7002	2,590,554.5662
PT	11+00.15	R 200.00'	L 80.17'	7,008,573.7166	2,590,513.9462
		S 88° 36' 46" W			
	POT 12+48.80			7,008,570.1182	2,590,365.3425

WELLINGTON LANE (NORTH)

CURVE				N	E
	POT 10+00.00			7,008,126.9118	2,590,560.0664
		N 86° 02' 35" E			
	POT 11+80.00			7,008,139.3332	2,590,739.6373

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LAKEWAY DRIVE

CURVE				N	E
	POT 10+00.00			7,008,100.5764	2,590,561.2851
		S 89° 53' 55" W			
	POT 13+00.00			7,008,100.0462	2,590,261.2856

WELLINGTON LANE (SOUTH)

CURVE				N	E
	POT 10+00.00			7,008,089.8929	2,590,561.7795
		N 85° 59' 58" E			
	POT 11+80.00			7,008,102.4506	2,590,741.3409

COUNTRY CLUB DRIVE (NORTH)

CURVE				N	E
	POT 10+00.00			7,007,699.3487	2,590,579.8519
		N 87° 21' 02" E			
(CCLUBN-1) PC	11+01.28	D 11° 27' 33"		7,007,704.0305	2,590,681.0265
PI	11+93.97	Δ 21° 00' 11" RT	T 92.68'	7,007,708.3148	2,590,773.6105
PT	12+84.57	R 500.00'	L 183.29'	7,007,679.1308	2,590,861.5789
		S 71° 38' 47" E			

MONT BLANC (NORTH)

CURVE				N	E
	POT 10+00.00			7,007,694.7563	2,590,580.0644
		S 87° 21' 02" W			
	POT 11+50.00			7,007,687.8225	2,590,430.2248

MONT BLANC (SOUTH)

CURVE				N	E
	POT 10+00.00			7,007,666.7752	2,590,581.3592
		S 87° 21' 02" W			
	POT 11+50.00			7,007,659.8414	2,590,431.5196

COUNTRY CLUB DRIVE (SOUTH)

CURVE				N	E
	POT 10+00.00			7,007,644.2679	2,590,582.4008
		N 87° 21' 02" E			
(CCLUBS-1) PC	10+92.98	D 11° 56' 12"		7,007,648.5660	2,590,675.2826
PI	12+03.97	Δ 26° 02' 22" RT	T 110.99'	7,007,653.6965	2,590,786.1541
PT	13+11.13	R 480.00'	L 218.15'	7,007,609.6351	2,590,888.0237
		S 66° 36' 37" E			

LAFAYETTE DRIVE (NORTH)

CURVE				N	E
	POT 10+00.00			7,007,237.8003	2,590,601.4418
		S 89° 09' 13" W			
	POT 11+46.11			7,007,235.6418	2,590,455.3453

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Texas Department of Transportation

FM 740
HORIZONTAL ALIGNMENT AND CONTROL POINT DATA

SCALE: NTS SHEET 5 OF 6

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	115
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

LAFAYETTE DRIVE (SOUTH)

CURVE				N	E
POT 10+00.00				7,007,192.6350	2,590,604.0636
	S 89° 14' 41" W				
POT 11+48.14				7,007,190.6826	2,590,455.9379

LAFAYETTE LANDING (NORTH)

CURVE				N	E
POT 10+00.00				7,006,776.9698	2,590,628.5243
	S 86° 37' 56" W				
POT 11+26.62				7,006,769.5314	2,590,502.1227

LAFAYETTE LANDING (SOUTH)

CURVE				N	E
POT 10+00.00				7,006,738.6547	2,590,630.7790
	S 86° 37' 56" W				
(LAFLANS-1) PC 10+76.51	D 114° 35' 30"			7,006,734.1599	2,590,554.3988
PI 10+83.58	Δ 16° 05' 18" RT	T 7.07'		7,006,733.7448	2,590,547.3446
PT 10+90.55	R 50.00'	L 14.04'		7,006,735.3008	2,590,540.4517
	N 77° 16' 46" W				
POT 11+33.68				7,006,744.7976	2,590,498.3818

SHEPHERDS GLEN ROAD

CURVE				N	E
POT 10+00.00				7,005,977.4408	2,590,773.4836
	S 61° 33' 09" W				
(SHEPHRD-1) PC 11+59.50	D 19° 05' 55"			7,005,901.4635	2,590,633.2452
PI 12+31.06	Δ 26° 50' 04" RT	T 71.57'		7,005,867.3729	2,590,570.3208
PT 13+00.00	R 300.00'	L 140.51'		7,005,865.3584	2,590,498.7835
	S 88° 23' 13" W				

GREEN PASTURES ROAD

CURVE				N	E
POT 10+00.00				7,005,324.3477	2,591,105.8547
	S 72° 45' 05" W				
POT 13+00.00				7,005,235.3916	2,590,819.3467

FM 1140

CURVE				N	E
POT 10+00.00				7,002,971.7744	2,592,093.6981
	S 89° 30' 08" W				
POT 16+22.89				7,002,966.3641	2,591,470.8267
	S 88° 43' 43" W				
POT 27+20.56				7,002,942.0101	2,590,373.4287

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BLUE HERON LANE (NORTH)

CURVE				N	E
POT 10+00.00				7,004,889.3209	2,591,186.3209
	S 80° 46' 08" W				
(BHERONN-1) PC 10+80.33	D 71° 37' 11.01"			7,004,876.4342	2,591,107.2961
PI 11+03.48	Δ 32° 16' 35" LT	T 23.15'		7,004,872.7208	2,591,084.4473
PT 11+25.40	R 80.00'	L 45.07'		7,004,857.3799	2,591,067.1121
	S 48° 29' 33" W				

BLUE HERON LANE (SOUTH)

CURVE				N	E
POT 10+00.00				7,004,862.3332	2,591,190.9735
	S 80° 13' 09" W				
(BHERONS-1) PC 10+65.60	D 114° 35' 30"			7,004,851.1892	2,591,126.3271
PI 10+74.95	Δ 16° 05' 18" RT	T 7.07'		7,004,849.6014	2,591,117.1162
PT 10+83.49	R 50.00'	L 14.04'		7,004,842.3603	2,591,111.2061
	S 39° 13' 15" W				
POT 10+91.84				7,004,835.8900	2,591,105.9252

HEATHLAND CROSSING

CURVE				N	E
POT 10+00.00				7,002,942.0228	2,592,094.6777
	N 89° 59' 42" E				
POT 12+00.00				7,002,942.0406	2,592,294.6777

CONTROL MONUMENTS

POINT	NORTHING	EASTING	ELEVATION
TX 17	7007644.565	2590586.368	573.350
TX 16	7008734.686	2590516.345	560.780
TX 12	7008884.259	2590918.408	551.095
TX 11	7010549.103	2591101.749	557.692
TX 51	7010430.428	2590674.297	527.143
TX 10	7012033.876	2590845.877	567.368
TX 55	7011934.209	2590401.713	569.542
TX 54	7012107.600	2591081.477	566.324
TX 8	7013639.021	2591071.054	563.270
TX 9	7013590.930	2590721.238	547.070
TX 56	7013353.297	2591395.435	553.542
TX 39	7003199.188	2592079.443	551.224
TX 38	7003180.115	2592440.981	548.299
TX 15	7008625.732	2590901.360	545.100
TX 52	7008984.002	2590526.585	551.167
TX 22	7002843.898	2592084.729	542.994
TX 37	7002906.094	2592458.386	547.540
TX 19	7004634.820	2591206.930	564.156
TX 44	7004592.012	2590882.668	553.018
TX 43	7004639.887	2591760.780	551.171
TX 18	7006056.044	2590717.702	549.947
TX 46	7005880.628	2590388.330	515.763
TX 45	7006218.817	2591177.049	537.875
TX 20	7002958.373	2591293.360	566.843
TX 21	7002726.609	2591263.753	566.772
TX 40	7002941.764	2590679.702	574.211
TX 41	7002579.000	2590949.993	573.730

BENCH MARKS

B.M. #	MONUMENT TYPE	STATION	OFFSET	NORTHING	EASTING	ELEVATION
921	TxDOT DISK	563+42.37	414.42' LT	7016739.6870	2461232.4850	456.98
912	TxDOT DISK	572+30.44	636.93' RT	7017876.6810	2462007.8330	458.95
911	TxDOT DISK	573+61.69	574.37' LT	7017679.0860	2460805.5680	459.20
91	TxDOT DISK	574+41.71	0.54' LT	7017909.7040	2461337.0720	459.63

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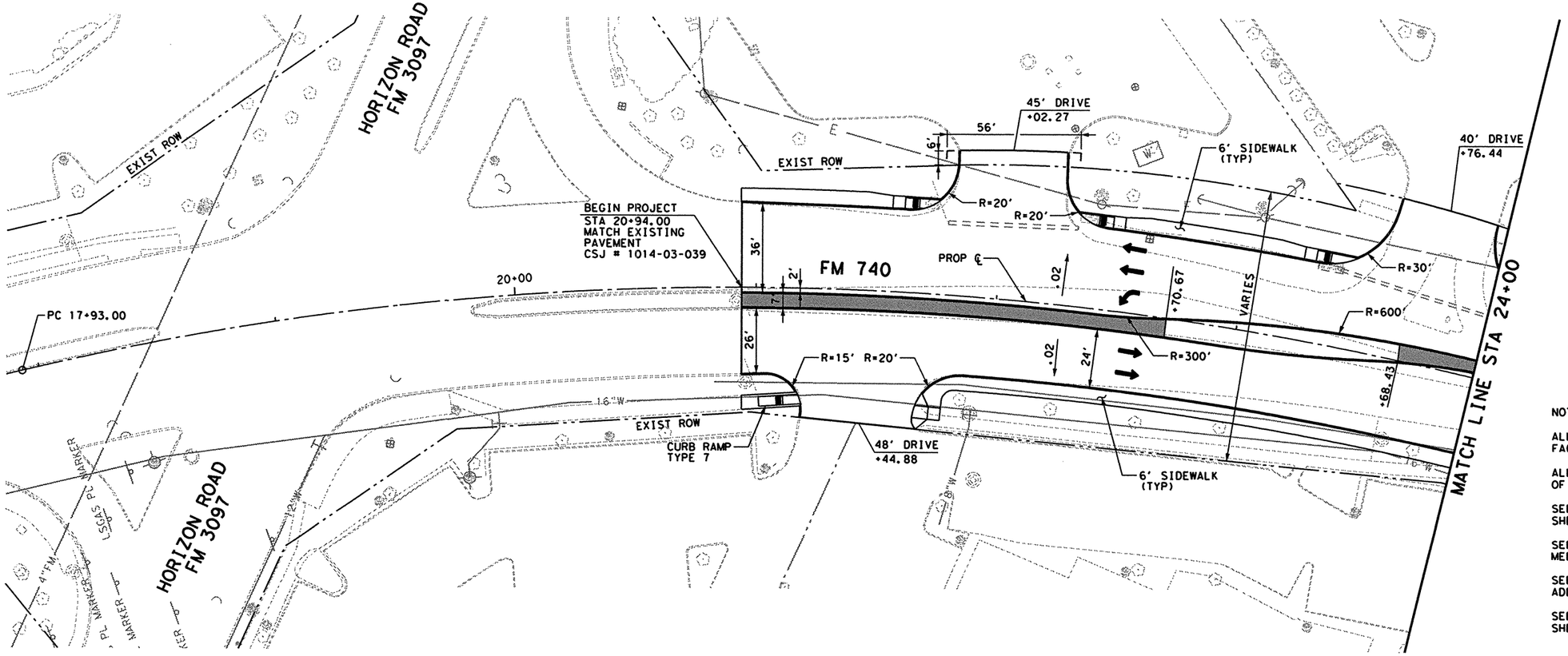
FM 740
HORIZONTAL ALIGNMENT AND CONTROL POINT DATA

SCALE: NTS SHEET 6 OF 6

DESIGN	FED.RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	116
CHECK CVL	CONTROL	SECTION	JOB	
CHECK DAN	1014	03	039	



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SCALE IN FEET

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

ALL PAVEMENT DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB.

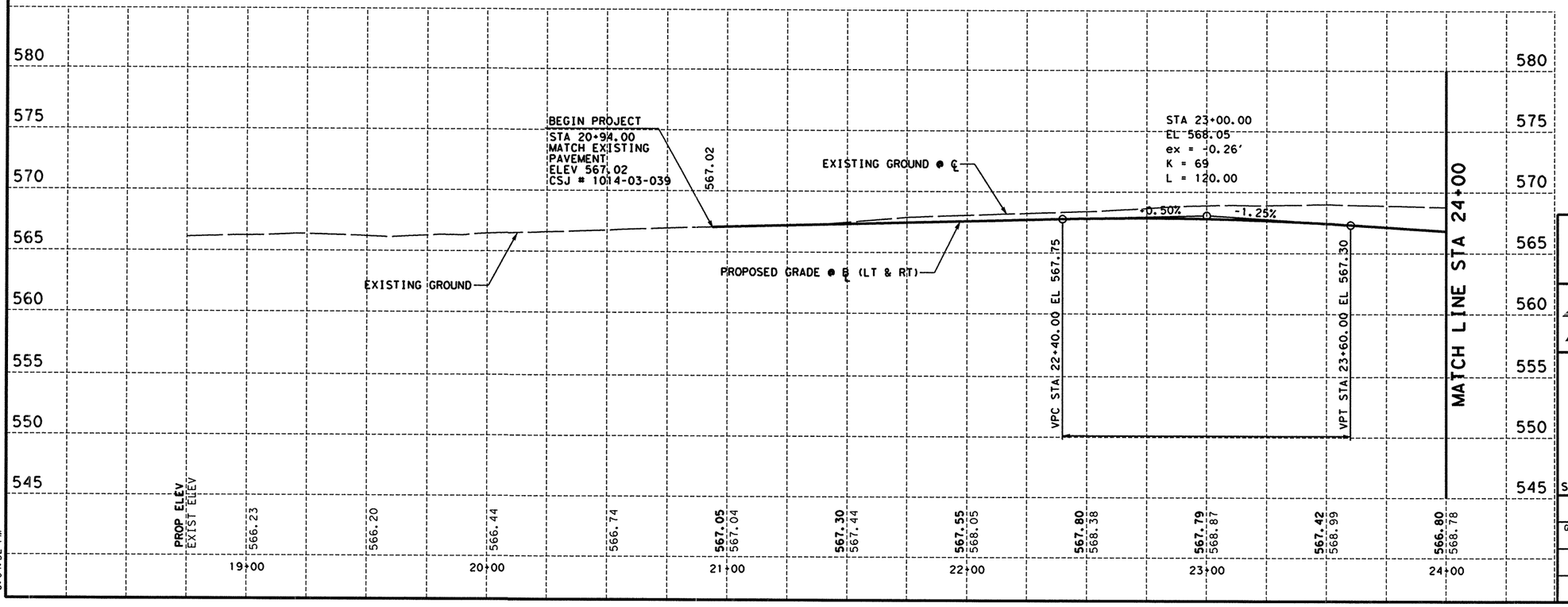
ALL RADII DIMENSIONED OFF OF FACE OF CURB.

SEE MISCELLANEOUS DRIVEWAY DETAILS SHEET FOR ADDITIONAL DRIVEWAY INFORMATION.

SEE MEDIAN DETAILS SHEETS FOR ADDITIONAL MEDIAN INFORMATION.

SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SEE MISCELLANEOUS ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION.



STATE OF TEXAS
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Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
PAVING PLAN & PROFILE
BEGIN PROJECT TO STA 24+00

H: 1"=50'
SCALE: V: 1"=10'

SHEET 1 OF 24

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	117
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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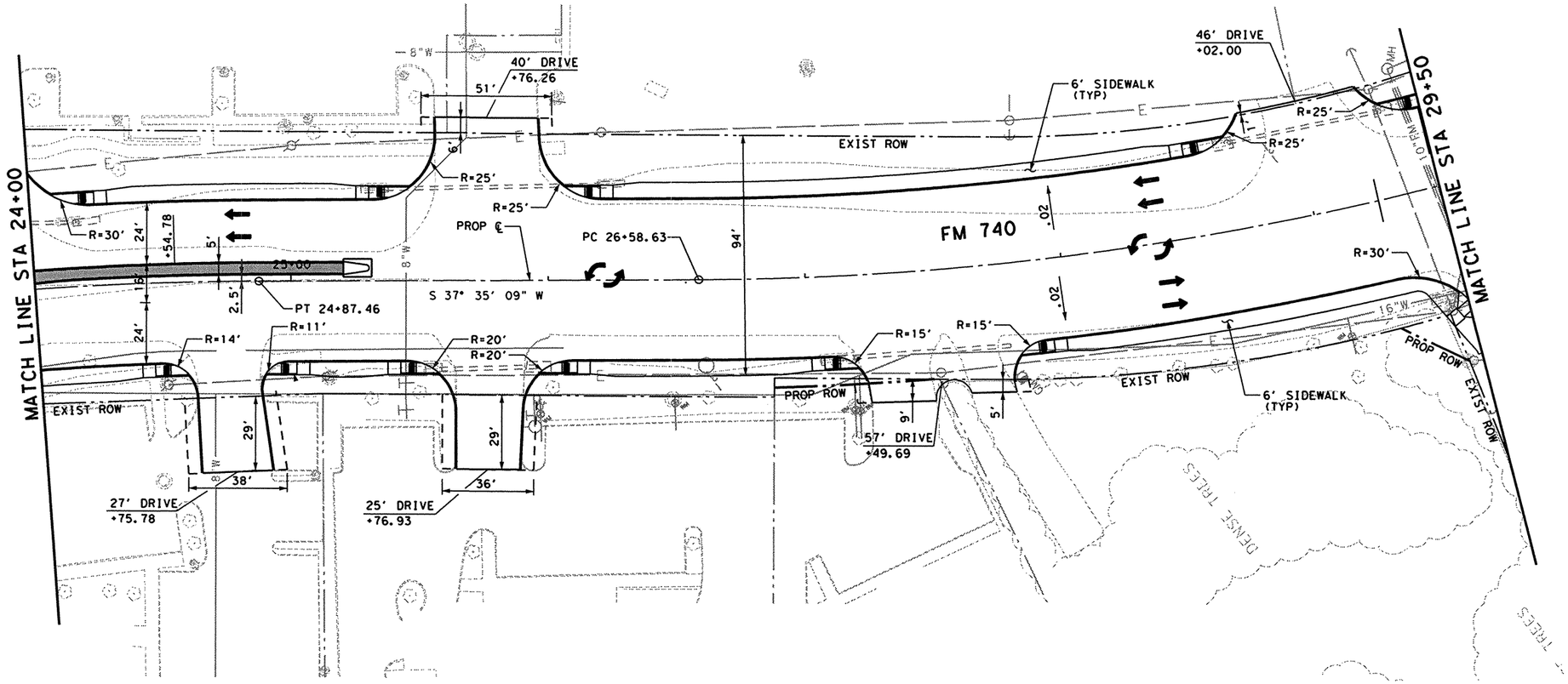

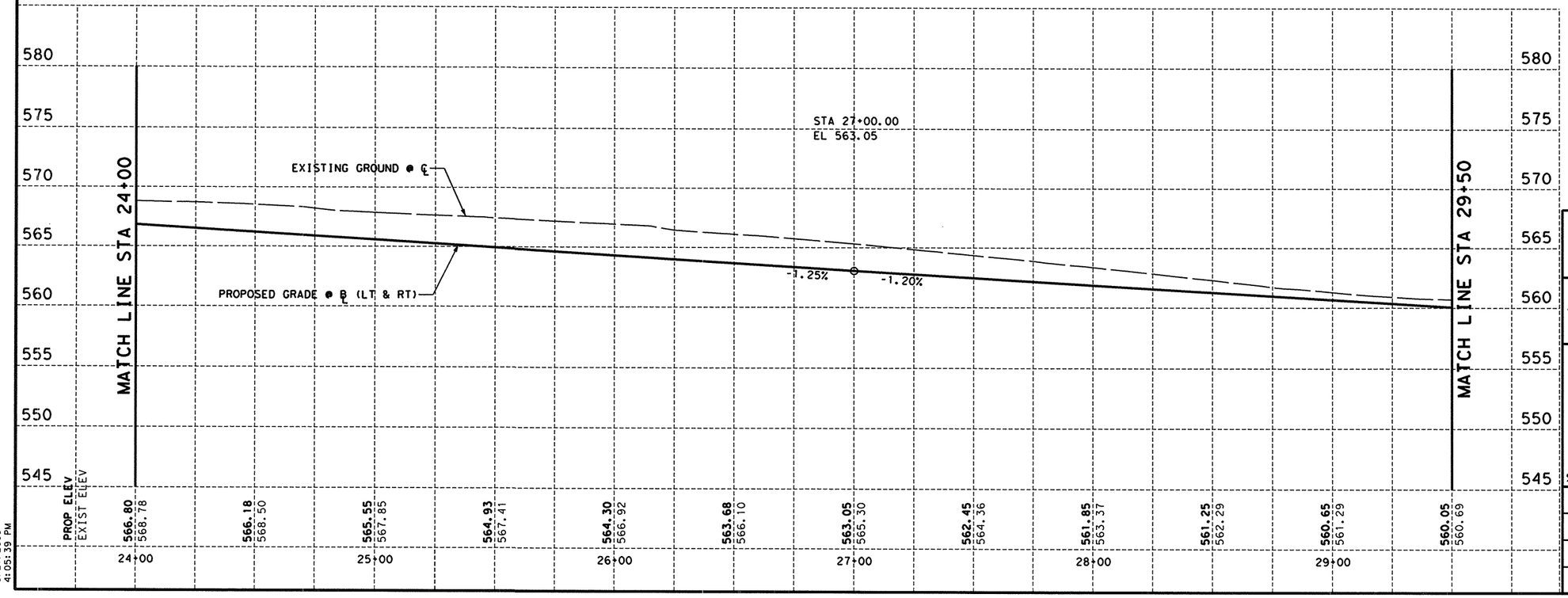

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SCALE IN FEET

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

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ALL RADII DIMENSIONED OFF OF FACE OF CURB.

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SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SEE MISCELLANEOUS ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
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5-21-09

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Texas Department of Transportation

FM 740
PAVING PLAN & PROFILE
STA 24+00 TO STA 29+50

H: 1"=50'
SCALE: V: 1"=10'

SHEET 2 OF 24

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	118
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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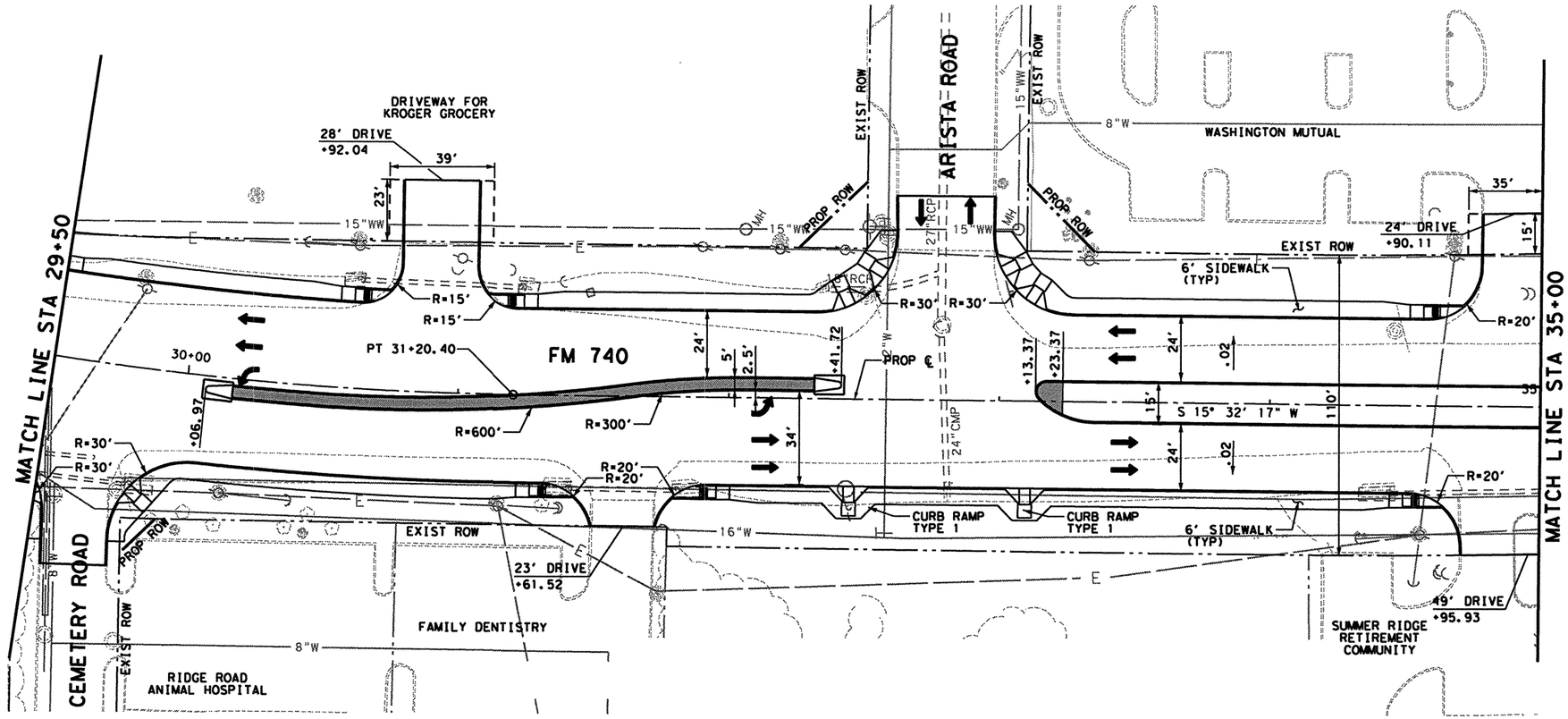

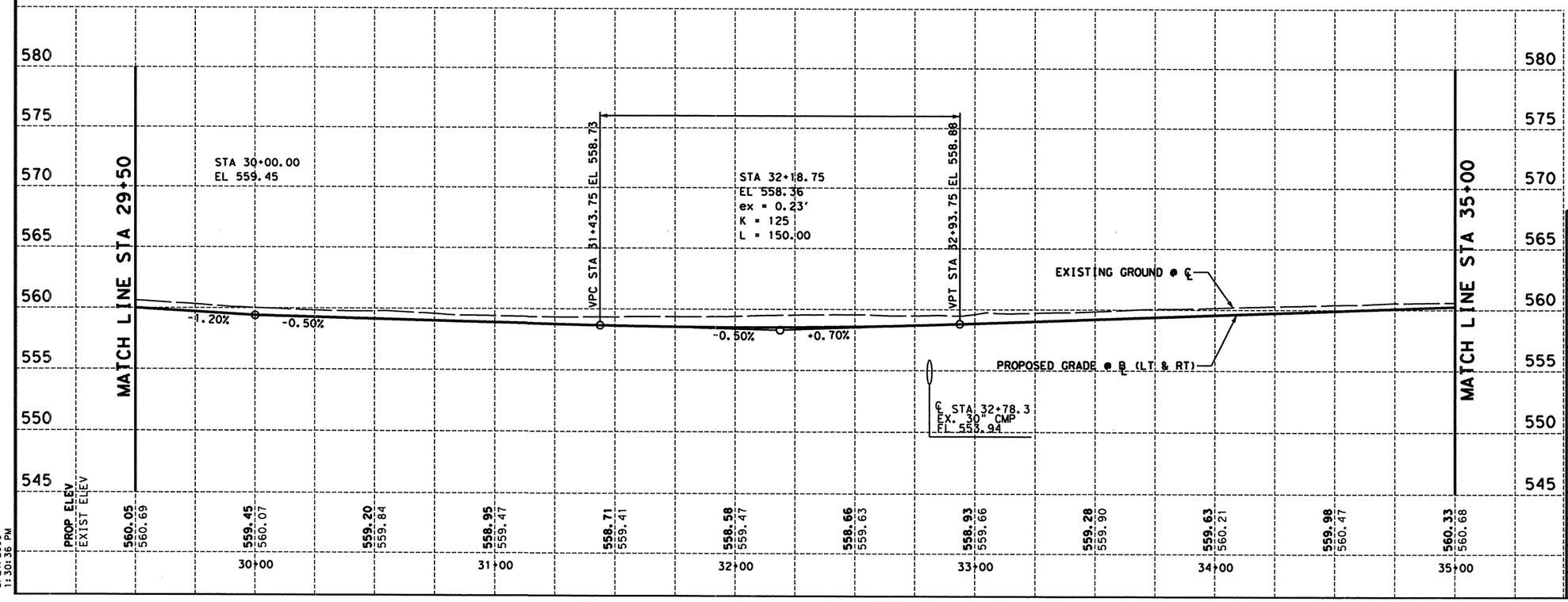

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SCALE IN FEET

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

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ALL RADII DIMENSIONED OFF OF FACE OF CURB.

SEE MISCELLANEOUS DRIVEWAY DETAILS SHEET FOR ADDITIONAL DRIVEWAY INFORMATION.

SEE MEDIAN DETAILS SHEETS FOR ADDITIONAL MEDIAN INFORMATION.

SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SEE MISCELLANEOUS ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
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5-21-09

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Texas Department of Transportation

FM 740
PAVING PLAN & PROFILE

STA 29+50 TO STA 35+00

SCALE: H: 1"=50'
V: 1"=10'

SHEET 3 OF 24

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	119
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

jparas
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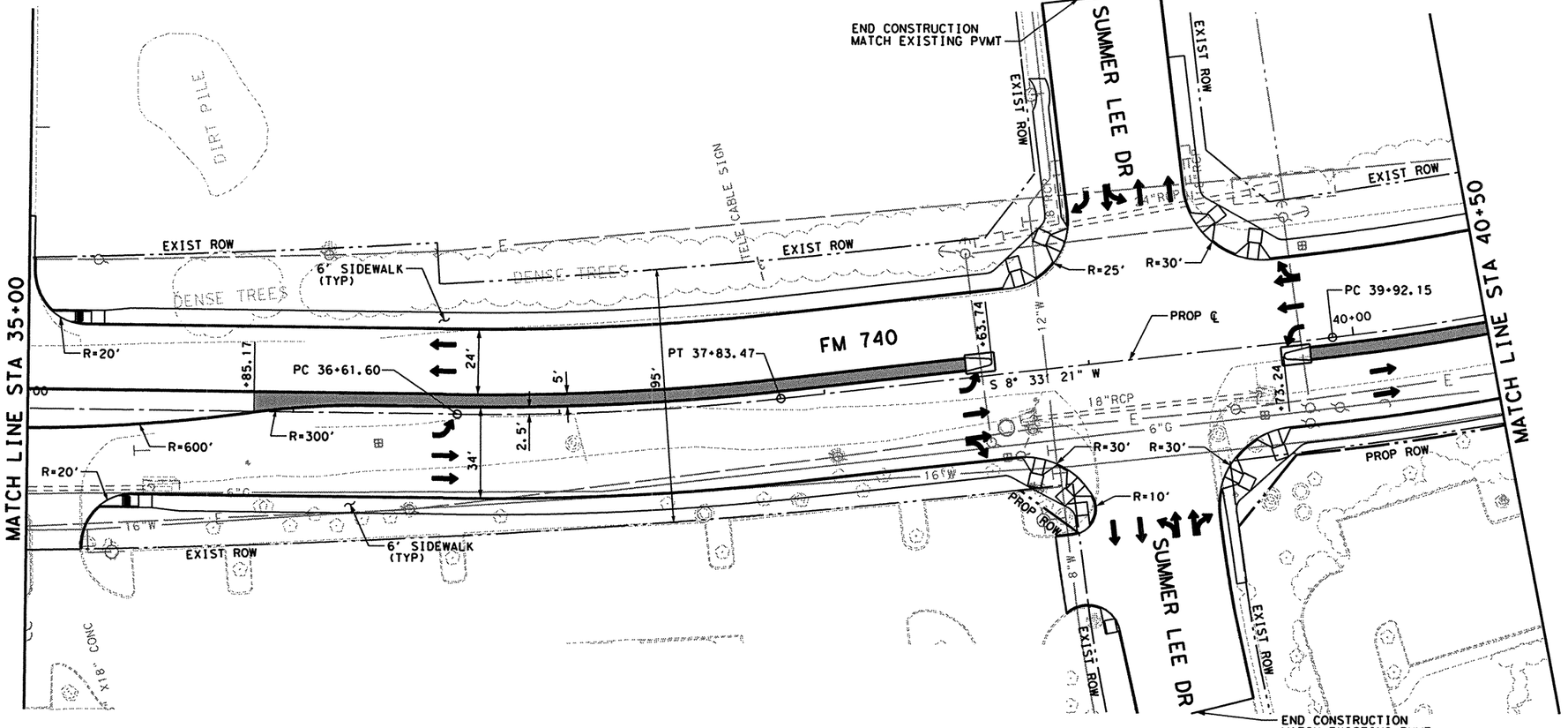

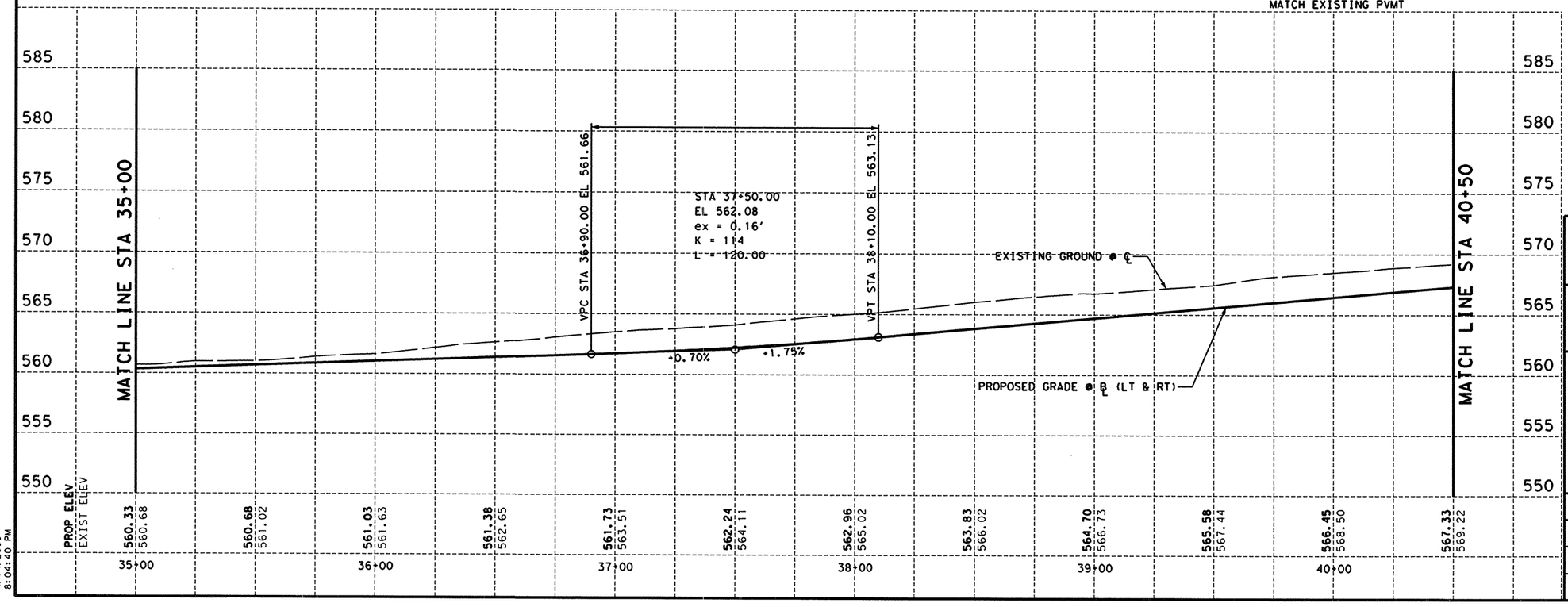

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SCALE IN FEET

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

ALL PAVEMENT DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB.

ALL RADII DIMENSIONED OFF OF FACE OF CURB.

SEE MISCELLANEOUS DRIVEWAY DETAILS SHEET FOR ADDITIONAL DRIVEWAY INFORMATION.

SEE MEDIAN DETAILS SHEETS FOR ADDITIONAL MEDIAN INFORMATION.

SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SEE MISCELLANEOUS ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
4-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

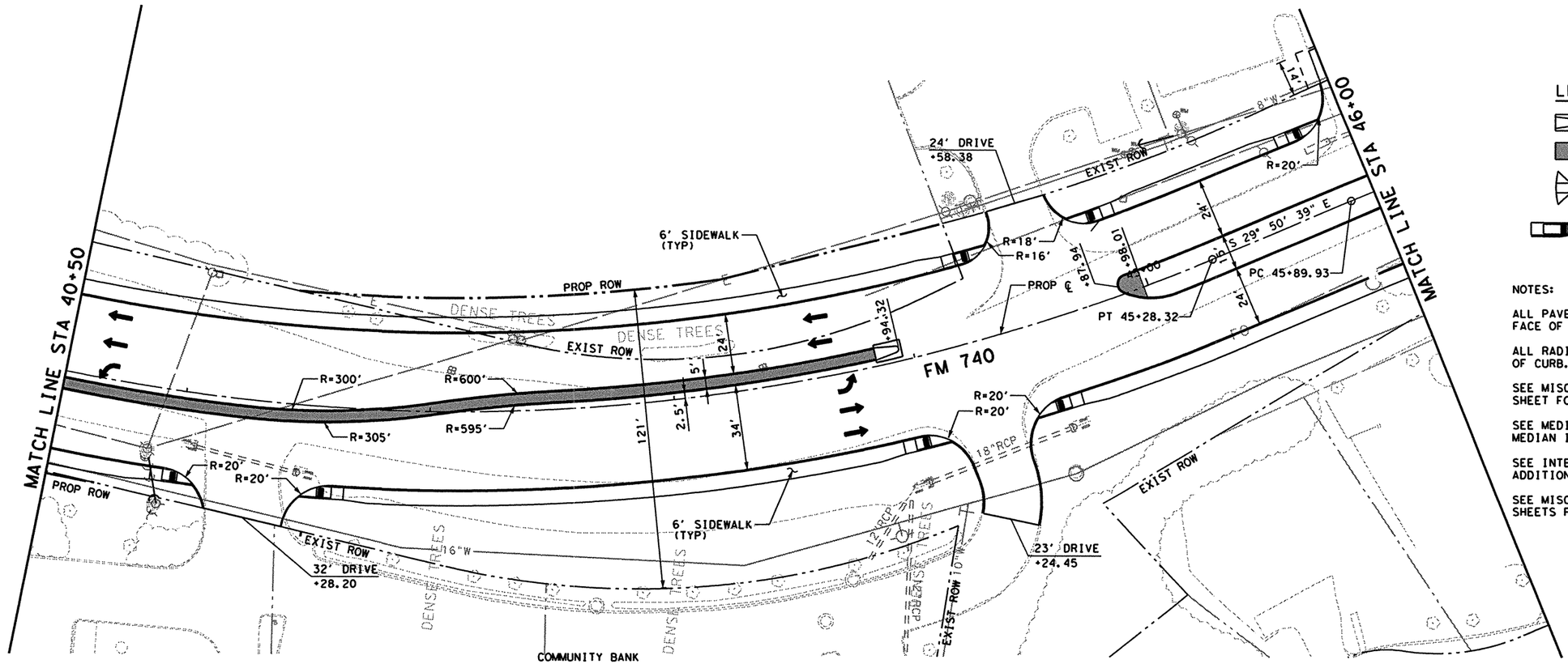
Texas Department of Transportation

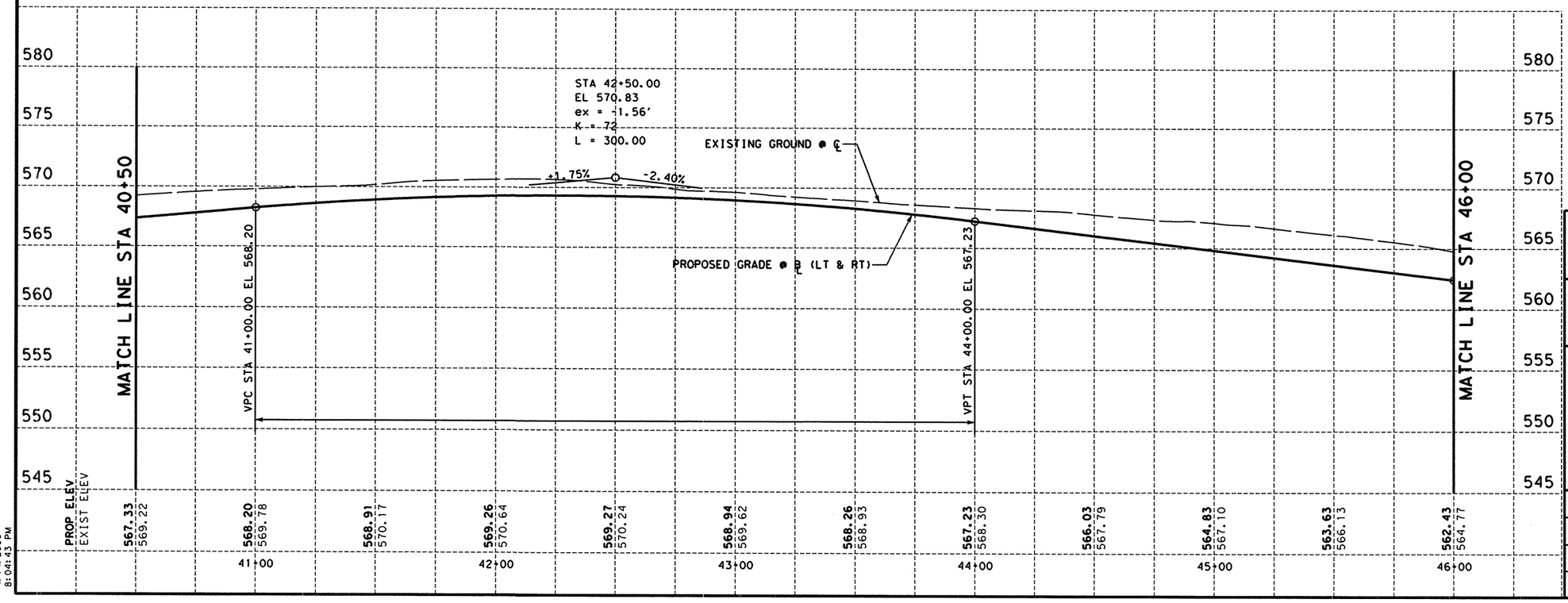
FM 740
PAVING PLAN & PROFILE
STA 35+00 TO STA 40+50

SCALE: H: 1"=50'
V: 1"=10'

SHEET 4 OF 24

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	120
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	





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0 25 50
SCALE IN FEET

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

ALL PAVEMENT DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB.

ALL RADII DIMENSIONED OFF OF FACE OF CURB.

SEE MISCELLANEOUS DRIVEWAY DETAILS SHEET FOR ADDITIONAL DRIVEWAY INFORMATION.

SEE MEDIAN DETAILS SHEETS FOR ADDITIONAL MEDIAN INFORMATION.

SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SEE MISCELLANEOUS ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
4-15-09

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Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

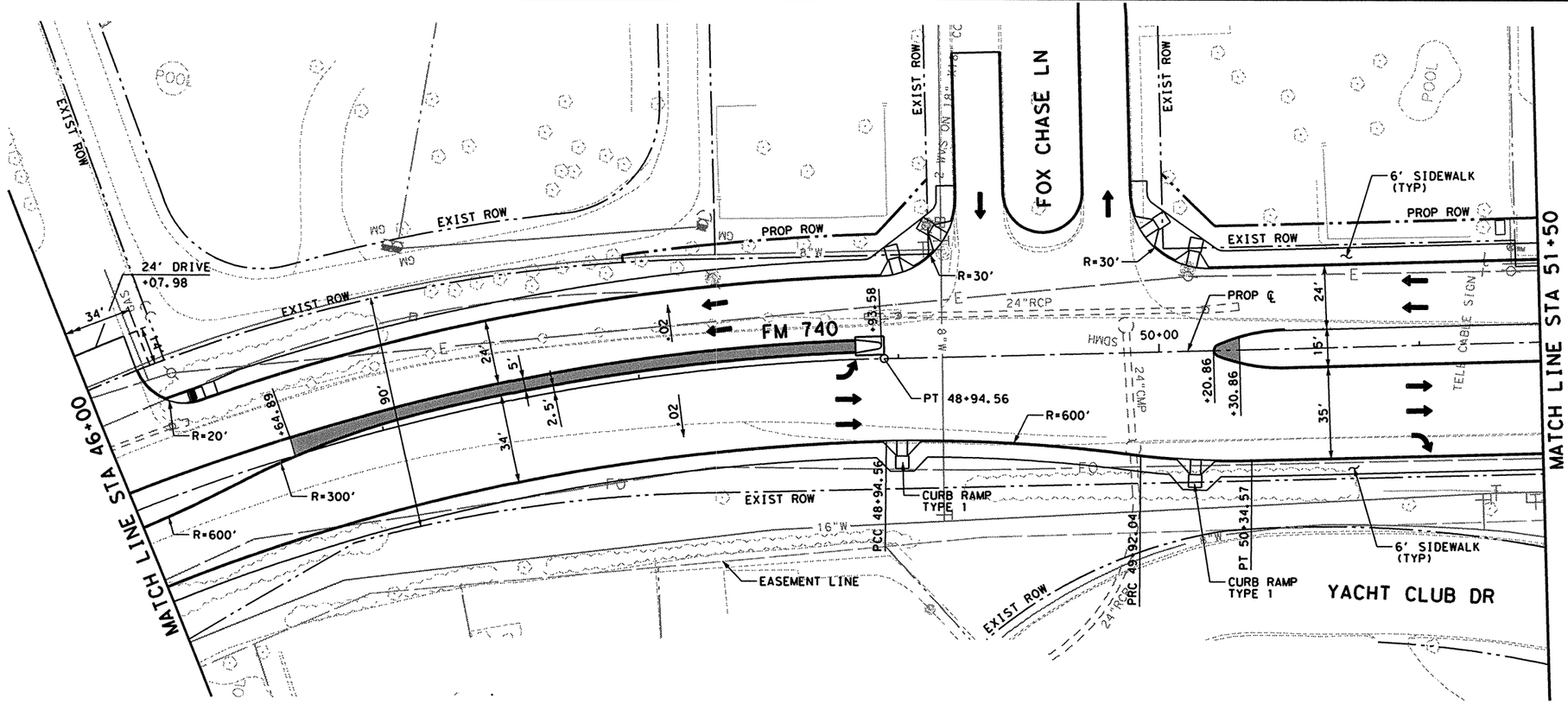
Texas Department of Transportation

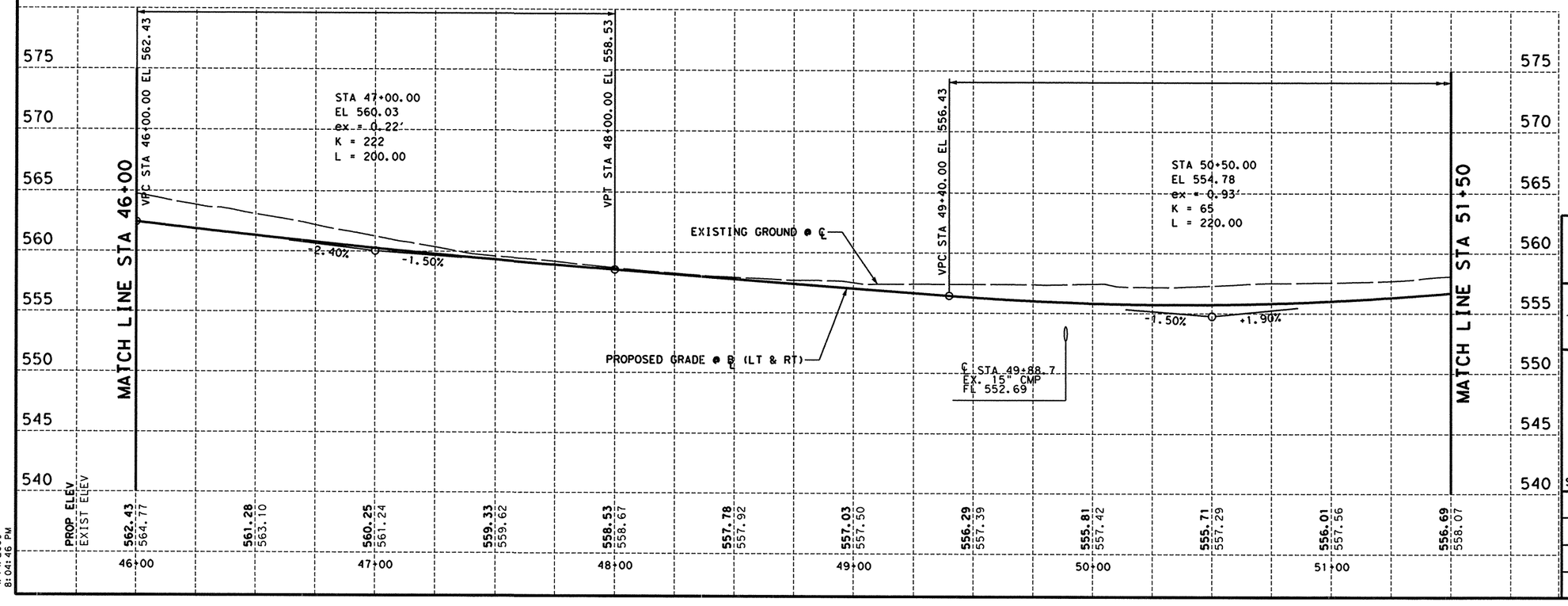
FM 740
PAVING PLAN & PROFILE
STA 40+50 TO STA 46+00

SCALE: H: 1"=50'
V: 1"=10'

SHEET 5 OF 24

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	121
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	





LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

ALL PAVEMENT DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB.

ALL RADII DIMENSIONED OFF OF FACE OF CURB.

SEE MISCELLANEOUS DRIVEWAY DETAILS SHEET FOR ADDITIONAL DRIVEWAY INFORMATION.

SEE MEDIAN DETAILS SHEETS FOR ADDITIONAL MEDIAN INFORMATION.

SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SEE MISCELLANEOUS ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
DAVID ALAN NUFER
68818
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4-15-09

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HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

FM 740
PAVING PLAN & PROFILE
STA 46+00 TO STA 51+50

SCALE: H: 1"=50'
V: 1"=10'

SHEET 6 OF 24

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	122
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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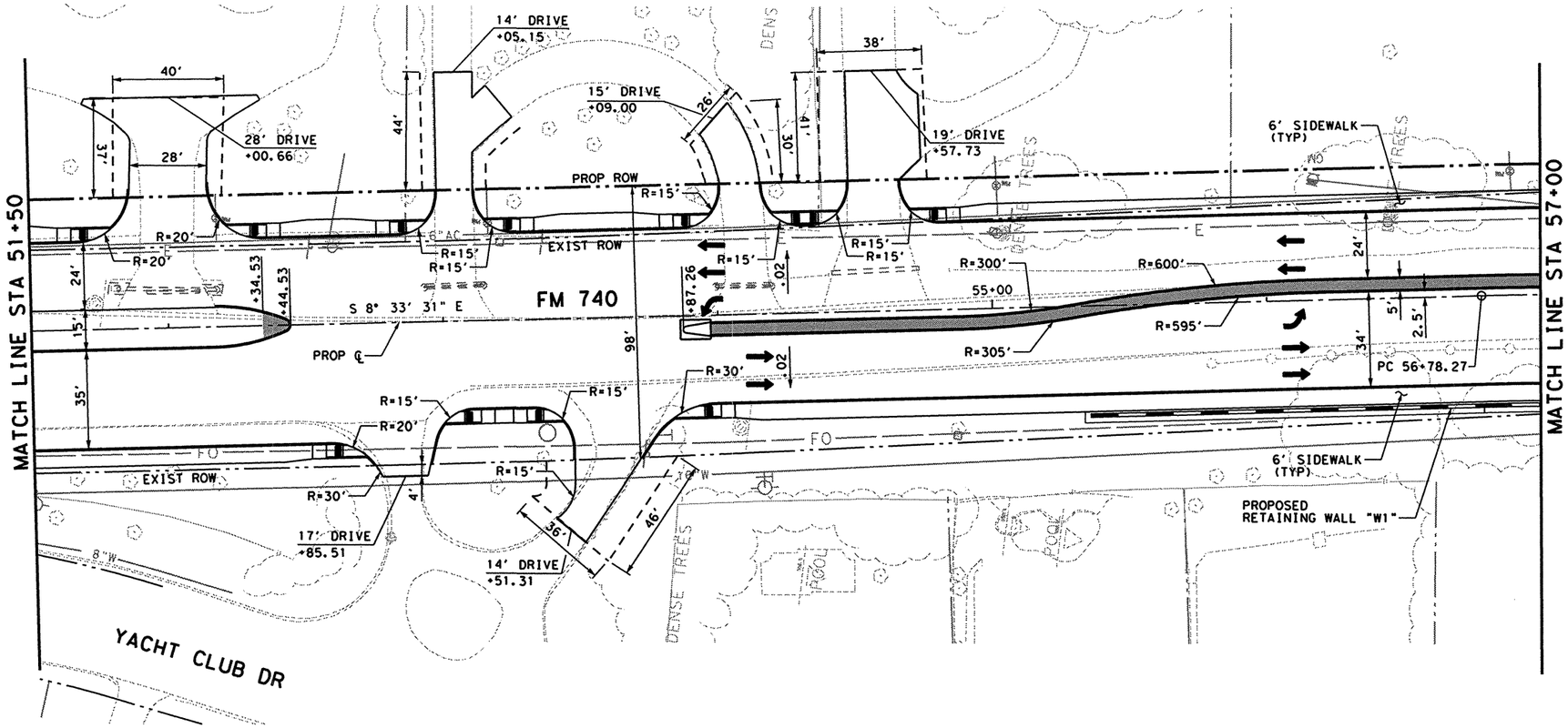

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SCALE IN FEET

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

ALL PAVEMENT DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB.

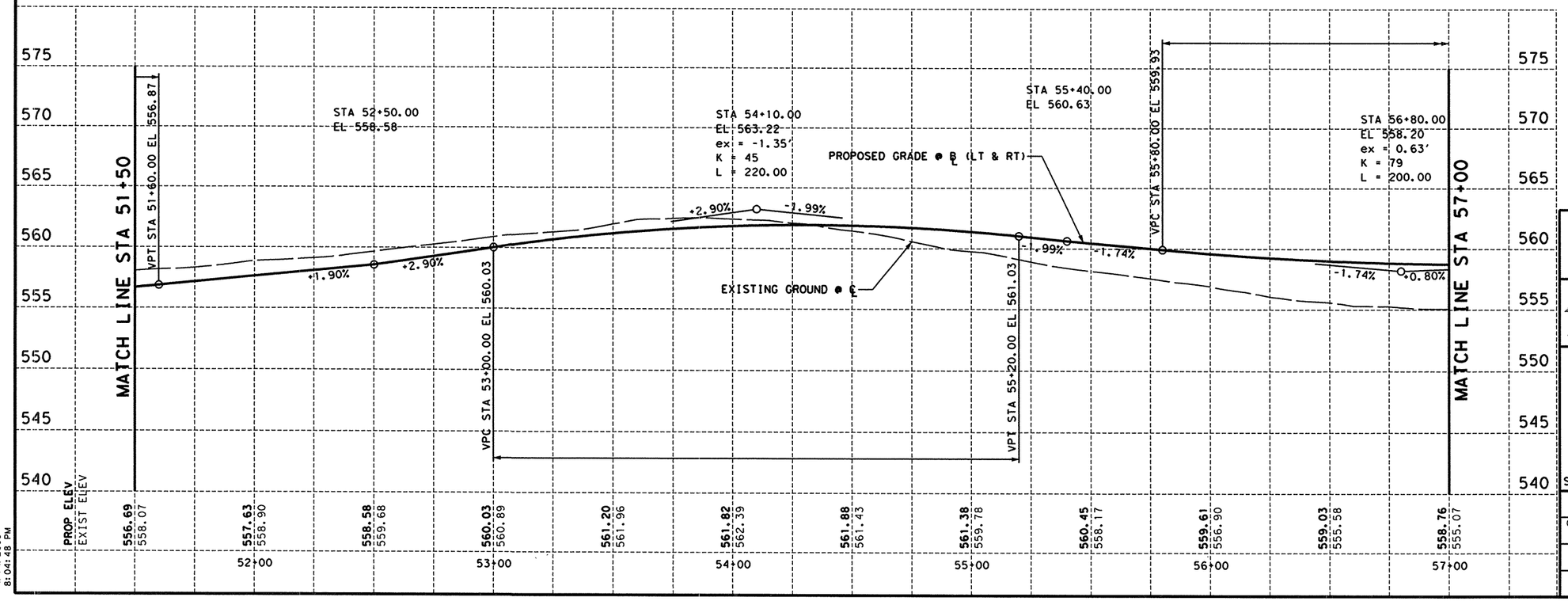
ALL RADII DIMENSIONED OFF OF FACE OF CURB.

SEE MISCELLANEOUS DRIVEWAY DETAILS SHEET FOR ADDITIONAL DRIVEWAY INFORMATION.

SEE MEDIAN DETAILS SHEETS FOR ADDITIONAL MEDIAN INFORMATION.

SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SEE MISCELLANEOUS ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION.



Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

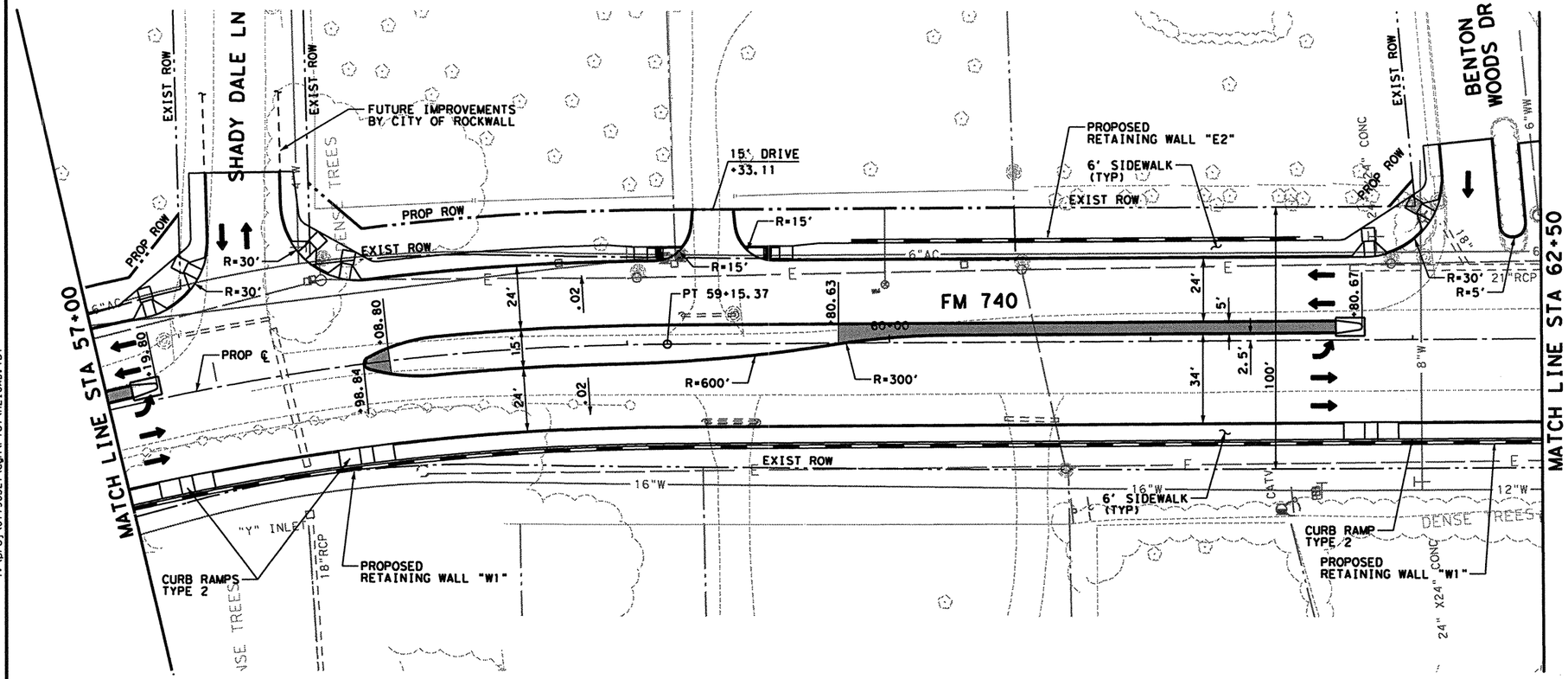
Texas Department of Transportation

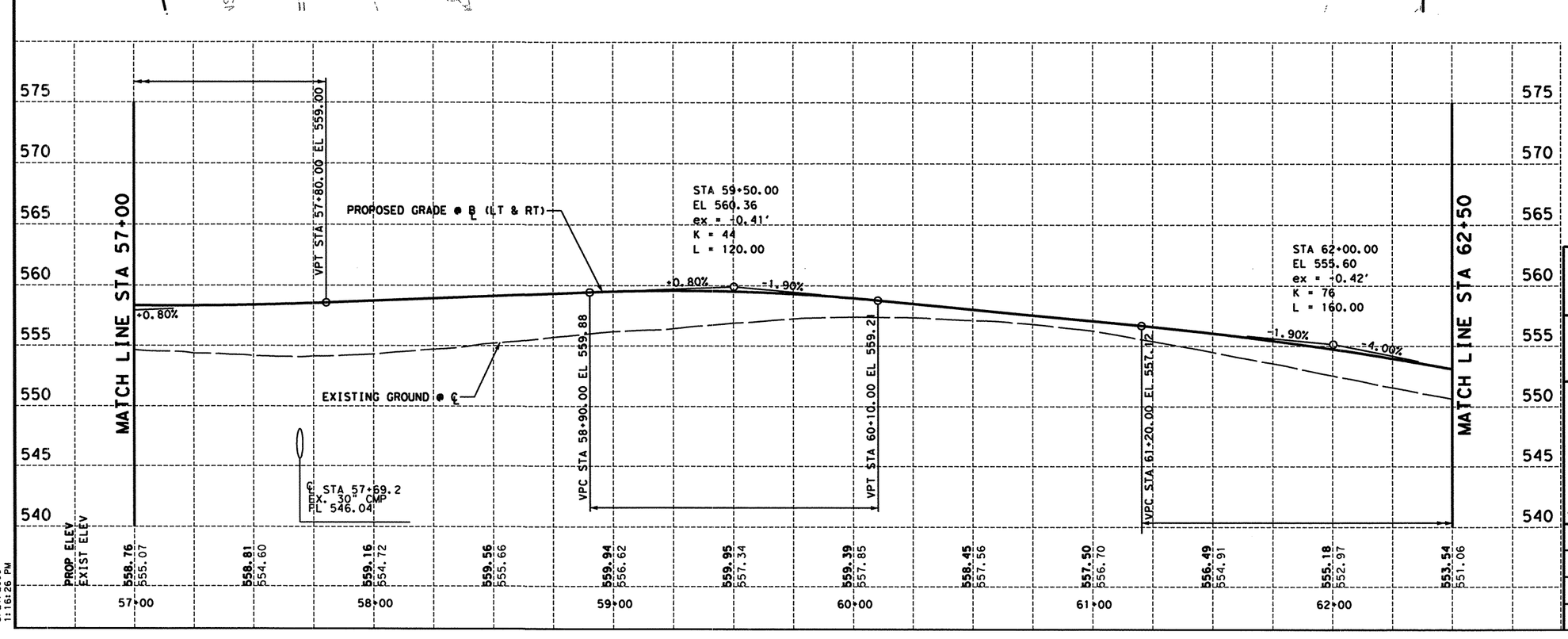
FM 740
PAVING PLAN & PROFILE
STA 51+50 TO STA 57+00

SCALE: H: 1"=50'
V: 1"=10'

SHEET 7 OF 24

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	123
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	





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SCALE IN FEET

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

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ALL RADII DIMENSIONED OFF OF FACE OF CURB.

SEE MISCELLANEOUS DRIVEWAY DETAILS SHEET FOR ADDITIONAL DRIVEWAY INFORMATION.

SEE MEDIAN DETAILS SHEETS FOR ADDITIONAL MEDIAN INFORMATION.

SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SEE MISCELLANEOUS ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
5-21-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
PAVING PLAN & PROFILE

STA 57+00 TO STA 62+50

H: 1"=50'
SCALE: V: 1"=10'

SHEET 8 OF 24

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	124
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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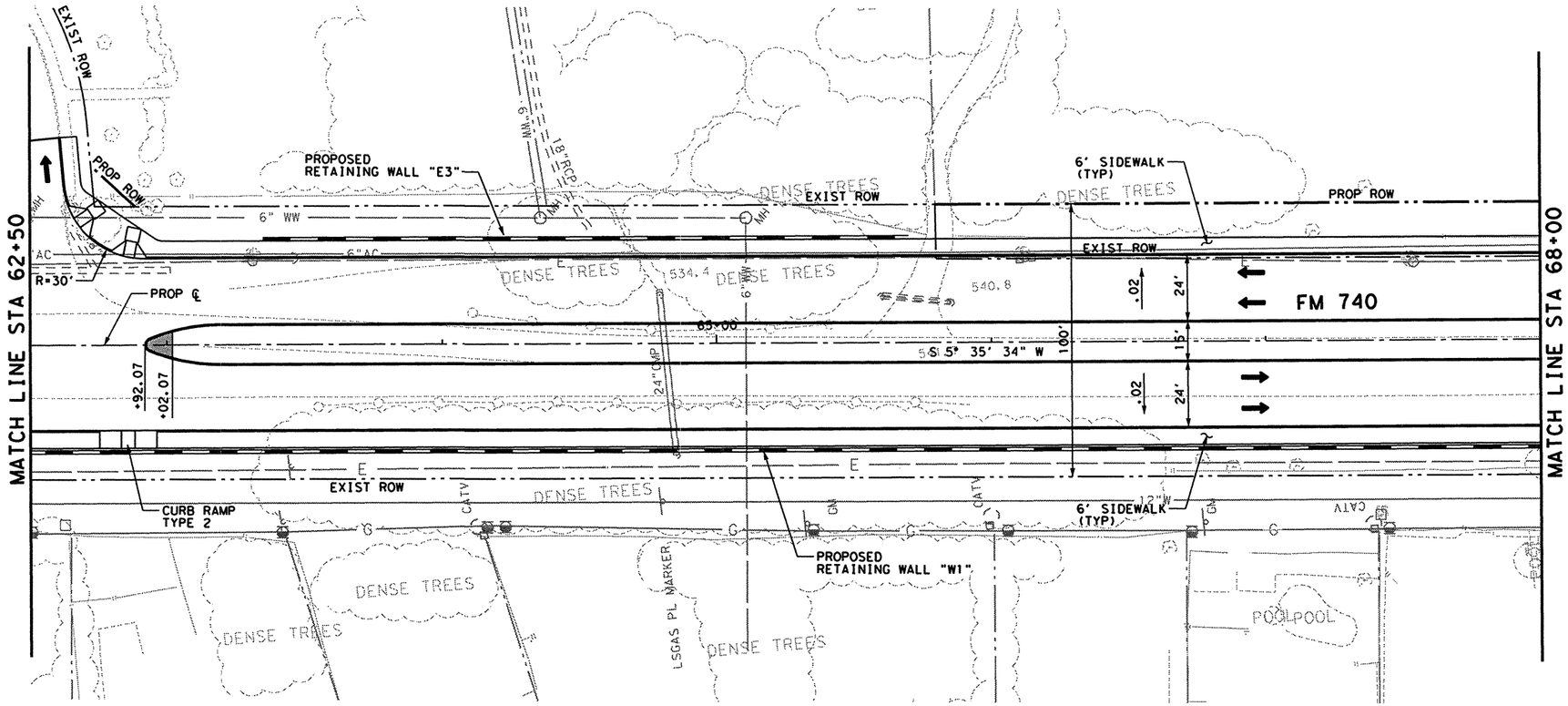

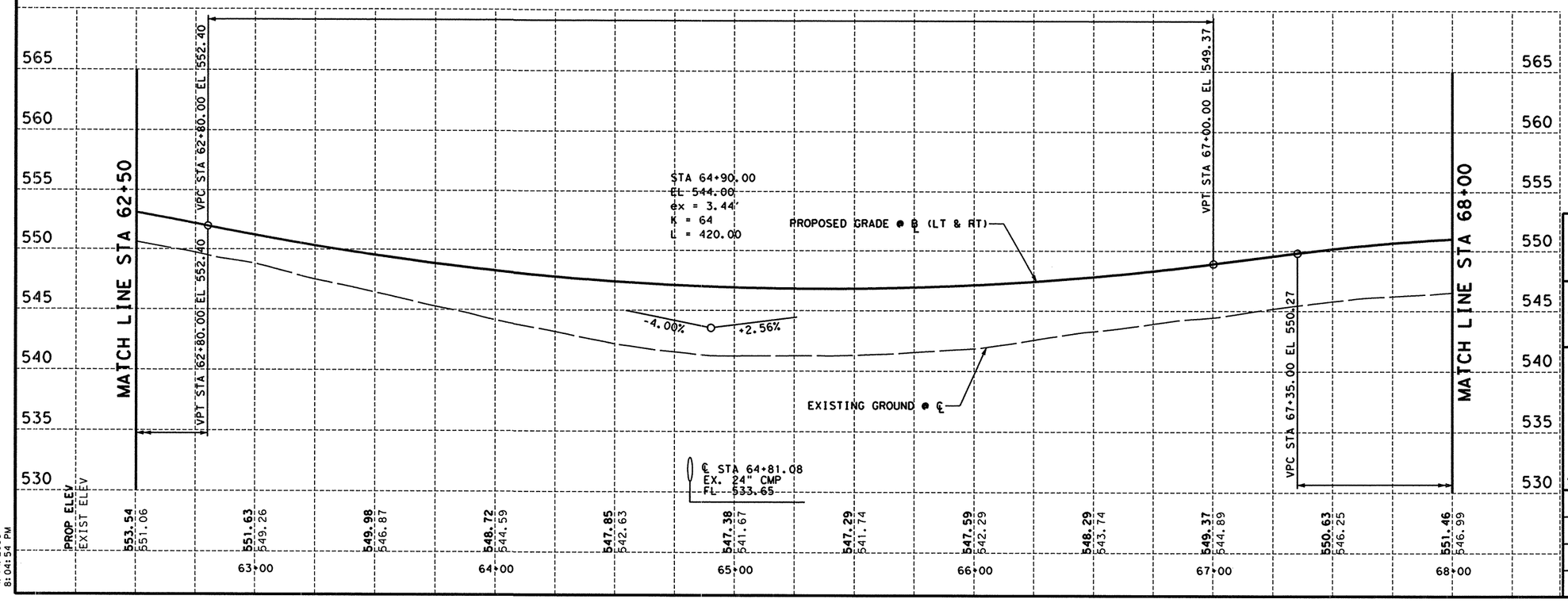

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SCALE IN FEET

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

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SEE MISCELLANEOUS DRIVEWAY DETAILS SHEET FOR ADDITIONAL DRIVEWAY INFORMATION.

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SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SEE MISCELLANEOUS ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
4-15-09

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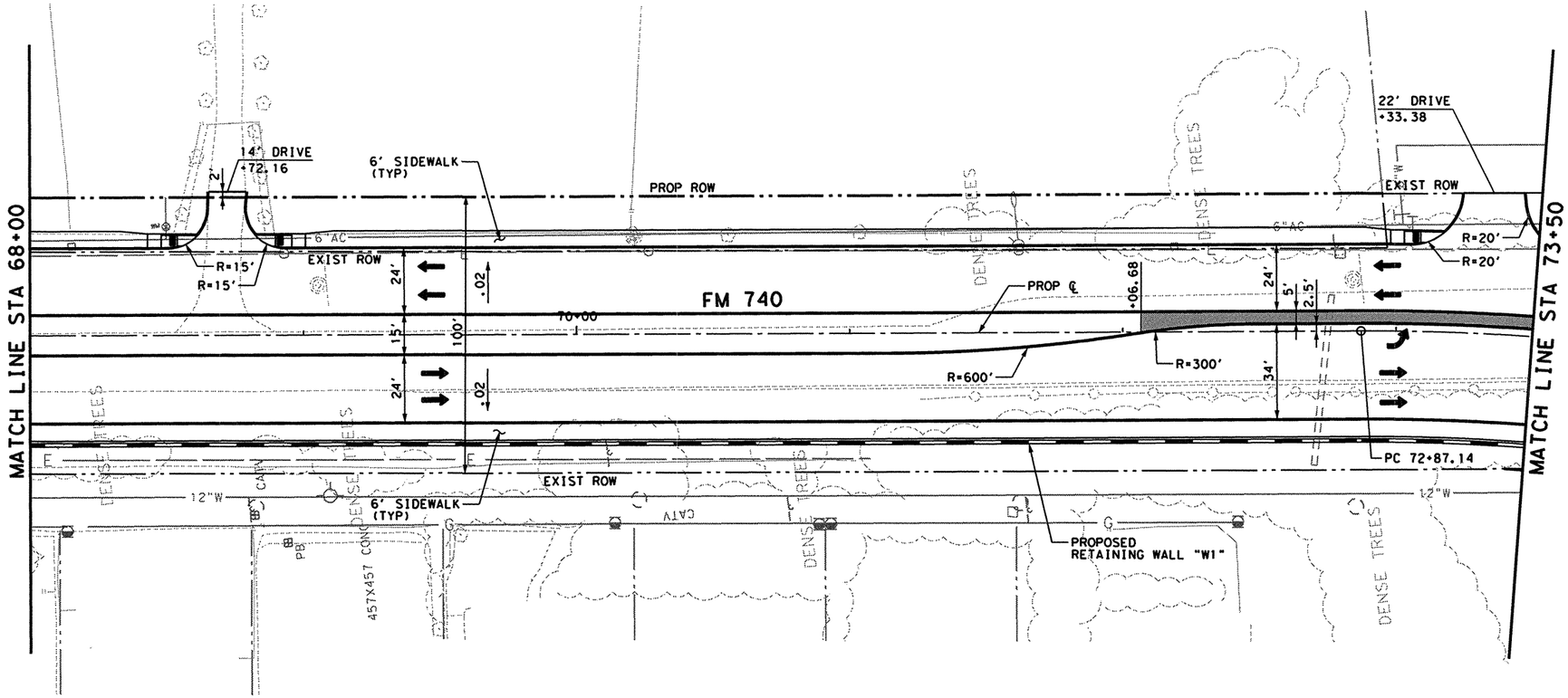
HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

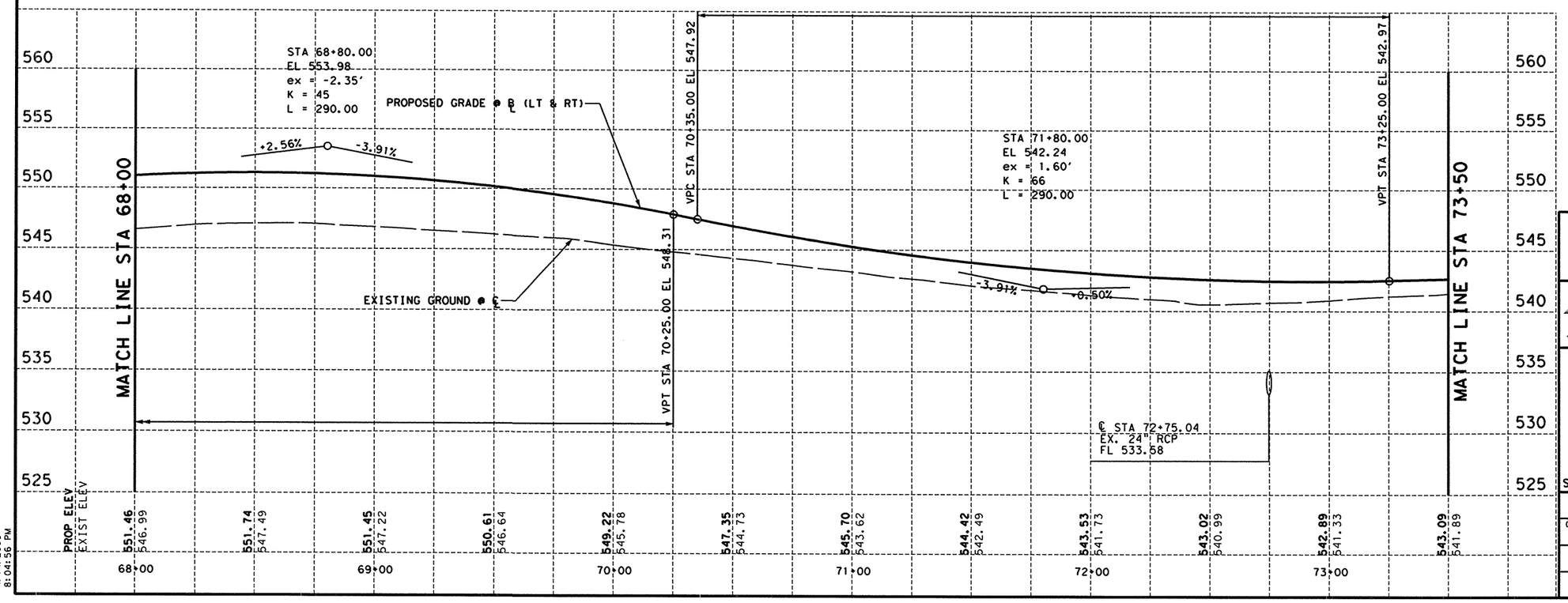
FM 740
PAVING PLAN & PROFILE
STA 62+50 TO STA 68+00

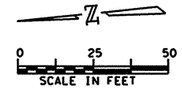
SCALE: H: 1"=50'
V: 1"=10'

SHEET 9 OF 24

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	125
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	







LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

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ALL RADII DIMENSIONED OFF OF FACE OF CURB.

SEE MISCELLANEOUS DRIVEWAY DETAILS SHEET FOR ADDITIONAL DRIVEWAY INFORMATION.

SEE MEDIAN DETAILS SHEETS FOR ADDITIONAL MEDIAN INFORMATION.

SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SEE MISCELLANEOUS ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
4-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
PAVING PLAN & PROFILE

STA 68+00 TO
STA 73+50

H: 1"=50'
SCALE: V: 1"=10'

SHEET 10 OF 24

DESIGN	FED.RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	126
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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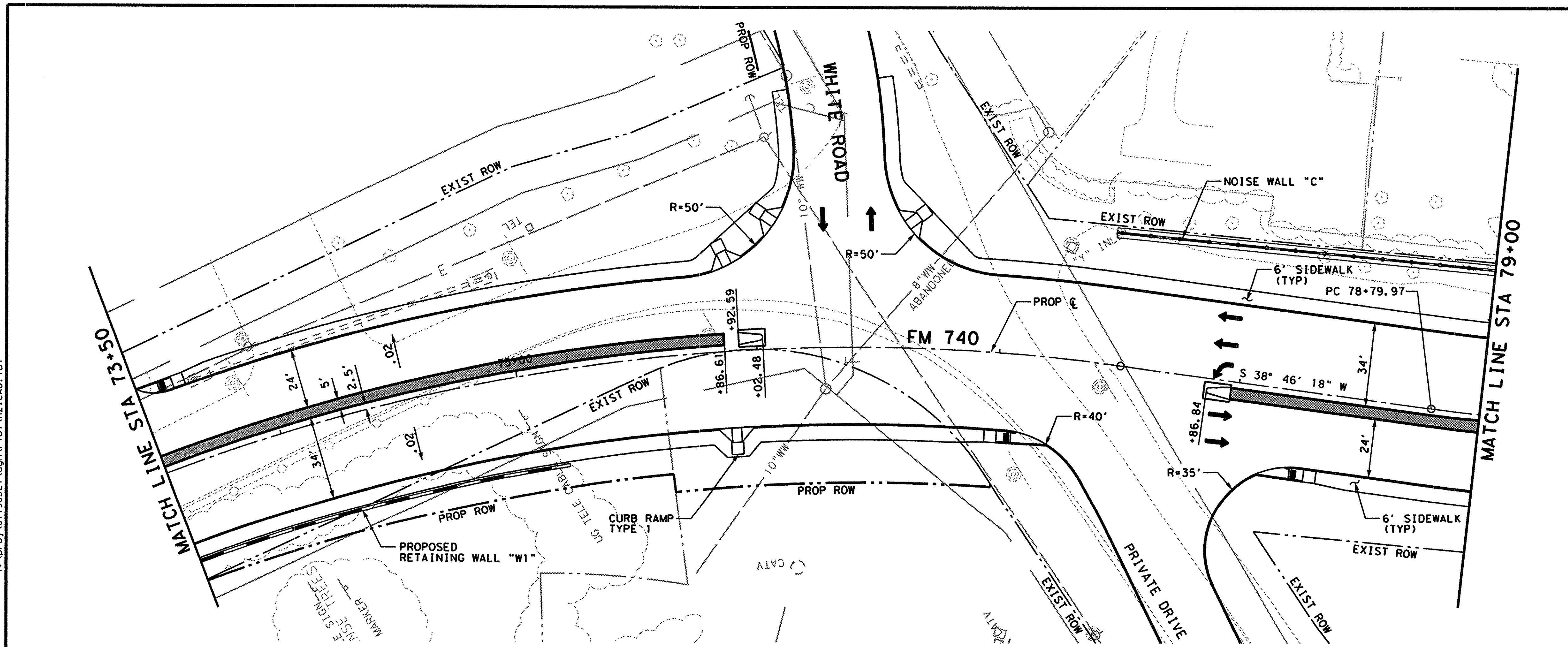


LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

SCALE IN FEET: 0 25 50

NOTES:

ALL PAVEMENT DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB.

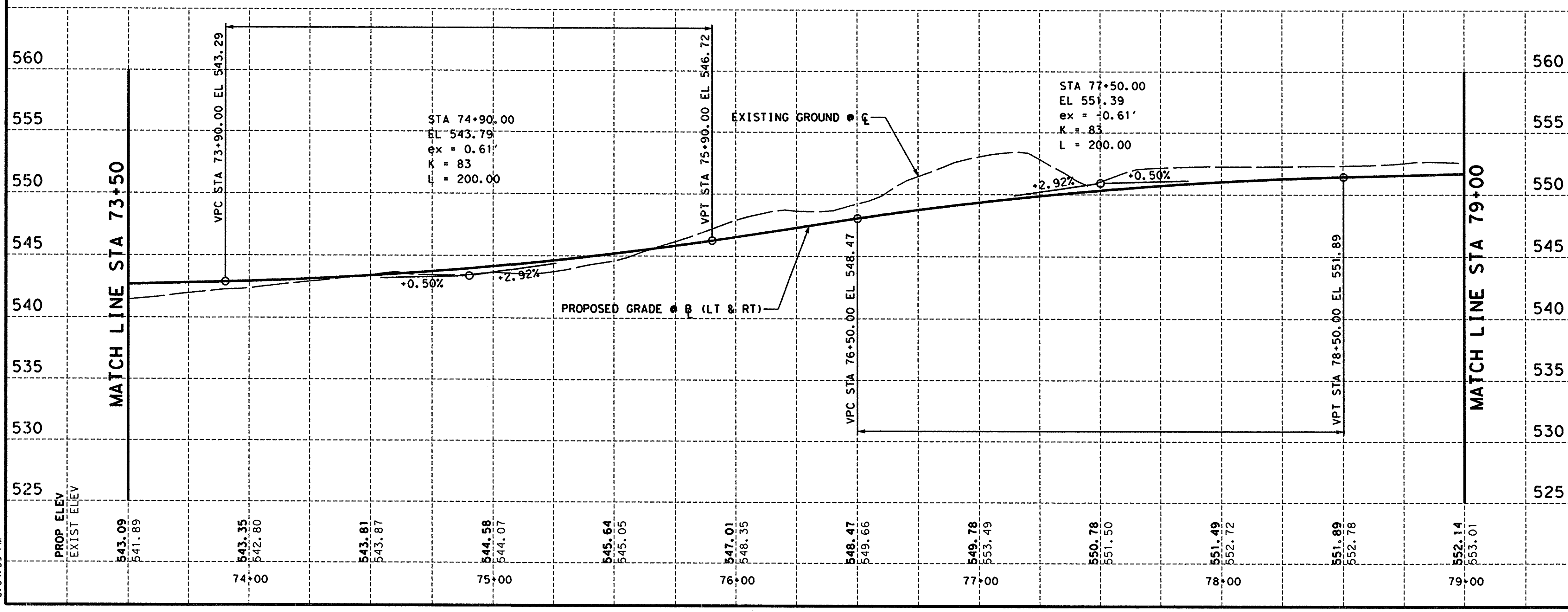
ALL RADII DIMENSIONED OFF OF FACE OF CURB.

SEE MISCELLANEOUS DRIVEWAY DETAILS SHEET FOR ADDITIONAL DRIVEWAY INFORMATION.

SEE MEDIAN DETAILS SHEETS FOR ADDITIONAL MEDIAN INFORMATION.

SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SEE MISCELLANEOUS ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION.



STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
4-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
PAVING PLAN & PROFILE
STA 73+50 TO STA 79+00

SCALE: H: 1"=50' V: 1"=10'

SHEET 11 OF 24

DESIGN DAN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.			HIGHWAY NO.
GRAPHICS MTU	6	SEE TITLE SHEET			FM 740
CHECK CVL	STATE	DISTRICT	COUNTY		SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL		127
	CONTROL	SECTION	JOB		
	1014	03	039		

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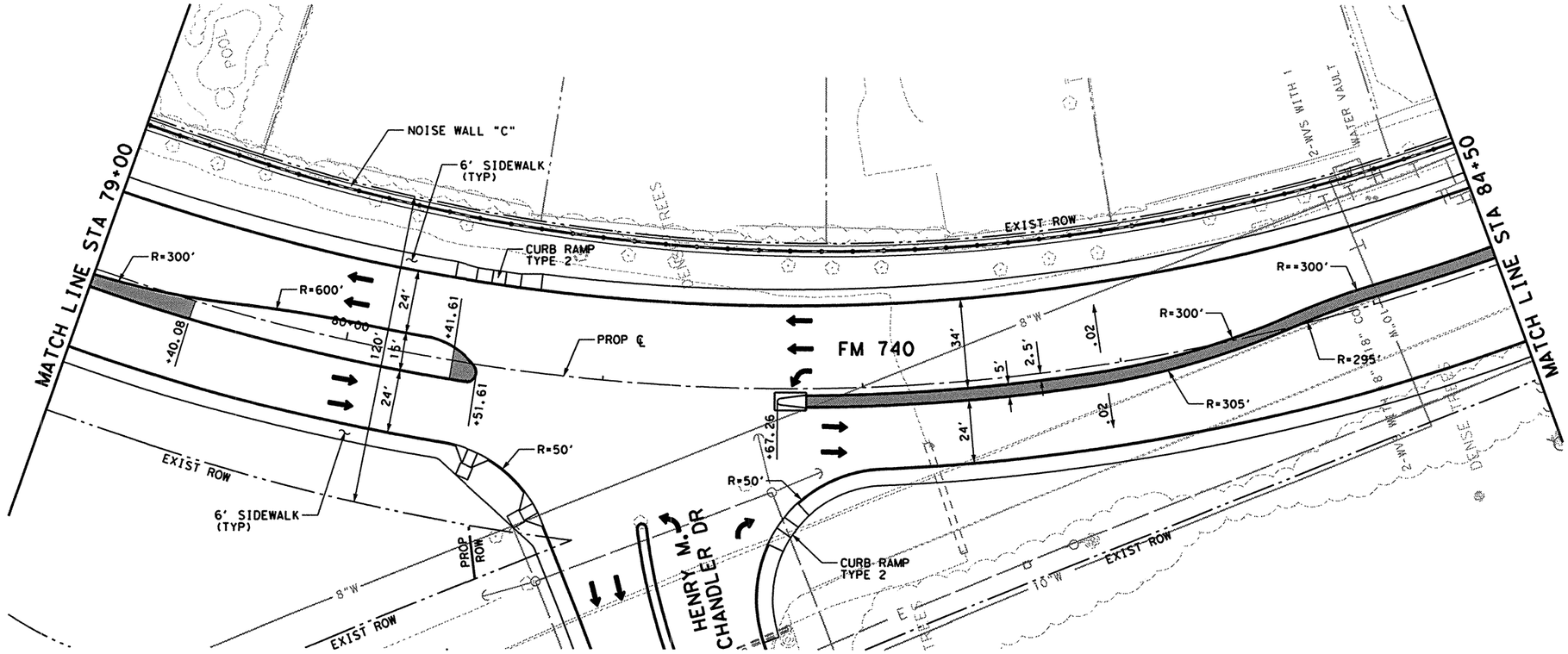

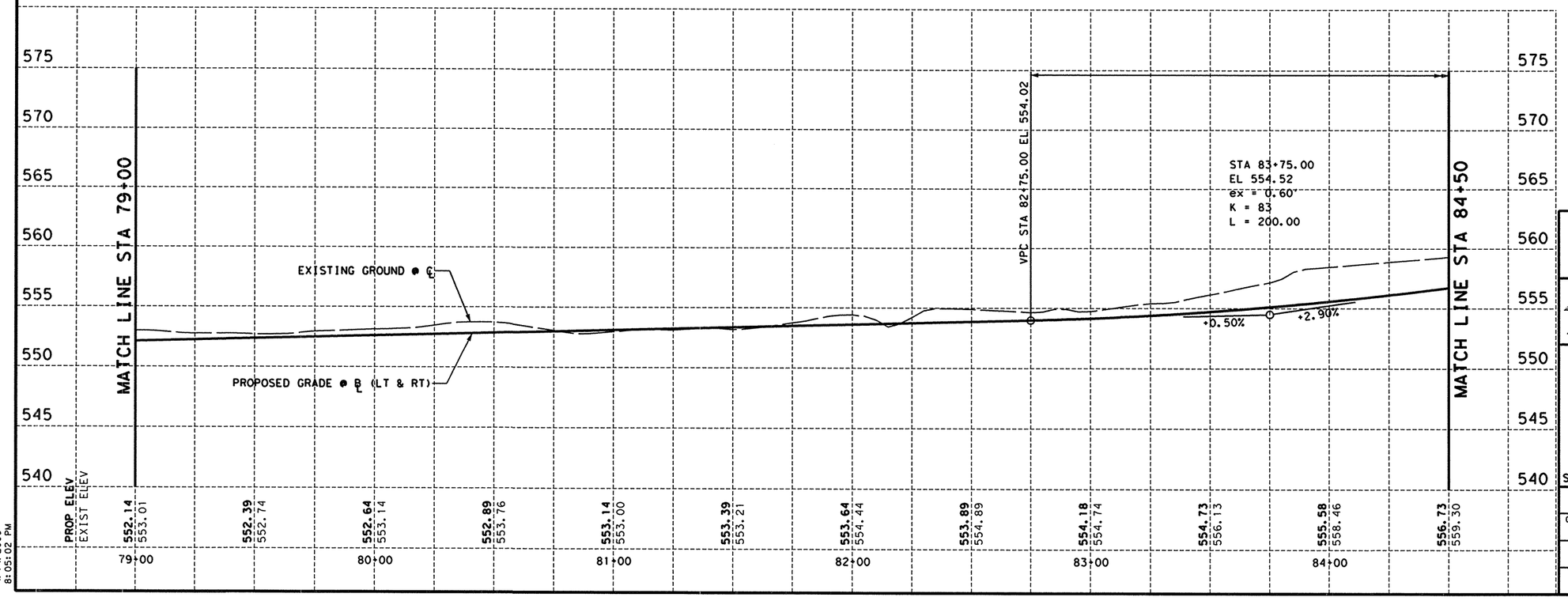

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SCALE IN FEET

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

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ALL RADII DIMENSIONED OFF OF FACE OF CURB.

SEE MISCELLANEOUS DRIVEWAY DETAILS SHEET FOR ADDITIONAL DRIVEWAY INFORMATION.

SEE MEDIAN DETAILS SHEETS FOR ADDITIONAL MEDIAN INFORMATION.

SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SEE MISCELLANEOUS ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
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4-15-09

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Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

FM 740
PAVING PLAN & PROFILE
STA 79+00 TO STA 84+50

SCALE: H: 1"=50'
V: 1"=10'

SHEET 12 OF 24

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	128
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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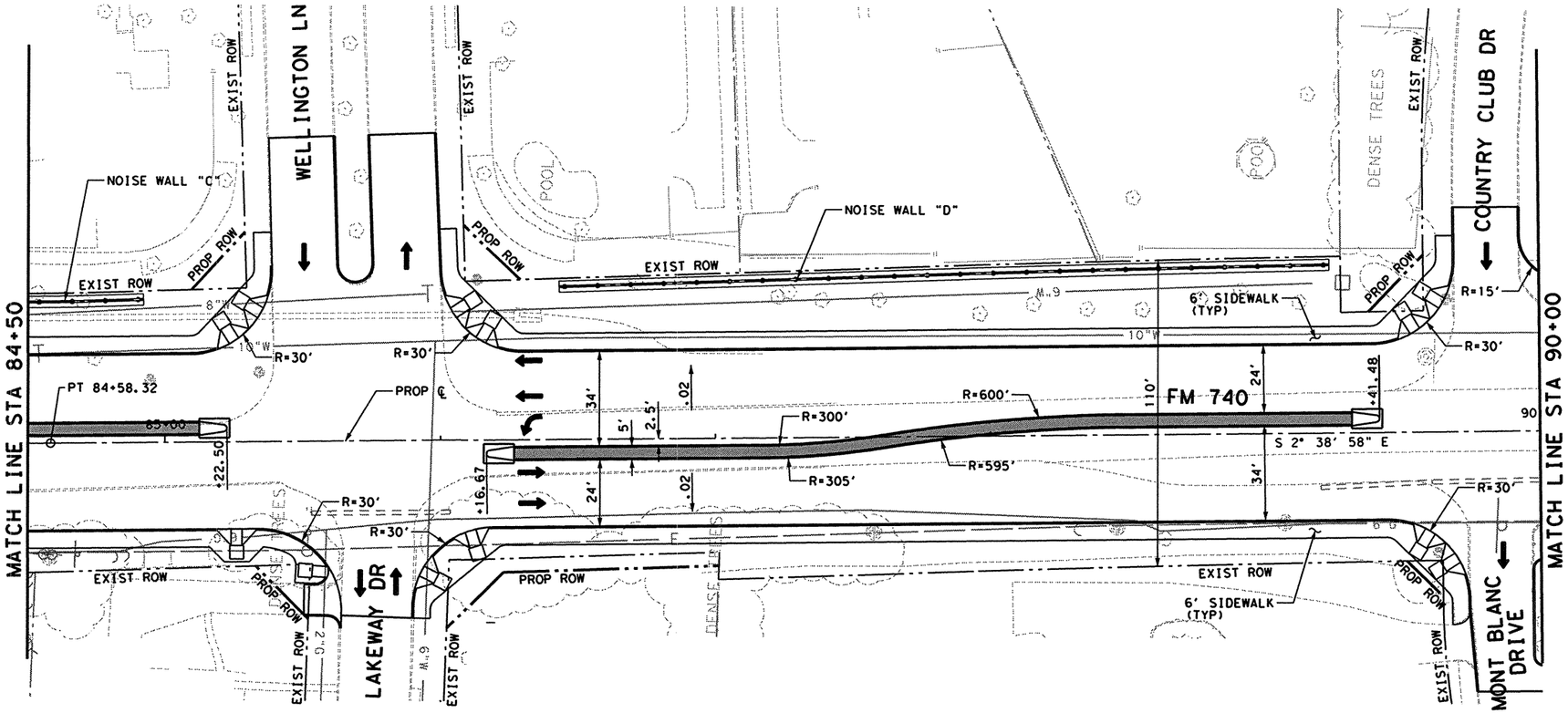

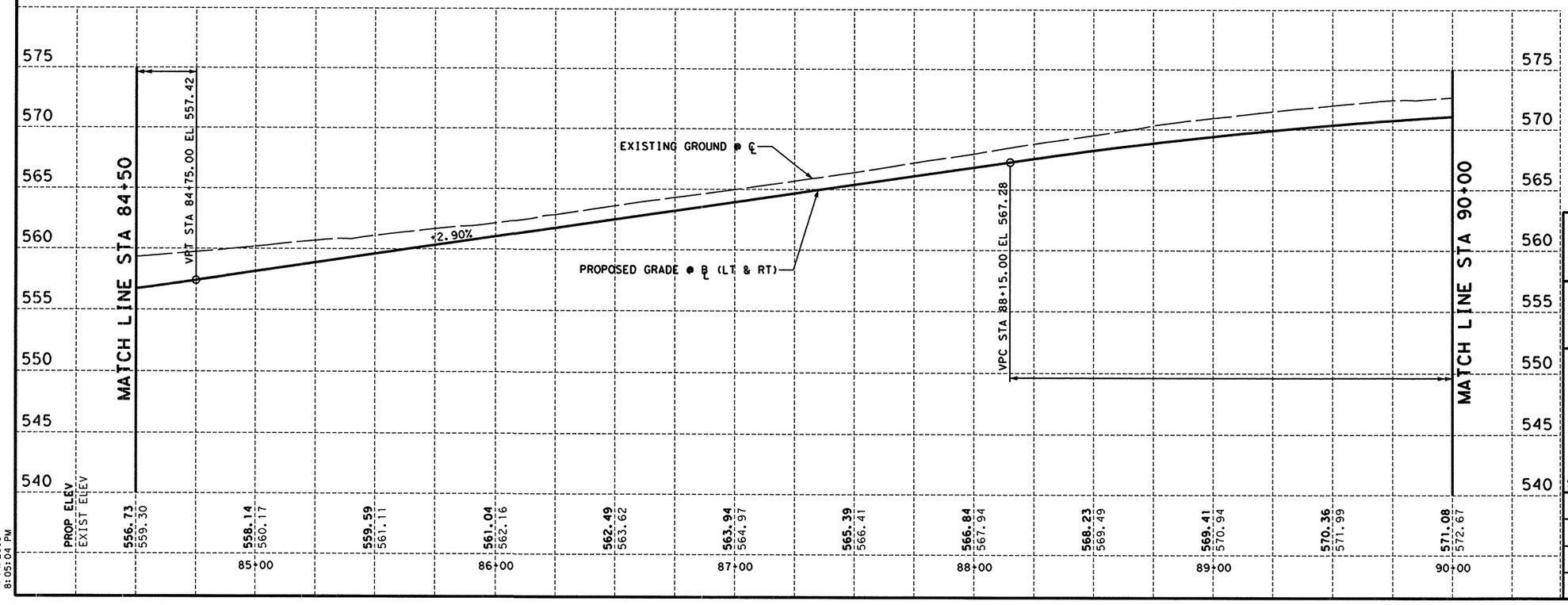

0 25 50
SCALE IN FEET

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

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ALL RADII DIMENSIONED OFF OF FACE OF CURB.

SEE MISCELLANEOUS DRIVEWAY DETAILS SHEET FOR ADDITIONAL DRIVEWAY INFORMATION.

SEE MEDIAN DETAILS SHEETS FOR ADDITIONAL MEDIAN INFORMATION.

SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SEE MISCELLANEOUS ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
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PROFESSIONAL ENGINEER
4-15-09

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Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
PAVING PLAN & PROFILE
STA 84+50 TO STA 90+00

SCALE: H: 1"=50'
V: 1"=10'

SHEET 13 OF 24

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	129
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

jporas
SCALE=1:50
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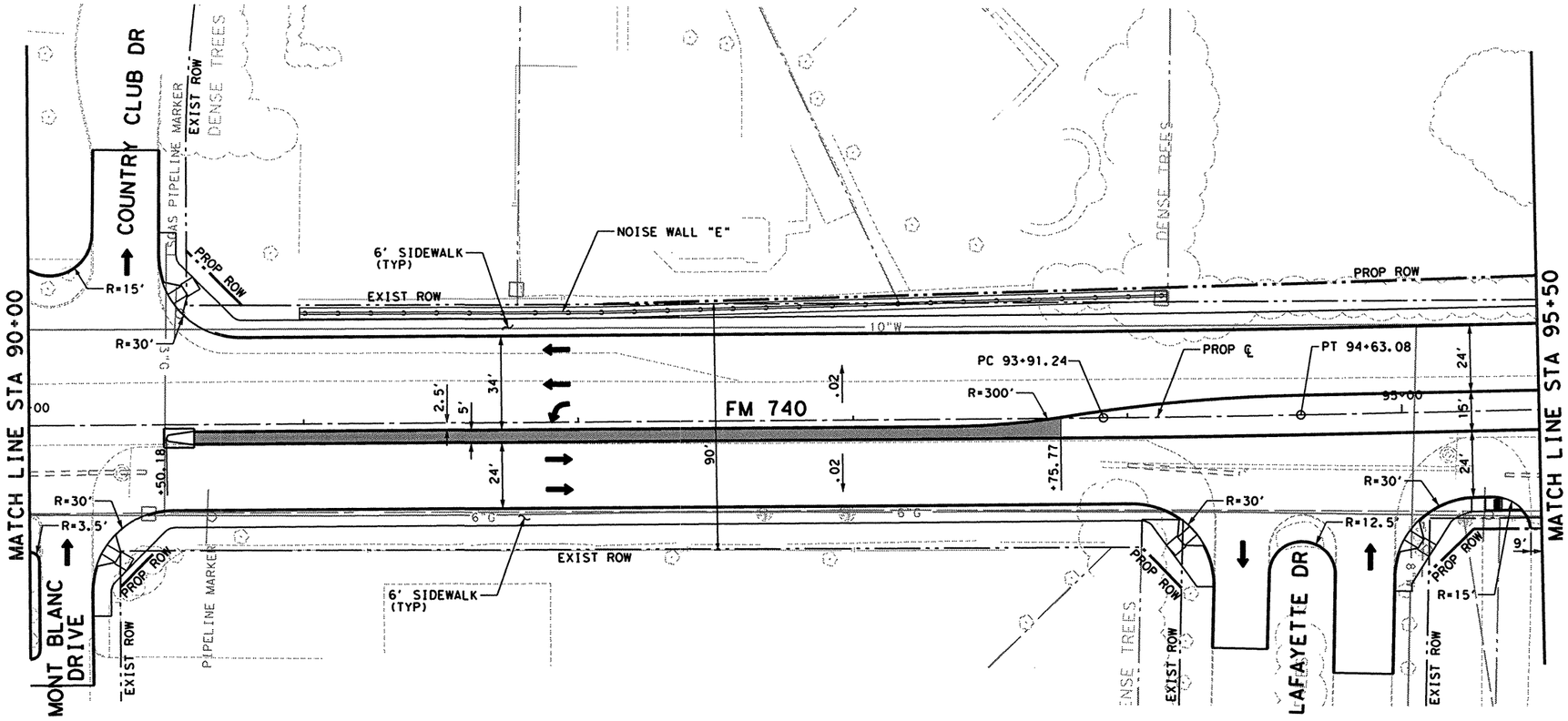

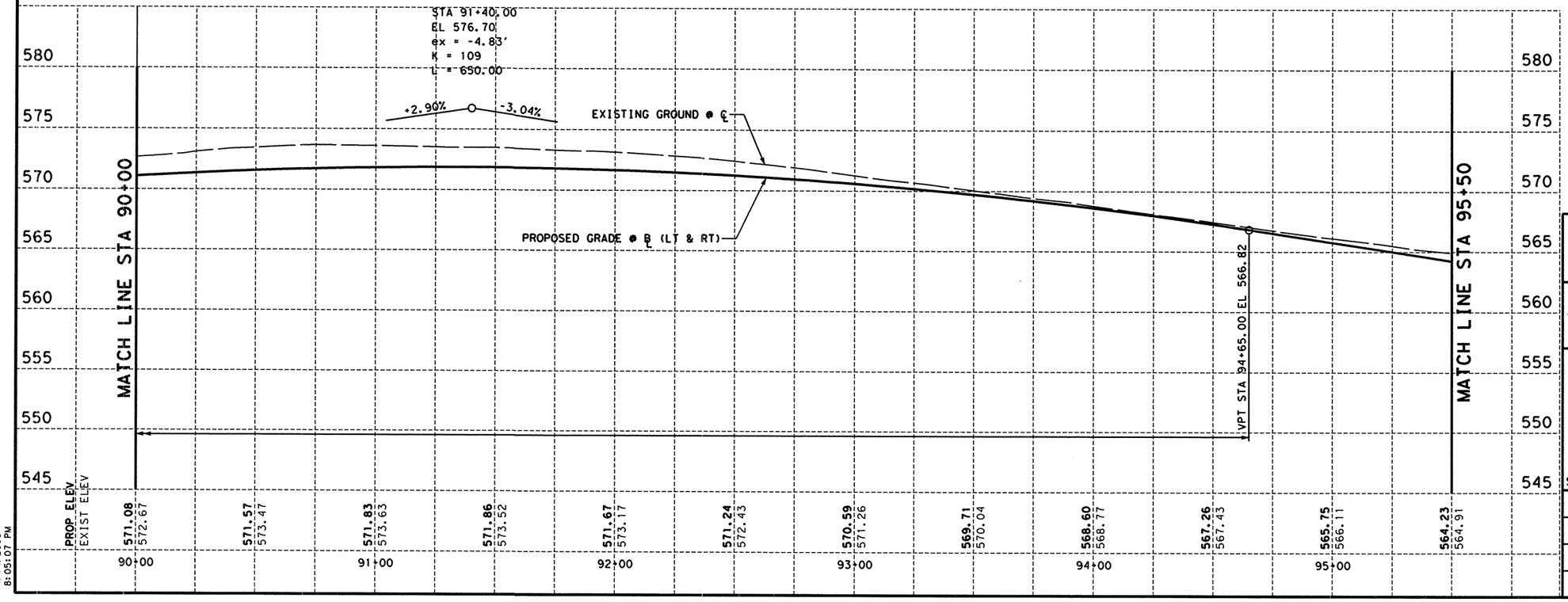

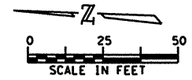

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

ALL PAVEMENT DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB.

ALL RADII DIMENSIONED OFF OF FACE OF CURB.

SEE MISCELLANEOUS DRIVEWAY DETAILS SHEET FOR ADDITIONAL DRIVEWAY INFORMATION.

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STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
4-17-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
PAVING PLAN & PROFILE

STA 90+00 TO STA 95+50

SCALE: H: 1"=50' V: 1"=10'

SHEET 14 OF 24

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	130
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

jparas
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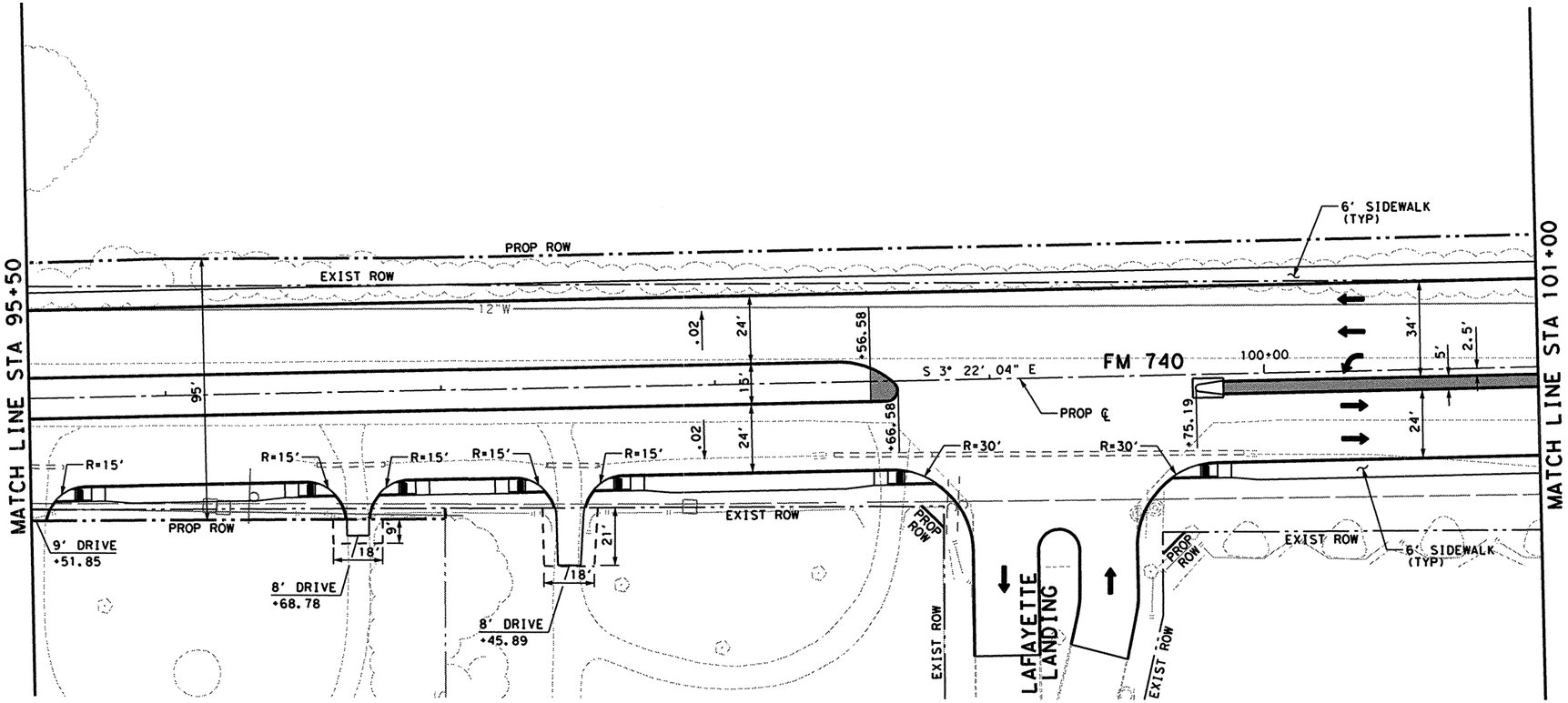

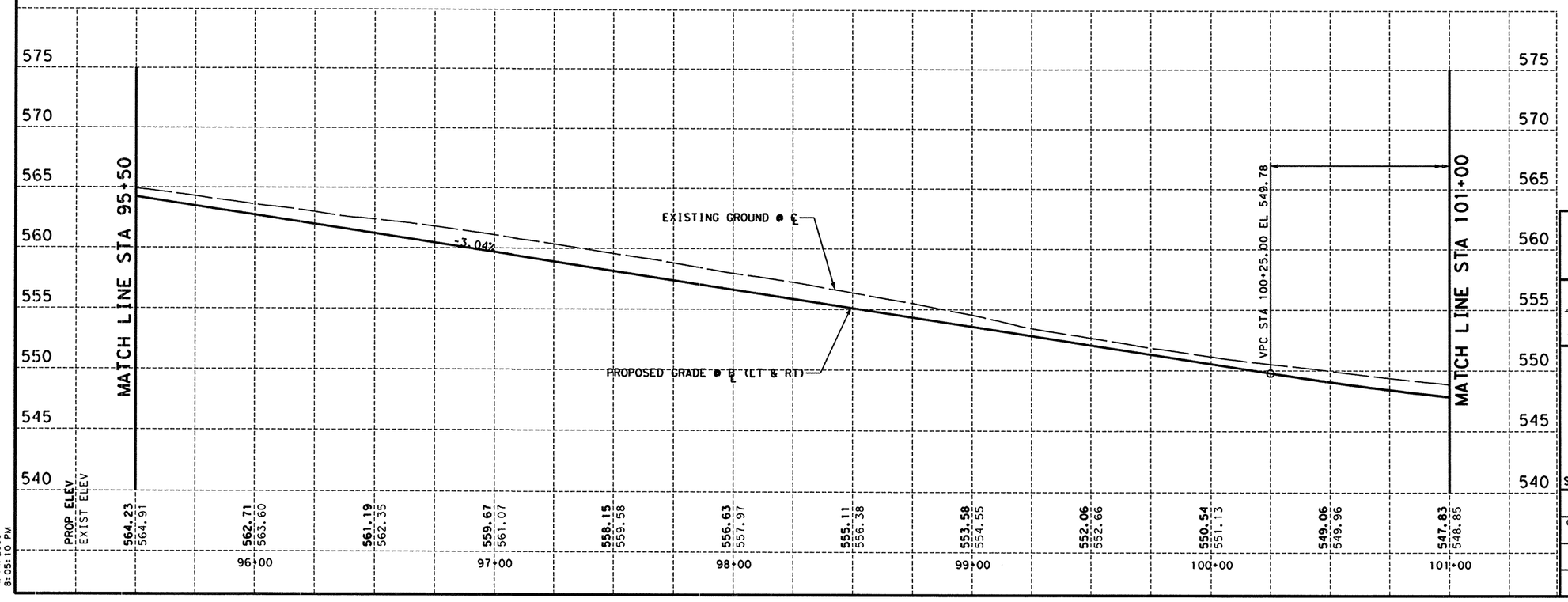

0 25 50
SCALE IN FEET

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

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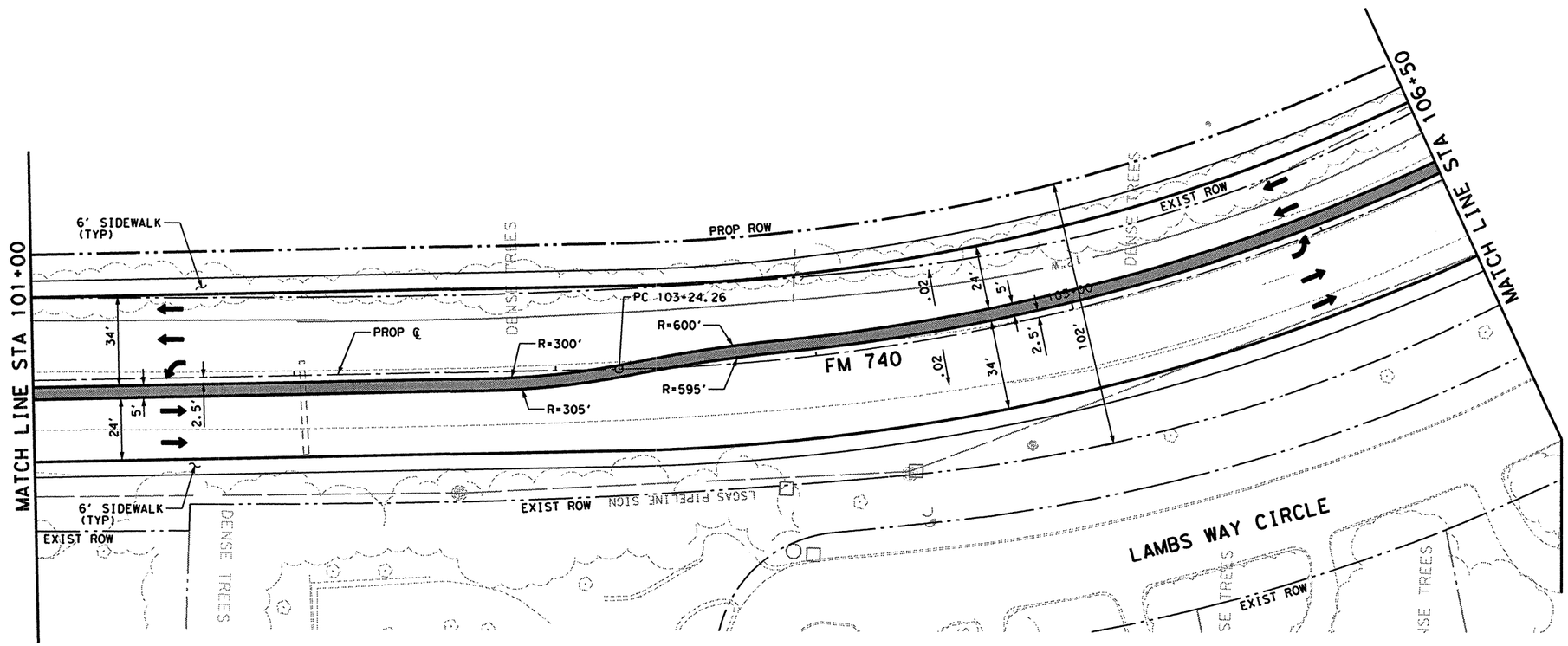
Texas Department of Transportation

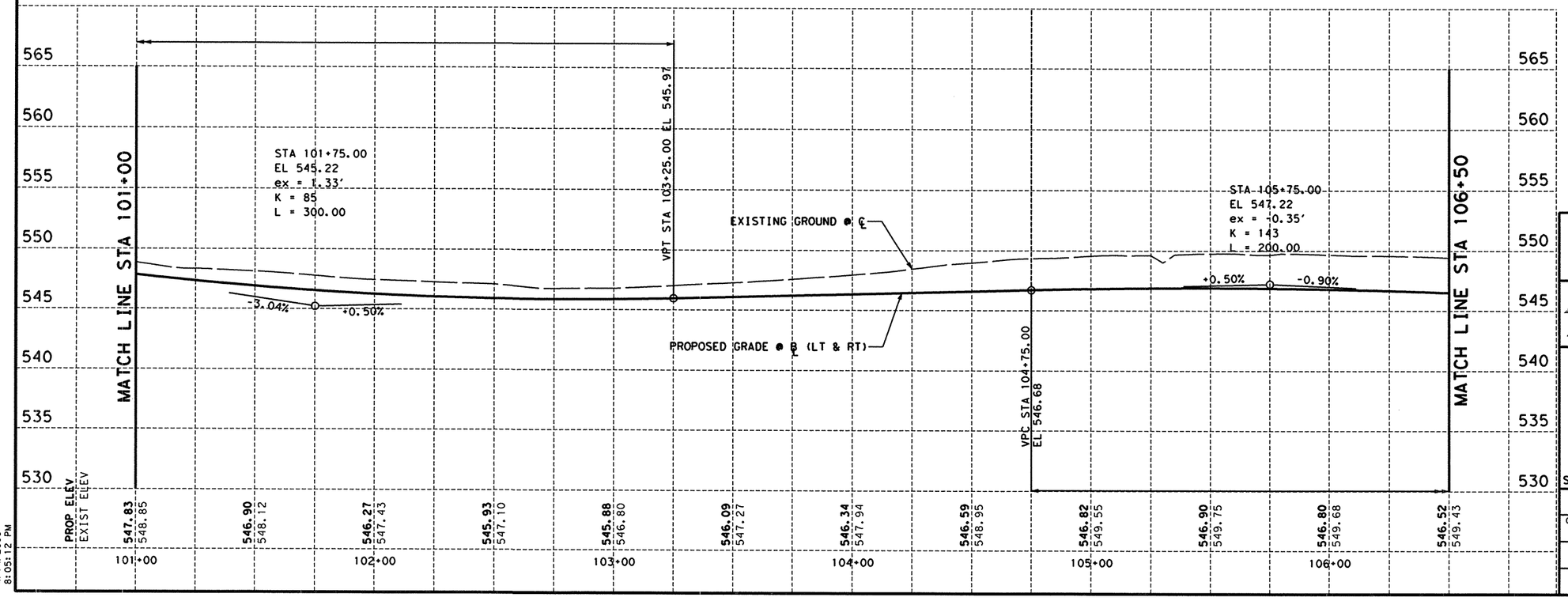
FM 740
PAVING PLAN & PROFILE
STA 95+50 TO STA 101+00

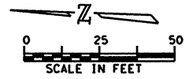
H: 1"=50'
SCALE: V: 1"=10'

SHEET 15 OF 24

DESIGN	FED.RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	131
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	







LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

ALL PAVEMENT DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB.

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Texas Department of Transportation

FM 740
PAVING PLAN & PROFILE
STA 101+00 TO STA 106+50

SCALE: H: 1"=50'
V: 1"=10'

SHEET 16 OF 24

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	132
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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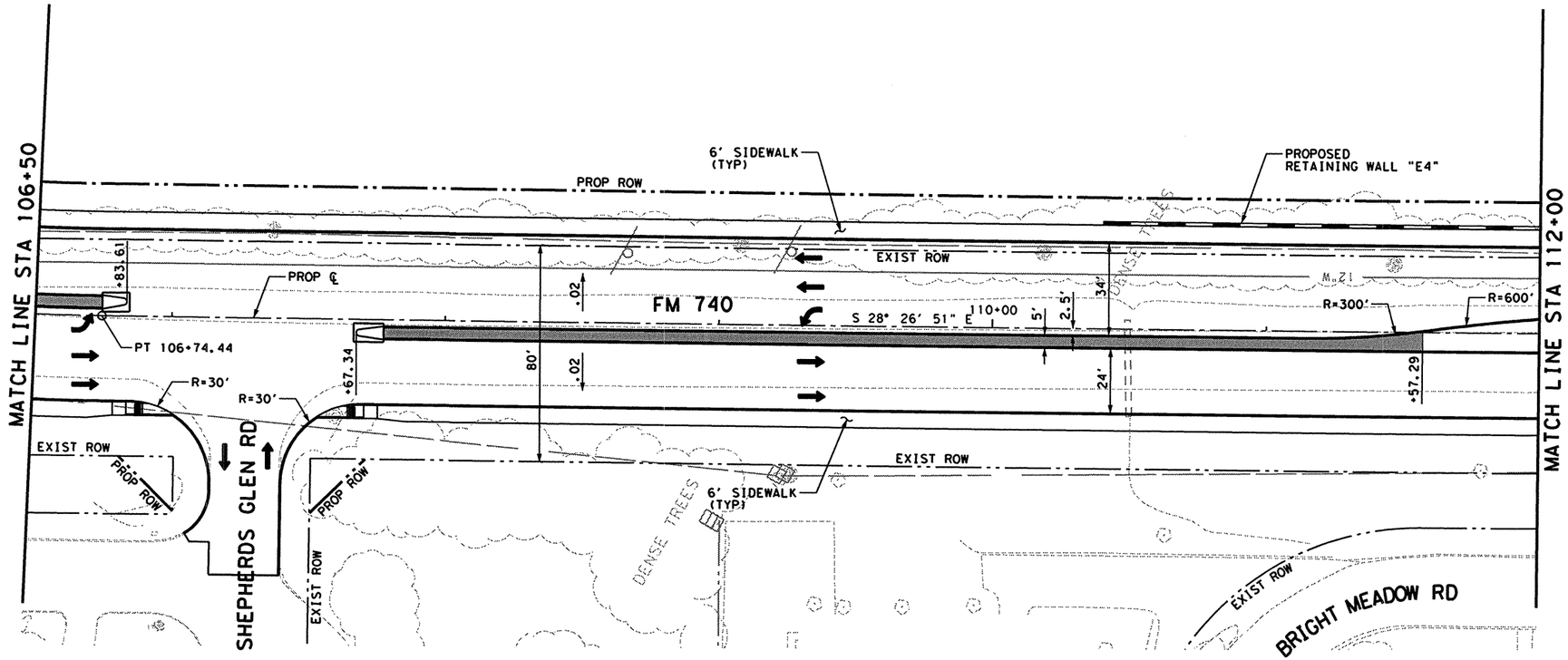

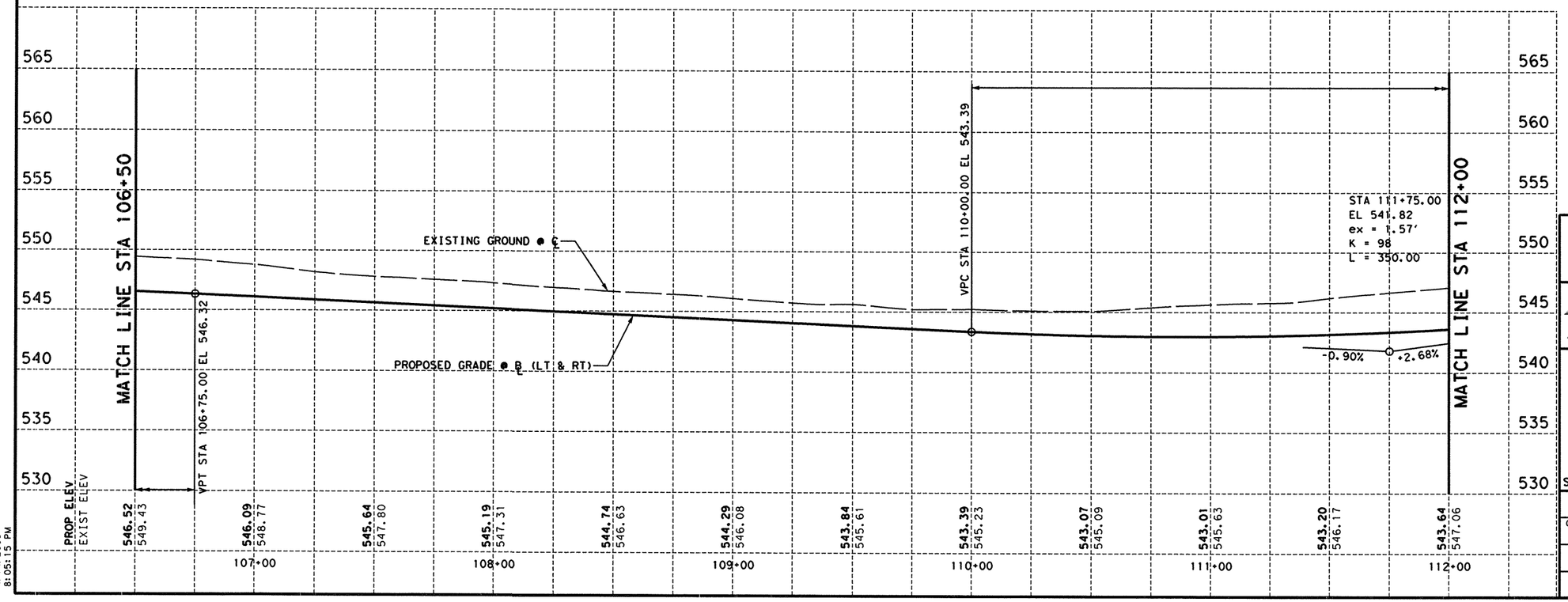

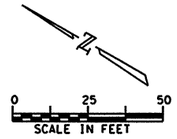

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

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Texas Department of Transportation

FM 740
PAVING PLAN & PROFILE
STA 106+50 TO STA 112+00

SCALE: H: 1"=50'
V: 1"=10'

SHEET 17 OF 24

DESIGN	FED.RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	133
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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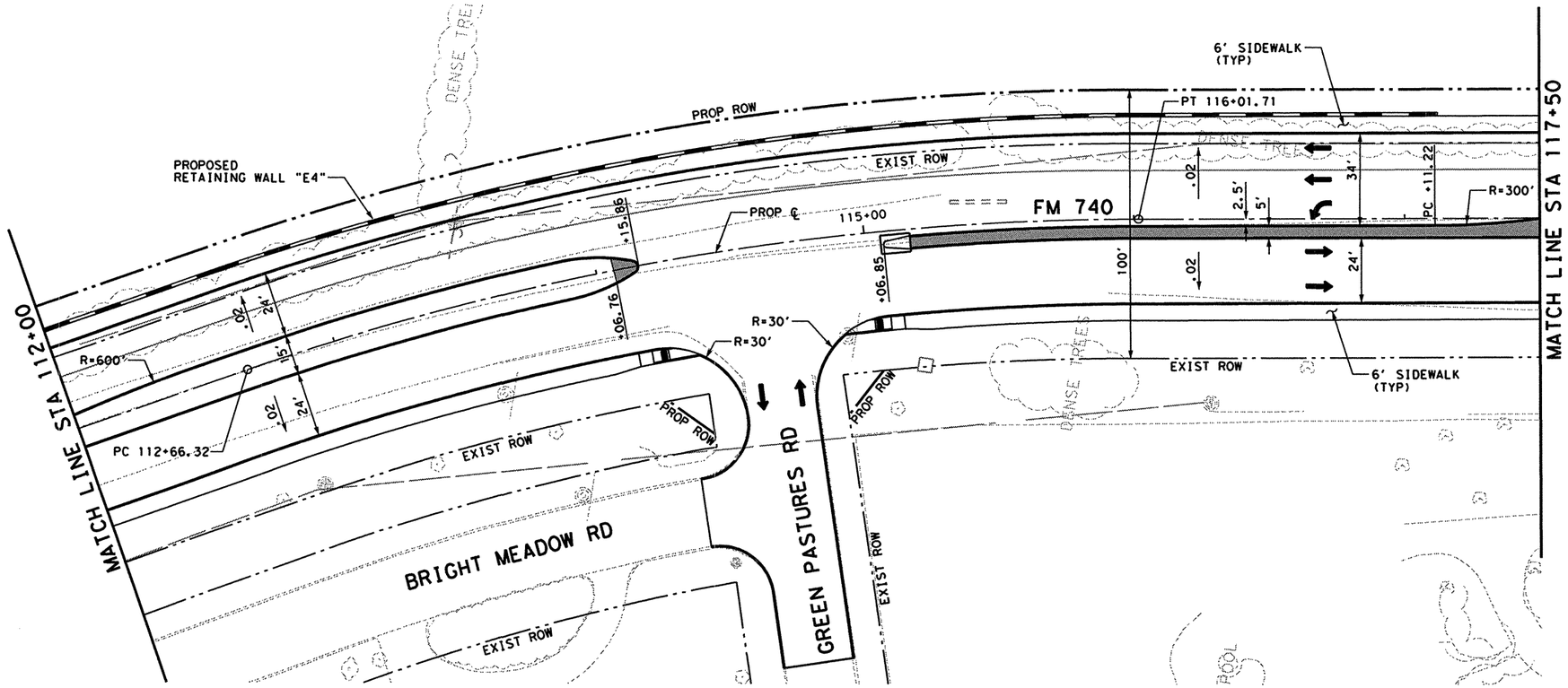

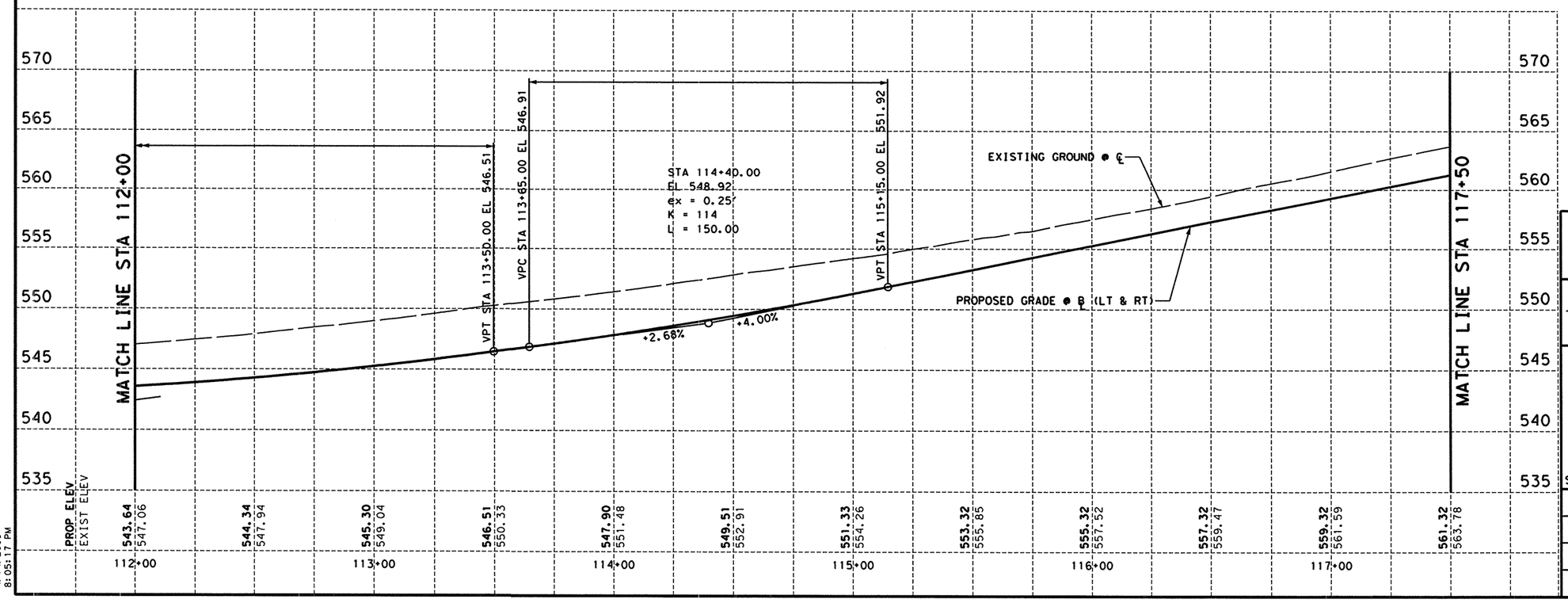

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SCALE IN FEET

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

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STATE OF TEXAS
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Texas Department of Transportation

FM 740
PAVING PLAN & PROFILE
STA 112+00 TO STA 117+50

H: 1"=50'
SCALE: V: 1"=10'

SHEET 18 OF 24

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	134
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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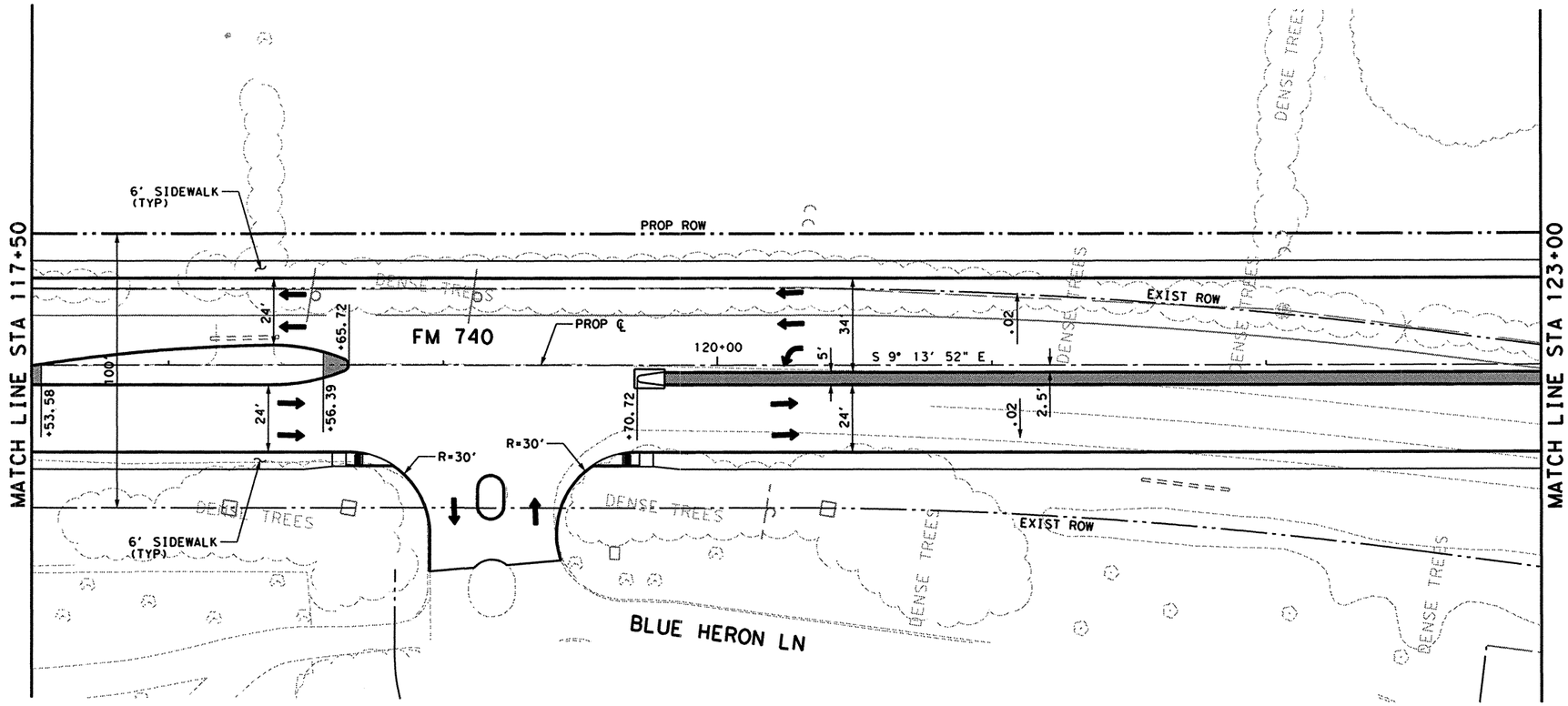

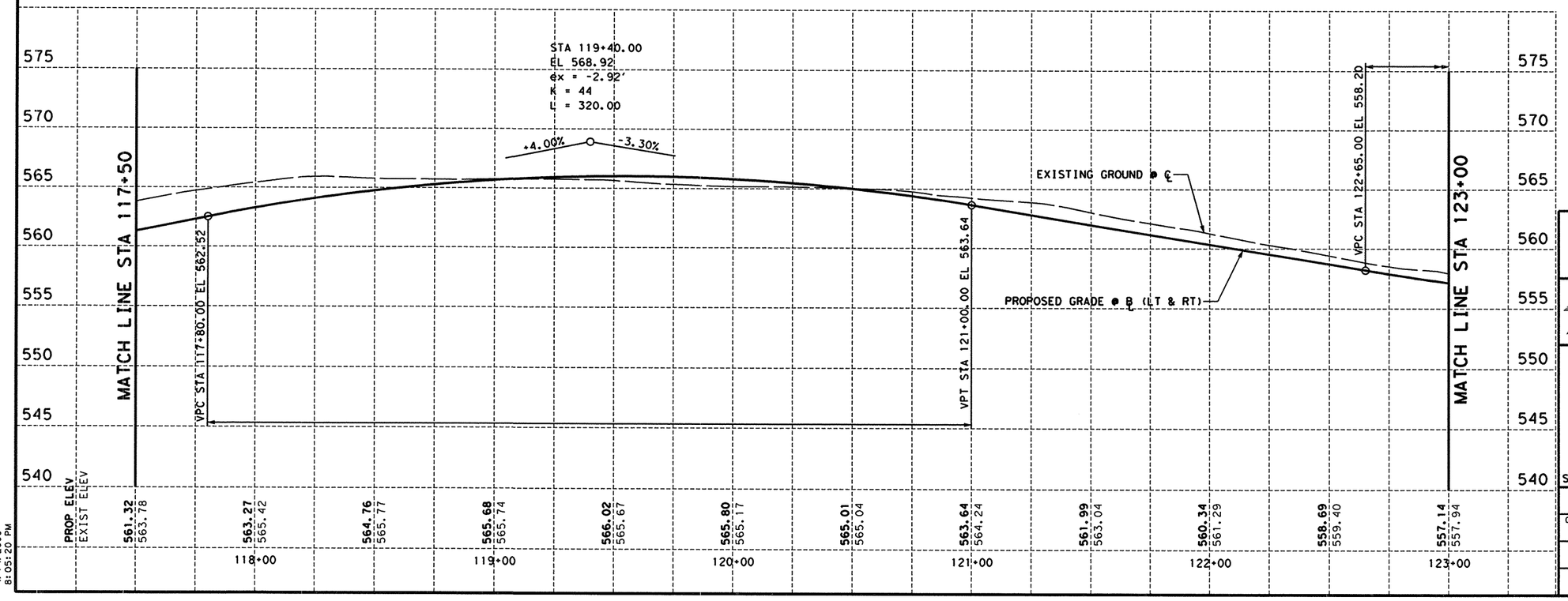

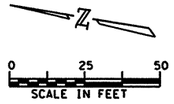

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

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Texas Department of Transportation

FM 740
PAVING PLAN & PROFILE
STA 117+50 TO STA 123+00

SCALE: H: 1"=50'
V: 1"=10'

SHEET 19 OF 24

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	135
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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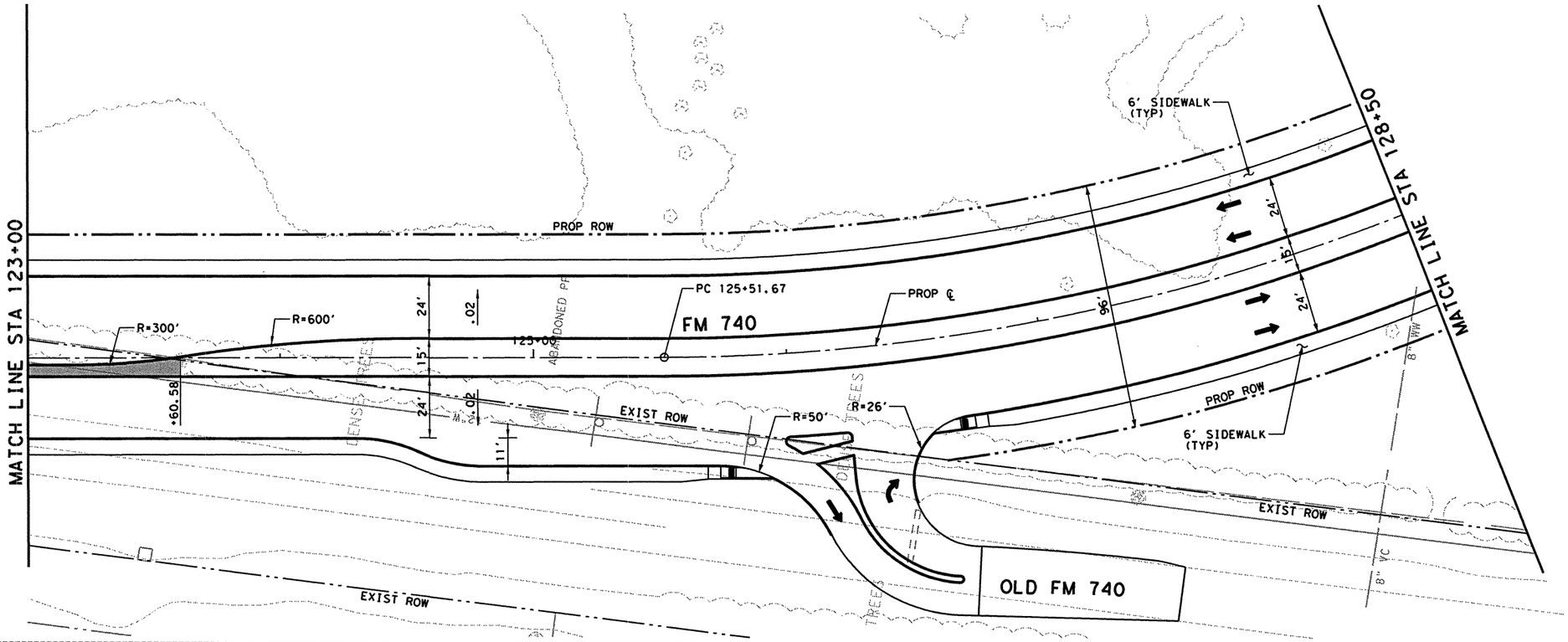

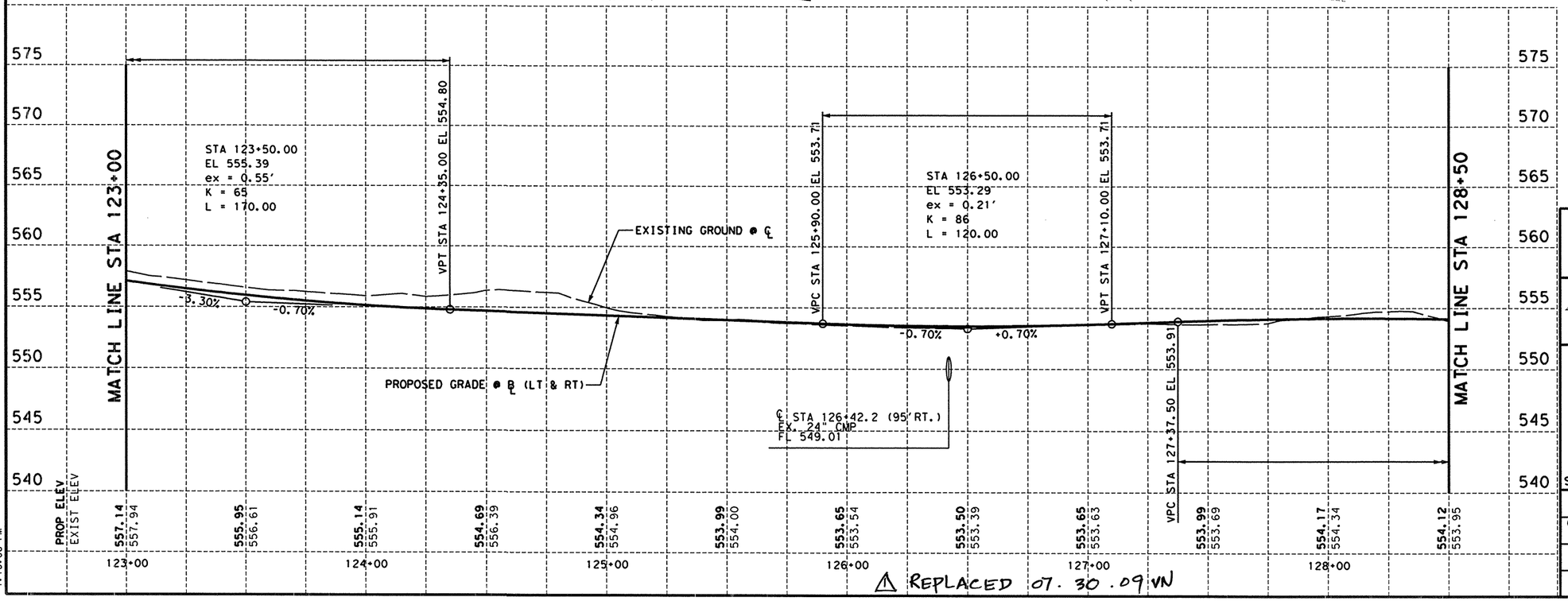

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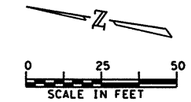

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

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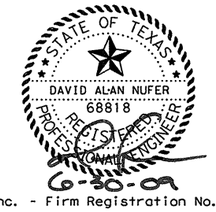
SEE MISCELLANEOUS ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION.



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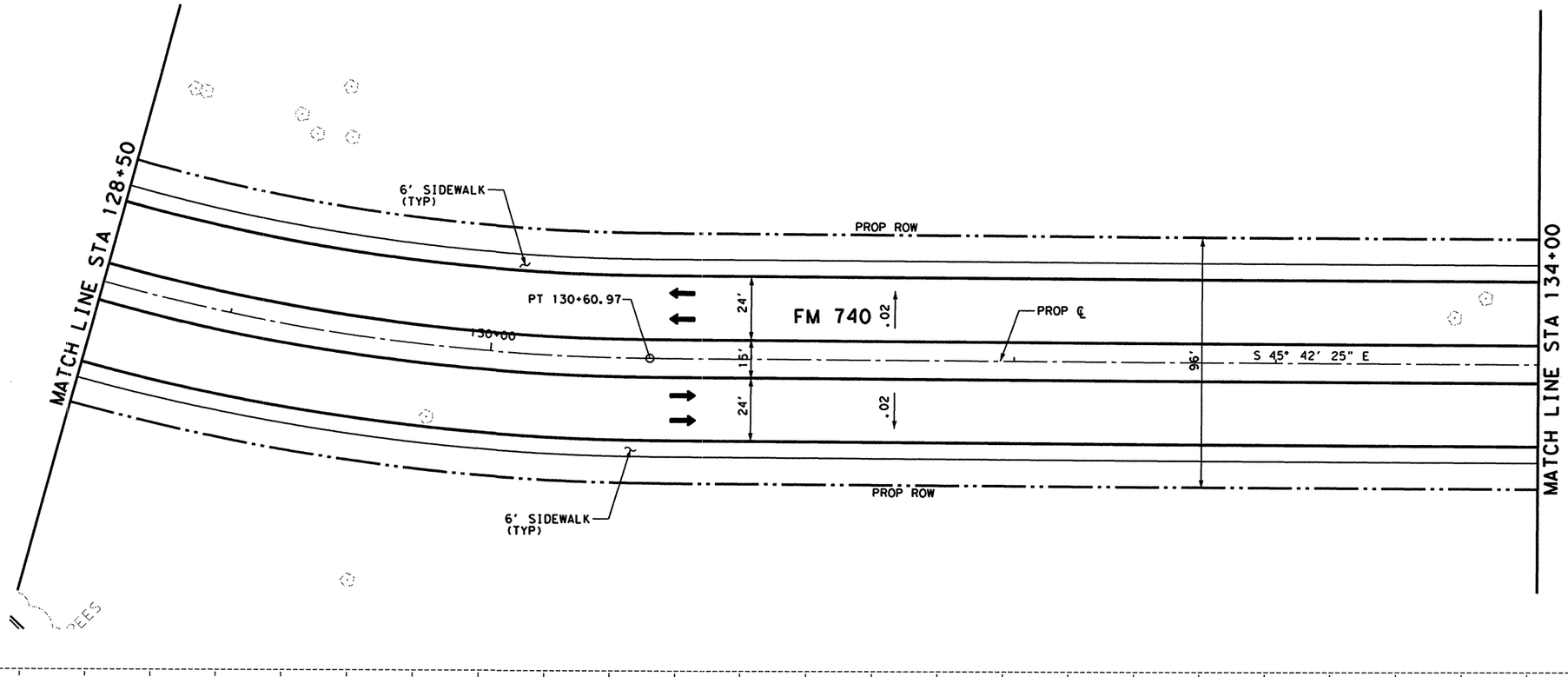
Texas Department of Transportation

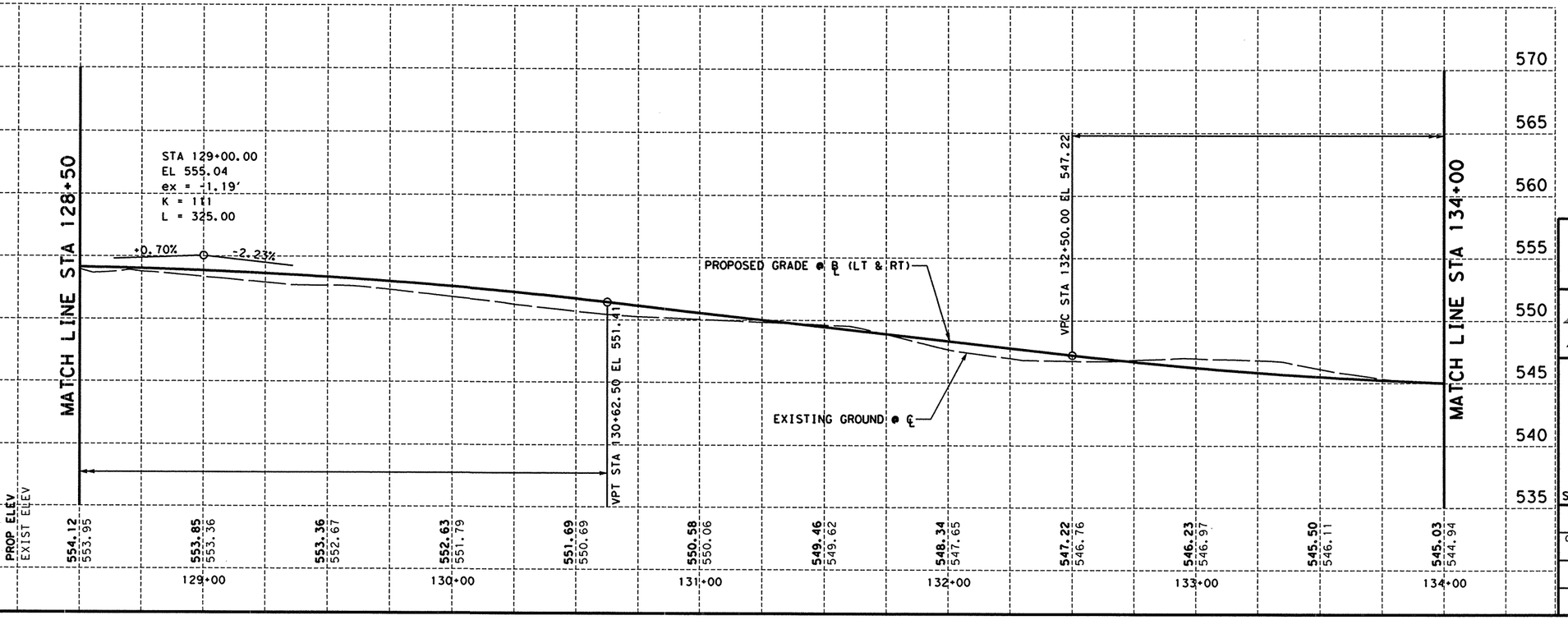
FM 740
PAVING PLAN & PROFILE
STA 123+00 TO STA 128+50

H: 1"=50'
SCALE: V: 1"=10'

SHEET 20 OF 24

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	136
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	





0 25 50
SCALE IN FEET

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

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Texas Department of Transportation

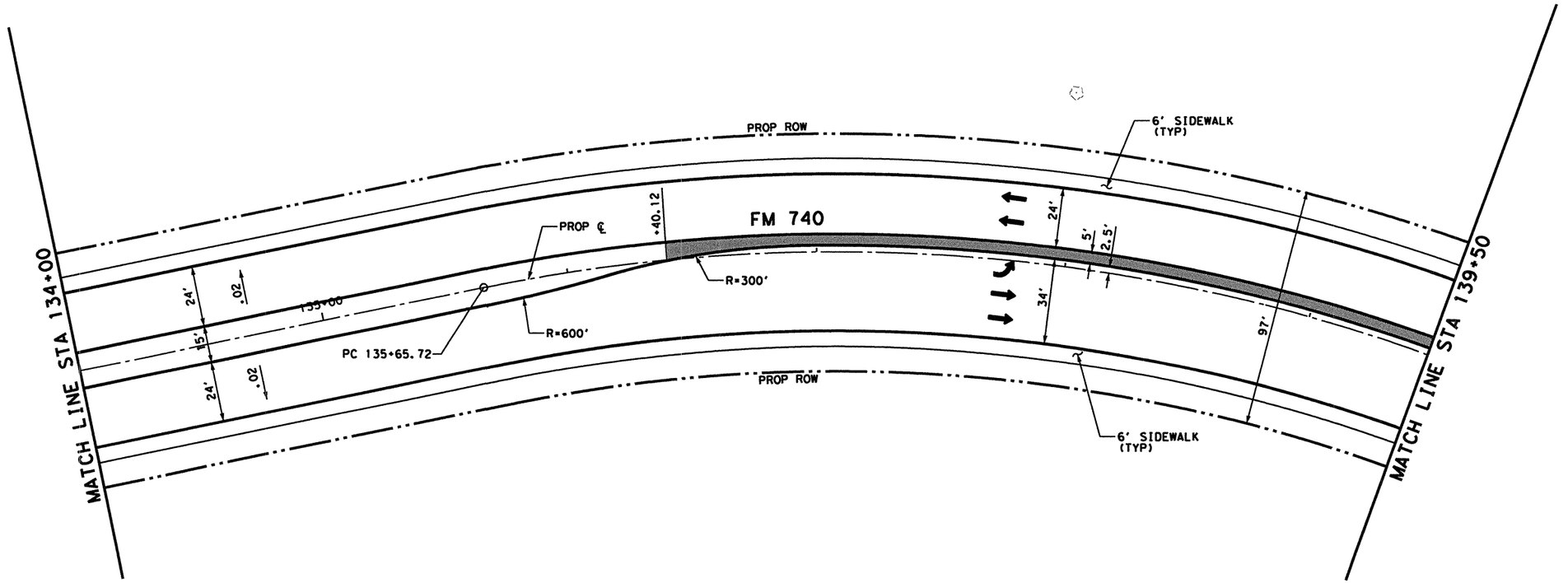
FM 740
PAVING PLAN & PROFILE

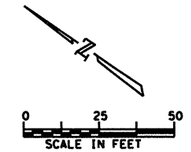
STA 128+50 TO STA 134+00

H: 1"=50'
SCALE: V: 1"=10'

SHEET 21 OF 24

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	137
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	





LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

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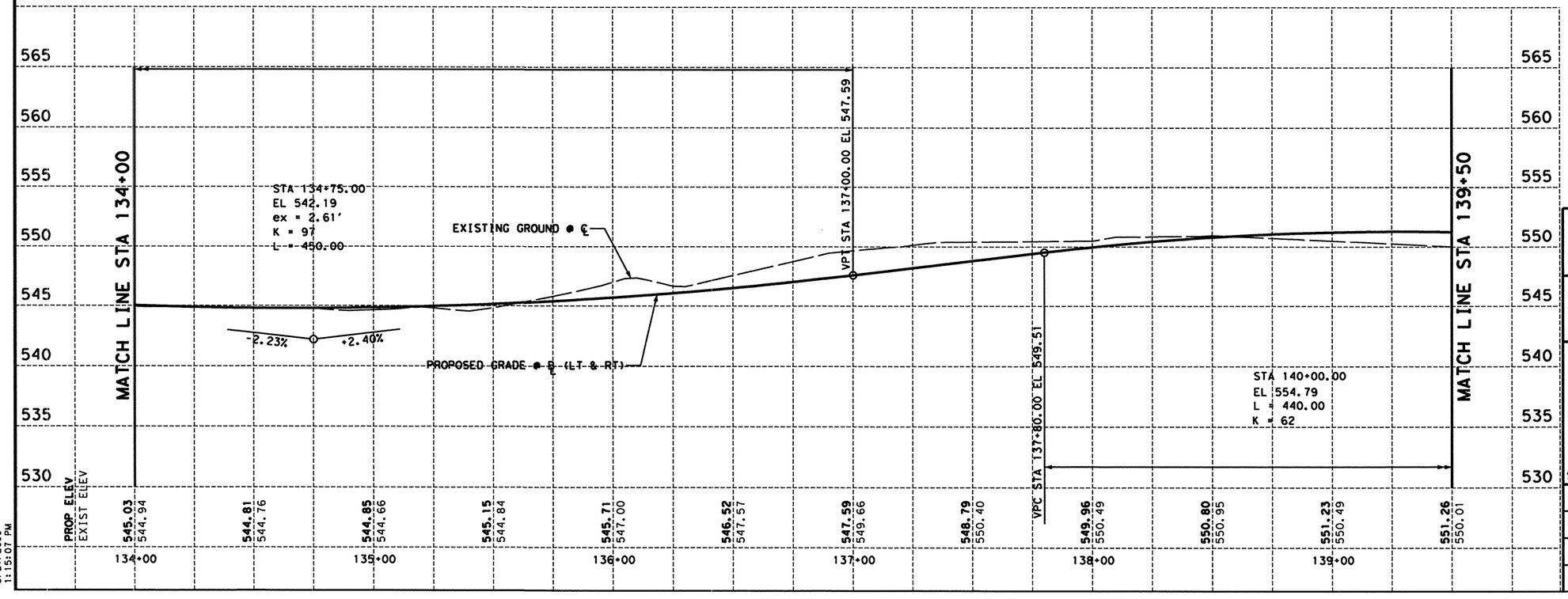

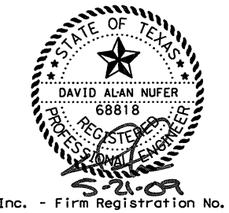

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Texas Department of Transportation

FM 740
PAVING PLAN & PROFILE
STA 134+00 TO STA 139+50

H: 1"=50'
SCALE: V: 1"=10'

SHEET 22 OF 24

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	138
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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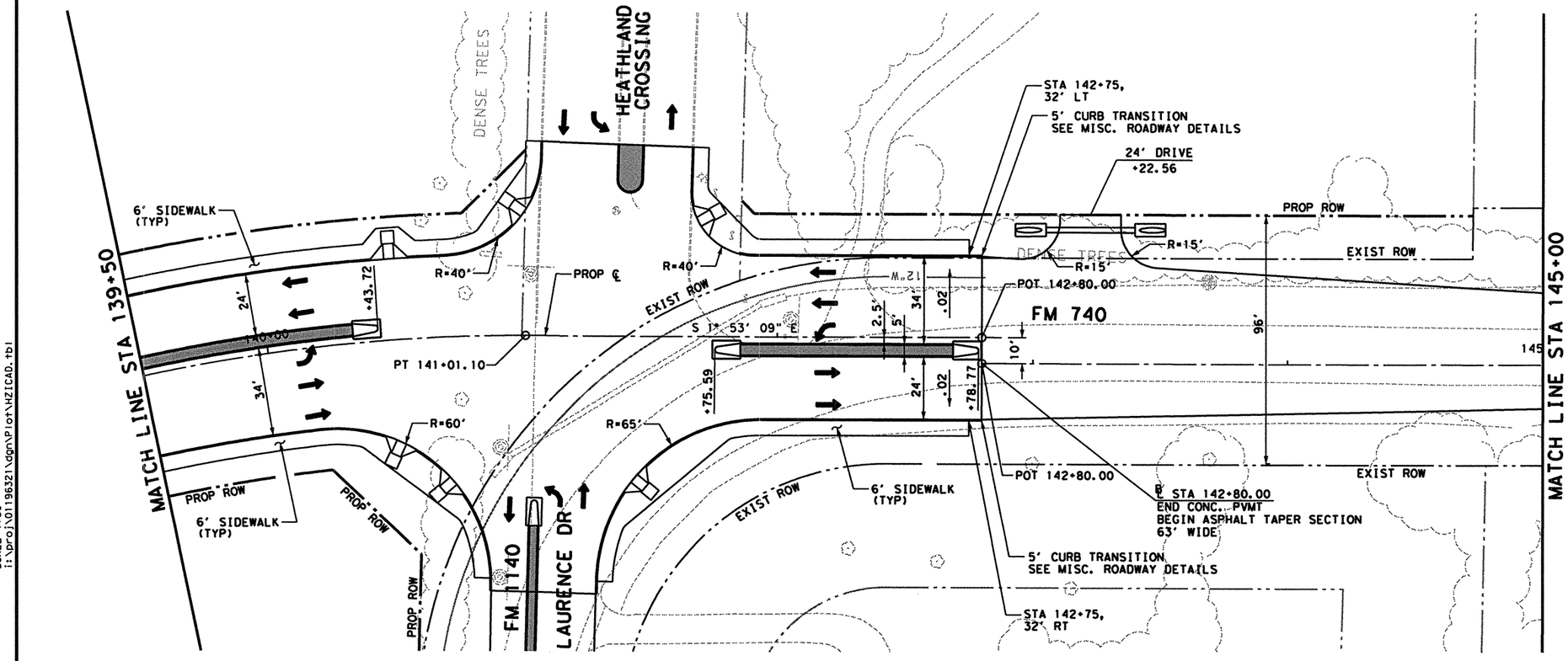

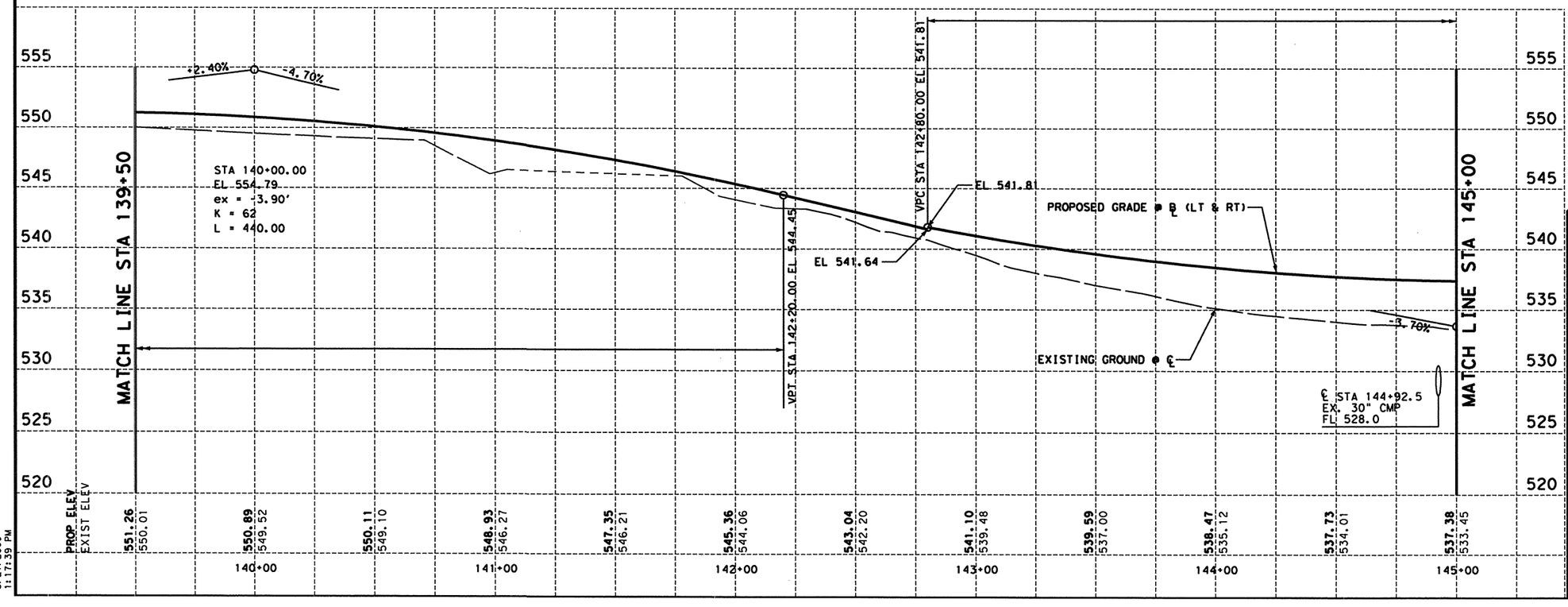

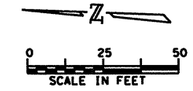

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

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ALL RADII DIMENSIONED OFF OF FACE OF CURB.

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SEE MISCELLANEOUS ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION.

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Dallas, Texas 75204-2489

FM 740
PAVING PLAN & PROFILE
STA 139+50 TO STA 145+00

H: 1"=50'
SCALE: V: 1"=10'

SHEET 23 OF 24

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	139
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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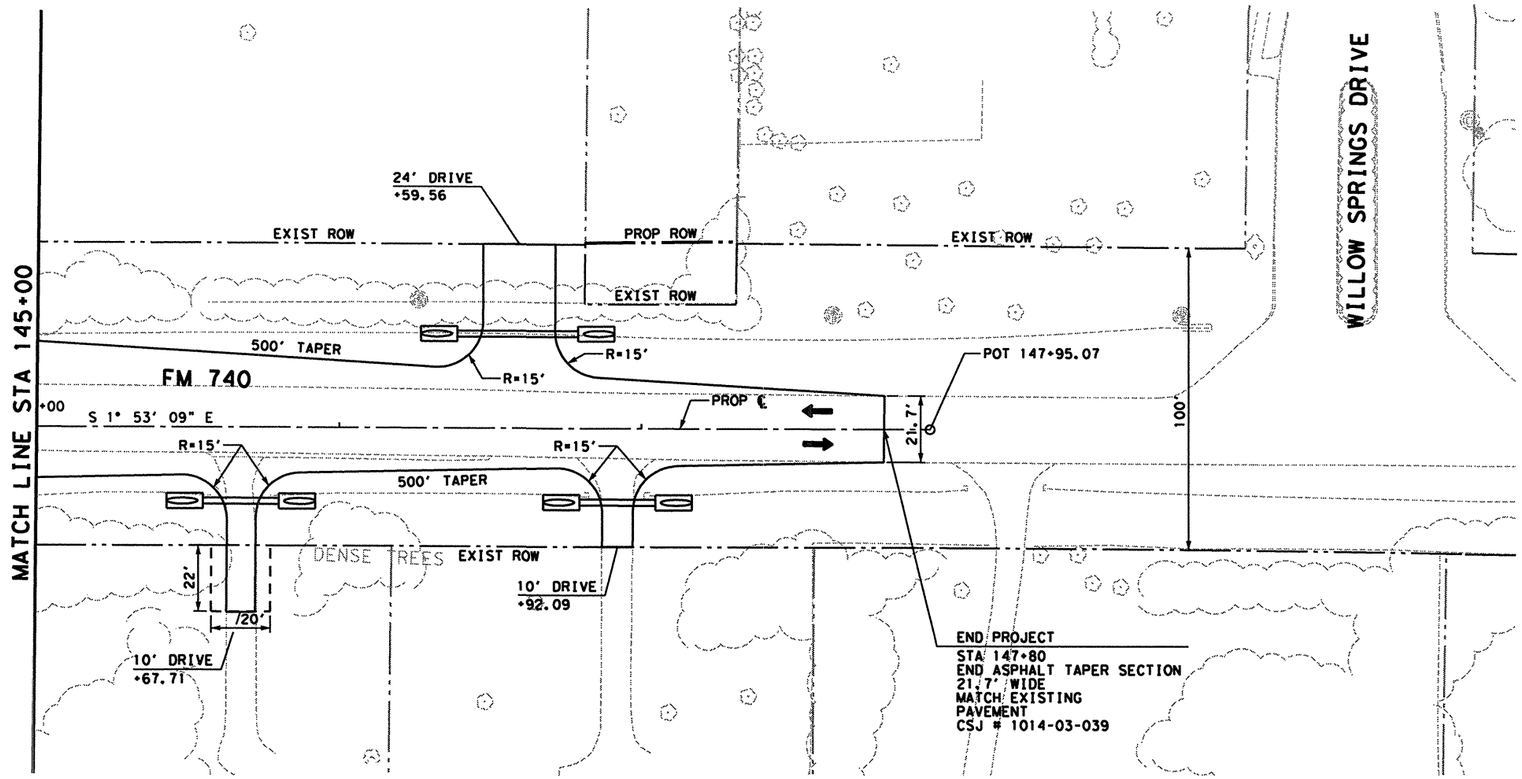

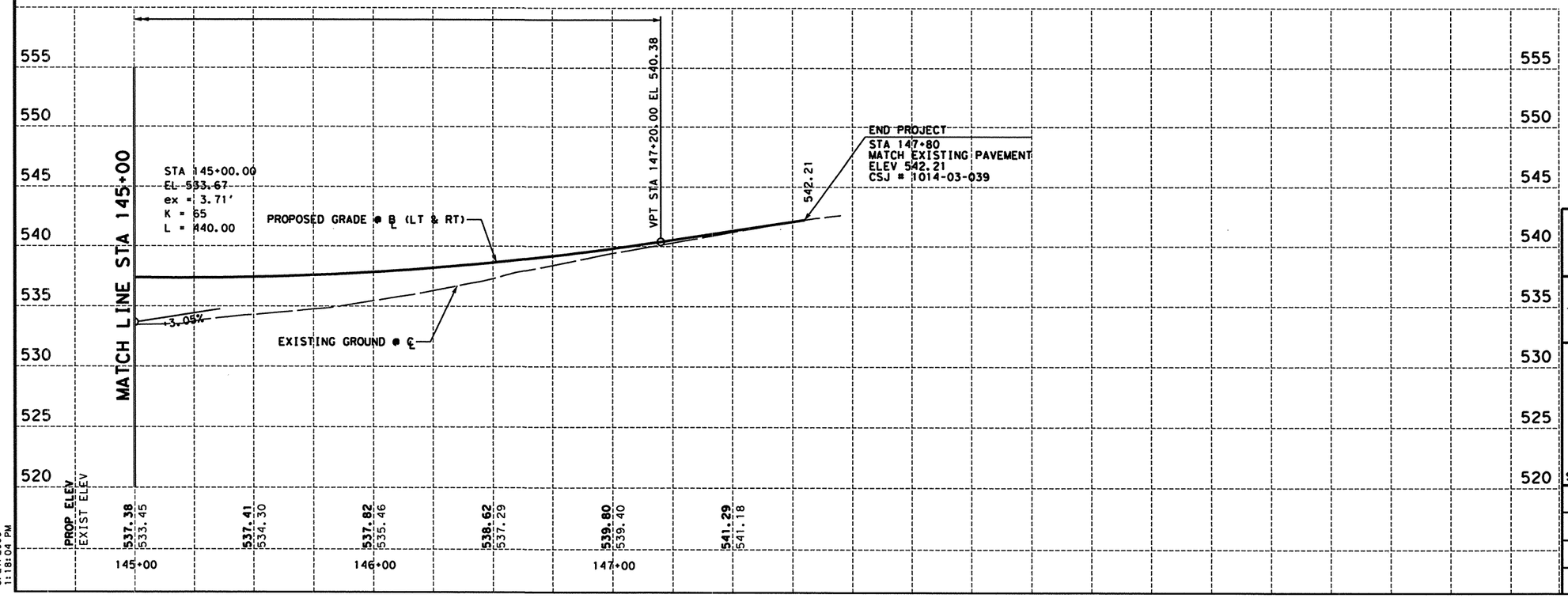

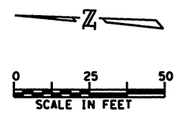

LEGEND

- MONOLITHIC MEDIAN NOSE
- COLORED TEXTURED CONCRETE 4"
- CURB RAMP TYPE 8
- CURB RAMP TYPE 10

NOTES:

ALL PAVEMENT DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB.

ALL RADII DIMENSIONED OFF OF FACE OF CURB.

SEE MISCELLANEOUS DRIVEWAY DETAILS SHEET FOR ADDITIONAL DRIVEWAY INFORMATION.

SEE MEDIAN DETAILS SHEETS FOR ADDITIONAL MEDIAN INFORMATION.

SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SEE MISCELLANEOUS ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION.

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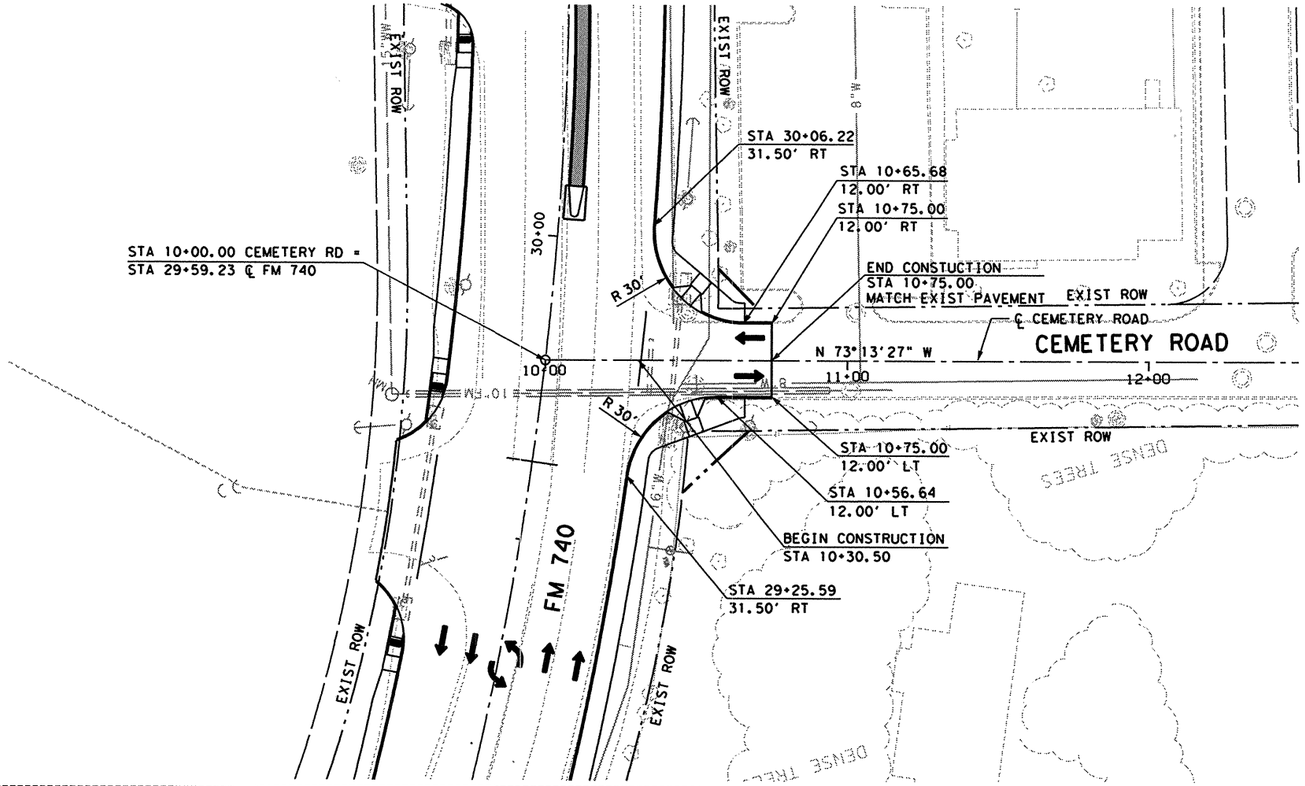
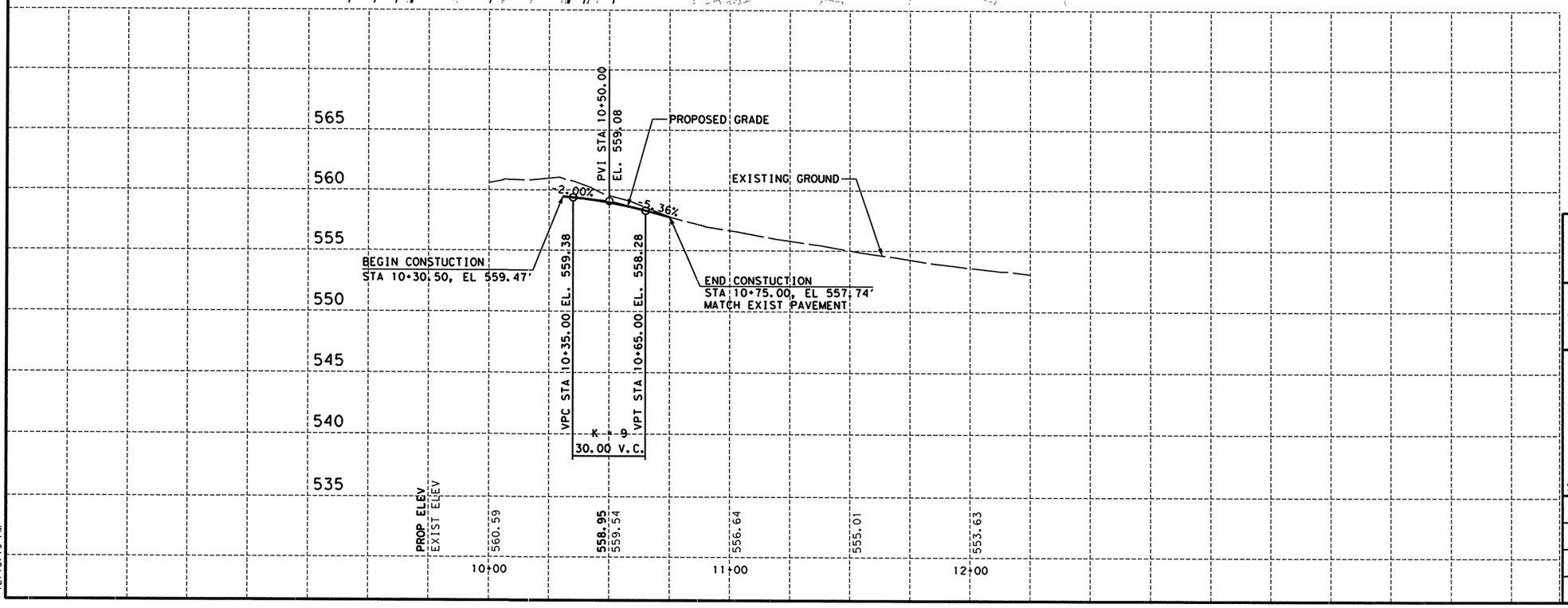
FM 740
PAVING PLAN & PROFILE
STA 145+00 TO END OF PROJECT

SCALE: H: 1"=50'
V: 1"=10'

SHEET 24 OF 24

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	140
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	





0 25 50
SCALE IN FEET

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
4-15-09

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FM 740
INTERSECTION LAYOUT
CEMETERY ROAD

H: 1"=50'
SCALE: V: 1"=10'

SHEET 1 OF 20

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS JP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	141
CHECK DAN	CONTROL 1014	SECTION 03	JOB 039	

jparos
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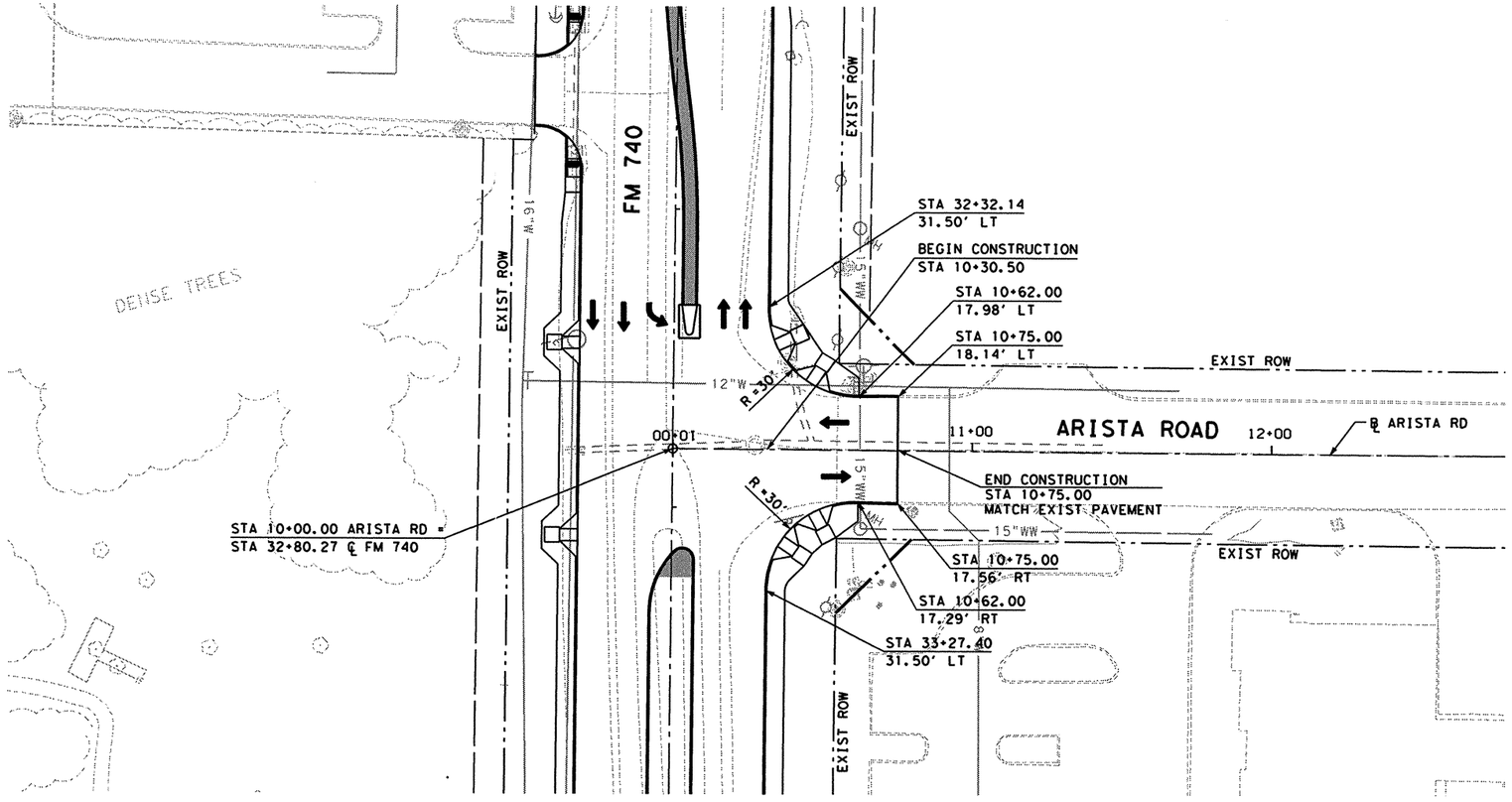

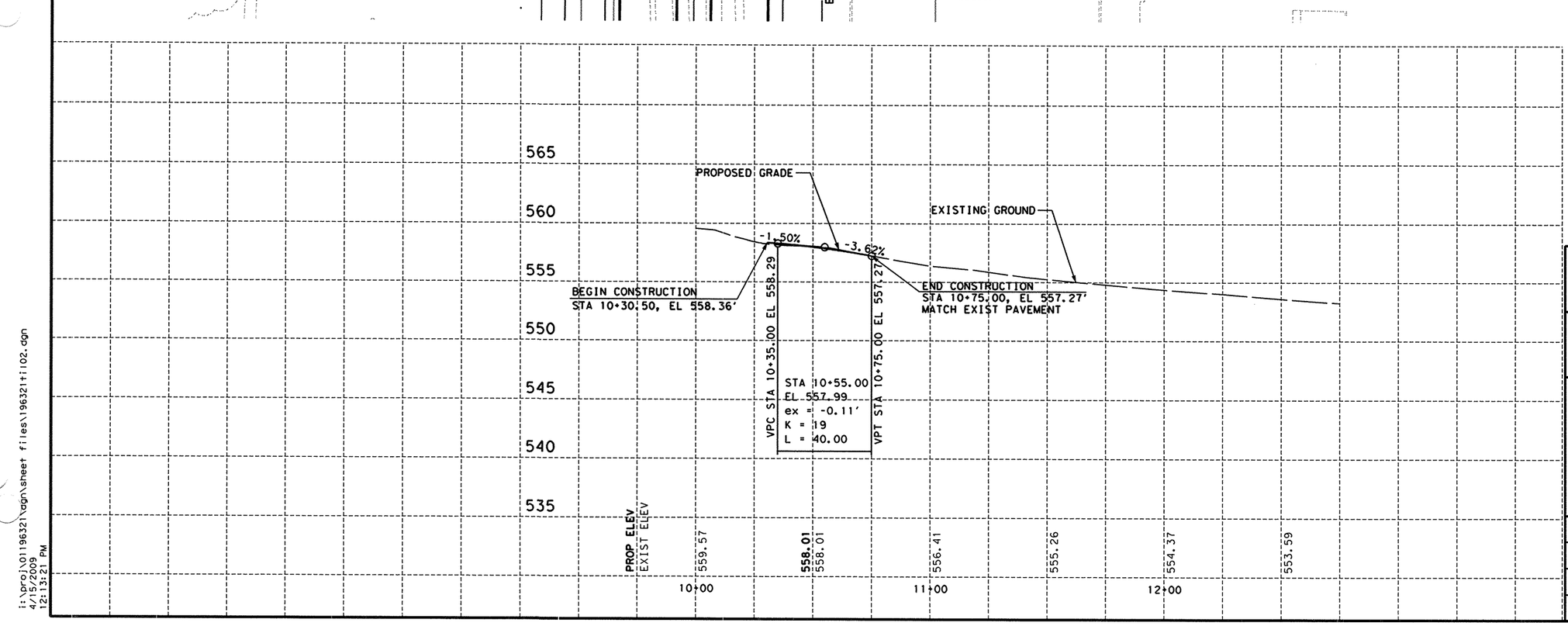

0 25 50
SCALE IN FEET

STATE OF TEXAS
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FM 740
INTERSECTION LAYOUT
ARISTA ROAD

H: 1"=50'
SCALE: V: 1"=10'

SHEET 2 OF 20

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS JP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	142
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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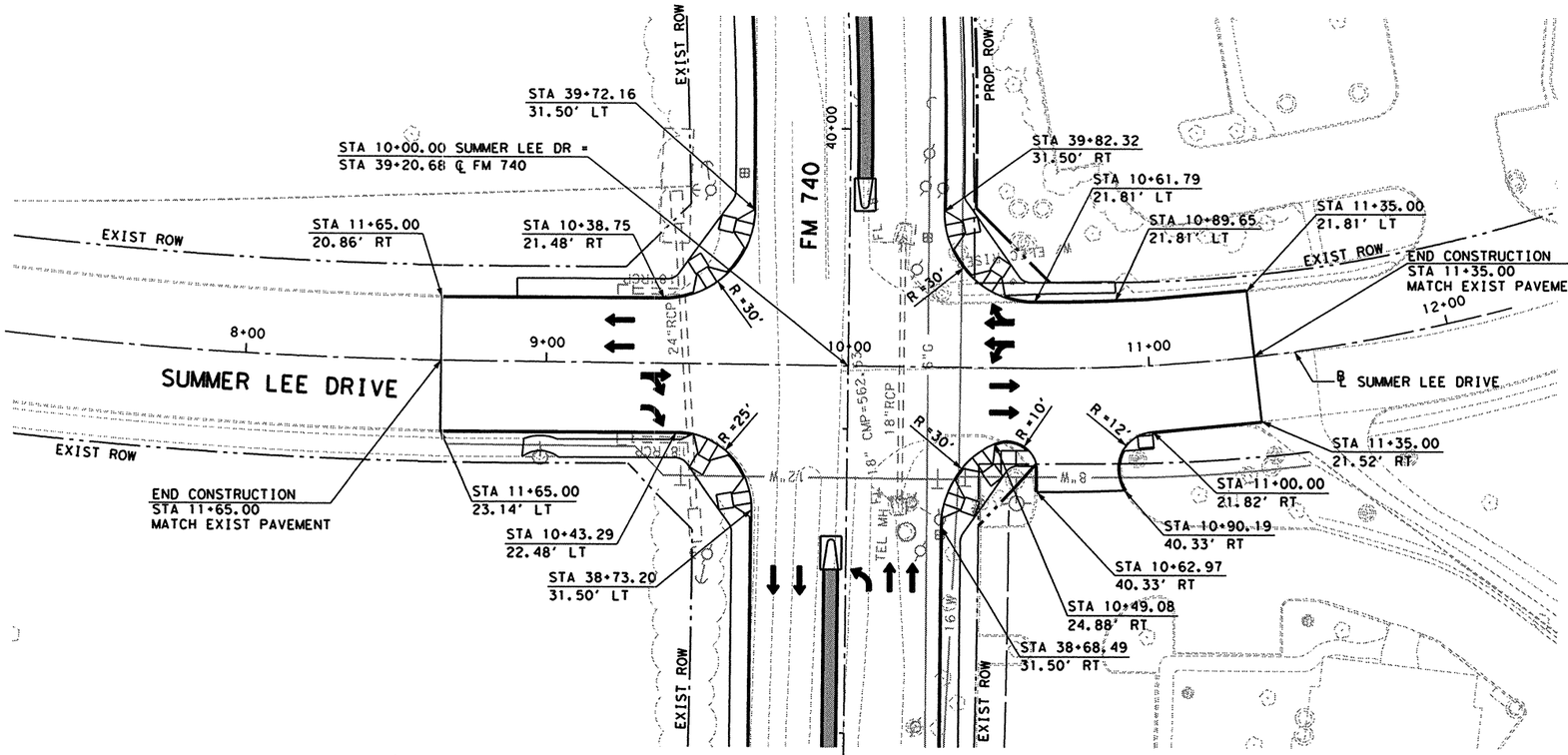

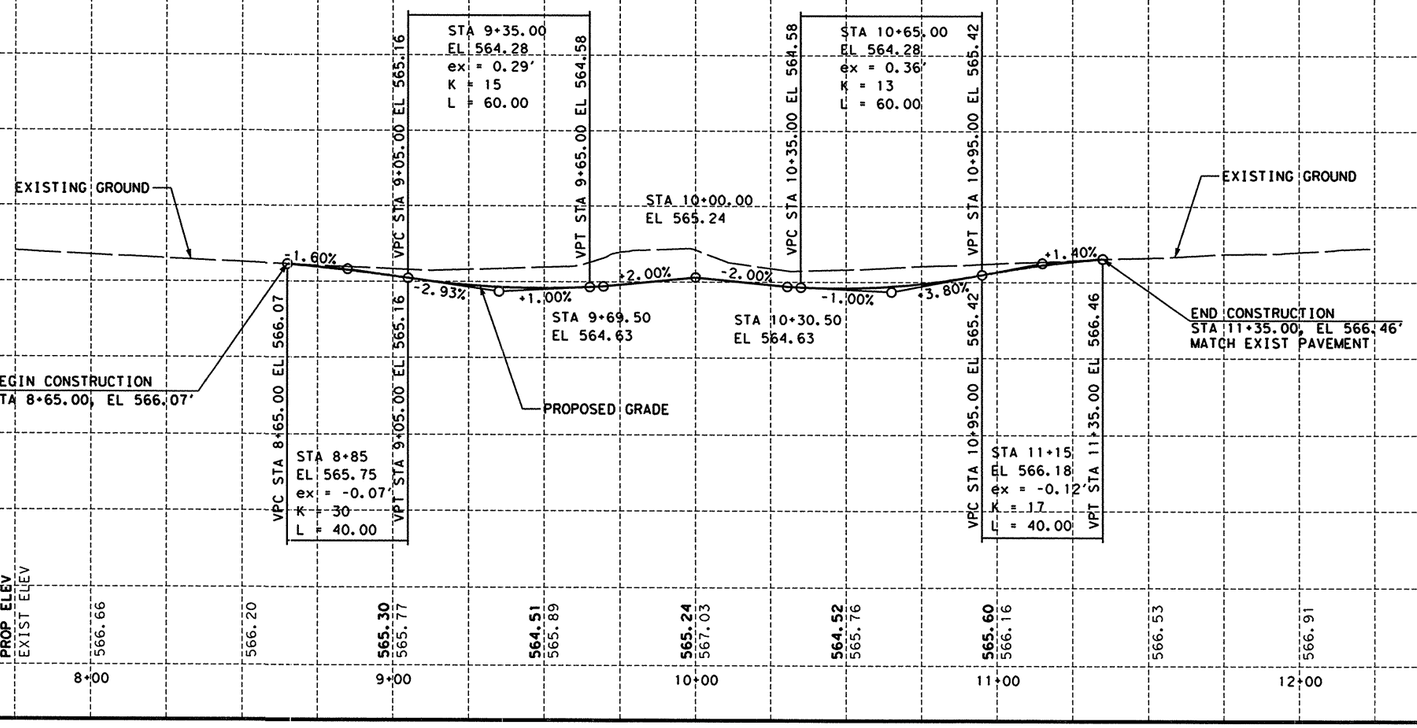

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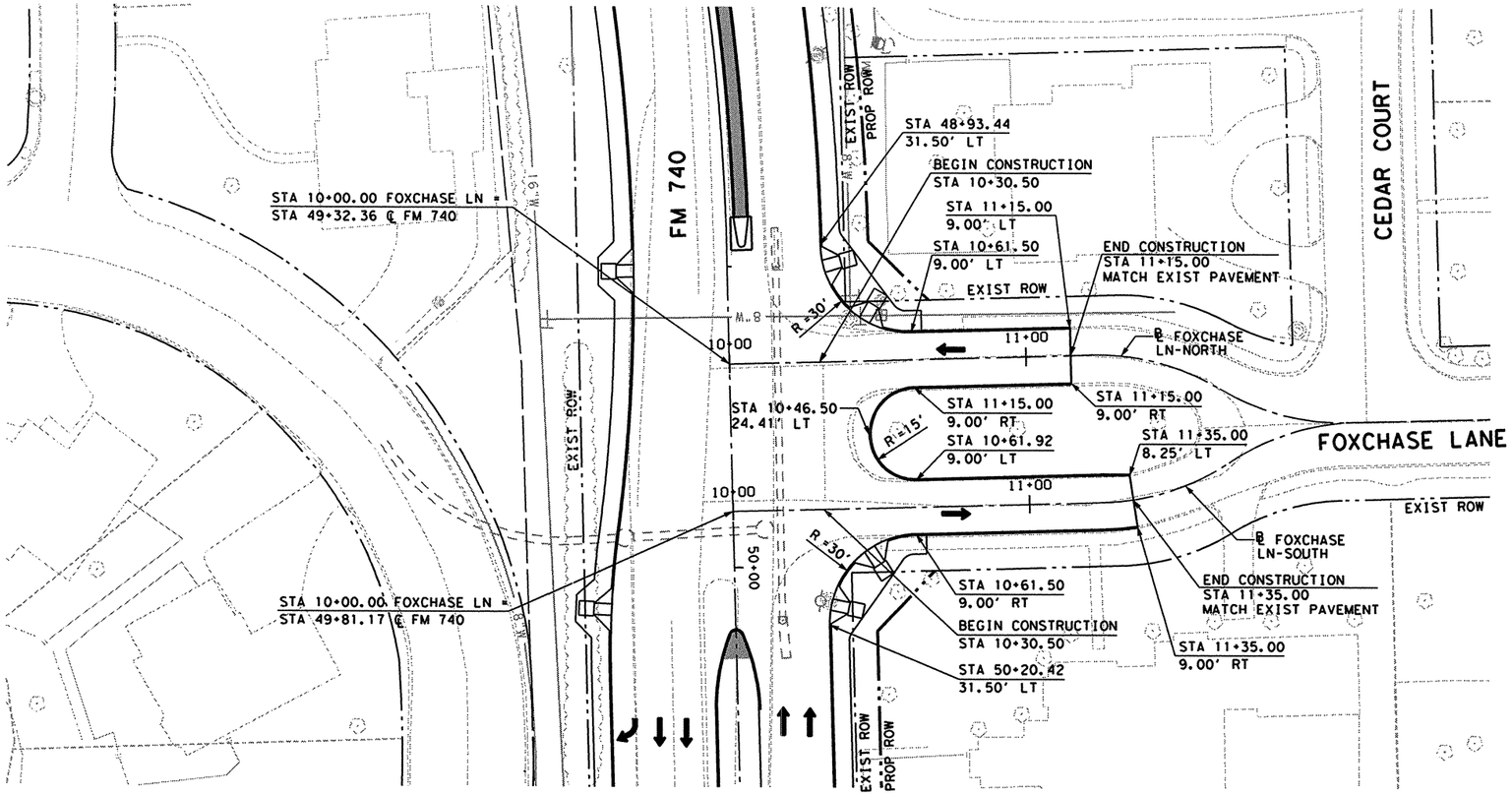
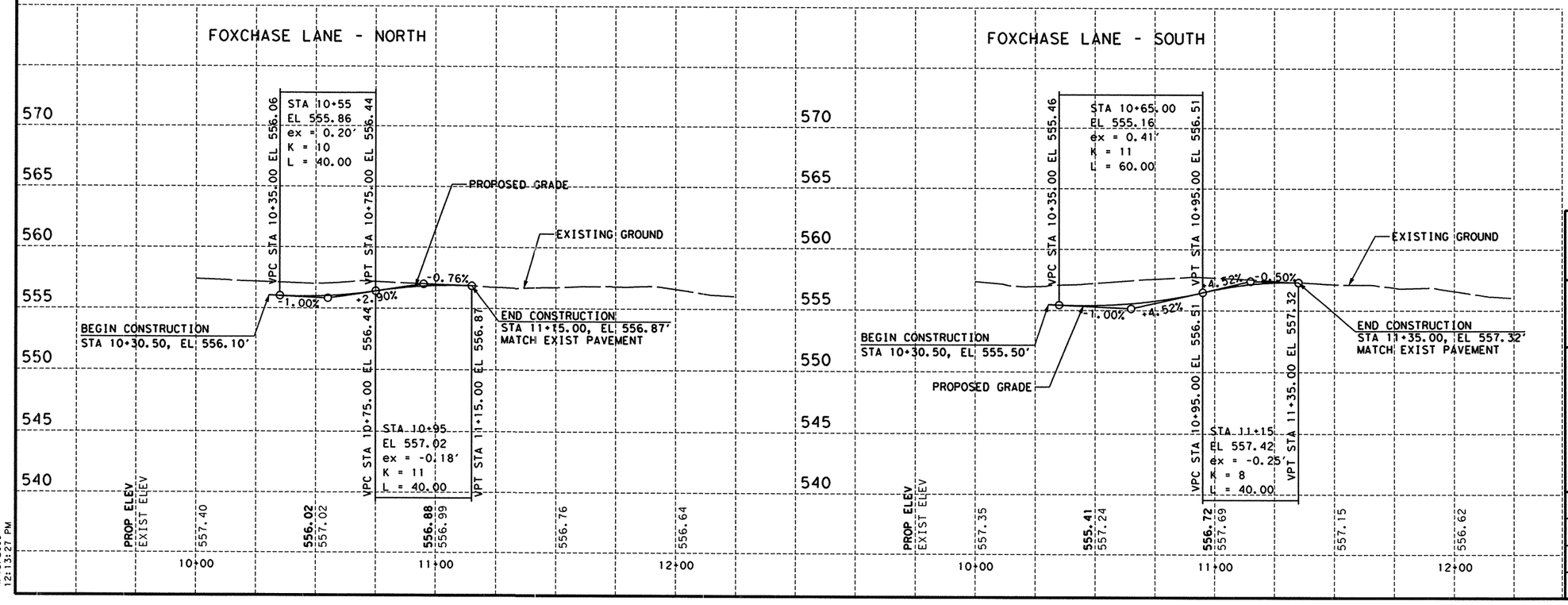
FM 740
INTERSECTION LAYOUT
SUMMER LEE DRIVE

H: 1"=50'
SCALE: V: 1"=10'

SHEET 3 OF 20

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
RP	TEXAS	DALLAS	ROCKWALL	143
CHECK	CONTROL	SECTION	JOB	
CVL	1014	03	039	
CHECK				
DAN				





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FM 740
INTERSECTION LAYOUT
FOXCHASE LANE

H: 1"=50'
SCALE: V: 1"=10'

SHEET 4 OF 20

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS RP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	144
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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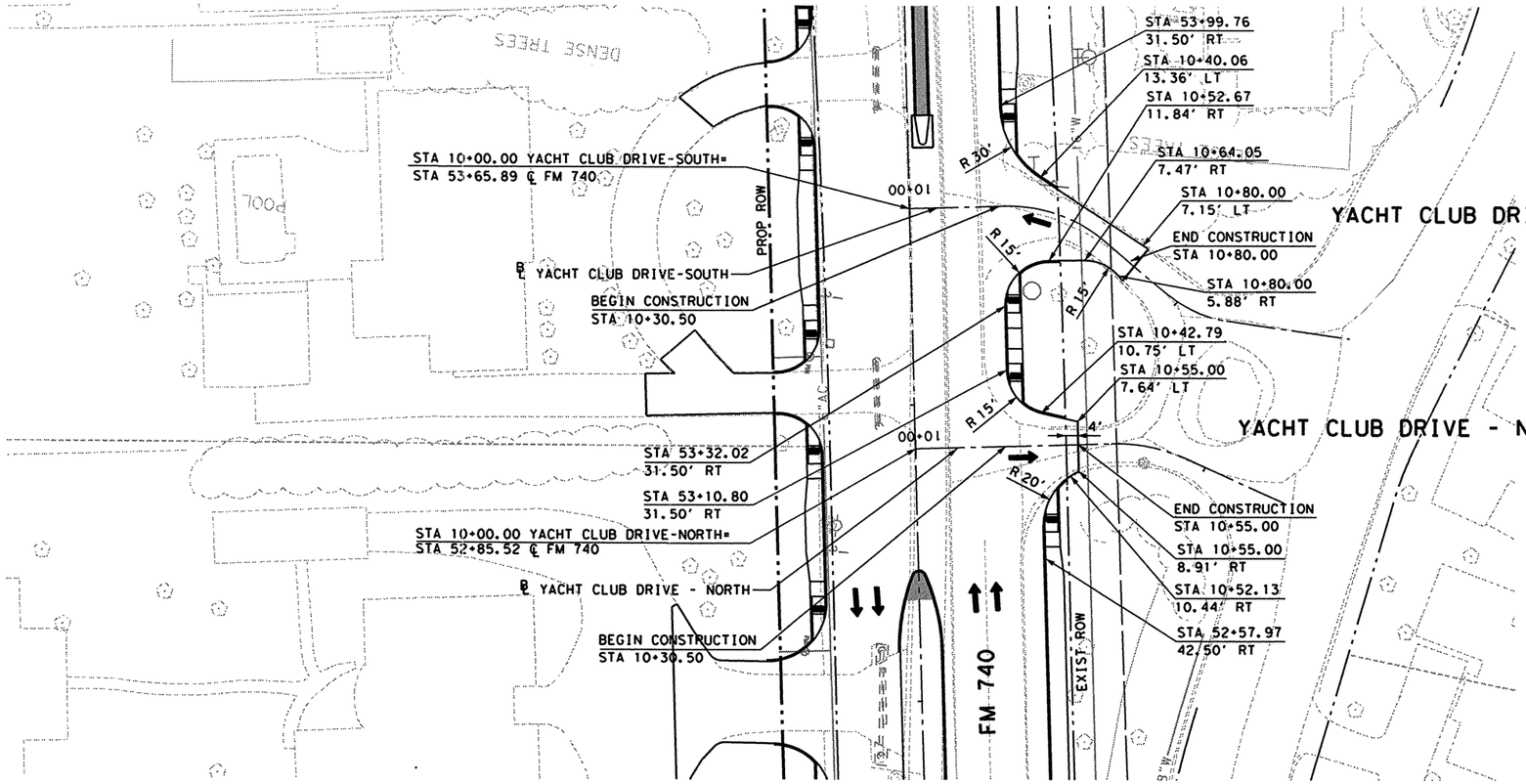

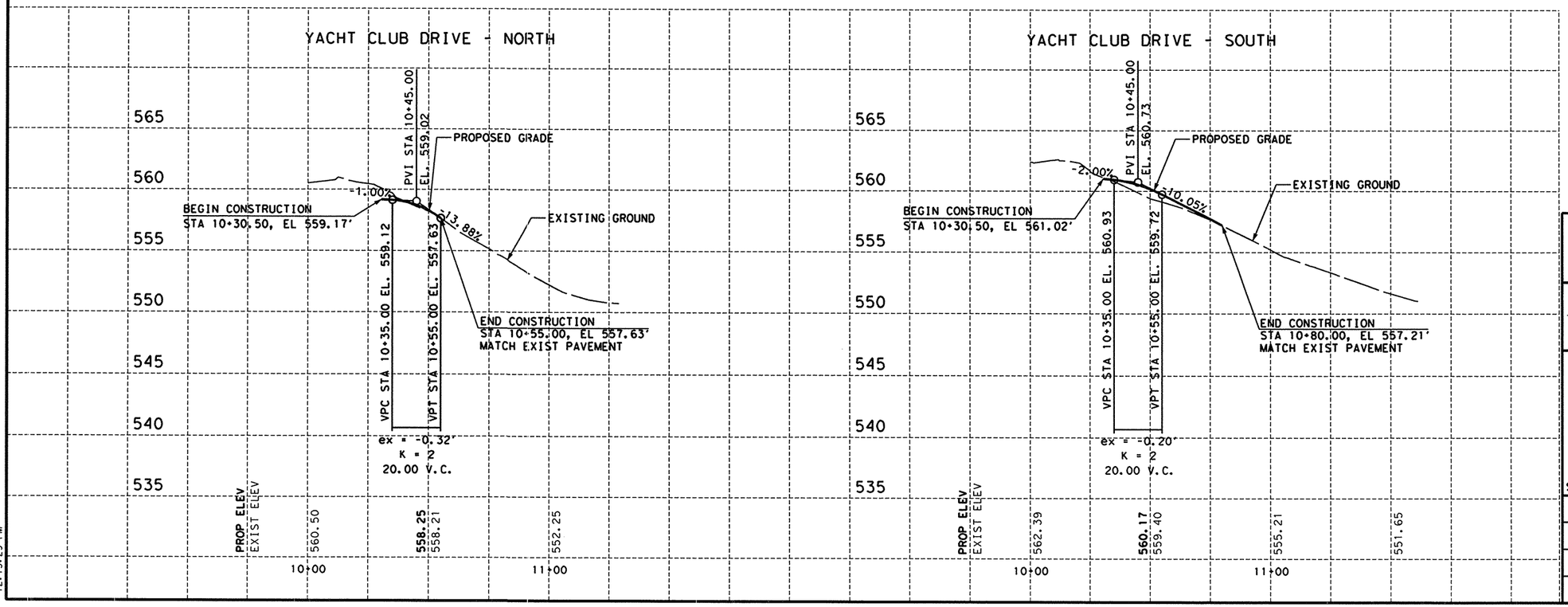

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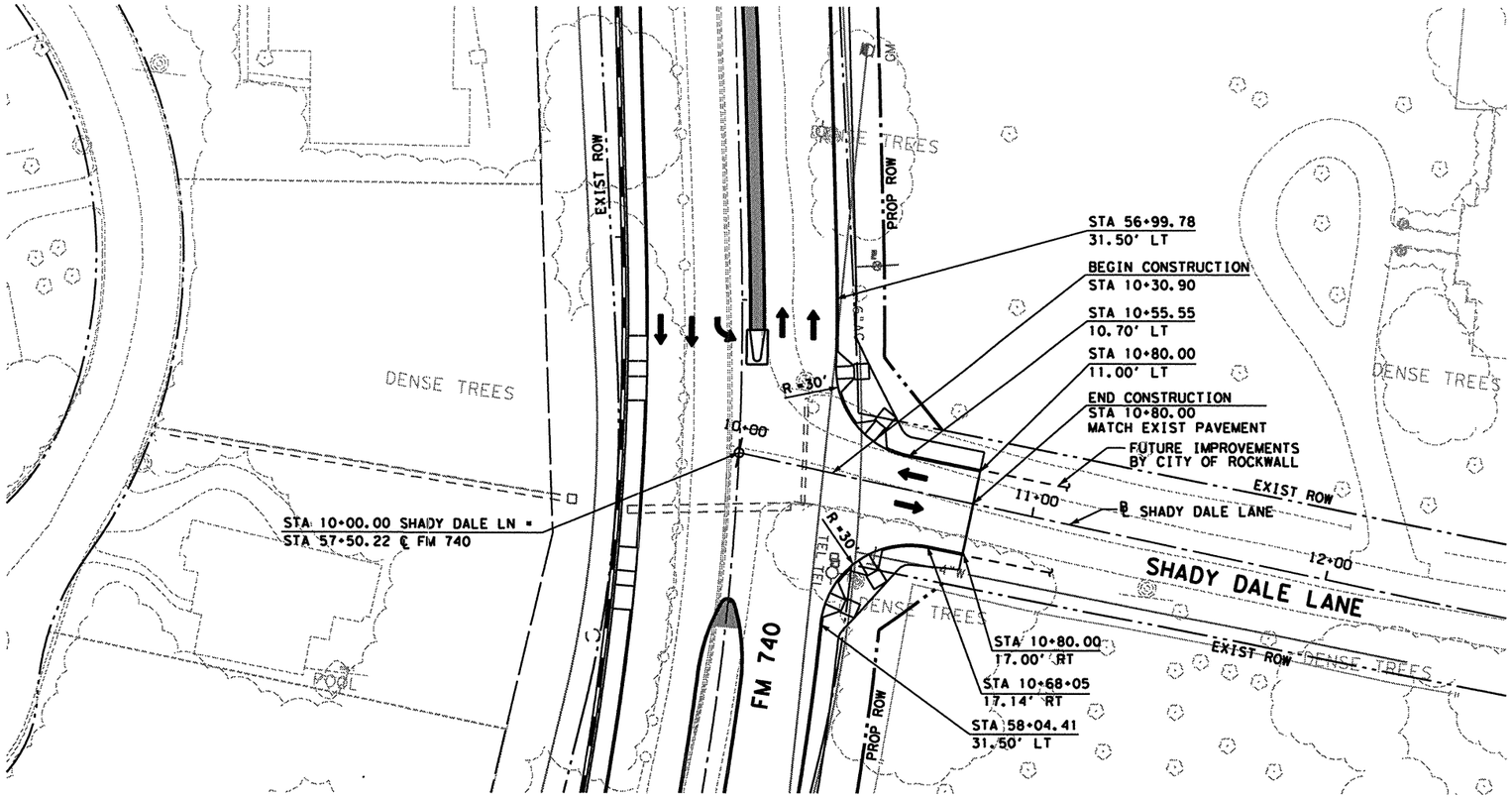
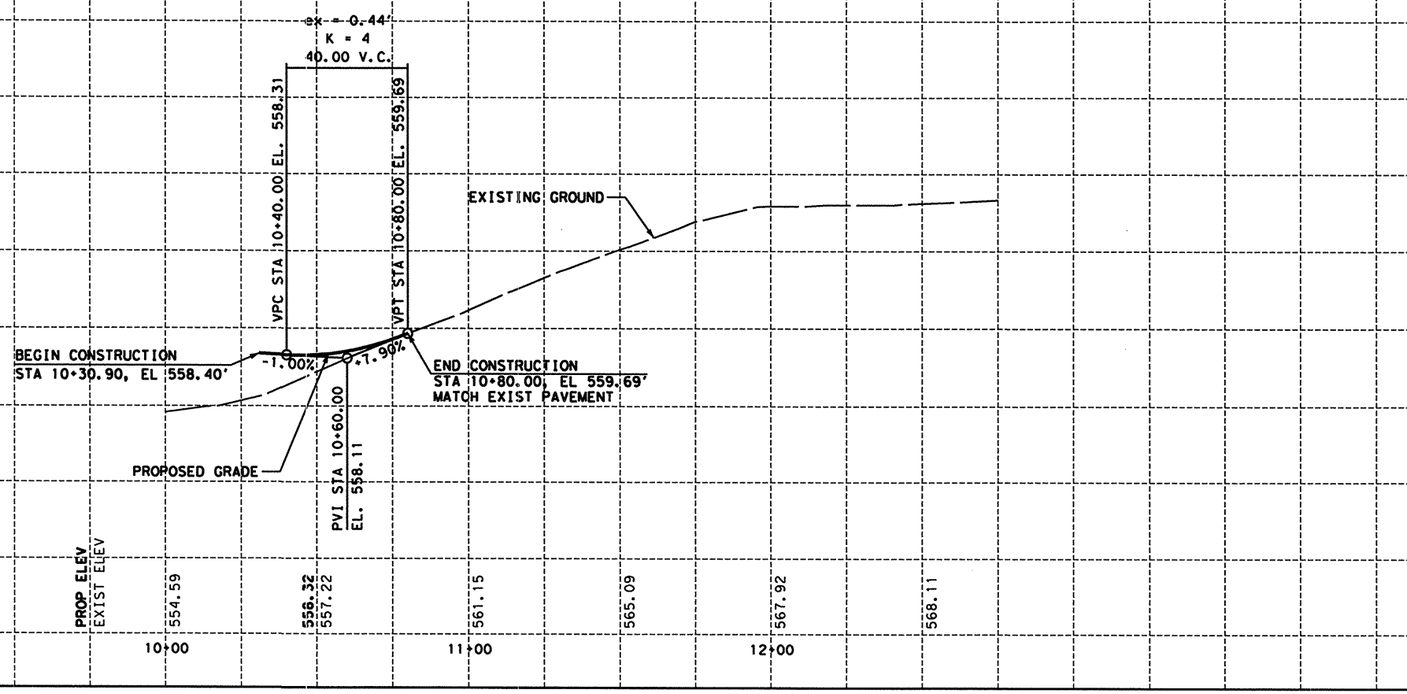
FM 740
INTERSECTION LAYOUT
YACHT CLUB DRIVE

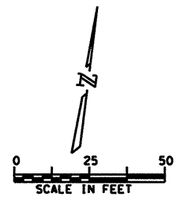
H: 1"=50'
SCALE: V: 1"=10'

SHEET 5 OF 20

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS JP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	145
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	







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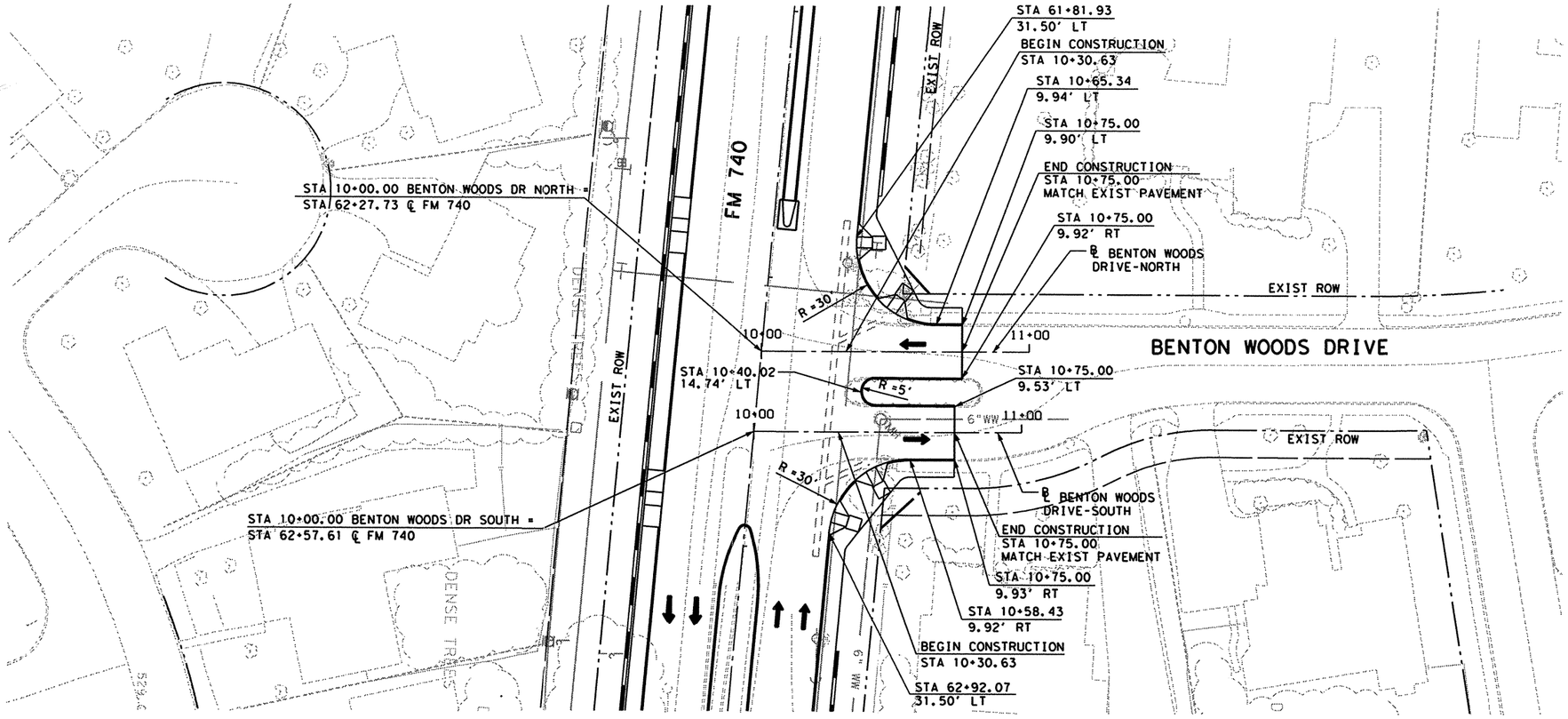
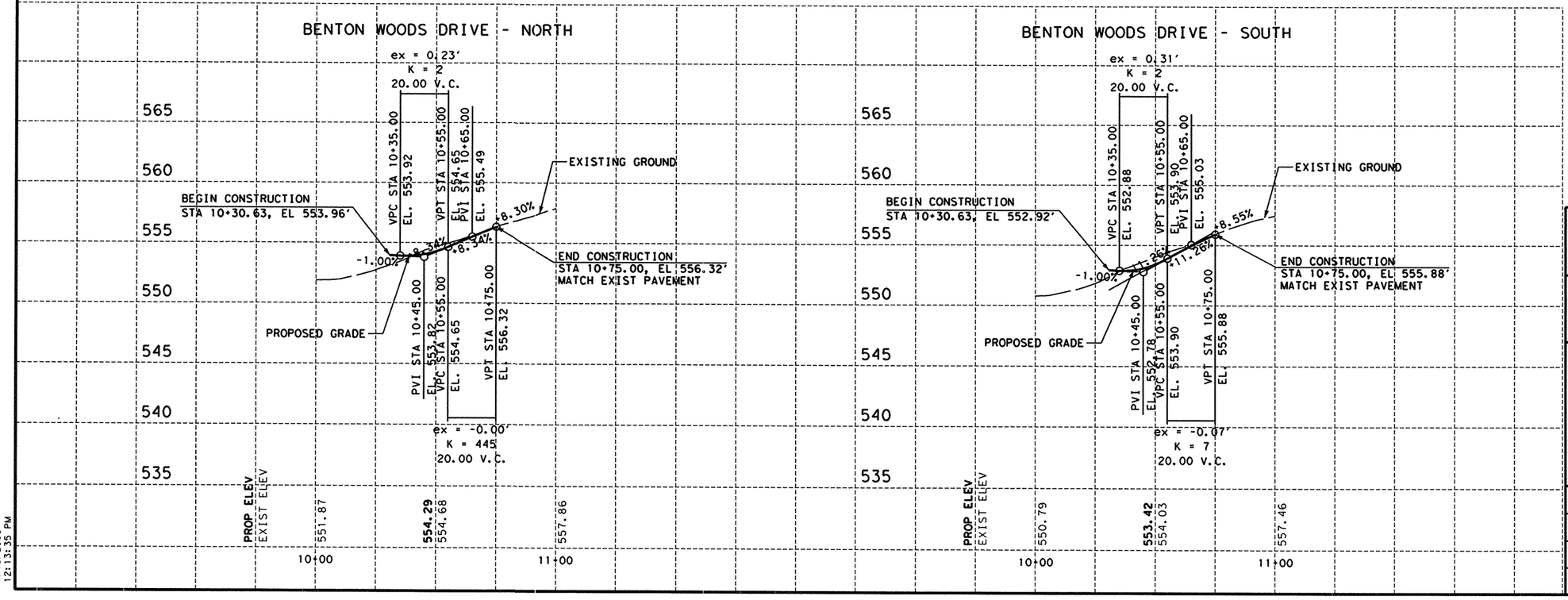
FM 740
INTERSECTION LAYOUT
SHADY DALE LANE

H: 1"=50'
SCALE: V: 1"=10'

SHEET 6 OF 20

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS RP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	146
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	





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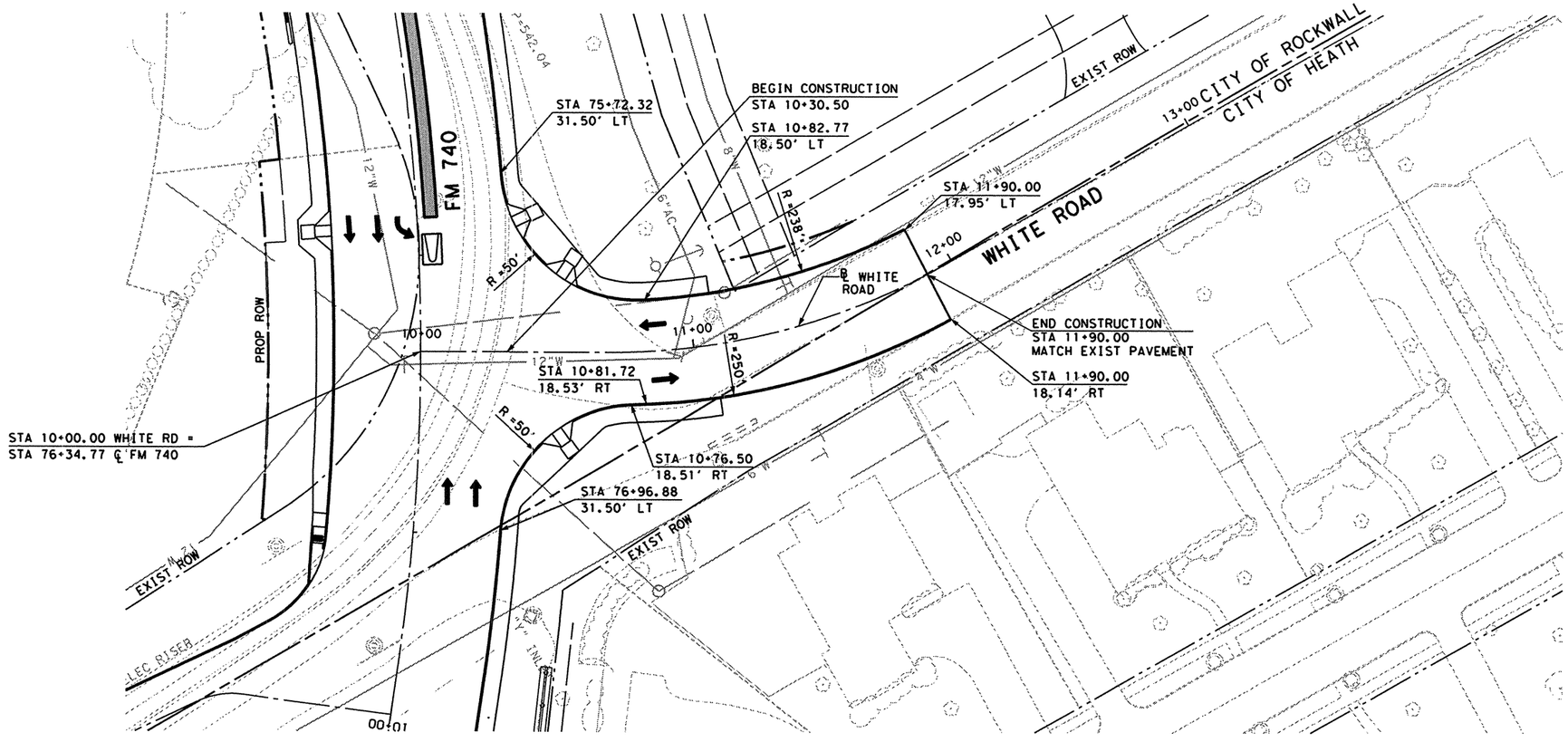
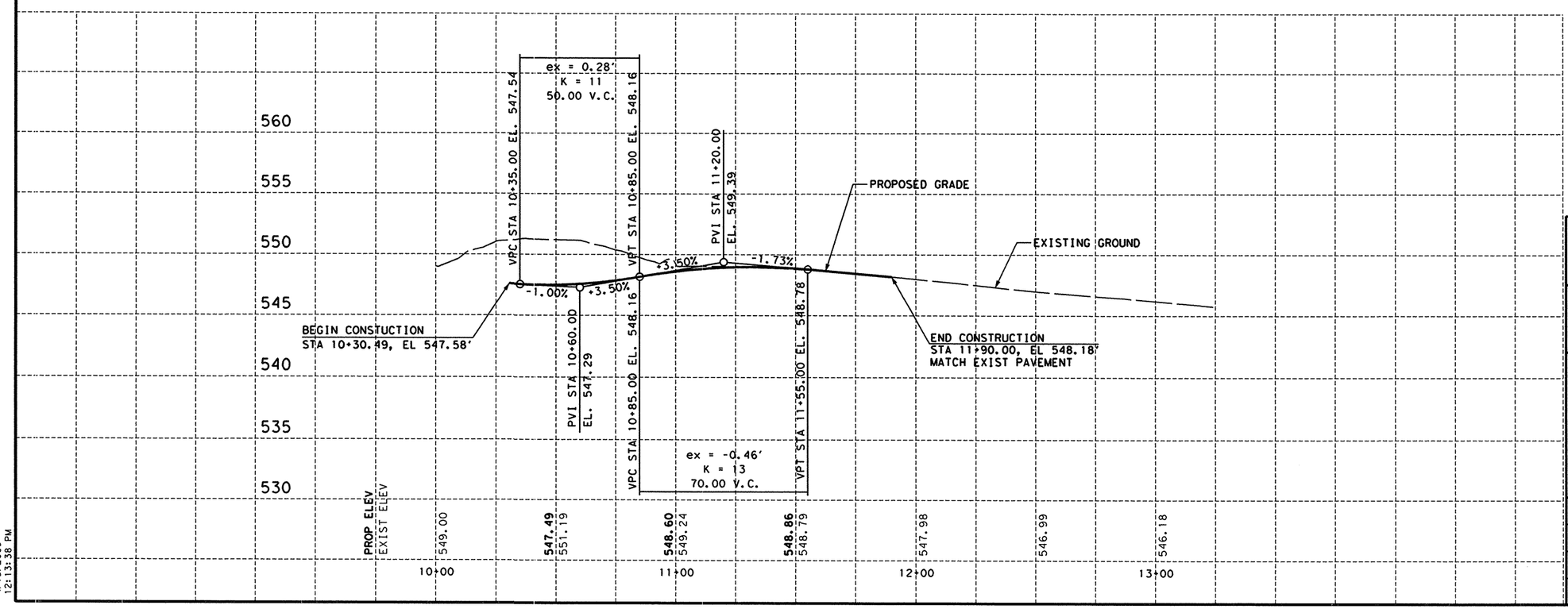
FM 740
INTERSECTION LAYOUT
BENTON WOODS DRIVE

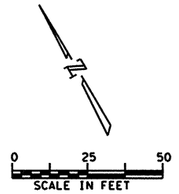
H: 1"=50'
SCALE: V: 1"=10'

SHEET 7 OF 20

DESIGN CVL	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS JP	6	SEE TITLE SHEET		FM 740
CHECK DAN	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	147
	CONTROL	SECTION	JOB	
	1014	03	039	







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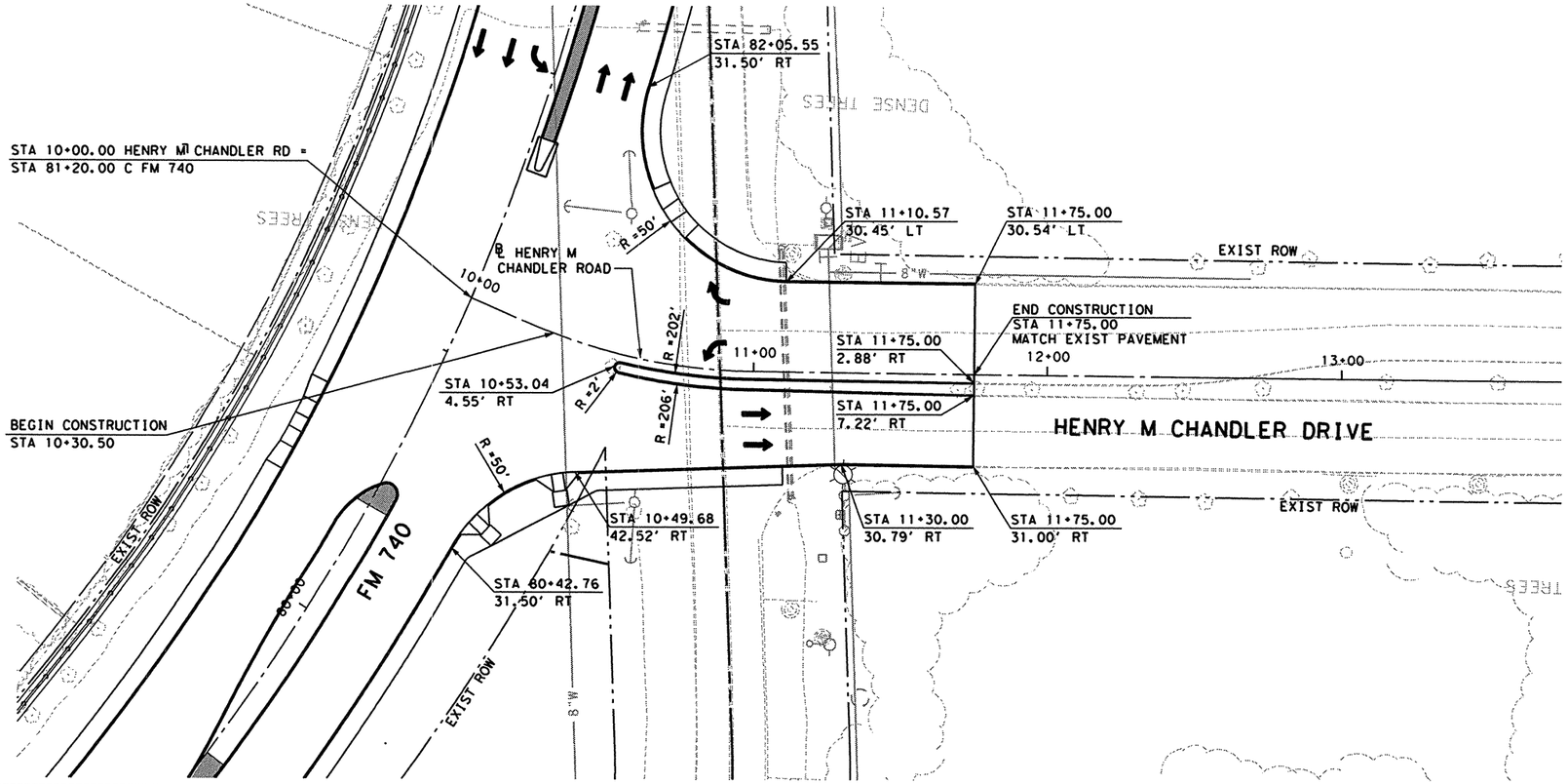
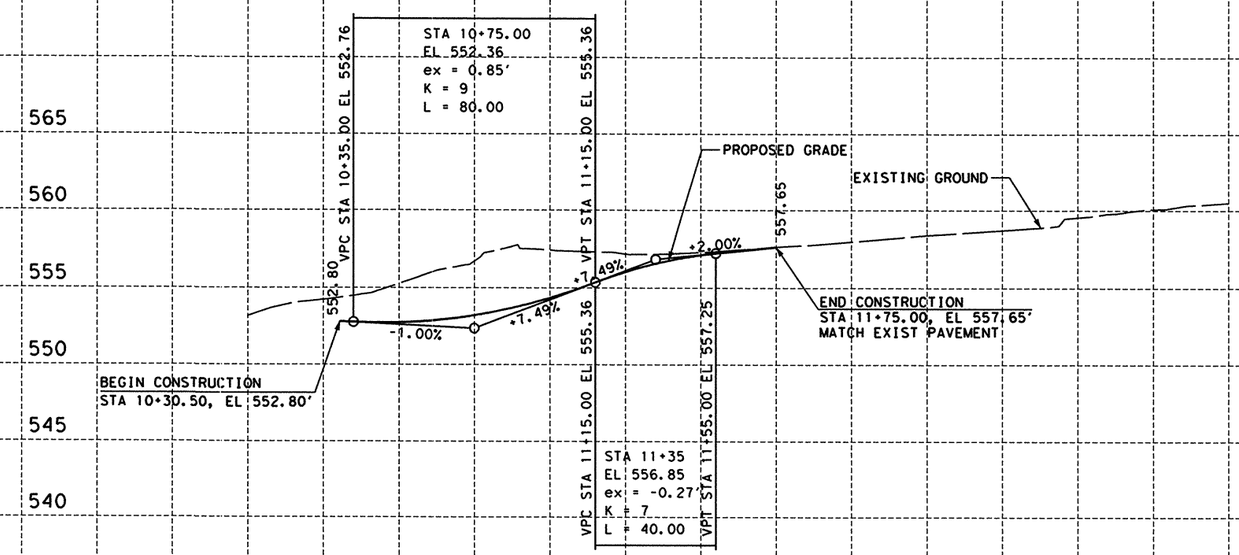
FM 740
INTERSECTION LAYOUT
WHITE ROAD

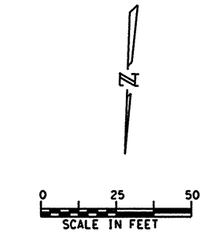
H: 1"=50'
SCALE: V: 1"=10'

SHEET 8 OF 20

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
RP	TEXAS	DALLAS	ROCKWALL	148
CHECK	CONTROL	SECTION	JOB	
DAN	1014	03	039	
CHECK				
CVL				







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FM 740
INTERSECTION LAYOUT
HENRY M. CHANDLER DRIVE

H: 1"=50'
SCALE: V: 1"=10'

SHEET 9 OF 20

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS JP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	149
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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SCALE=1:50
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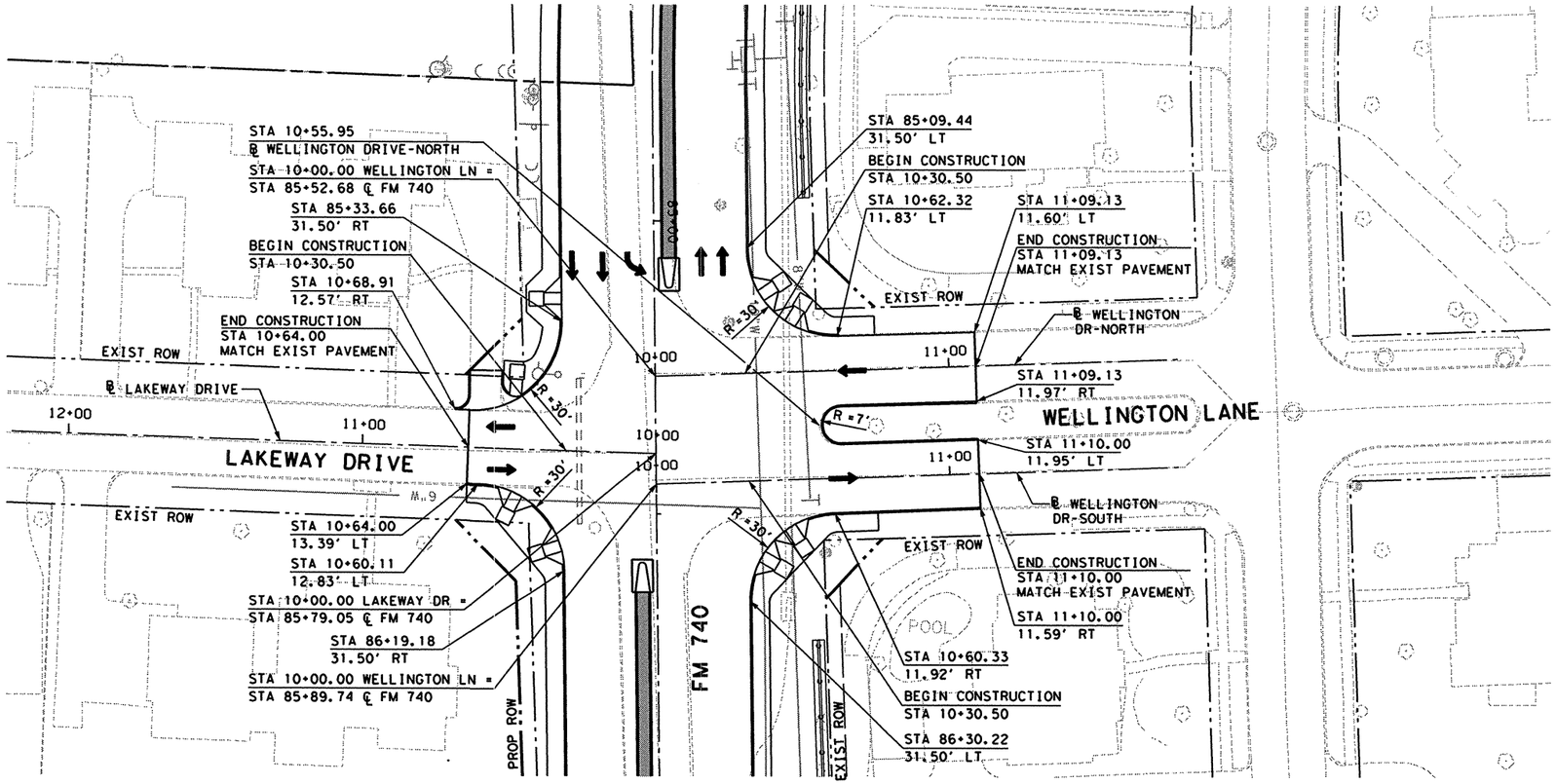

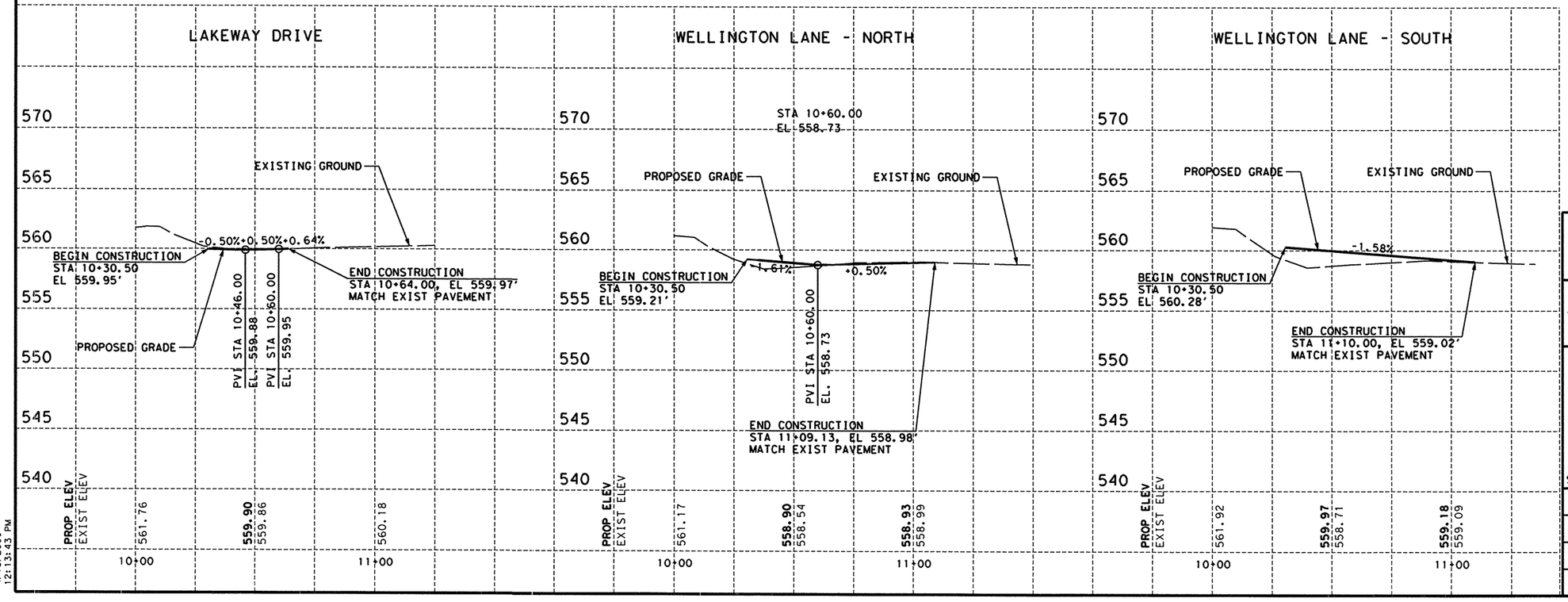

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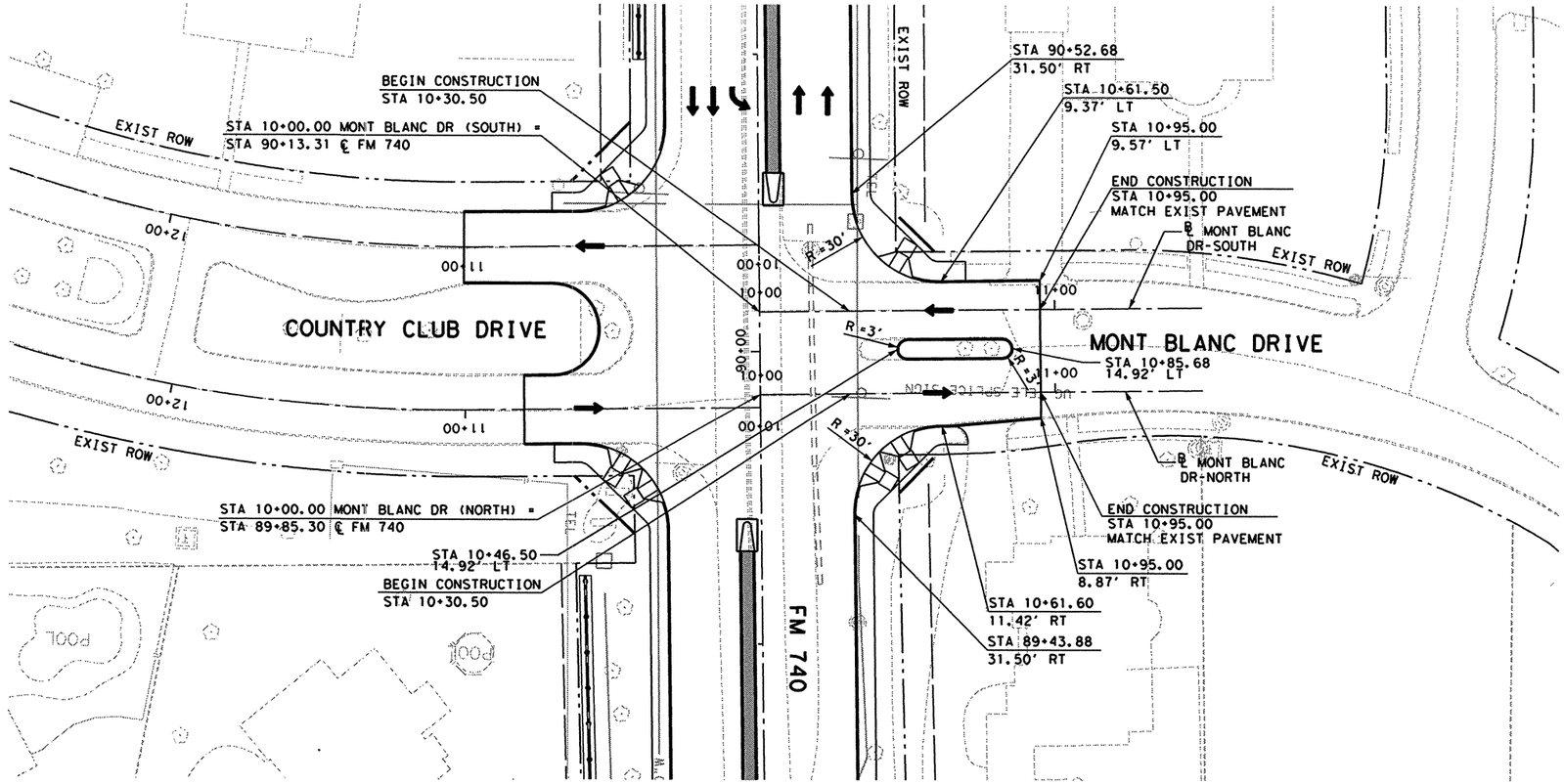
FM 740
INTERSECTION LAYOUT

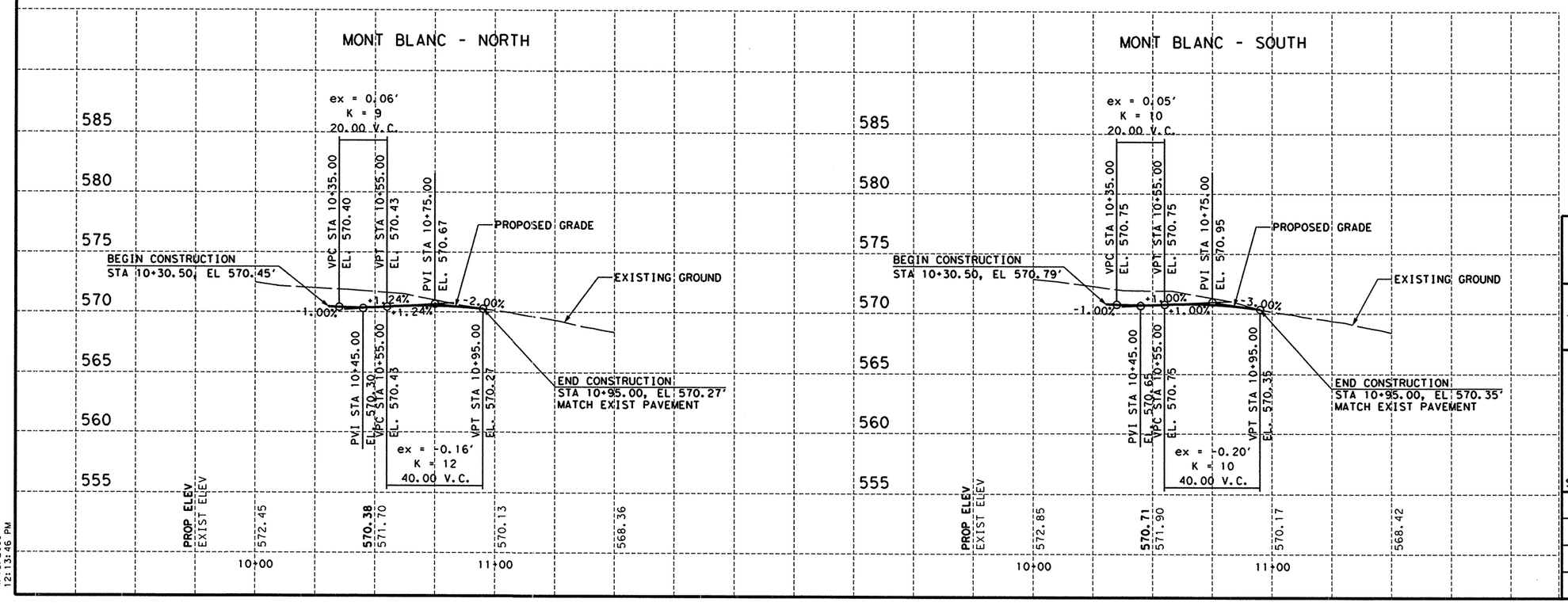
LAKEWAY DRIVE/WELLINGTON LANE

H: 1"=50'
SCALE: V: 1"=10'

SHEET 10 OF 20

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
RP	TEXAS	DALLAS	ROCKWALL	150
CHECK	CONTROL	SECTION	JOB	
DAN	1014	03	039	
CHECK				
CVL				





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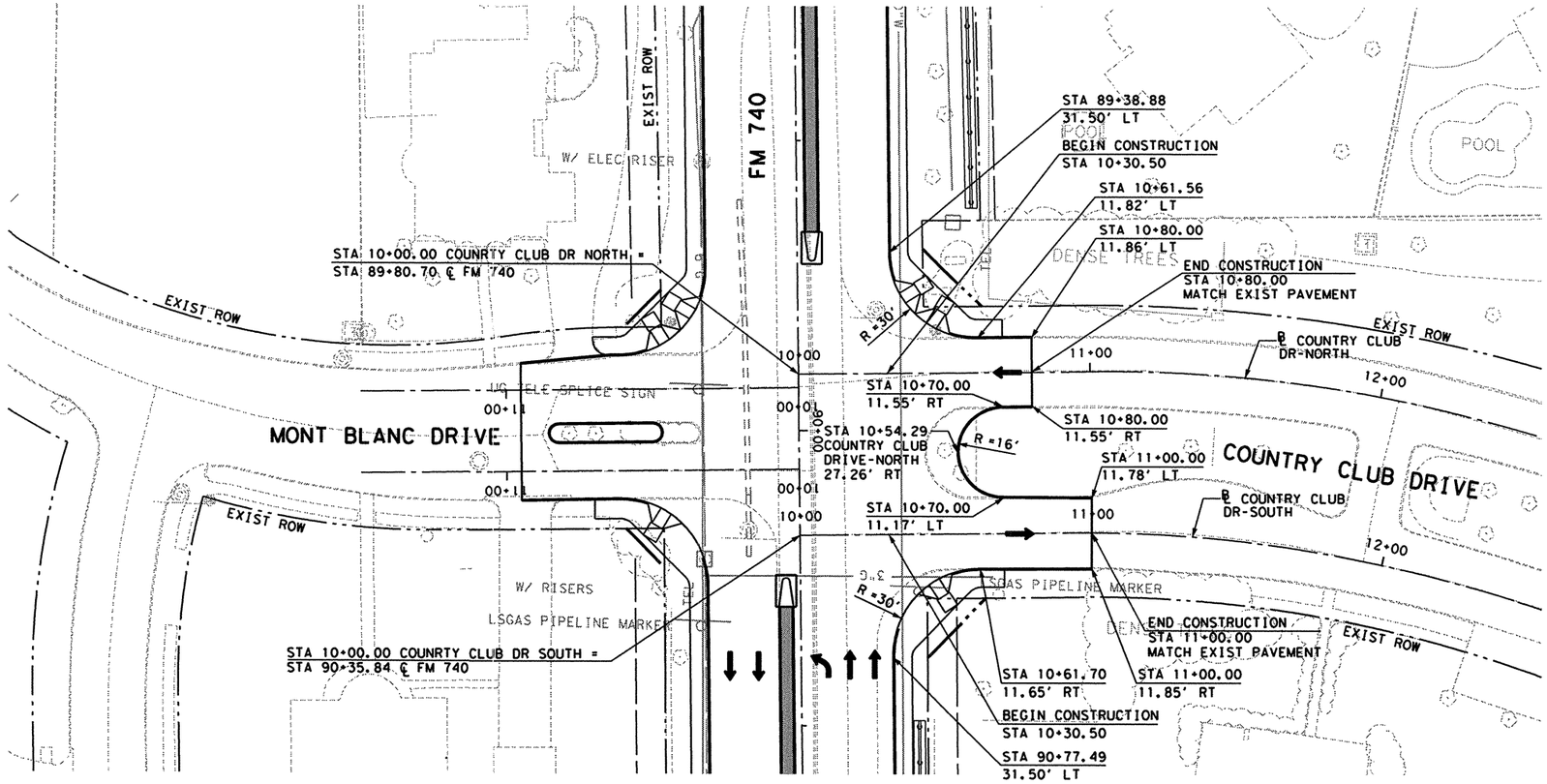
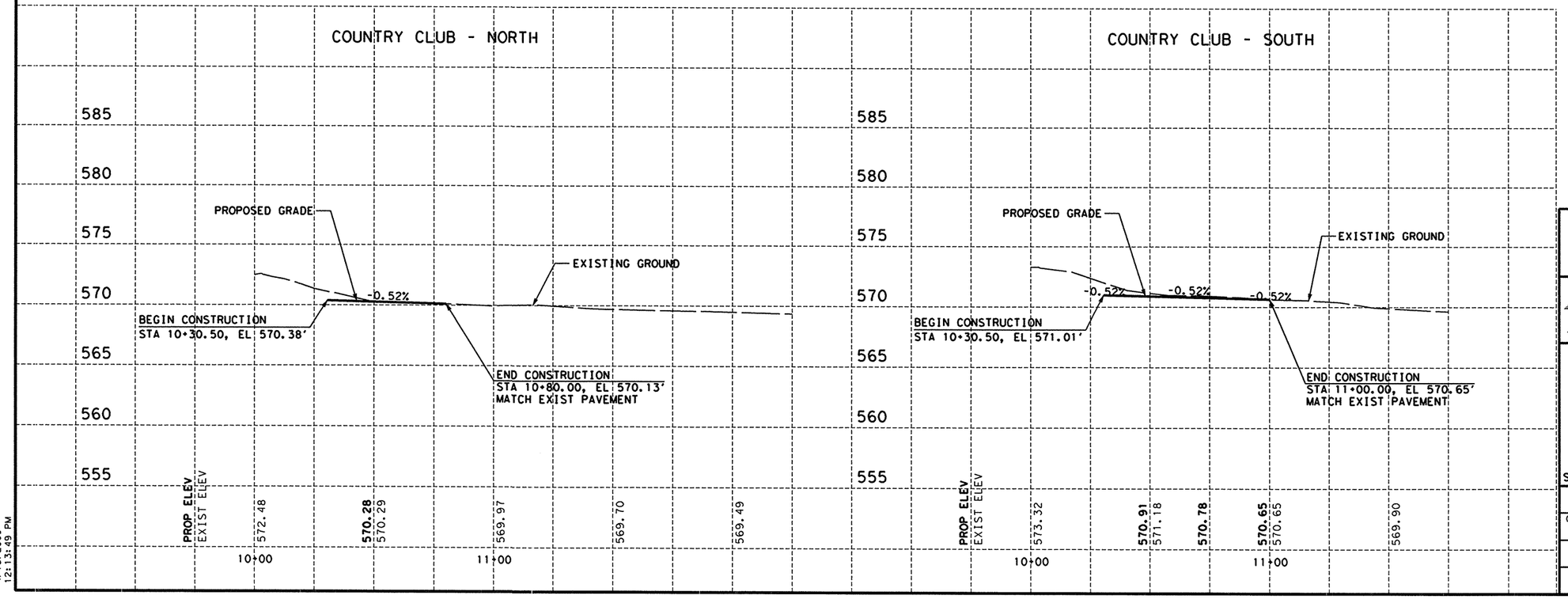
FM 740
INTERSECTION LAYOUT
MONT BLANC DRIVE

H: 1"=50'
SCALE: V: 1"=10'

SHEET 11 OF 20

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS JP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	151
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	





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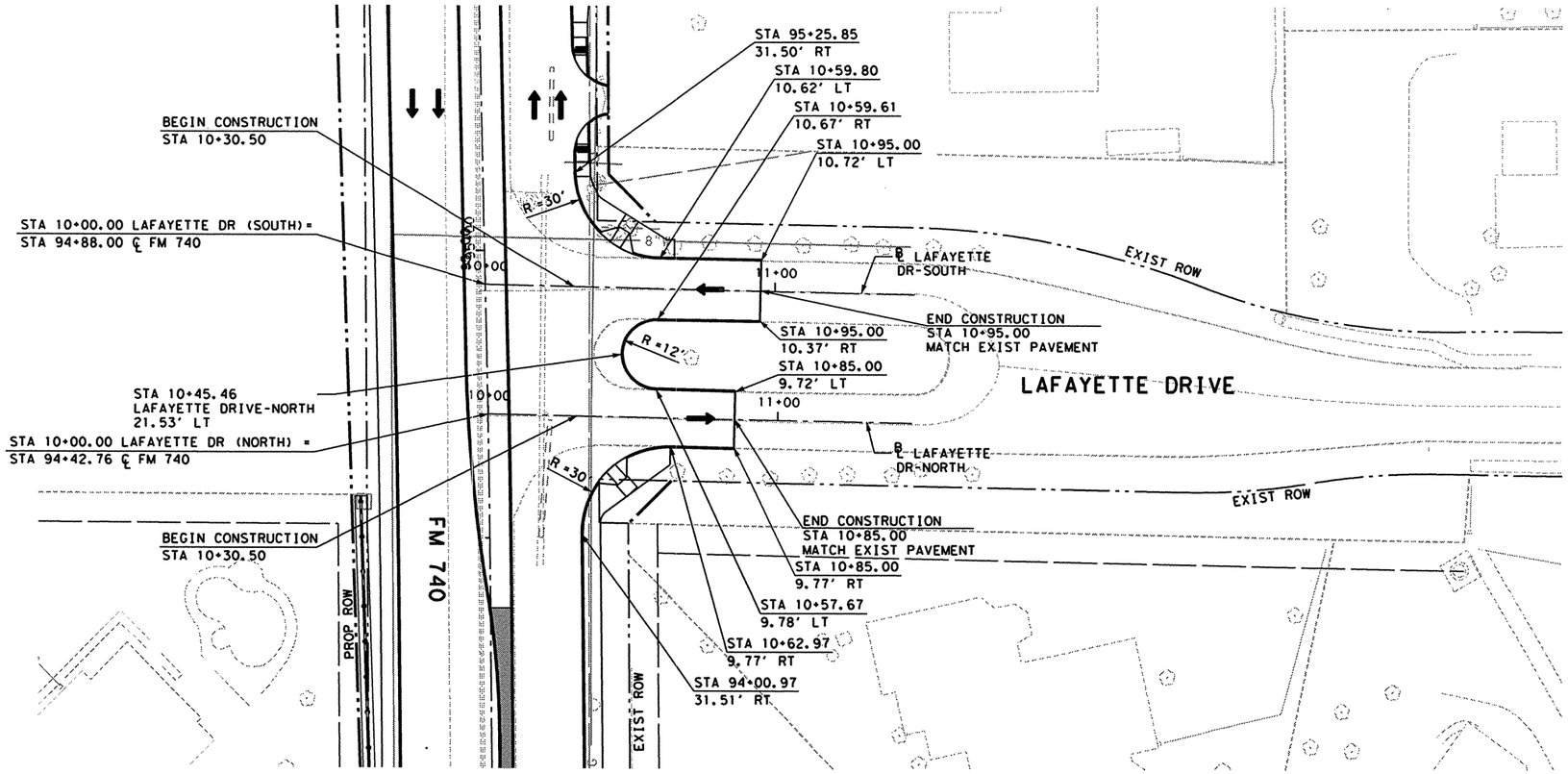
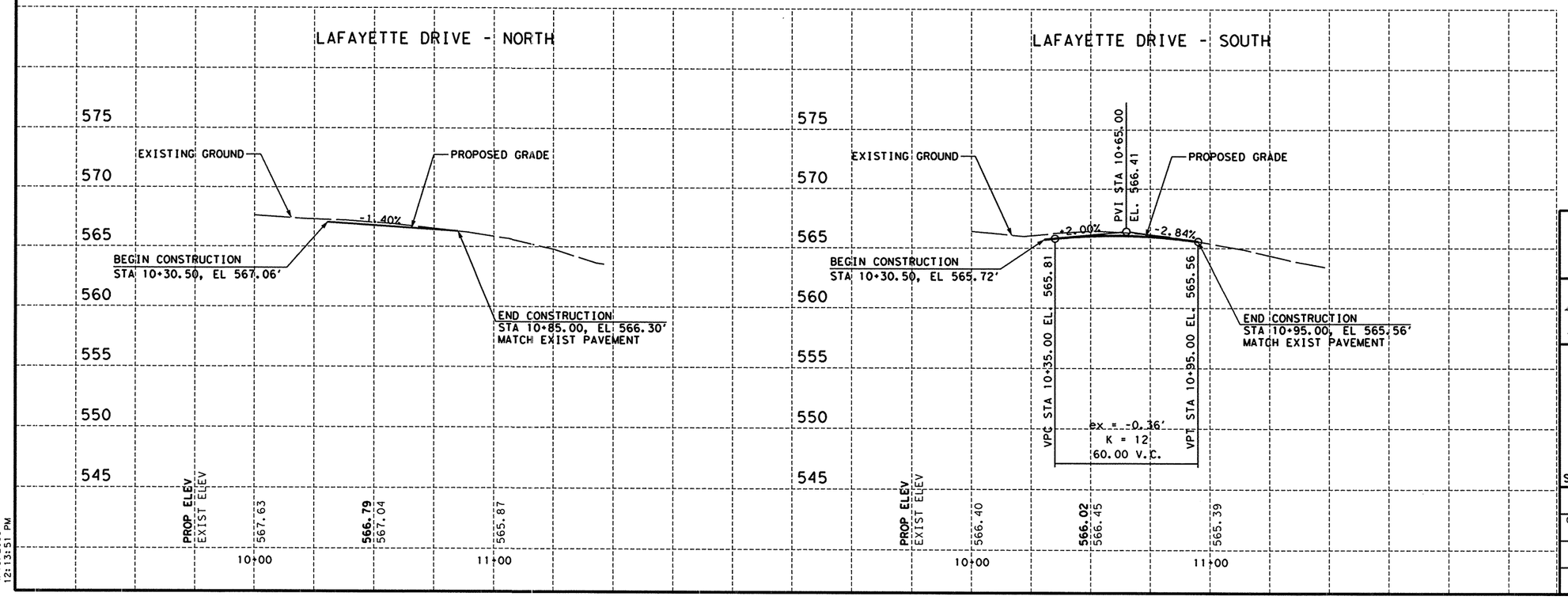
FM 740
INTERSECTION LAYOUT
COUNTRY CLUB DRIVE

SCALE: H: 1"=50'
V: 1"=10'

SHEET 12 OF 20

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS RP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	152
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	





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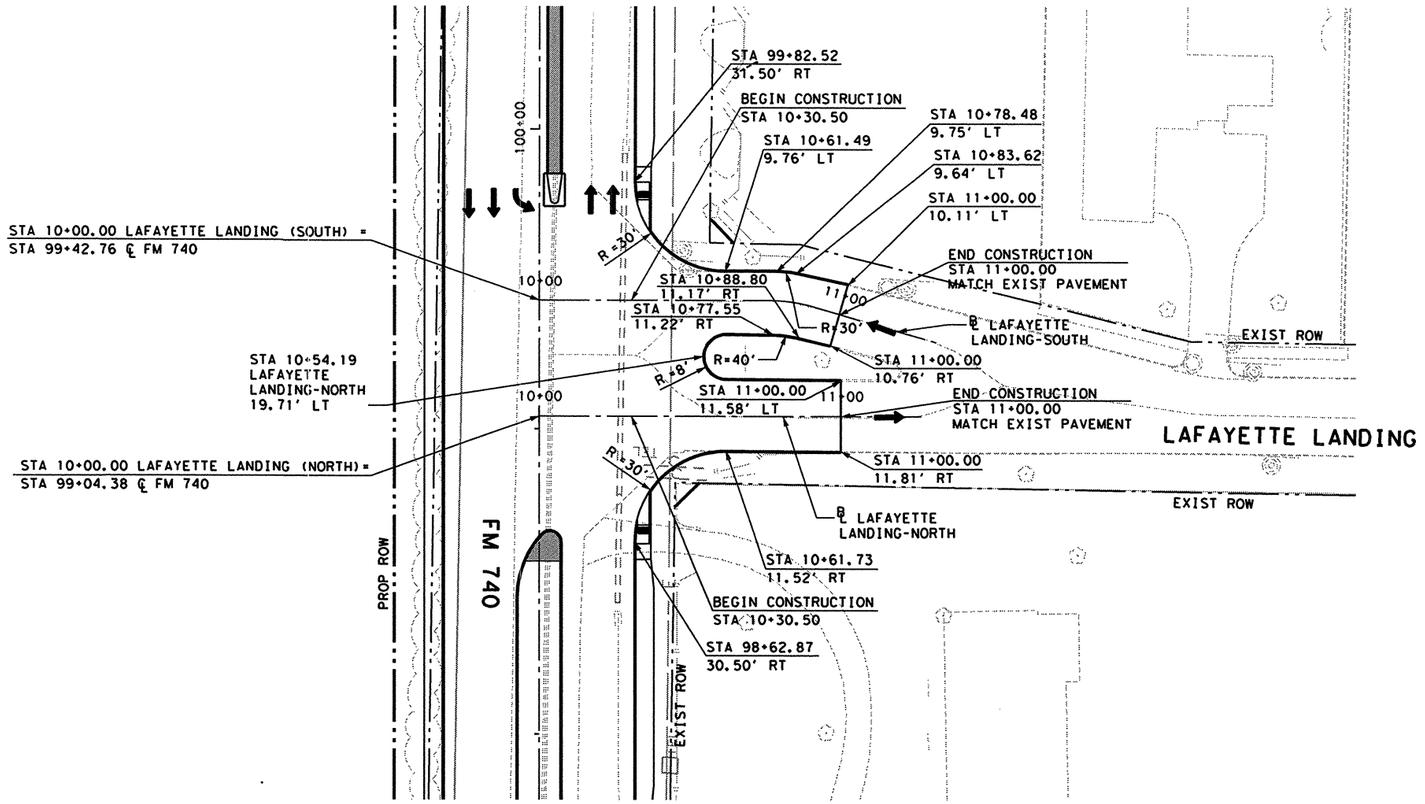
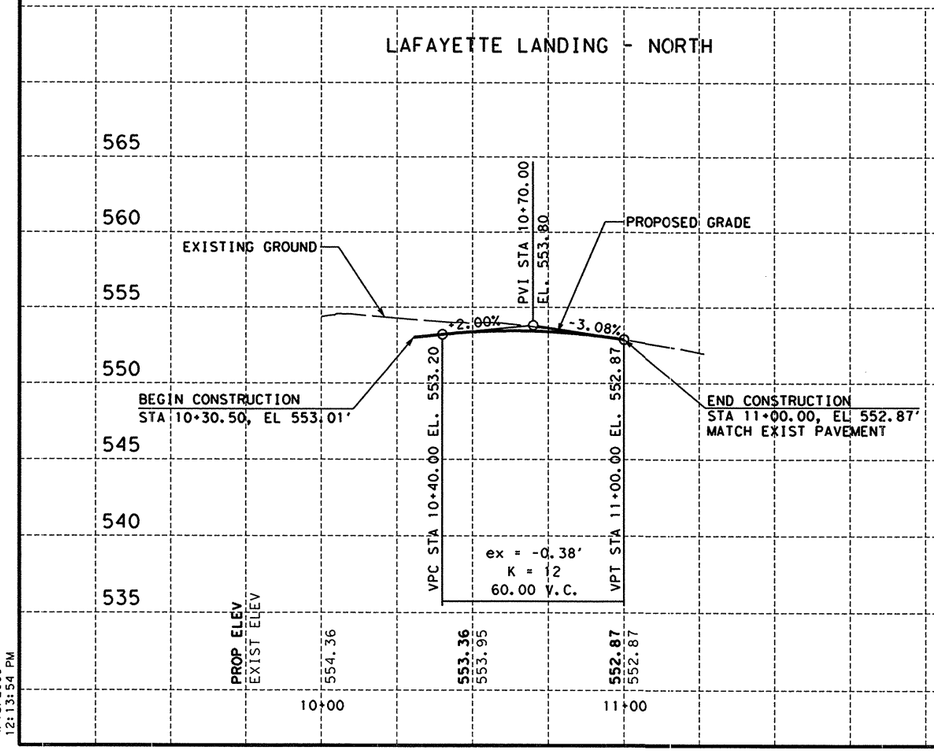
FM 740
INTERSECTION LAYOUT
LAFAYETTE DRIVE

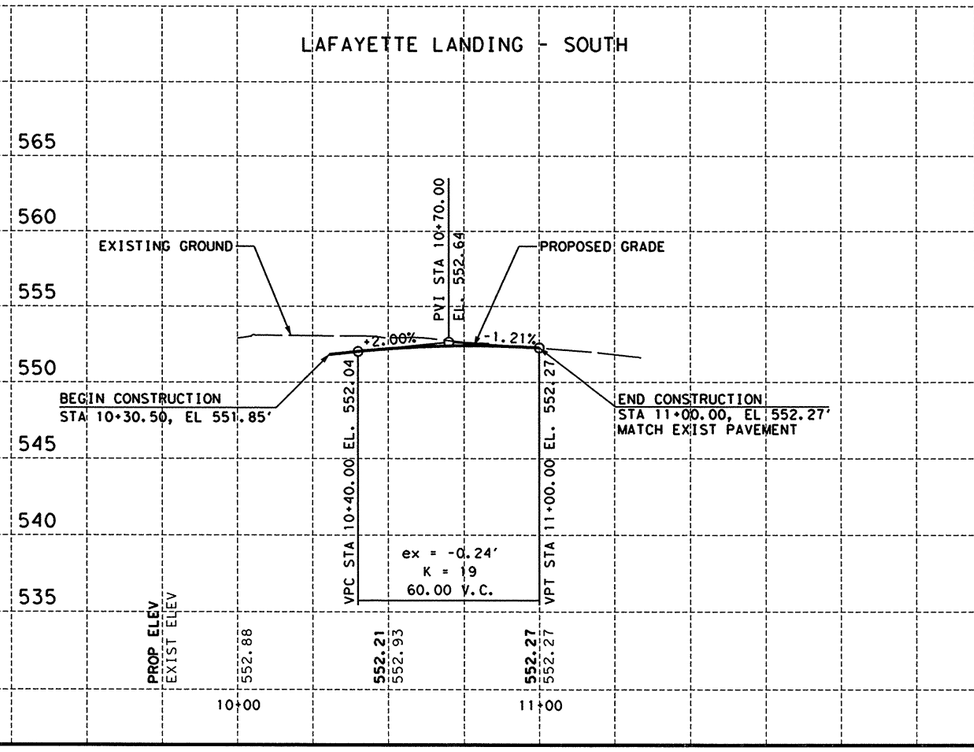
H: 1"=50'
SCALE: V: 1"=10'

SHEET 13 OF 20

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS RP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	153
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	







STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
4-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

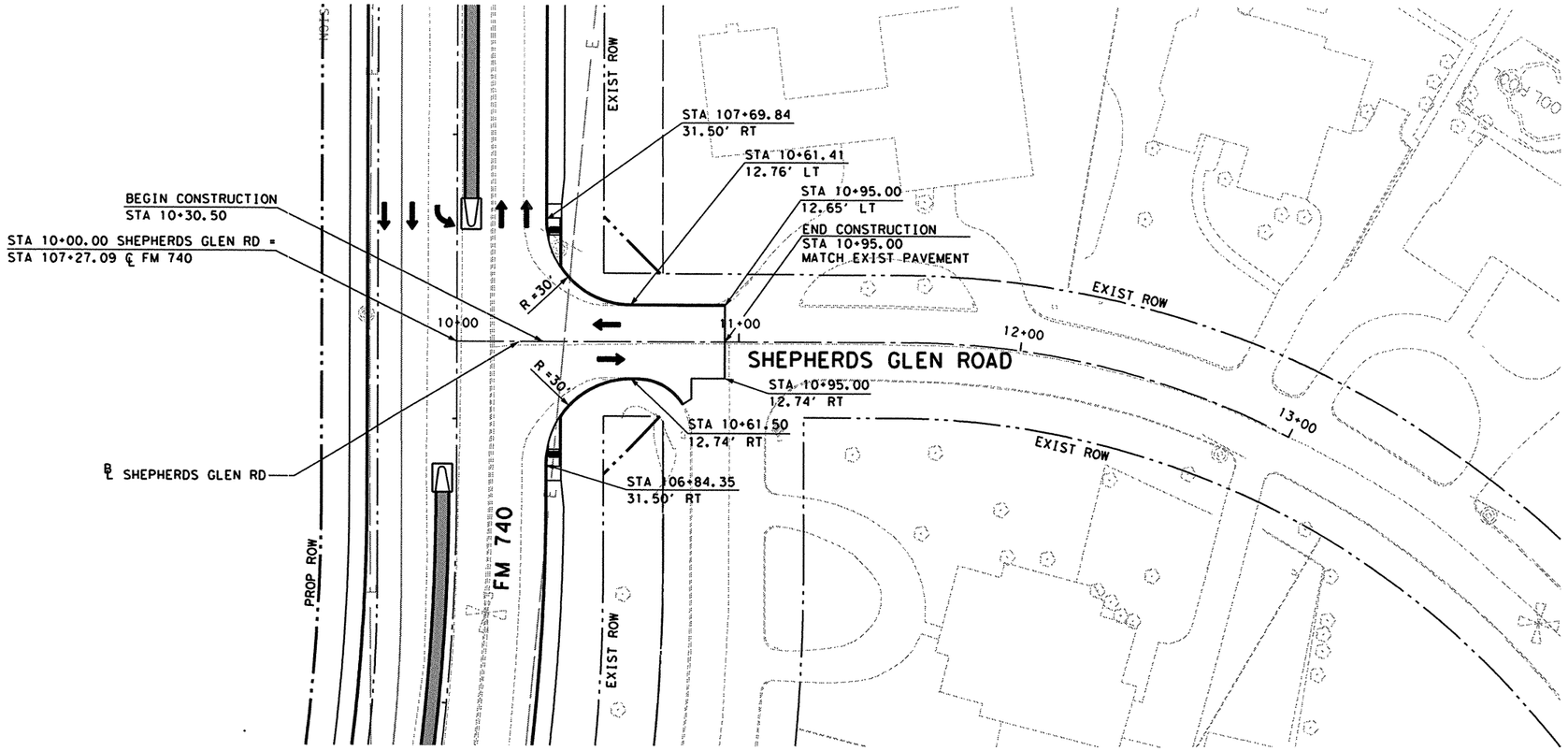
Texas Department of Transportation

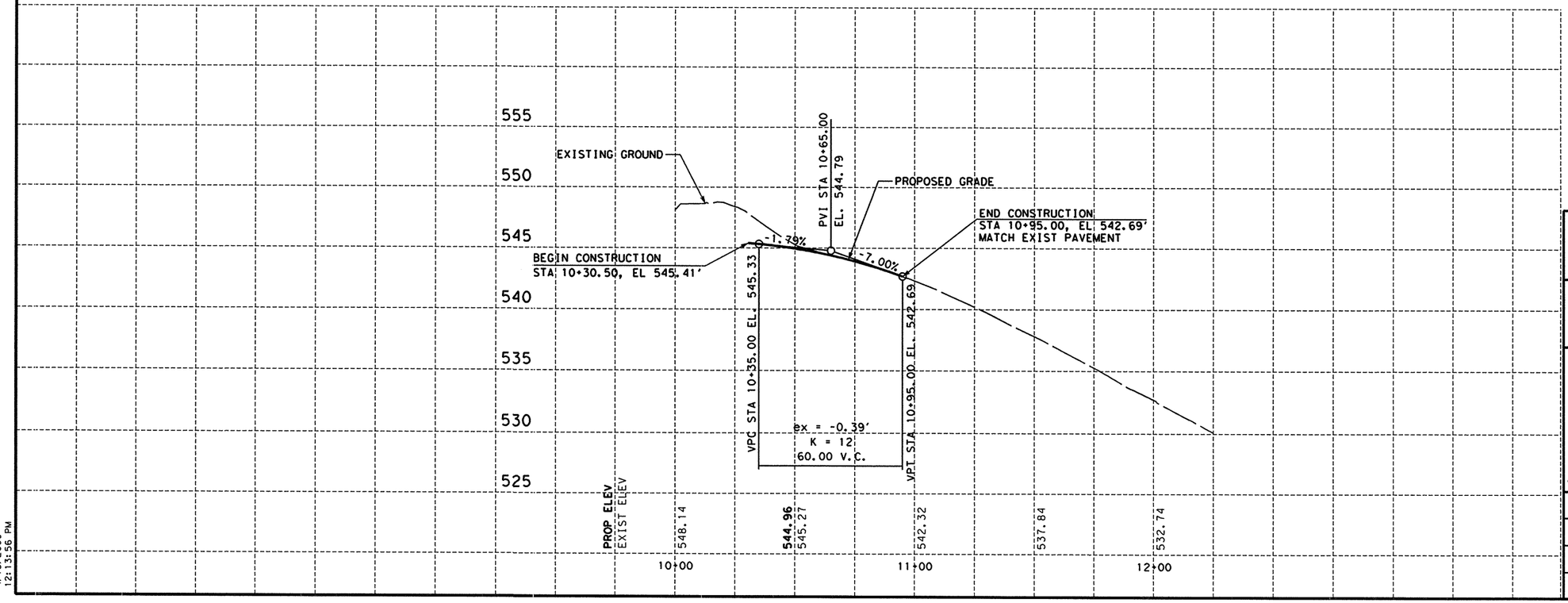
FM 740
INTERSECTION LAYOUT
LAFAYETTE LANDING

H: 1"=50'
SCALE: V: 1"=10'

SHEET 14 OF 20

DESIGN	FED.RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
RP	TEXAS	DALLAS	ROCKWALL	154
CHECK	CONTROL	SECTION	JOB	
DAN	1014	03	039	
CHECK				
CVL				





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4-15-09

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FM 740
INTERSECTION LAYOUT
SHEPHERDS GLEN ROAD

H: 1"=50'
SCALE: V: 1"=10'

SHEET 15 OF 20

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS JP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	15
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	

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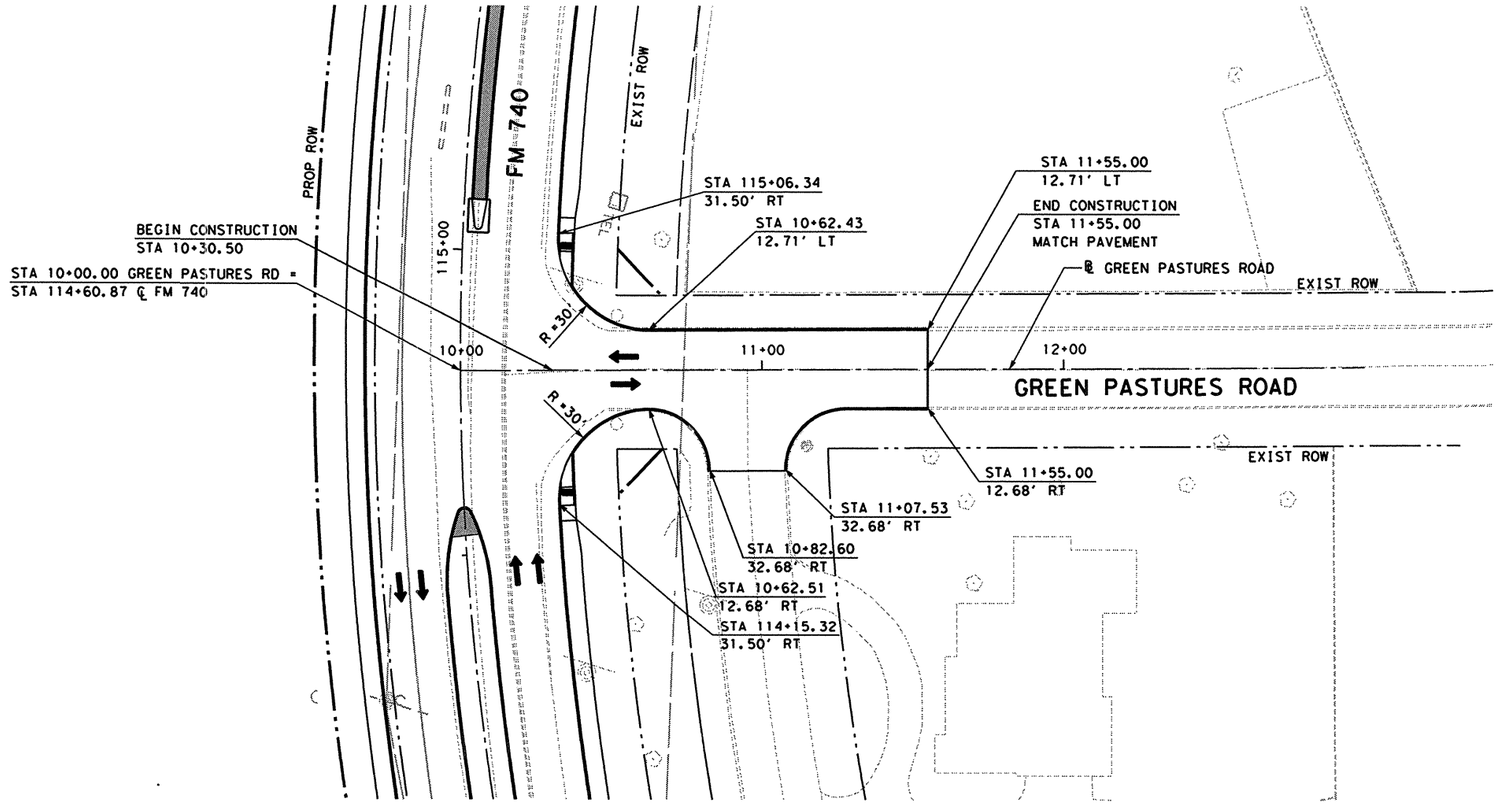

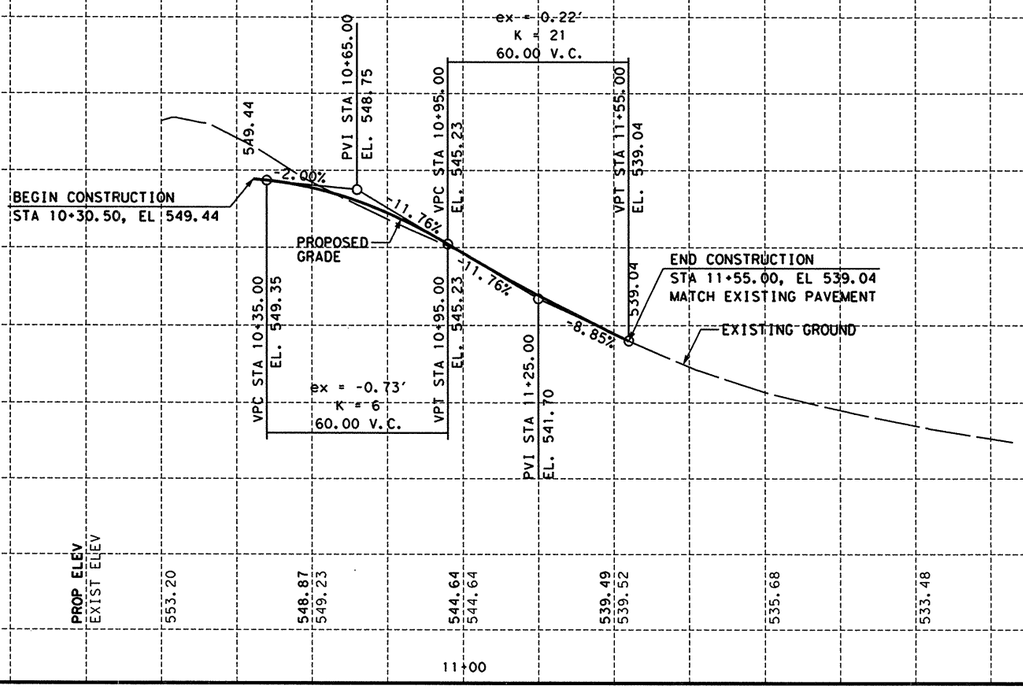

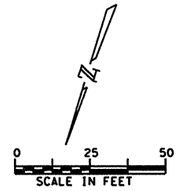

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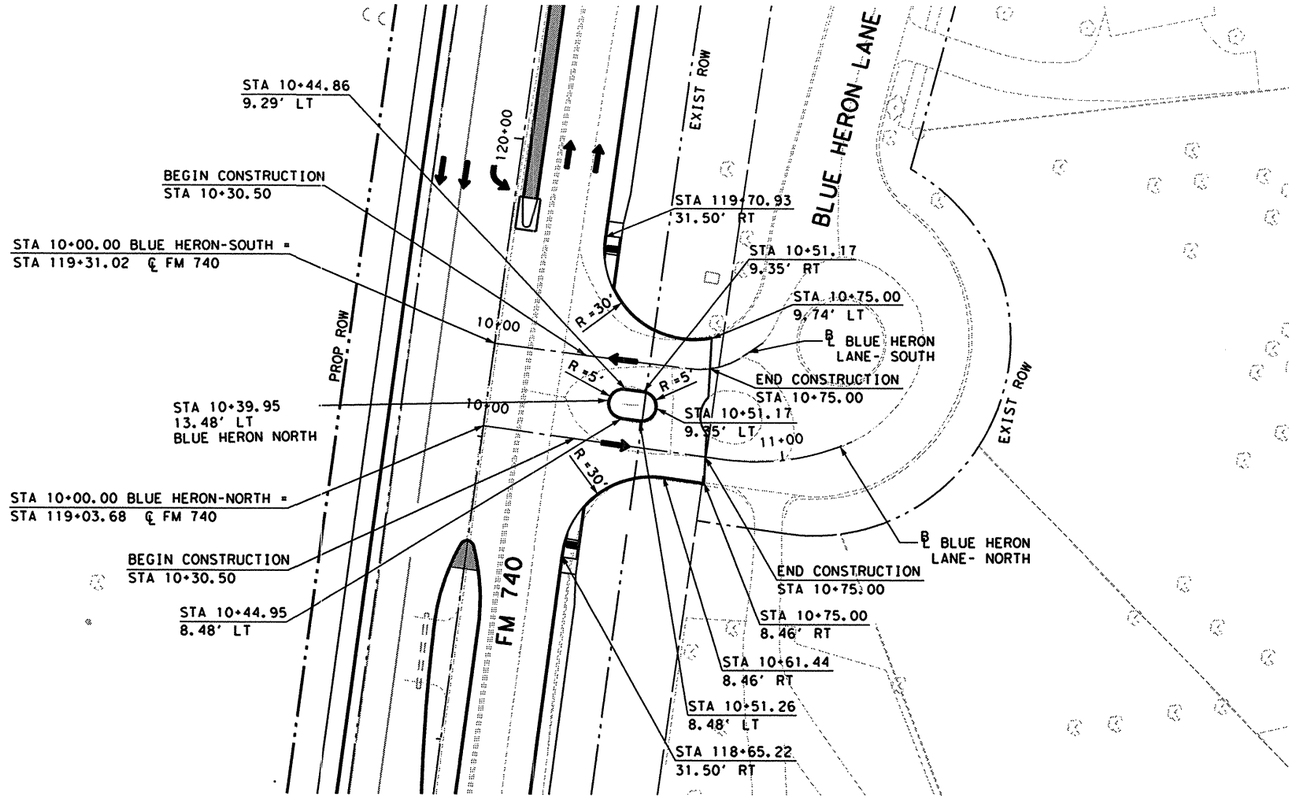
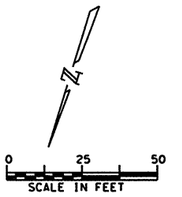
FM 740
INTERSECTION LAYOUT
GREEN PASTURES ROAD

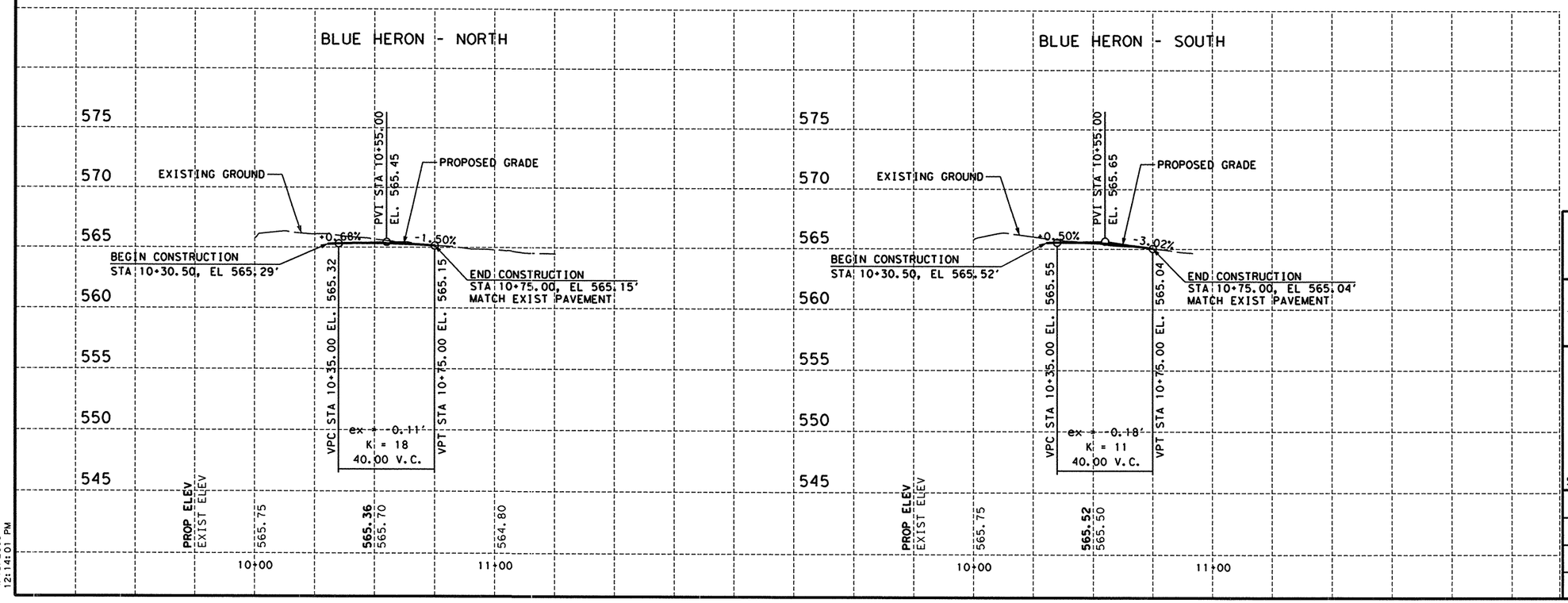
H: 1"=50'
SCALE: V: 1"=10'

SHEET 16 OF 20

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS JP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK DAN	TEXAS	DALLAS	ROCKWALL	156
CHECK CVL	CONTROL	SECTION	JOB	
	1014	03	039	







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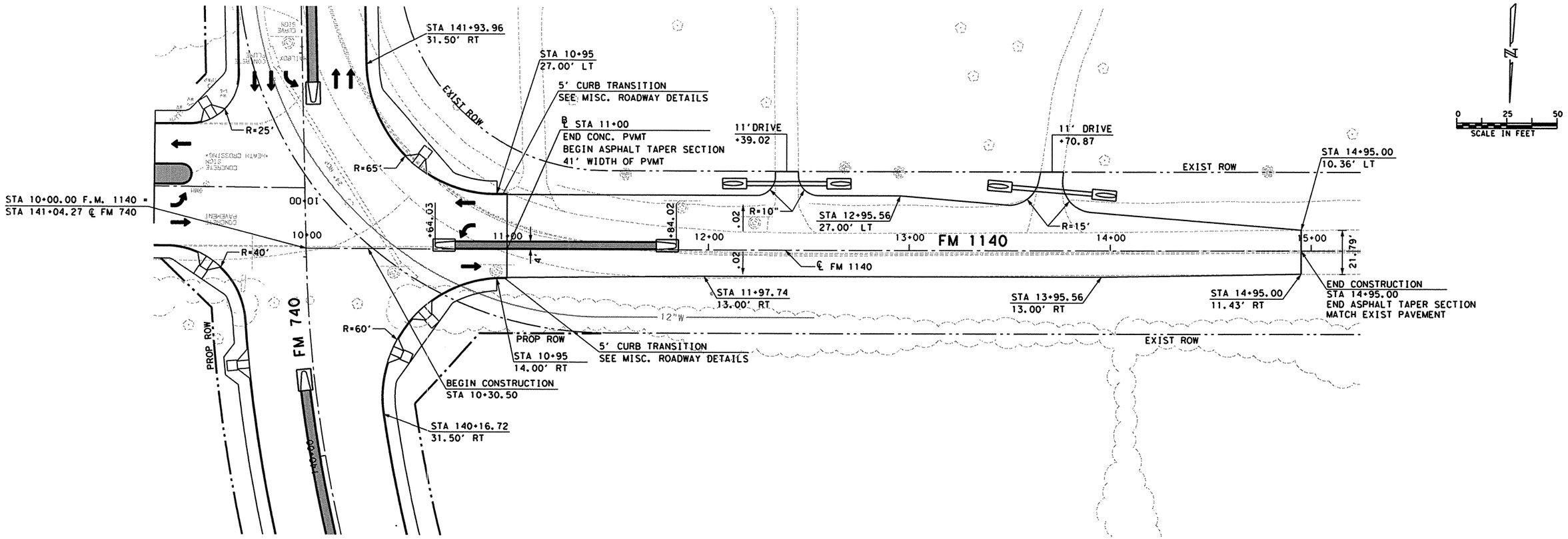
Texas Department of Transportation

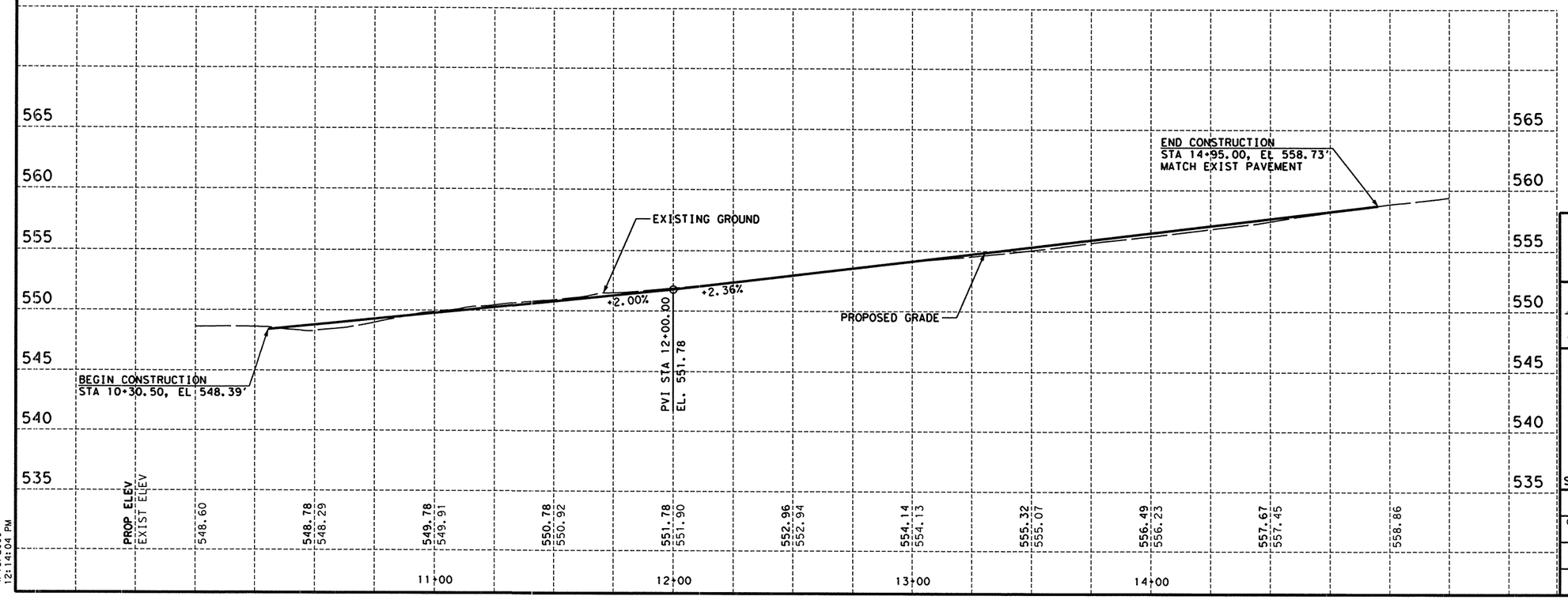
FM 740
INTERSECTION LAYOUT
BLUE HERON LANE

H: 1"=50'
SCALE: V: 1"=10'

SHEET 17 OF 20

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
CVL	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
JP	TEXAS	DALLAS	ROCKWALL	157
CHECK	CONTROL	SECTION	JOB	
DAN	1014	03	039	
CHECK				
CVL				





STATE OF TEXAS
DAVID ALAN NUFER
68818
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PROFESSIONAL ENGINEER
4-15-09

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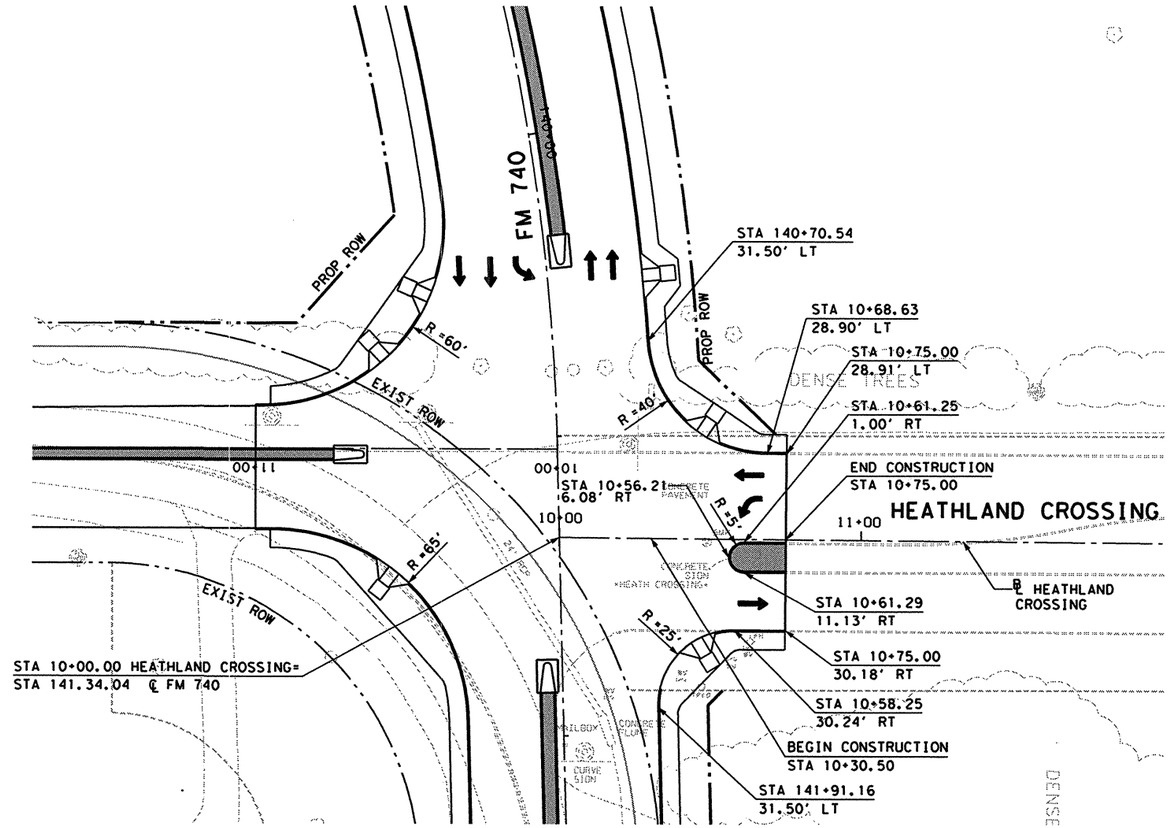
Dallas, Texas 75204-2489

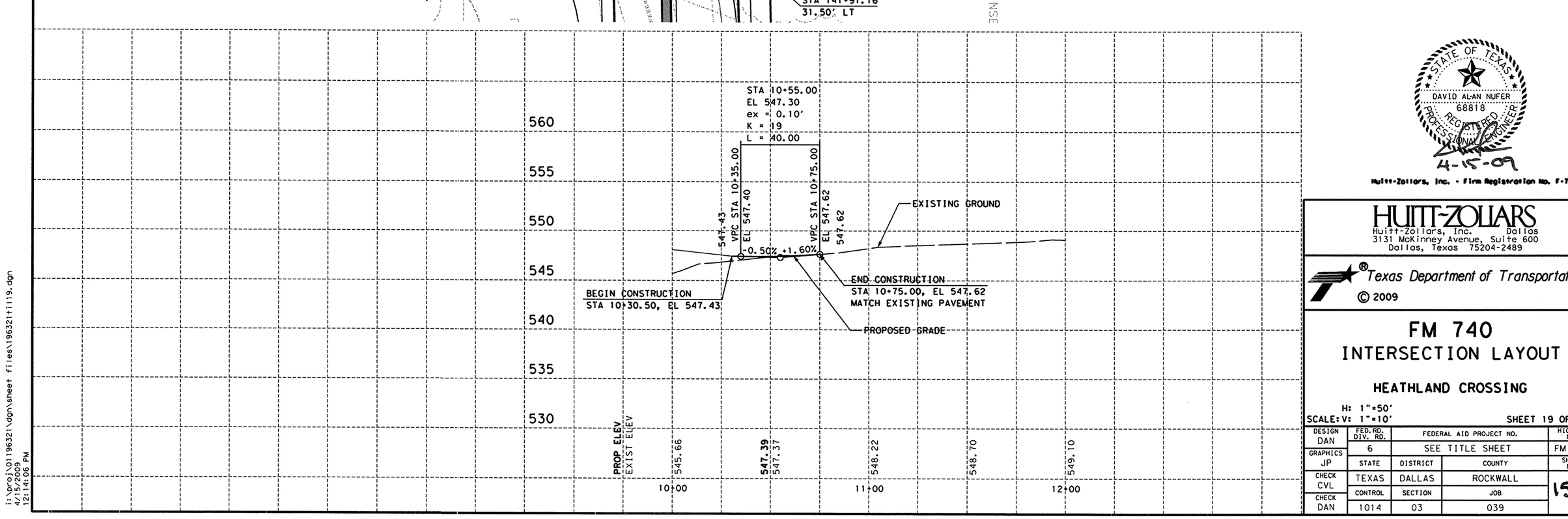
FM 740
INTERSECTION LAYOUT
FM 1140

H: 1"=50'
V: 1"=10'

SHEET 18 OF 20

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS JP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK ANU	TEXAS	DALLAS	ROCKWALL	158
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	





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0 25 50
SCALE IN FEET

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
4-15-09

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FM 740
INTERSECTION LAYOUT
HEATHLAND CROSSING

SCALE: H: 1"=50'
V: 1"=10'

SHEET 19 OF 20

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS JP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	159
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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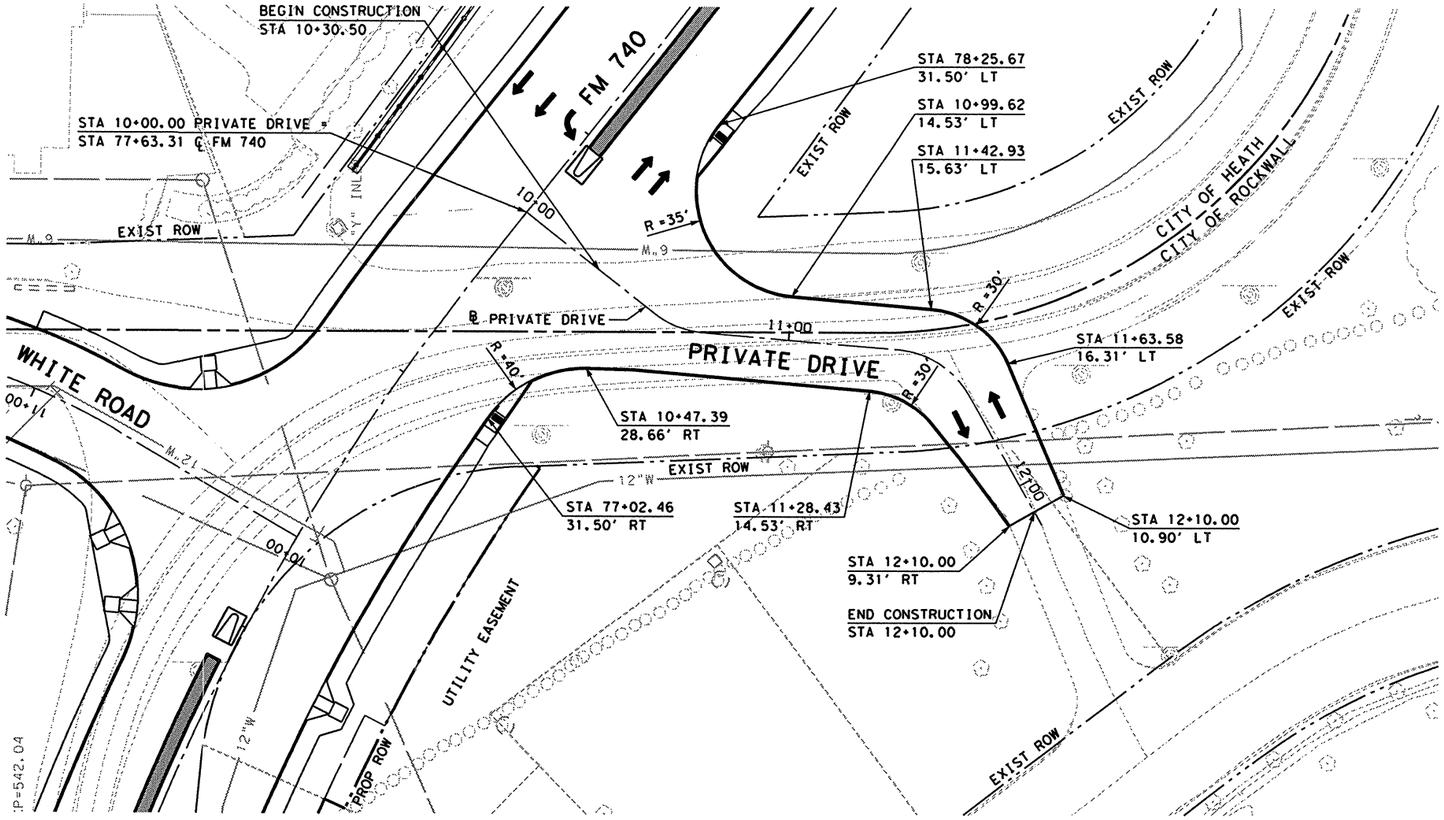

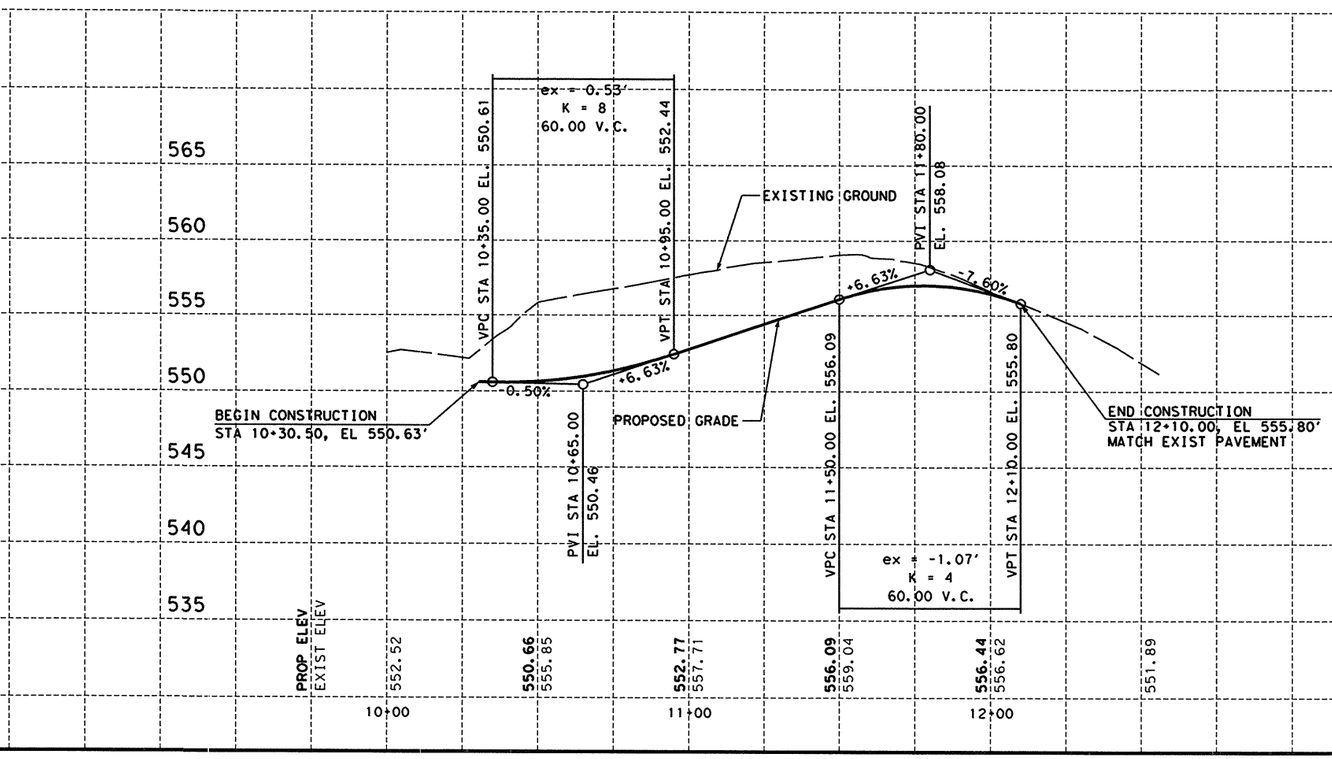

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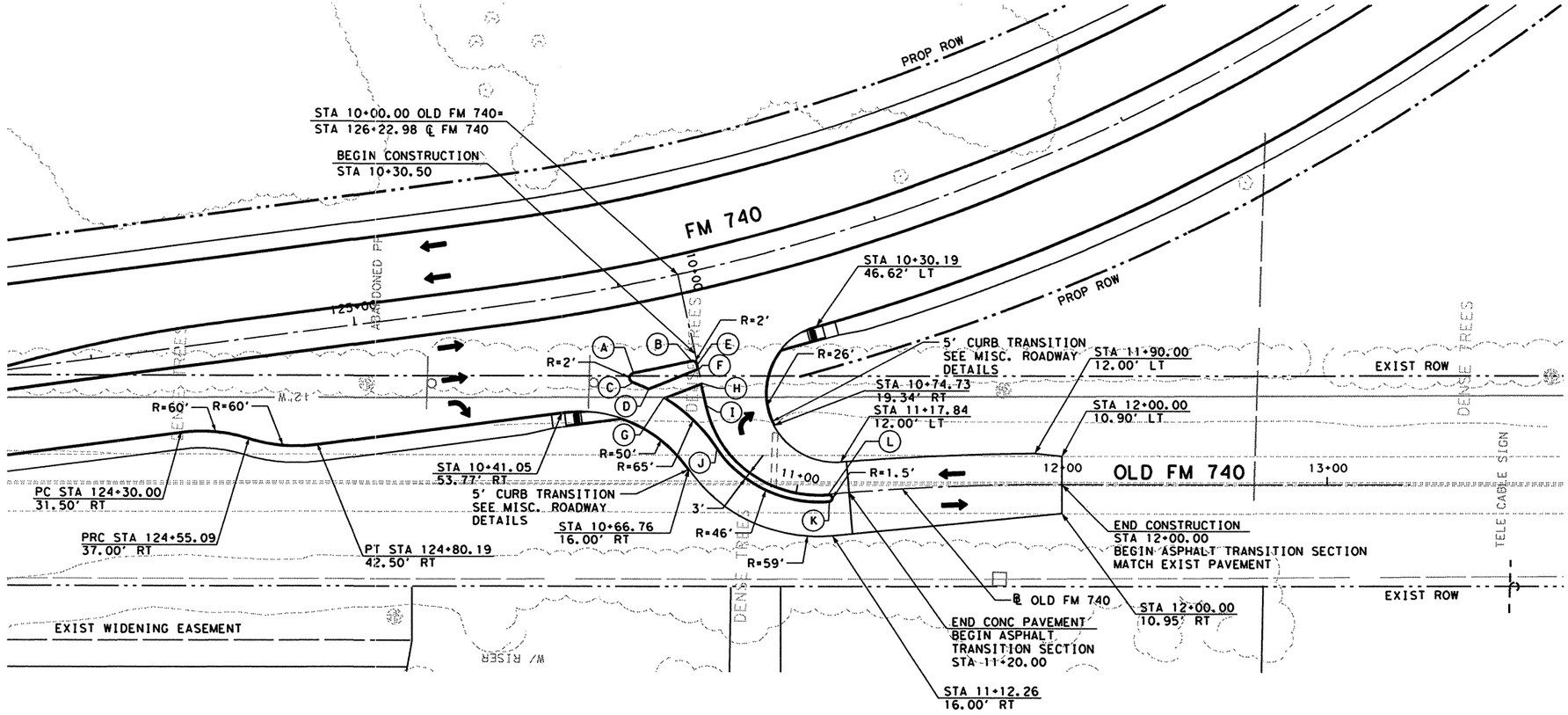
Texas Department of Transportation

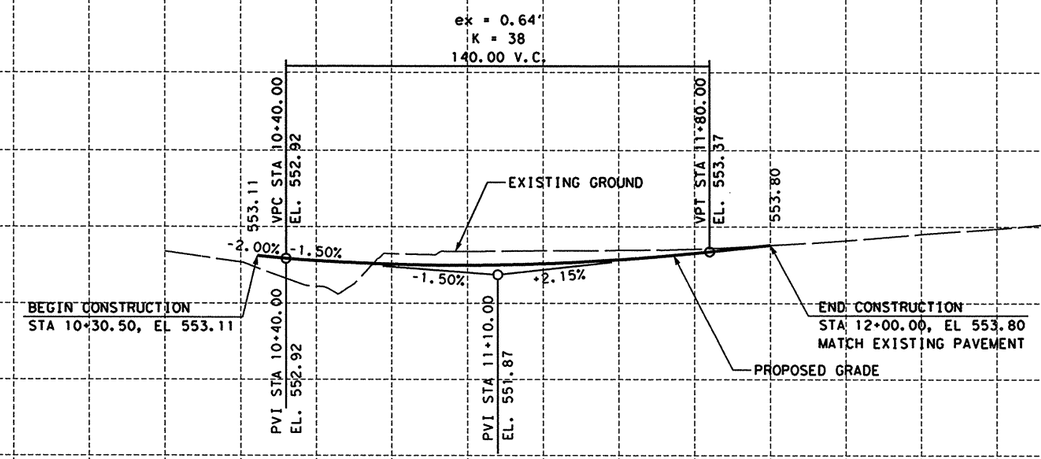
FM 740
INTERSECTION LAYOUT
PRIVATE DRIVE

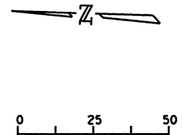
H: 1"=50'
SCALE: V: 1"=10'

SHEET 20 OF 20

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS JP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	600
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	







MEDIAN DETAILS

PT	STATION	OFFSET
A	10+32.14	24.40' RT
B	10+32.50	2.00' RT
C	10+35.83	25.53' RT
D	10+39.61	20.21' RT
E	10+34.50	0.00'
F	10+36.49	0.00'
G	10+43.91	15.29' RT
H	10+41.55	0.00'
I	10+50.41	0.00'
J	10+66.37	3.00' RT
K	11+12.26	3.00' RT
L	11+12.26	0.00'

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Texas Department of Transportation

FM 740
INTERSECTION LAYOUT
OLD FM 740

SCALE: H: 1"=50'
V: 1"=10'

SHEET 21A

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS JP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	160A
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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6/5/2009 12:26:19 PM

NOTE:
CONTOURS SHOWN AT 0.25' INTERVALS

N

0 10 20
SCALE IN FEET

EXIST ROW

PROP ROW

EXIST ROW

564

563

N 81° 26' 39" W

SUMMER LEE DRIVE

10.00

566

565

565

FM 740

568

567

EXIST ROW

EXIST ROW

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
4-15-09

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Texas Department of Transportation

FM 740
INTERSECTION CONTOUR DETAILS
SUMMER LEE DRIVE

SCALE: 1"=20' SHEET 1 OF 4

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
RP	TEXAS	DALLAS	ROCKWALL	161
CHECK	CONTROL	SECTION	JOB	
CVL	1014	03	039	
CHECK				
DAN				

jparras
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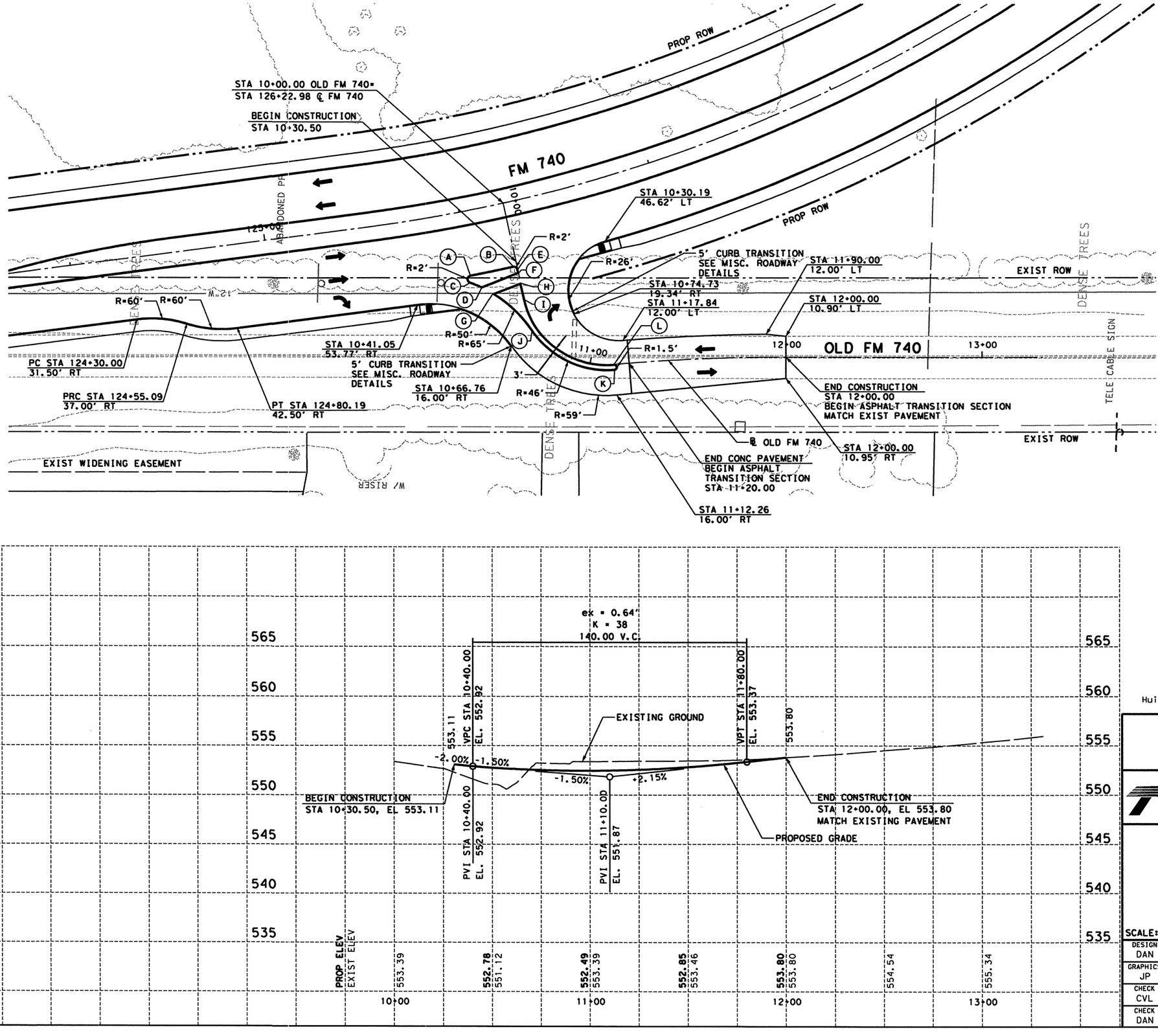

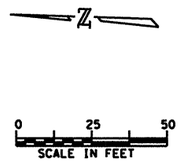

MEDIAN DETAILS

PT	STATION	OFFSET
A	10+32.14	24.40' RT
B	10+32.50	2.00' RT
C	10+35.83	25.53' RT
D	10+39.61	20.21' RT
E	10+34.50	0.00'
F	10+36.49	0.00'
G	10+43.91	15.29' RT
H	10+41.55	0.00'
I	10+50.41	0.00'
J	10+66.37	3.00' RT
K	11+12.26	3.00' RT
L	11+12.26	0.00'

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FM 740
INTERSECTION LAYOUT
OLD FM 740

SCALE: H: 1"=50'
V: 1"=10'

SHEET 21A

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS JP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	161A
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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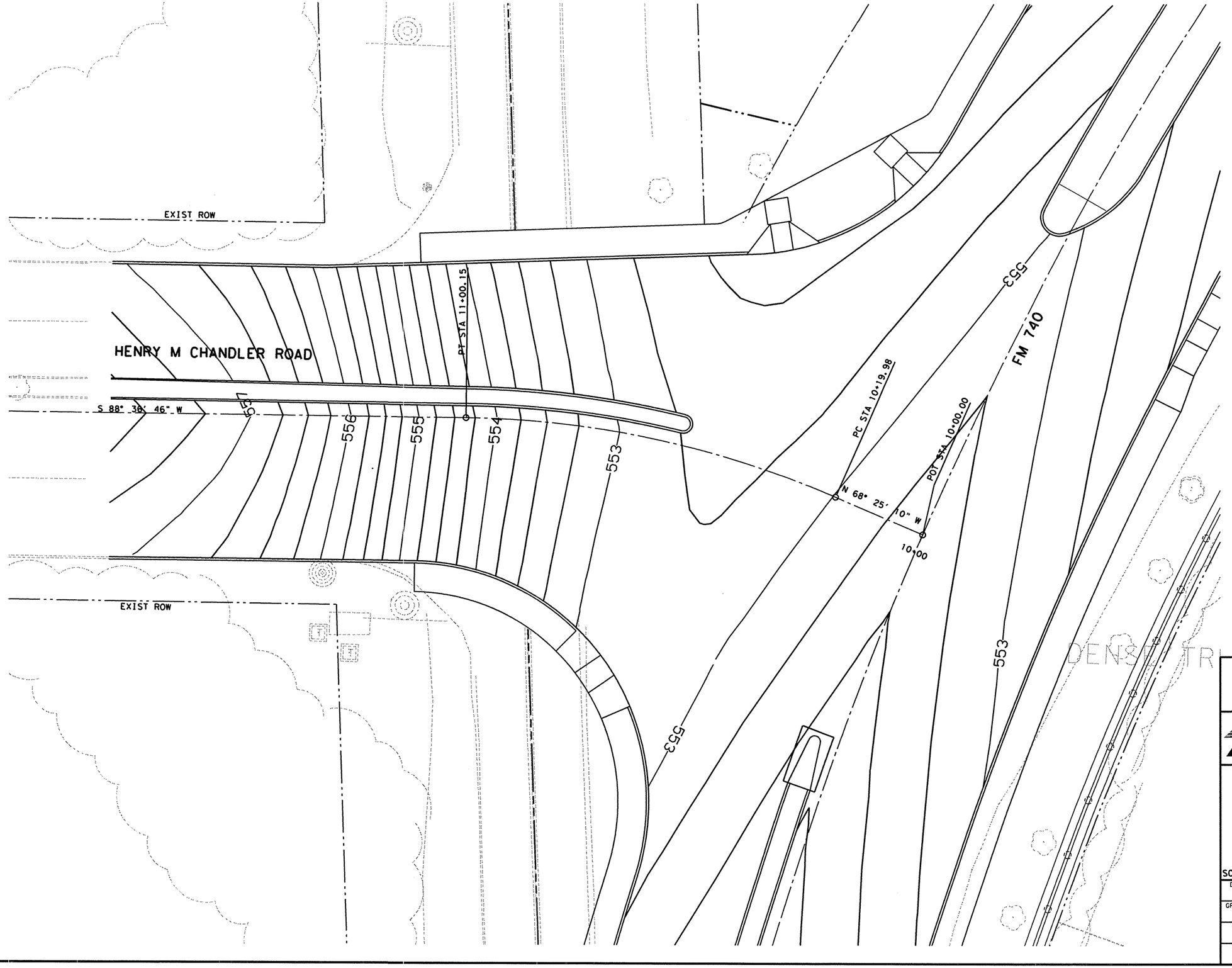

N

0 10 20
SCALE IN FEET

NOTE:
CONTOURS SHOWN AT 0.25' INTERVALS

STATE OF TEXAS
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4-15-09

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FM 740
INTERSECTION CONTOUR DETAILS
HENRY M. CHANDLER ROAD

SCALE: 1"=20' SHEET 2 OF 4

DESIGN	FED.RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS JP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	162
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

jparas
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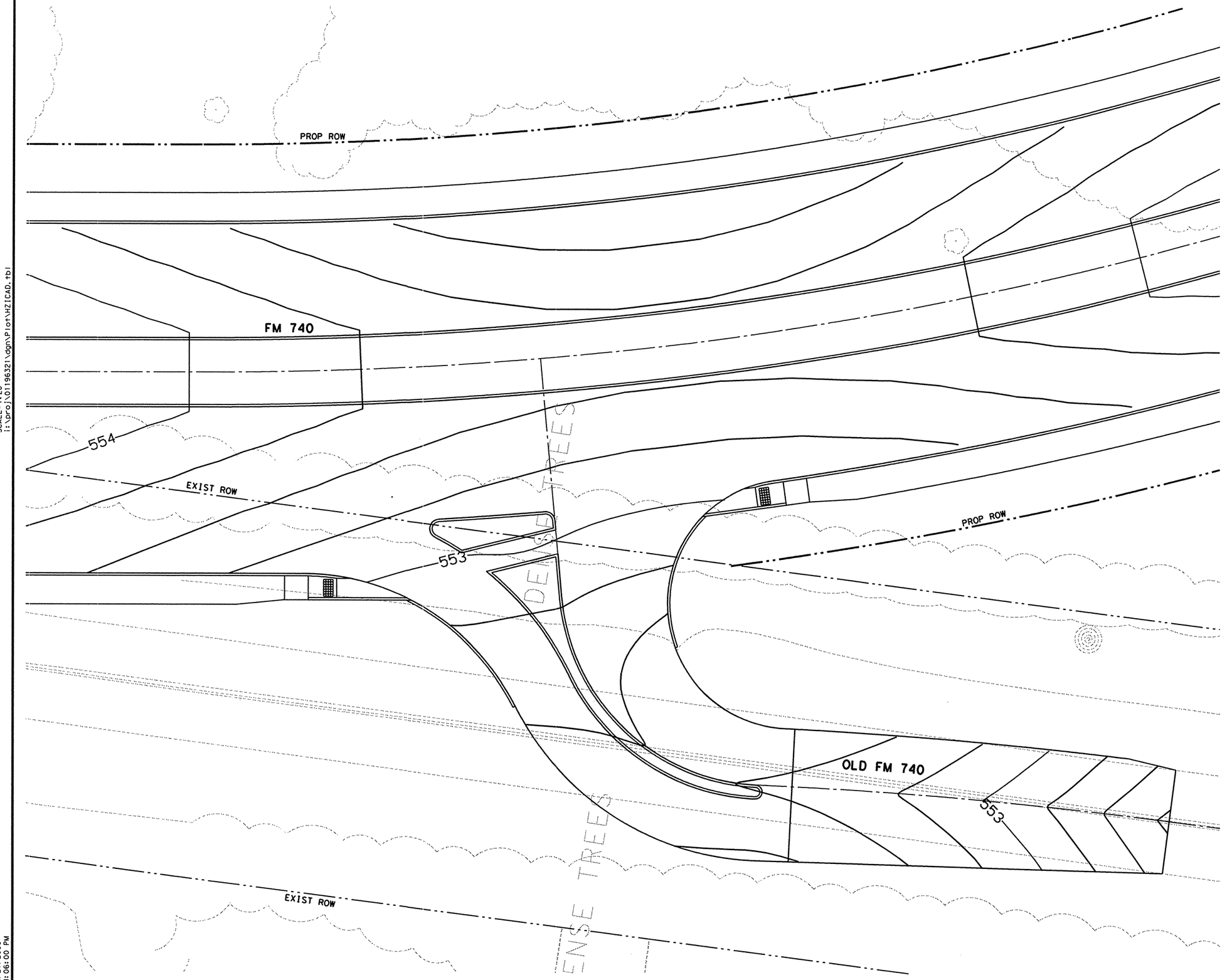

N

0 10 20
SCALE IN FEET

NOTE:
CONTOURS SHOWN AT 0.25' INTERVALS

STATE OF TEXAS
DAVID ALAN NUFER
68818
PROFESSIONAL ENGINEER
5-21-09

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FM 740
INTERSECTION CONTOUR DETAILS
OLD FM 740

SCALE: 1"=20' SHEET 3 OF 4

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS JP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	163
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

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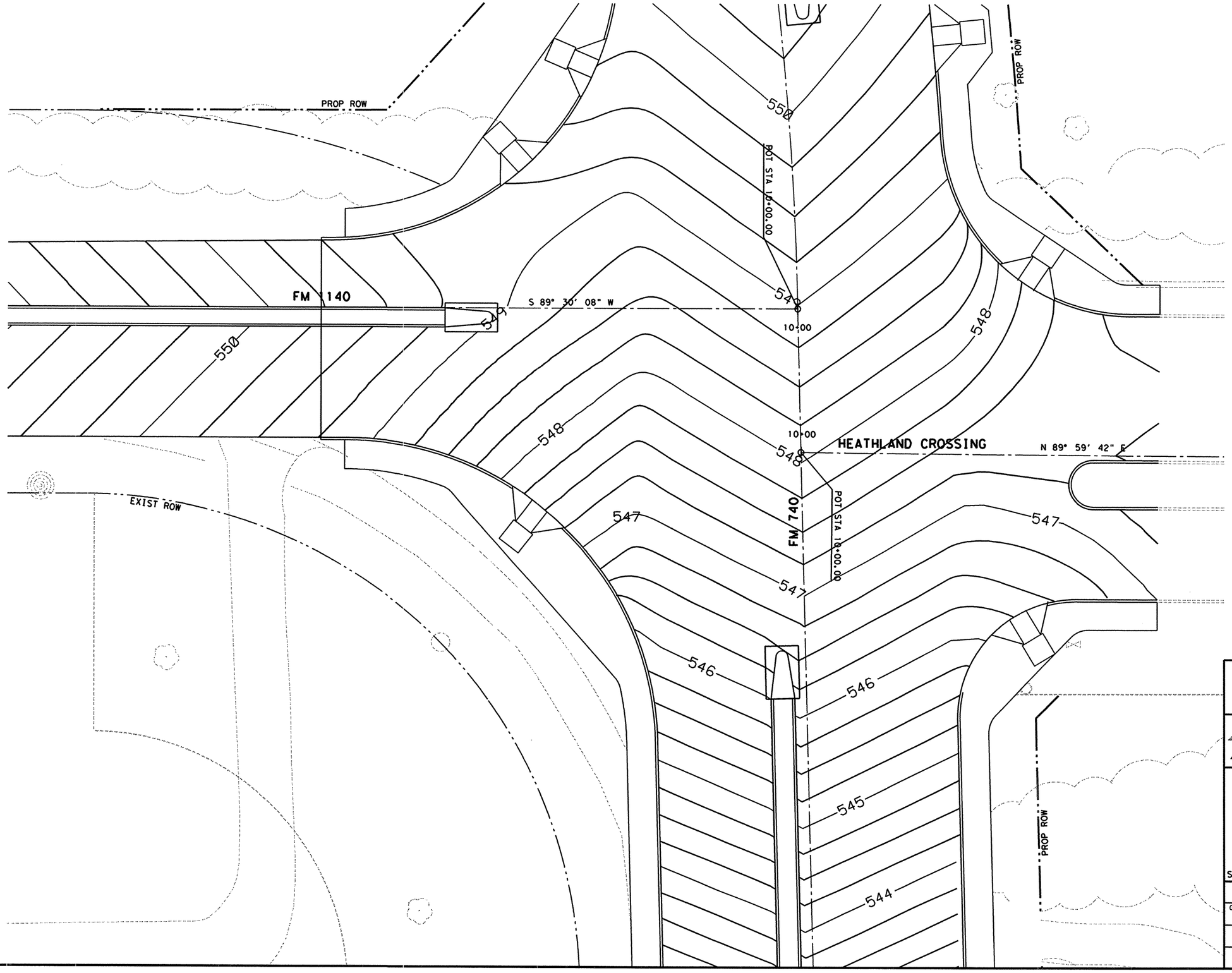

NOTE:
CONTOURS SHOWN AT 0.25' INTERVALS

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
4-15-09

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FM 740
INTERSECTION CONTOUR DETAILS
HEATHLAND CROSSING

SCALE: 1"=20' SHEET 4 OF 4

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS JP	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	164
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

jparas
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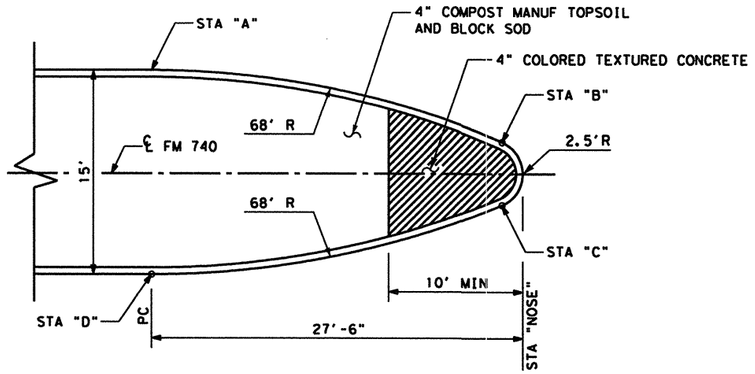
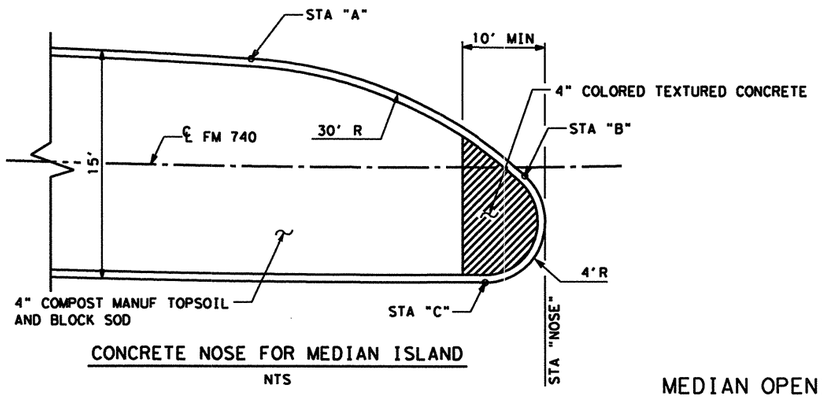


CONCRETE NOSE FOR MEDIAN ISLAND

NTS

MEDIAN OPENING DATA

STA "A"	OFFSET	R (FT)	NORTHING	EASTING	STA "B"	OFFSET	R (FT)	NORTHING	EASTING	STA "C"	OFFSET	R (FT)	NORTHING	EASTING	STA "D"	OFFSET	NORTHING	EASTING	STA "NOSE"
50+48.46	7.50	68	7011508.7302	2591025.9919	50+22.40	2.30	2.50	7011533.7255	2591016.9809	50+22.40	2.30	68.00	7011533.0382	2591012.4140	50+48.46	7.5000	7011506.4979	7011506.4979	50+20.86
52+16.93	7.50	68	7011342.1290	2591051.0651	52+42.99	2.30	2.50	7011315.5887	2591049.8101	52+42.99	2.30	68.00	7011314.9014	2591045.2432	52+16.93	7.5000	7011339.8967	7011339.8967	52+44.53
58+26.44	7.50	68	7010737.1369	2591130.4835	58+00.42	2.30	2.50	7010763.2496	2591125.0776	58+00.35	2.30	68.00	7010763.2115	2591120.4594	58+26.44	7.5000	7010737.2116	7010737.2116	57+98.84
63+19.67	7.50	68	7010245.2945	2591086.4893	62+93.61	2.30	2.50	7010271.7343	2591083.8627	62+93.61	2.30	68.00	7010272.1844	2591079.2664	63+19.67	7.5000	7010246.7563	7010246.7563	62+92.07
63+19.67	7.50	68	7010245.2945	2591086.4893	62+93.61	2.30	2.50	7010271.7343	2591083.8627	62+93.61	2.30	68.00	7010272.1844	2591079.2664	63+19.67	7.5000	7010246.7563	7010246.7563	62+92.07
113+88.26	7.50	68	7005395.5711	2591088.7453	114+14.29	2.30	2.50	7005369.2749	2591093.1495	114+14.35	2.30	68.00	7005367.6399	2591088.8303	113+88.26	7.5000	7005390.0832	7005390.0832	114+15.86
118+38.12	7.46	68	7004955.2281	2591183.4343	118+64.18	2.30	2.50	7004928.6850	2591182.5308	118+64.18	2.30	68.00	7004927.9403	2591177.9714	118+38.12	7.5000	7004952.8282	7004952.8282	118+65.72

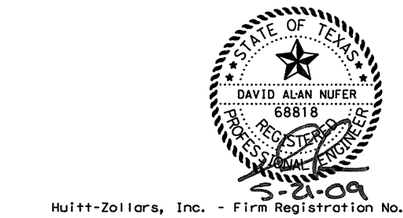


CONCRETE NOSE FOR MEDIAN ISLAND

NTS

MEDIAN OPENING DATA

STA "A"	OFFSET	R (FT)	NORTHING	EASTING	STA "B"	OFFSET	R (FT)	NORTHING	EASTING	STA "C"	OFFSET	NORTHING	EASTING	STA "NOSE"
33+35.10	7.50	30	7013158.4518	2590904.9050	33+14.62	0.58	4.00	7013176.0185	2590918.1725	33+17.35	7.50	7013171.5333	2590924.1111	33+13.35
45+10.00	7.50	30	7012011.6783	2590849.8734	44+89.26	0.54	4.00	7012033.8569	2590847.2748	44+91.96	7.50	7012034.6412	2590854.6919	44+87.94
80+32.35	7.50	30	7008628.4814	2590654.1940	80+50.31	0.54	4.00	7008616.2526	2590638.8647	80+47.63	7.50	7008621.7867	2590633.8560	80+51.61
98+44.83	7.50	30	7006836.8566	2590632.5131	98+65.31	0.58	4.00	7006815.9388	2590625.6531	98+62.58	7.50	7006818.2579	2590618.5816	98+66.58



Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

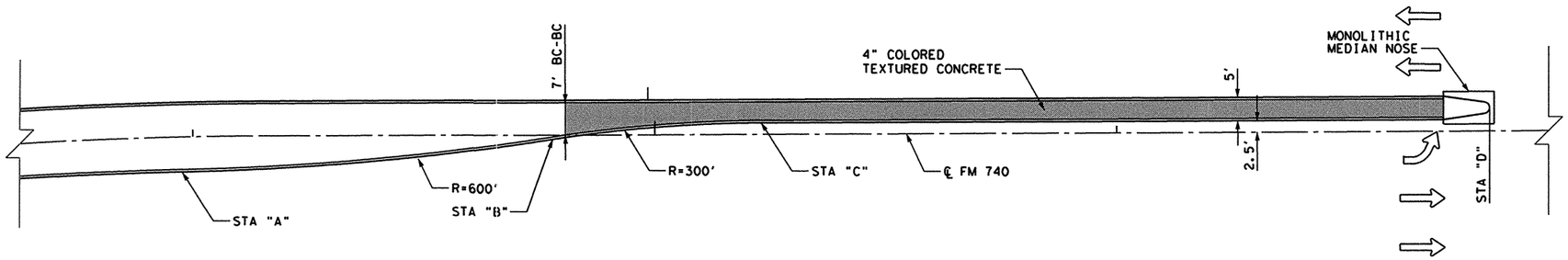
FM 740

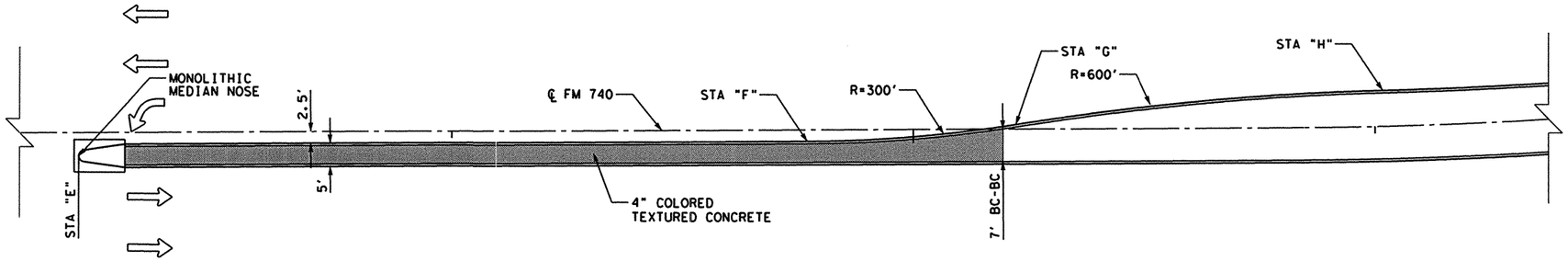
MEDIAN DETAILS

SCALE: NONE SHEET 1 OF 3

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	165
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

TYPICAL SB LEFT TURN & MEDIAN OPENING





TYPICAL NB LEFT TURN & MEDIAN OPENING

MEDIAN OPENING DATA

STA "F" (PC)	OFFSET	R (FT)	NORTHING	EASTING	STA "G" (PRC)	OFFSET	R (FT)	NORTHING	EASTING	STA "H" (PT)	OFFSET	NORTHING	EASTING	STA "E"
22+40.10	1.94	300	7014119.6248	2591408.5859	22+68.66	0.26	600	7014093.4663	2591397.0580	24+00.00	7.50	7013976.3409	2591336.445	N/A
41+25.19	2.50	300	7012383.7618	2590756.9161	41+99.61	3.33	600	7012309.9282	2590767.4413	42+53.28	7.50	7012257.7743	2590779.1946	39+73.24
78+79.97	2.50	300	7008760.6960	2590729.1793	79+54.39	3.33	600	7008697.1982	2590690.0679	80+08.06	7.50	7008649.5822	2590665.7598	77+86.84
93+33.45	2.50	300	7007346.8636	2590593.6604	93+79.14	1.00	600	7007301.3889	2590599.2675	94+63.08	7.50	7007217.9517	2590610.0868	90+50.18
111+14.84	2.50	300	7005635.3128	2590955.9958	111+59.44	0.83	600	7005597.6886	2590980.1706	112+48.64	7.50	7005522.4403	2591028.5203	107+67.34
117+11.22	2.50	300	7005078.8866	2591153.2459	117+55.82	0.83	600	7005035.4019	2591163.6902	118+38.12	7.50	7004955.2281	2591183.4343	115+06.85
123+18.22	2.50	300	7004479.7481	2591250.6194	123+62.82	0.83	600	7004436.2634	2591261.0637	124+52.01	7.50	7004349.2941	2591281.9523	119+70.72
														141+75.59
														142+78.77
													FM 1140	10+64.03
													FM 1140	11+84.02

DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
4-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
MEDIAN DETAILS

SCALE: NONE SHEET 2 OF 3

DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	166
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

jparos
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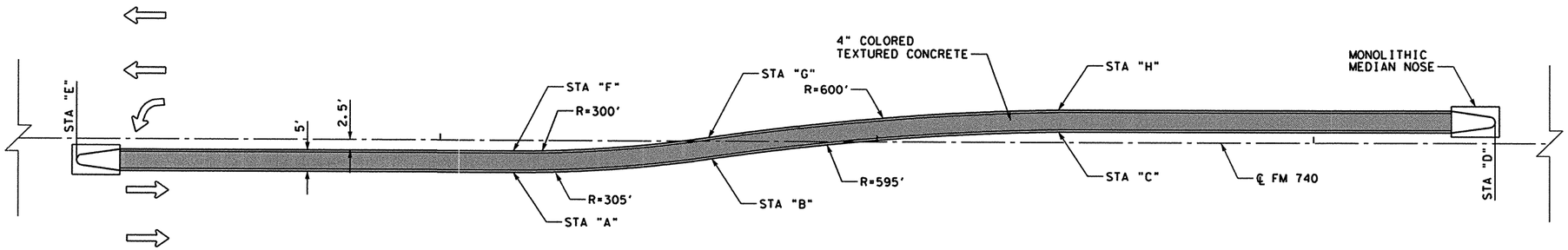
4/15/2009
12:29:04 PM

TYPICAL LEFT TURN & MEDIAN OPENING



MEDIAN OPENING DATA

STA "A" (PC)	OFFSET	R (FT)	NORTHING	EASTING	STA "B" (PRC)	OFFSET	R (FT)	NORTHING	EASTING	STA "C" (PT)	OFFSET	NORTHING	EASTING	STA "D"
30+43.48	7.50	600	7013439.1642	2590985.5279	31+64.96	0.42	300	7013320.4795	2590957.3061	32+06.69	2.50	7013279.4872	2590948.9367	32+41.69
41+25.19	7.50	305	7012383.6769	2590751.9168	42+00.39	1.61	595	7012308.6127	2590762.6175	42+53.28	2.50	7012256.8934	2590774.2728	43+94.32
54+87.27	7.50	305	7011072.5710	2591076.4641	55+31.44	4.11	595	7011029.3989	2591086.3870	56+19.90	2.50	7010942.9075	2591106.0909	57+19.80
82+85.51	7.50	305	7008394.5883	2590558.9576	83+67.14	0.56	295	7008312.3421	2590556.1235	84+03.40	2.50	7008276.0249	2590557.5492	85+22.50
87+16.67	7.50	305	7007962.7508	2590560.1550	87+62.18	4.09	595	7007917.4486	2590565.6692	88+41.52	2.50	7007838.4970	2590575.9155	89+41.48
102+74.26	7.50	305	7006407.2892	2590642.7659	103+28.52	2.64	595	7006353.3962	2590650.8134	103+87.61	2.50	7006295.1353	2590661.8864	106+83.61

STA "F" (PC)	OFFSET	R31 (FT)	NORTHING	EASTING	STA "G" (PRC)	OFFSET	R2 (FT)	NORTHING	EASTING	STA "H" (PT)	OFFSET	NORTHING	EASTING	STA "E"
30+43.48	2.50	595	7013437.5190	2590990.2495	31+64.26	4.53	305	7013319.8234	2590962.2629	32+06.69	7.50	7013278.1514	2590953.7550	30+06.97
41+25.19	2.50	300	7012383.7618	2590756.9161	41+99.61	3.33	600	7012309.9282	2590767.4413	42+53.28	7.50	7012257.7743	2590779.1946	39+73.24
54+87.26	2.50	300	7011073.3247	2591081.4070	55+30.70	0.83	600	7011030.8699	2591091.1657	56+19.90	7.50	7010943.6516	2591111.0352	53+87.26
82+85.51	2.50	300	7008393.7435	2590563.8857	83+66.29	4.37	300	7008312.8456	2590561.0981	84+03.40	7.50	7008275.9129	2590562.5480	81+67.26
87+16.67	2.50	300	7007962.9819	2590565.1496	87+61.44	0.86	600	7007918.4224	2590570.5735	88+41.48	7.50	7007838.7677	2590580.9083	86+16.67
102+74.26	2.50	300	7006407.5829	2590647.7573	103+27.65	2.28	600	7006354.5734	2590655.6728	103+87.61	7.50	7006295.8229	2590666.8389	99+75.19

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED
PROFESSIONAL ENGINEER
4-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

FM 740
MEDIAN DETAILS

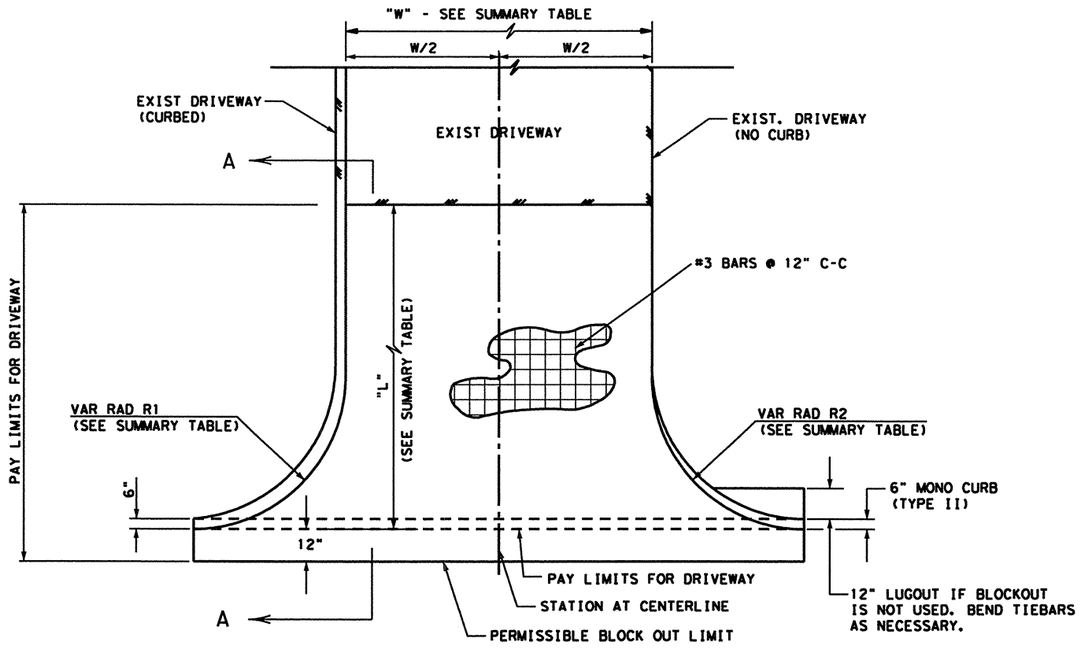
SCALE: NONE SHEET 3 OF 3

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	167
CHECK CVL	CONTROL	SECTION	JOB	
CHECK DAN	1014	03	039	

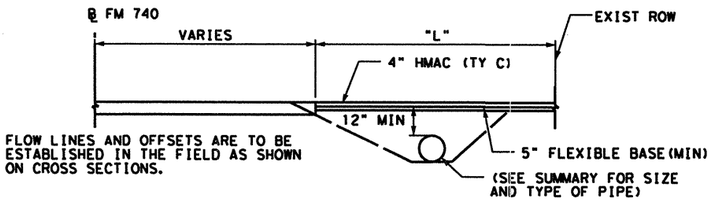
SUMMARY OF DRIVEWAYS

LOCATION	W	L	R1	R2	464-2005 RC PIPE (CL III) (24 IN)	467-2288 SET (TY II) (24 IN) (RCP) (6:1) (P)	530-2010 DRIVEWAYS (CONC)	530-2011 DRIVEWAYS (ACP)	247-2041 FL BS (CMP IN PLC) (TY A GR 1) (FNAL POS) *
FM 740	LF	LF	LF	LF	LF	EA	SY	SY	CY
21+44.88 RT	48	23.1	15	20	-	-	118	-	-
22+02.27 LT	45	29.7	20	20	-	-	160	-	-
23+76.44 LT	40	32.8	30	30	-	-	192	-	-
24+75.78 RT	27	43.2	14	11	-	-	130	-	-
25+76.26 LT	40	31.9	25	25	-	-	172	-	-
25+76.93 RT	25	42.6	20	20	-	-	140	-	-
27+49.69 RT	57	19.8	15	15	-	-	122	-	-
29+02.00 LT	46	13.4	25	25	-	-	89	-	-
30+92.04 LT	28	46.9	15	15	-	-	155	-	-
31+61.52 RT	24	16.0	20	20	-	-	59	-	-
34+90.11 LT	24	39.4	20	20	-	-	123	-	-
34+95.93 RT	49	22.4	20	20	-	-	142	-	-
41+28.20 RT	32	16.1	20	20	-	-	77	-	-
44+24.45 RT	23	41.7	20	20	-	-	127	-	-
44+58.38 LT	24	17.8	16	18	-	-	59	-	-
46+07.99 LT	24	33.0	20	20	-	-	107	-	-
52+00.66 LT	28	53.1	20	20	-	-	213	-	-
52+85.51 RT	17	12.5	20	15	-	-	33	-	-
53+05.15 LT	14	60.1	15	15	-	-	122	-	-
53+51.31 RT	14	49.0	15	30	-	-	124	-	-
54+09.00 LT	15	46.0	15	15	-	-	80	-	-
54+57.73 LT	19	57.1	15	15	-	-	156	-	-
59+33.11 LT	15	19.6	15	15	-	-	44	-	-
68+72.16 LT	14	21.0	15	15	-	-	42	-	-
73+33.38 LT	22	20.2	20	20	-	-	69	-	-
95+51.85 RT	9	12.2	15	15	-	-	22	-	-
96+68.78 RT	8	23.1	15	15	-	-	29	-	-
97+45.89 RT	8	32.4	15	15	-	-	45	-	-
143+22.56 LT	24	17.0	15	15	35	2	-	62	9
145+67.71 RT	10	45.7	15	15	25	2	-	59	9
146+59.56 LT	24	42.5	15	15	35	2	-	124	6
146+92.09 RT	10	26.3	15	15	25	2	-	40	6
FM 1140									
12+39.02 LT	12	11	10	10	25	2	19		
13+76.68 LT	12	11	15	15	25	2	34		
TOTAL					170	12	3004	285	30

* FOR CONTRACTORS INFO ONLY SUBSIDIARY TO BID ITEM 530

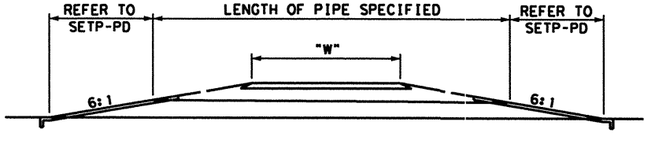


PLAN

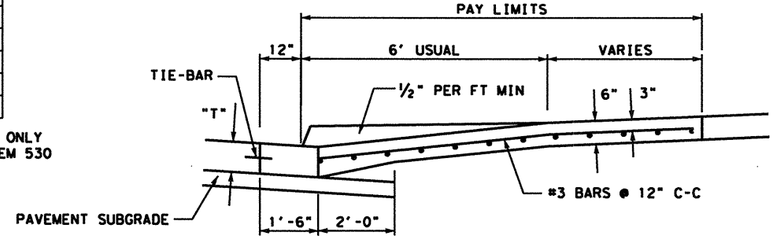


SECTION A-A

DRIVEWAY W/ PIPE



DETAIL SHOWING MEASUREMENT OF DRIVEWAY PIPE



SECTION A-A

DRIVEWAY RETURNS

NOTES:

1) DRIVEWAY LOCATIONS MAY BE SHIFTED AT TIME OF CONSTRUCTION AS DIRECTED BY THE ENGINEER TO MATCH EXISTING CONDITIONS.

2) OMIT PAYMENT FOR CURB WITHIN LIMITS OF DRIVEWAY. CURBS ON DRIVEWAYS SHALL BE CONSIDERED SUBSIDIARY TO THE PRICE BID PER SQUARE YARD FOR DRIVEWAY AND WILL NOT BE PAID FOR DIRECTLY.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
5-21-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

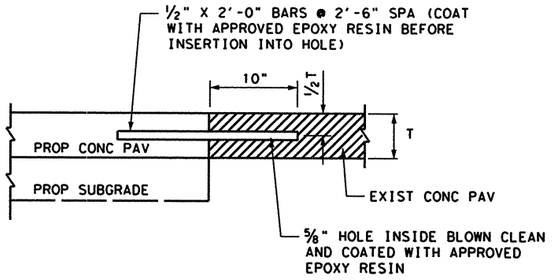
HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
MISCELLANEOUS
DRIVEWAY DETAILS

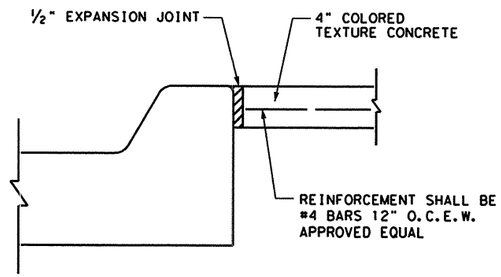
SCALE: NONE SHEET 1 OF 1

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MTU	TEXAS	DALLAS	ROCKWALL	
CHECK	CONTROL	SECTION	JOB	
CVL	1014	03	039	168
CHECK				
DAN				

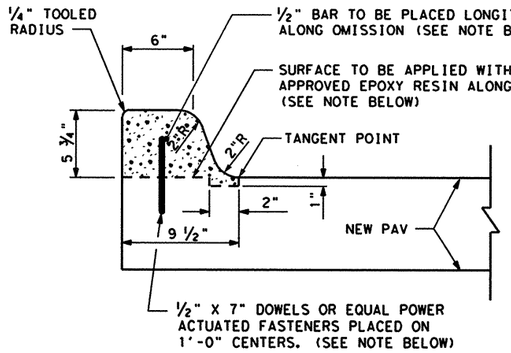


ANCHOR JOINT DETAIL

TO BE USED WHERE PROPOSED CONCRETE PAVEMENT MEETS EXISTING CONCRETE PAVEMENT



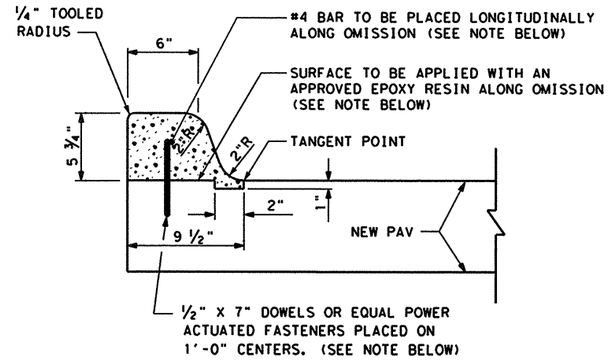
DETAIL AT PAVED TRAFFIC ISLANDS & MEDIAN NOSES



TYPE I CURB

(DOWEL)

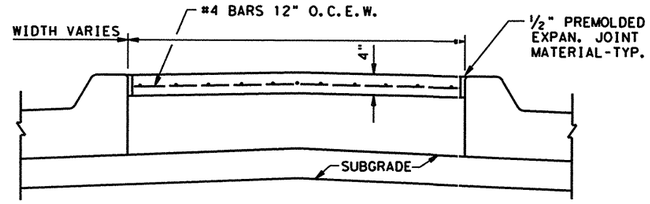
NTS



TYPE II CURB

(DOWEL)

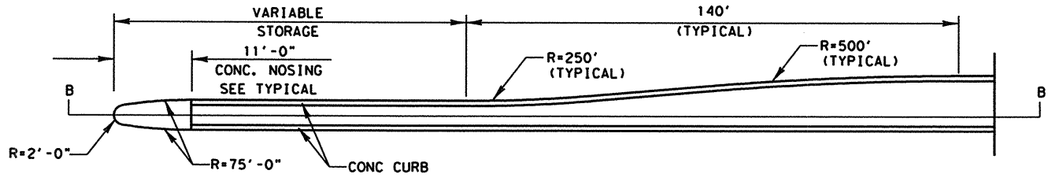
NOTE:
IF CONTINUOUS MONOLITHIC CURB HAS TO BE OMITTED FOR ANY REASON, THE CURB SHALL BE DOWELED AS SHOWN ABOVE.



PROVIDE SAWED CONTRACTION JOINTS ⅜" WIDE BY 1" DEEP AT 15' INTERVALS. PLACE JOINT SEALING COMPOUND IN ACCORDANCE WITH JOINT SEALS CONCRETE PAVING DETAILS.

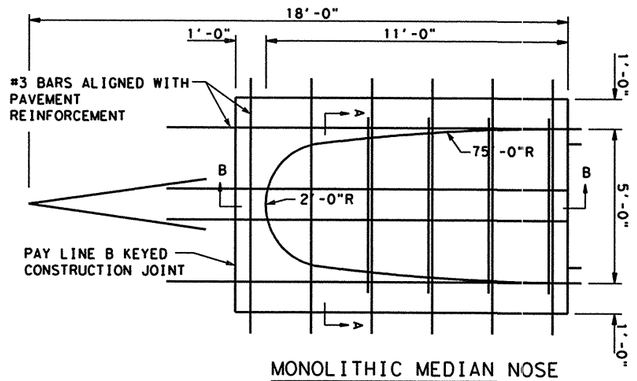
TYPICAL MEDIAN SECTION

CONCRETE



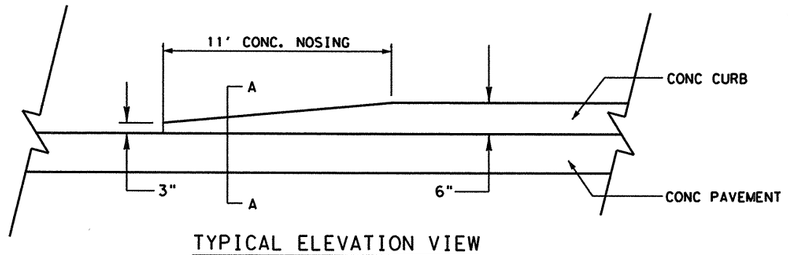
TYPICAL PLAN VIEW MEDIAN NOSE & LEFT TURN BAY

(ALL MEASUREMENT'S ARE FROM FACE OF CURB)

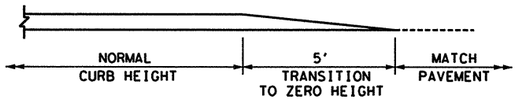


MONOLITHIC MEDIAN NOSE

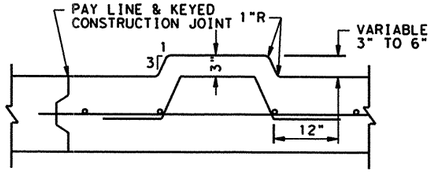
MONOLITHIC MEDIAN NOSE & PAVEMENT WITHIN PAY LINES SHALL BE PAID FOR AS CONCRETE MEDIAN BY THE SQUARE YARD.



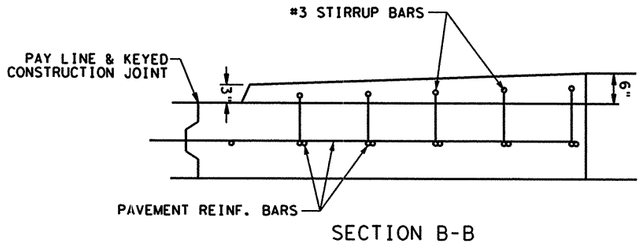
TYPICAL ELEVATION VIEW OF CONCRETE NOSING



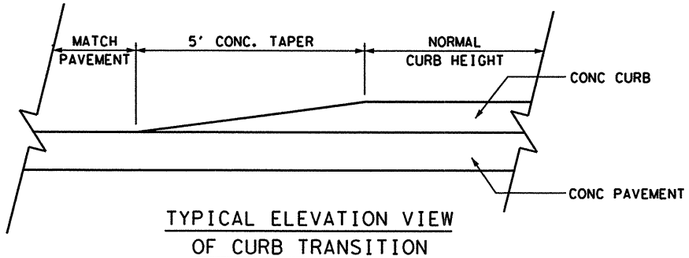
CURB TRANSITION DETAIL



SECTION A-A



SECTION B-B



TYPICAL ELEVATION VIEW OF CURB TRANSITION

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
4-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

FM 740
MISCELLANEOUS ROADWAY DETAILS

SCALE: NONE — SHEET 1 OF 2

DESIGN	FED.RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	69
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	

jparres
SCALE: 1:10
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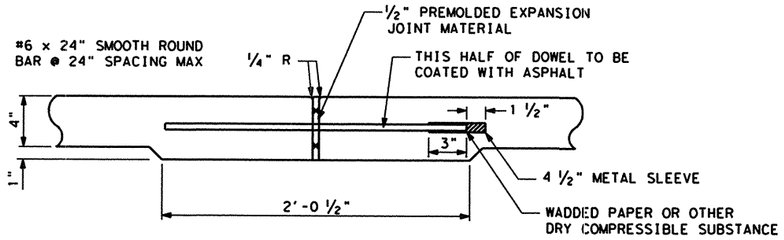
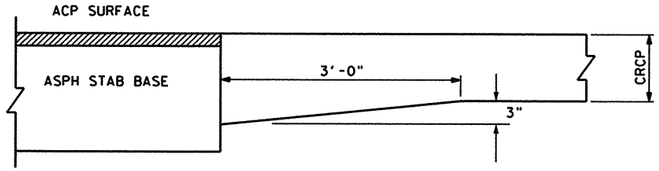
4/14/2009
8:31:26 PM



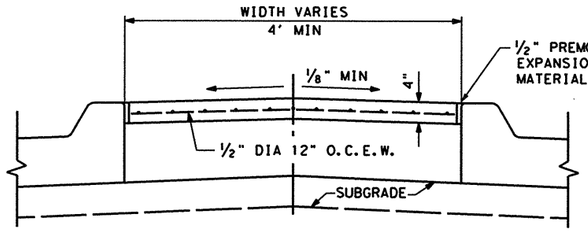
SIDEWALK EXPANSION JOINT DETAIL

NTS



DETAIL FOR JUNCTURE WITH FLEXIBLE TYPE PAVEMENT STRUCTURE

NTS

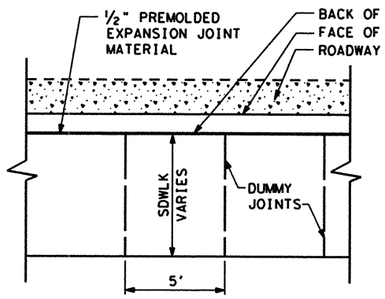


PROVIDE SAWED CONTRACTION JOINTS ⅜" WIDE BY 1" DEEP AT 15' INTERVALS. PLACE JOINT SEALING COMPOUND IN ACCORDANCE WITH JOINT SEALS CONCRETE PAVING DETAILS.

TYPICAL MEDIAN SECTION

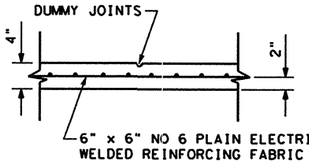
CONCRETE

NTS



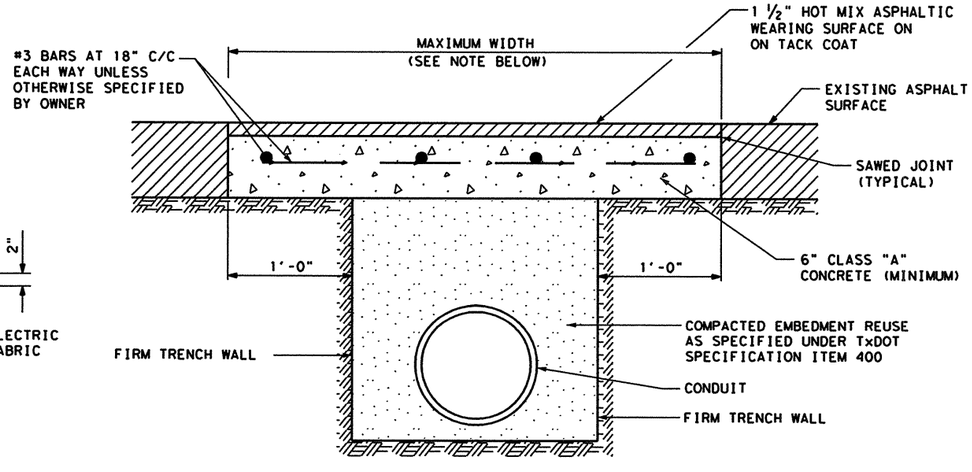
ADJACENT

NTS



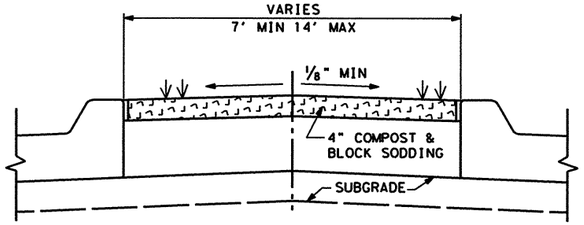
SIDEWALK DETAILS

NTS



ASPHALT PAVEMENT

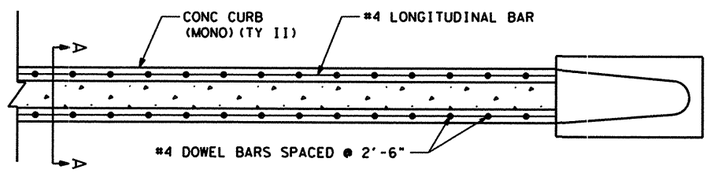
NTS



TYPICAL MEDIAN SECTION

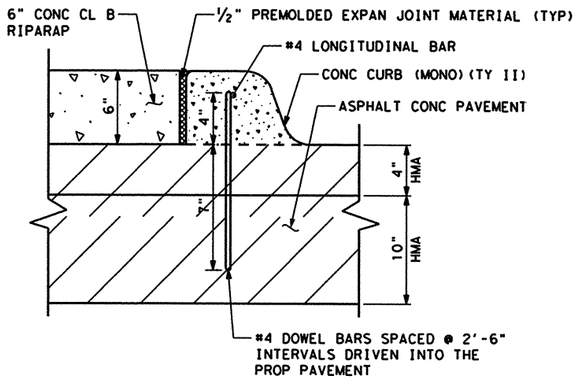
(GREEN SPACE)

NTS

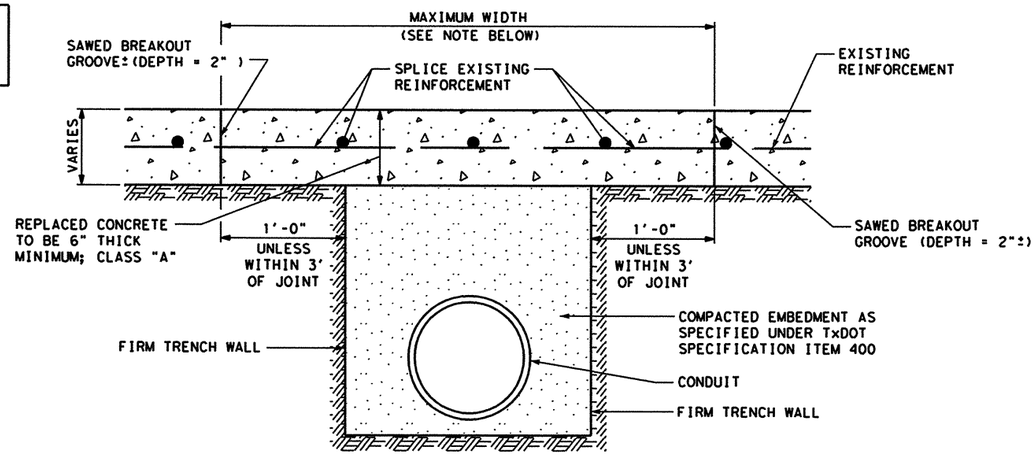


DIRECTIONAL ISLAND & CONCRTET CURB

NTS



SECTION A-A



CONCRETE PAVEMENT

NTS

NOTES:

1. PAYMENT TO THE CONTRACTOR FOR REPLACEMENT OF PAVEMENT AND/OR DRIVEWAYS WILL BE BASED ON ACTUAL MEASUREMENTS UP TO A MAXIMUM WIDTH EQUAL TO THE SPECIFIED MAXIMUM TRENCH WIDTH (PER SPECATION ITEM 400) PLUS 2 FEET. ANY EXISTING PAVEMENT DAMAGED OR REMOVED IN EXCESS OF THE MAXIMUM LIMITS SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

2. WHEN REMOVING CONCRETE PAVEMENT THE CONTRACTOR SHALL ENDEAVOR TO LIMIT DAMAGE TO EXISTING REINFORCEMENT SO IT MAY BE EMPLOYED IN THE REPLACEMENT OPERATION. IF ORIGINAL REINFORCEMENT IS CUT OR BROKEN, REPLACEMENT BARS OF THE SAME SIZE SHALL BE INSTALLED BY DRILLING AND DOWELLING AS DIRECTED BY THE OWNER.

STATE OF TEXAS
DAVID ALAN NUFER
68818
REGISTERED PROFESSIONAL ENGINEER
4-15-09

Huitt-Zollars, Inc. - Firm Registration No. F-761

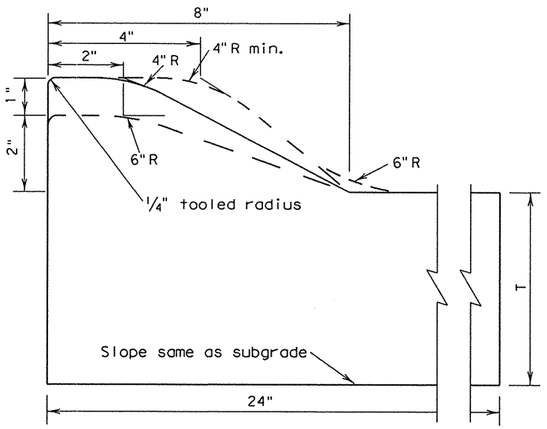
HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489

Texas Department of Transportation

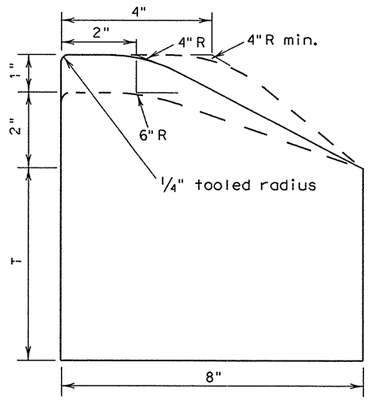
FM 740
MISCELLANEOUS ROADWAY DETAILS

SCALE: NONE SHEET 2 OF 2

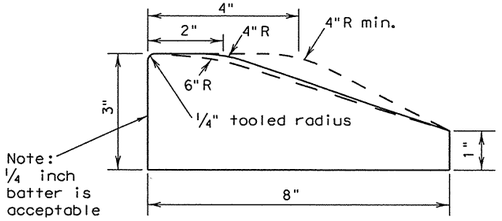
DESIGN	FED. RD. DIV. RD.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DAN	6	SEE TITLE SHEET		FM 740
GRAPHICS MTU	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK CVL	TEXAS	DALLAS	ROCKWALL	170
CHECK DAN	CONTROL	SECTION	JOB	
	1014	03	039	



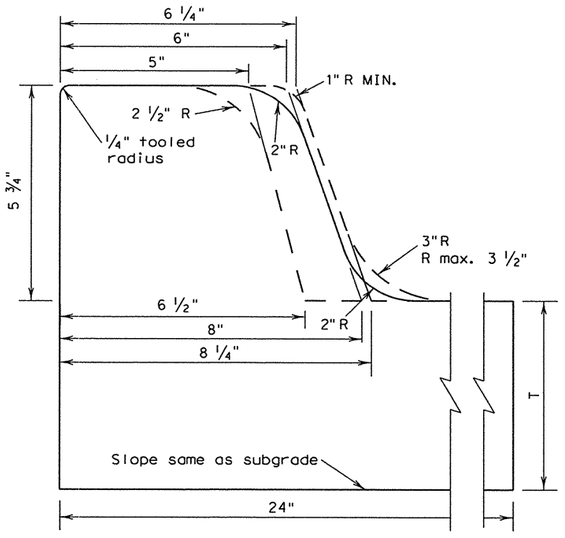
TYPE I CURB AND GUTTER



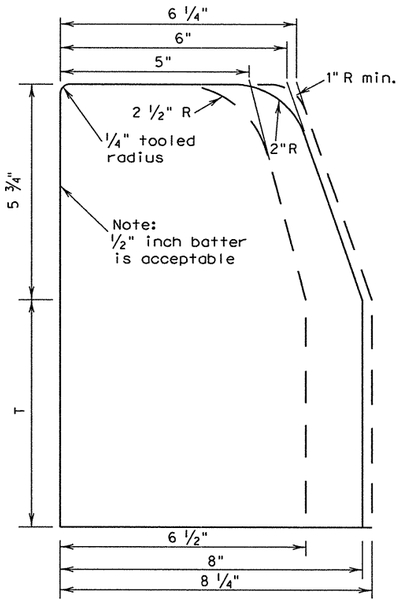
TYPE I CURB



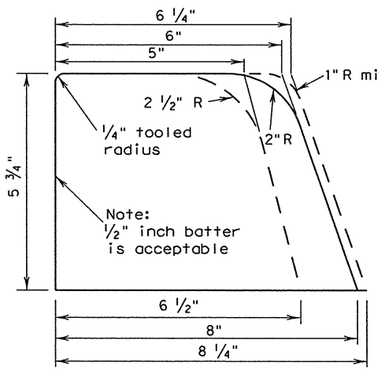
TYPE I MONO CURB OR
CURB PLACED ON PAVEMENT



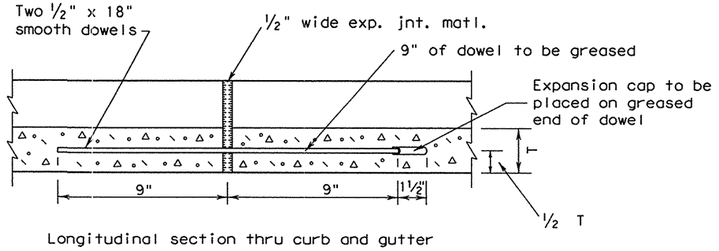
TYPE II CURB AND GUTTER



TYPE II CURB



TYPE II MONO CURB OR
CURB PLACED ON PAVEMENT



Longitudinal section thru curb and gutter showing typical expansion joint details.

Reinforcing steel (when used) shall not cross expansion joints. Steel shall be terminated 3" ± 1" from face of the joint.

GENERAL NOTES

1. Contractor may use existing forms if the cross section lies within the band shown by dotted lines. If new forms are to be purchased, leased, or constructed they shall conform to the solid line.
2. When reinforcing steel is required or placed at contractor's option, one of the following schemes of reinforcement shall be required. The manner of placement and location shall be to the satisfaction of the Engineer.
   a. Type I, or Type II, curb and gutter reinforcement shall have longitudinal reinforcing bars as follows: Three #3, two #4, two #5, or one #6.
   b. All types of curb (reinf.) shall have one #3 or #4 bar for for longitudinal reinforcement.
3. Reinforcing bars shall be lapped a minimum of 15".
4. When curb or curb and gutter is placed by a separate pour adjacent to or atop concrete pavement, curb or curb and gutter shall be tied to pavement in a manner satisfactory to the engineer with 8-inch long #3 or #4 bars spaced at 5 feet and expansion and/or contraction joints of curb or curb and gutter shall match those of pavement.

   When curb and curb and gutter is not constructed adjacent to concrete pavement, the following shall govern:
   a. Reinforced curb or curb and gutter shall have no contraction joints.
   b. Non-reinforced curb or curb and gutter shall have formed, tooled or sawed contraction joints at 10'±. The depth of these joints shall be sufficient to ensure cracking at the joints.
   c. Reinforcing curb or curb and gutter shall have expansion joints at points of curvature and at intervals no greater than 120' in all curves and at structures such as bridges, box culverts, curb inlets, etc.
   d. Non-reinforced curb or curb and gutter shall have expansion joints at points of curvature on curves of radius less than 25' and at structures such as bridges, box culverts, curb inlets, etc.
5. One-half inch expansion joint material shall be provided where curb or curb gutter is adjacent to sidewalk or riprap.
6. Unless otherwise shown, transitions between curbs or curbs and gutters of differing cross section shall be accomplished over a 20 foot length or as approved by the Engineer.
7. At contractor's option, dimension "T" may be thickness of pavement structure. In no case shall it be less than 6".
8. See the RAMP standard sheet for information on curb ramps and sidewalks crossing driveways.

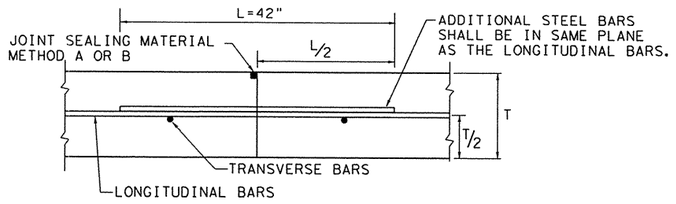
LEVELS DISPLAYED

Texas Department of Transportation
Design Division (Roadway)

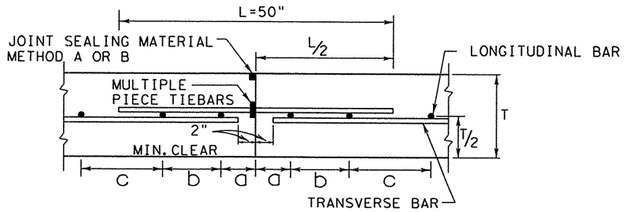
CONCRETE CURB AND CURB AND GUTTER

CCCG-01

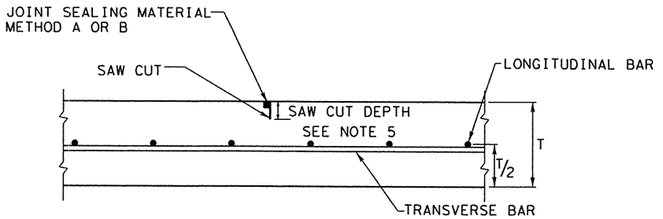
FILE: cccg01.DGN	DN: MAM	CK: RAR	DW: RAR	CK: MAM	
©TxDOT 1995	DIST	FEDERAL AID PROJECT			SHEET
REVISIONS	DALLAS	(SEE TITLE SHEET)			171
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	ROCKWALL		1014	03	039	FM 740



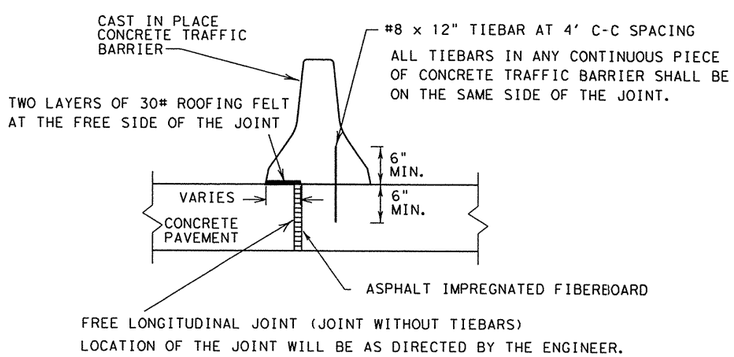
TRANSVERSE CONSTRUCTION JOINT
SECTION X - X



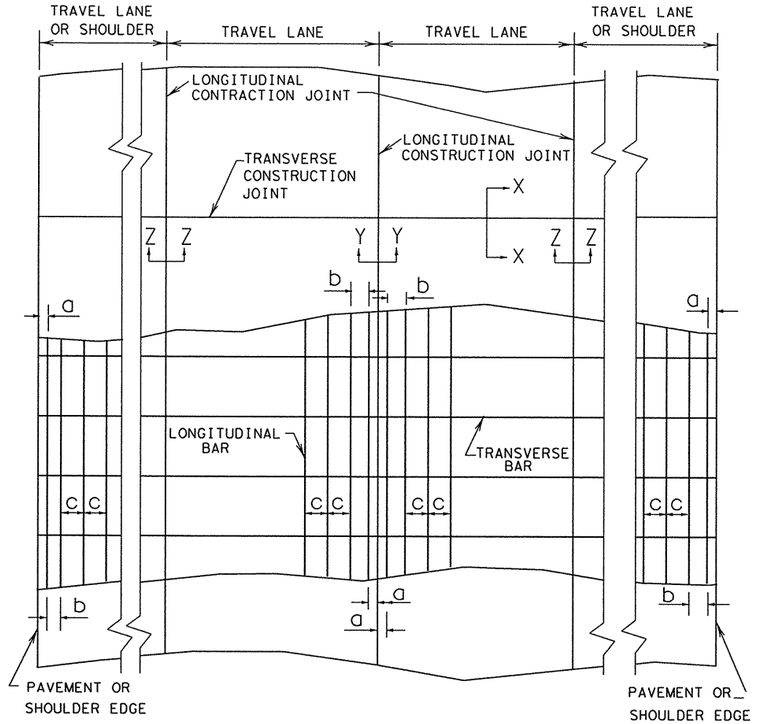
LONGITUDINAL CONSTRUCTION JOINT
SECTION Y - Y



LONGITUDINAL CONTRACTION JOINT
SECTION Z - Z



FREE LONGITUDINAL JOINT DETAIL



TYPICAL PAVEMENT LAYOUT

GENERAL NOTES

1. DETAILS FOR PAVEMENT WIDTH, PAVEMENT THICKNESS AND THE CROWN CROSS-SLOPE SHALL BE SHOWN ELSEWHERE IN THE PLANS.
2. LONGITUDINAL AND TRANSVERSE REINFORCING STEEL SHALL BE #6 DEFORMED STEEL BARS CONFORMING TO ASTM A 615 (GRADE 60) OR ASTM A 996 (GRADE 60).
3. THE DETAIL FOR THE JOINT SEALANT AND RESERVOIR IS SHOWN ON STANDARD SHEET "CONCRETE PAVING DETAILS, JOINT SEALS."
4. PAVEMENT WIDTHS OF MORE THAN 15 FT. SHALL HAVE A LONGITUDINAL JOINT (SECTION Z-Z OR Y-Y). THESE JOINTS SHALL BE LOCATED WITHIN 6 IN. OF THE LANE LINE UNLESS THE JOINT LOCATION IS SHOWN ELSEWHERE ON THE PLANS.
5. THE SAW CUT DEPTH FOR THE LONGITUDINAL JOINT SHALL BE MINIMUM OF ONE THIRD THE SLAB THICKNESS. IT MAY BE MINIMUM OF ONE FOURTH THE SLAB THICKNESS WHEN CRUSHED LIMESTONE IS USED AS THE COARSE AGGREGATE.
6. REINFORCING STEEL SPLICES SHALL BE A MINIMUM OF 25 IN.
7. MULTIPLE PIECE TIEBARS SHALL BE USED AT LONGITUDINAL CONSTRUCTION JOINTS UNLESS OTHERWISE SPECIFIED IN THE PLANS. THE TIEBARS SHALL BE #6 BARS. THE TIEBAR SPACING SHALL BE EQUAL TO THE TRANSVERSE BAR SPACING.
8. STEEL BAR PLACEMENT TOLERANCE SHALL BE +/- 1 IN. HORIZONTALLY AND +/- 0.5 IN. VERTICALLY. THE AVERAGE BAR SPACINGS SHALL CONFORM TO TABLE NO.1 AND TABLE NO.2.
9. MISSING OR DAMAGED TIEBARS SHALL BE REPLACED BY DRILLING AND EPOXY GROUTING AT THE CONTRACTOR'S EXPENSE.
10. AT TRANSVERSE CONSTRUCTION JOINTS, THE ADDITIONAL STEEL BARS SHALL BE PLACED APPROXIMATELY MIDWAY BETWEEN THE LONGITUDINAL STEEL BARS.
11. CONSOLIDATION WITH HAND-MANIPULATED MECHANICAL VIBRATORS IS REQUIRED ADJACENT TO ALL TRANSVERSE CONSTRUCTION JOINTS.

TABLE NO.1 LONGITUDINAL STEEL

SLAB THICKNESS AND BAR SIZE		REGULAR STEEL BARS	FIRST SPACING AT EDGE OR JOINT	SECOND SPACING FROM EDGE OR JOINT	ADDITIONAL STEEL BARS AT TRANSVERSE CONST. JOINT	
T (IN.)	BAR SIZE	SPACING c (IN.)	SPACING a (IN.)	SPACING b (IN.)	SPACING 2 x c (IN.)	LENGTH L (IN.)
8	#6	9	3 TO 4	3 TO 9	18	42
9	#6	8	3 TO 4	3 TO 8	16	42
10	#6	7	3 TO 4	3 TO 7	14	42
11	#6	6.5	3 TO 4	3 TO 6.5	13	42
12	#6	6	3 TO 4	3 TO 6	12	42
13	#6	5.5	3 TO 4	3 TO 5.5	11	42

TABLE NO.2 TRANSVERSE STEEL

SLAB THICKNESS AND BAR SIZE		PAVEMENT WIDTH (PW) FROM LONGITUDINAL FREE EDGE TO NEAREST LONGITUDINAL FREE EDGE, FT.						
		PW <=48	PW <=60	PW <=72	PW <=84	PW <=96	PW <=108	PW <=120
T (IN.)	BAR SIZE	SPACING (FT.)	SPACING (FT.)	SPACING (FT.)	SPACING (FT.)	SPACING (FT.)	SPACING (FT.)	SPACING (FT.)
8	#6	3	3	3	3	2.5	2.5	2
9	#6	3	3	3	2.5	2	2	1.5
10	#6	3	3	2.5	2.5	2	1.5	1.5
11	#6	3	2.5	2.5	2	2	1.5	1.5
12	#6	3	2.5	2	2	1.5	1.5	1
13	#6	2.5	2.5	2	1.5	1.5	1.5	1

Texas Department of Transportation
Construction Division (Pavements)

CONTINUOUSLY REINFORCED CONCRETE PAVEMENT

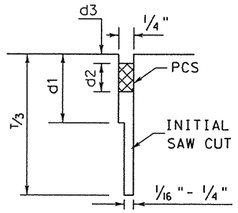
ONE LAYER STEEL BAR PLACEMENT
T-8, 9, 10, 11, 12, &13 INCHES

CRCP(1)-03

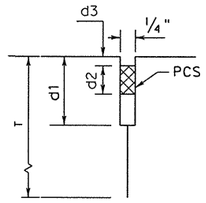
MODIFICATIONS	DN: HC	CK: MCW	DW: HC	CK: GEL	
	DISTRICT	FEDERAL AID PROJECT			SHEET
	DALLAS	(SEE TITLE SHEET)			172
	COUNTY	CONTROL	SECTION	JOB	HIGHWAY
	ROCKWALL	1014	03	039	FM 740

FILE: CRCP103.DGN
LEVELS DISPLAYED
1

LEVELS DISPLAYED
1

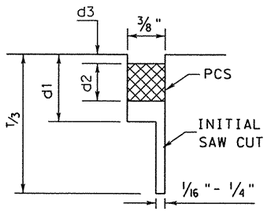


SAWED
LONGITUDINAL JOINT

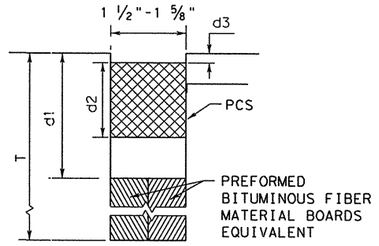


LONGITUDINAL
CONSTRUCTION JOINT

LONGITUDINAL JOINT SEALS



SAWED
CONTRACTION JOINT



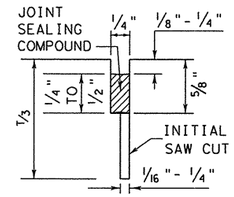
FORMED
FORMED EXPANSION JOINT

TRANSVERSE JOINT SEALS

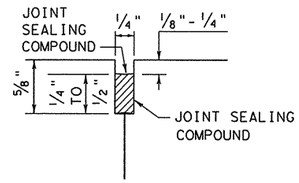
METHOD A: PREFORMED COMPRESSION SEALS (PCS)
(CLASS 6 PREFORMED JOINT SEALANT)

GENERAL NOTES FOR METHOD "A"

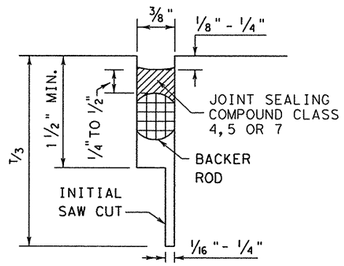
1. UNLESS OTHERWISE SHOWN IN THE PLANS, EITHER METHOD "A" OR METHOD "B" MAY BE USED.
2. THE LOCATION OF JOINTS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
3. DIMENSIONS d1, d2, AND d3 SHALL BE IN ACCORDANCE WITH THE PREFORMED COMPRESSION SEAL MANUFACTURES RECOMMENDATION.
4. THE JOINT RESERVOIR FOR SEALANT SHALL BE SAWED UNLESS OTHERWISE SHOWN ON THE PLANS FOR THE LONGITUDINAL AND TRANSVERSE CONSTRUCTION AND THE TWO SAWED JOINTS.
5. THE JOINTS SHALL BE CLEANED IN ACCORDANCE WITH THE ITEM 438 AND PRIOR TO BEGINNING OPERATIONS, THE CONTRACTOR SHALL SUBMIT A STATEMENT FROM THE SEALANT MANUFACTURER SHOWING THE RECOMMENDED EQUIPMENT AND INSTALLATION PROCEDURES TO BE USED.
6. THE SAW CUT FOR THE LONGITUDINAL JOINT SHALL BE ONE FOURTH THE SLAB THICKNESS WHEN CRUSHED LIMESTONE IS USED AS THE COARSE AGGREGATE.



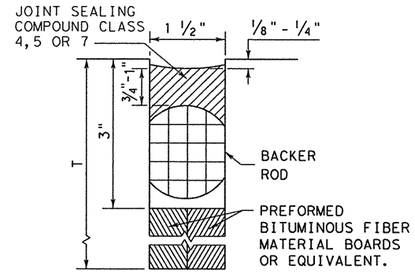
SAWED
LONGITUDINAL JOINT



LONGITUDINAL OR TRANSVERSE
CONSTRUCTION JOINT



TRANSVERSE SAWED
CONTRACTION JOINT



TRANSVERSE FORMED
EXPANSION JOINT

METHOD B: JOINT SEALING COMPOUND

GENERAL NOTES FOR METHOD "B"

1. UNLESS OTHERWISE SHOWN IN THE PLANS, EITHER METHOD "A" OR METHOD "B" MAY BE USED.
2. THE LOCATION OF JOINTS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
3. THE ENGINEER SHALL SELECT A TARGET PLACEMENT THICKNESS FOR THE SEALANT DETAILS WHICH SHOW RANGES IN THICKNESS. THE TARGET THICKNESS WILL NORMALLY BE THE MIDPOINT OF THE RANGE.
4. THE JOINT RESERVOIR FOR SEALANT SHALL BE SAWED UNLESS OTHERWISE SHOWN ON THE PLANS FOR THE LONGITUDINAL AND TRANSVERSE CONSTRUCTION AND THE TWO SAWED JOINTS.
5. THE JOINTS SHALL BE CLEANED IN ACCORDANCE WITH THE ITEM 438 AND PRIOR TO BEGINNING OPERATIONS, THE CONTRACTOR SHALL SUBMIT A STATEMENT FROM THE SEALANT MANUFACTURER SHOWING THE RECOMMENDED EQUIPMENT AND INSTALLATION PROCEDURES TO BE USED.
6. THE SAW CUT FOR THE LONGITUDINAL JOINT SHALL BE ONE FOURTH THE SLAB THICKNESS WHEN CRUSHED LIMESTONE IS USED AS THE COARSE AGGREGATE.

Texas Department of Transportation
Construction Division (Pavement)

CONCRETE PAVING DETAILS
JOINT SEALS

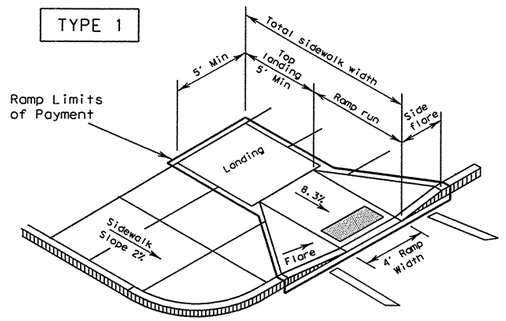
JS-94

MODIFICATIONS	DN: LJB	CK: LJB	DW: BGD	CK: GLG	
	DISTRICT	FEDERAL AID PROJECT			SHEET
	DALLAS	(SEE TITLE SHEET)			173

COUNTY	CONTROL	SECTION	JOB	HIGHWAY
ROCKWALL	1014	03	039	FM 740

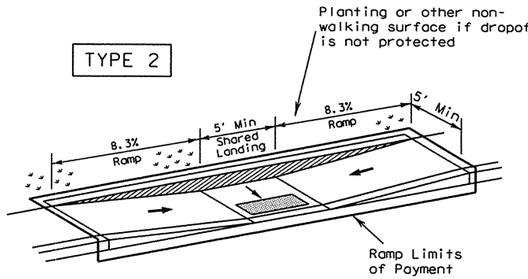
LEVELS DISPLAYED

TYPE 1



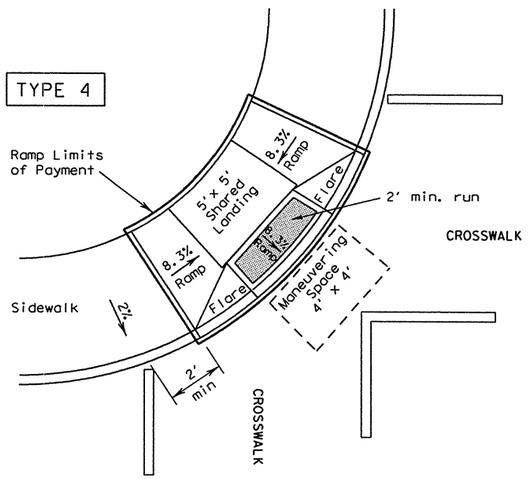
PERPENDICULAR CURB RAMP

TYPE 2



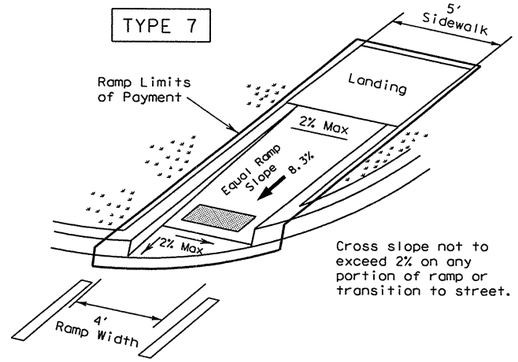
PARALLEL CURB RAMP
(Use only where water will not pond in the landing.)

TYPE 4



DIAGONAL COMBINATION CURB RAMP
Perpendicular to the Tangent of the Curb Radius and Contained in Crosswalk

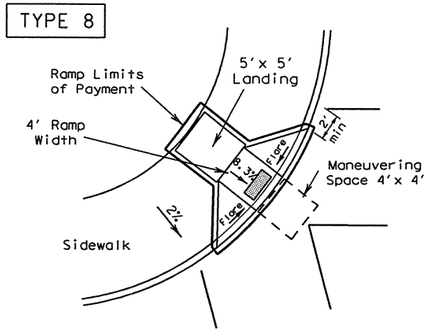
TYPE 7



Cross slope not to exceed 2% on any portion of ramp or transition to street.

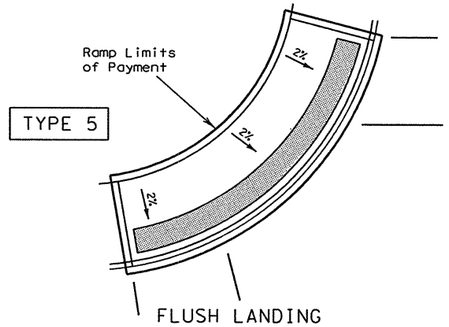
DIRECTIONAL RAMP WITHIN RADIUS
(Sidewalk set back from curb)

TYPE 8



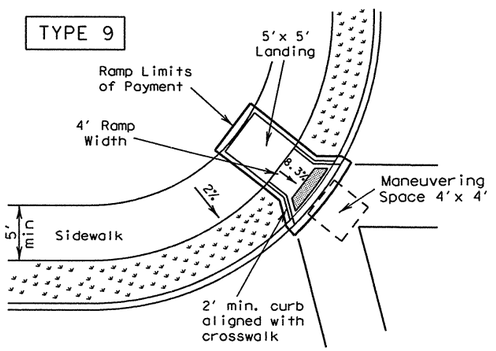
DIAGONAL CURB RAMP (FLARED SIDES)

TYPE 5

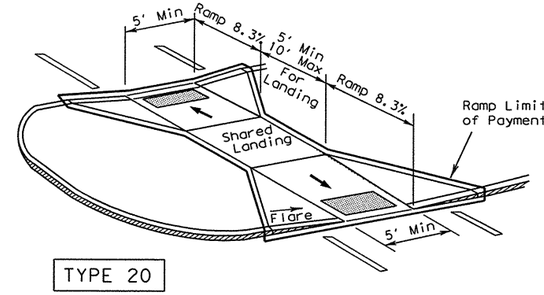


FLUSH LANDING

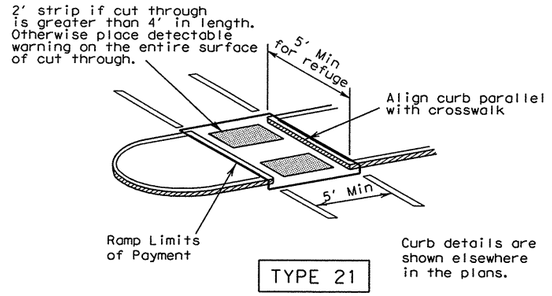
TYPE 9



DIAGONAL CURB RAMP (RETURNED CURB)



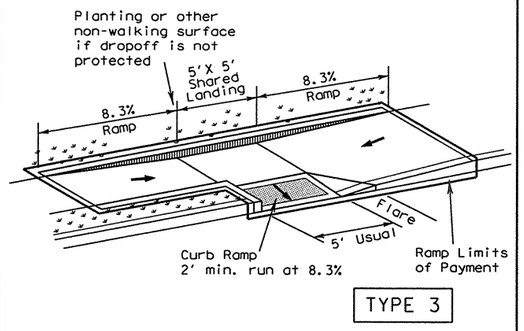
TYPE 20



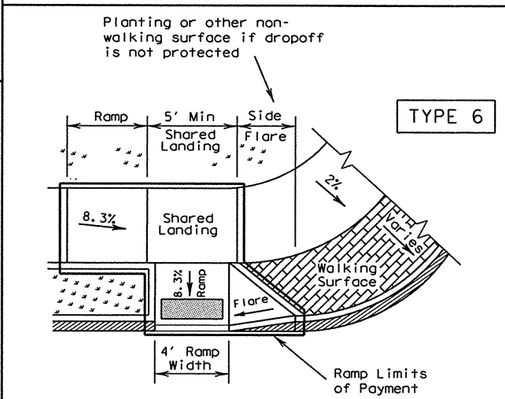
TYPE 21

Curb details are shown elsewhere in the plans.

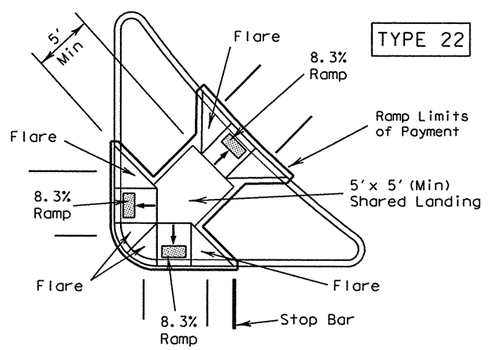
CURB RAMPS AT MEDIAN ISLANDS



TYPE 3



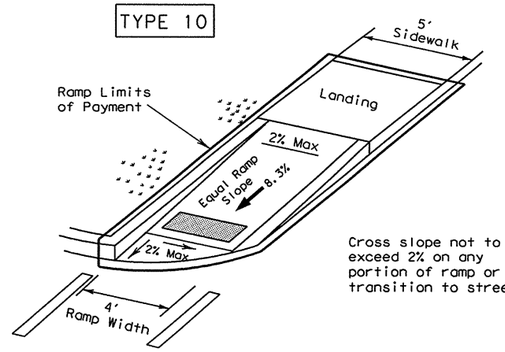
TYPE 6



TYPE 22

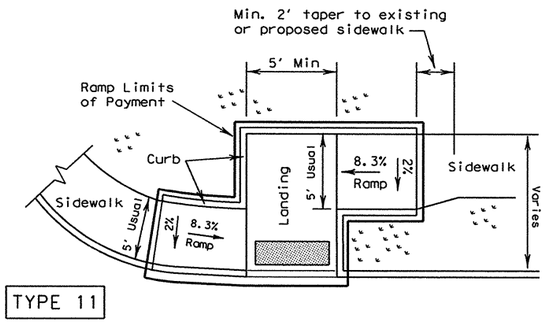
COMBINATION ISLAND RAMPS

TYPE 10



Cross slope not to exceed 2% on any portion of ramp or transition to street.

DIRECTIONAL RAMP WITHIN RADIUS
(Sidewalk adjacent to curb)



TYPE 11

OFFSET PARALLEL CURB RAMP

NOTES:
See General Notes on sheet 2 of 4 for more information.

" " Denotes planting or non-walking surface.

Texas Department of Transportation
Design Division (Roadway)

PEDESTRIAN FACILITIES
CURB RAMPS

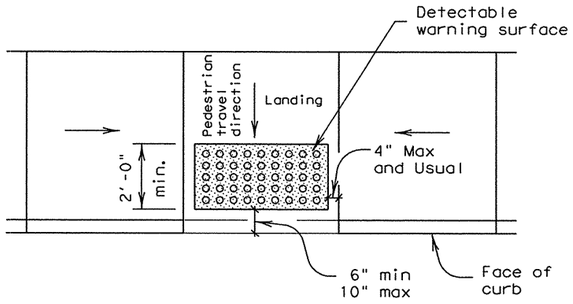
PED-05 SHEET 1 OF 4

FILE: ped05.dgn	DN: EH	CK:	DW: BGD	CK:	
©TxDOT March 2002	DIST	FEDERAL AID PROJECT			SHEET
REVISIONS	DAL	(SEE TITLE SHEET)			174
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	ROCKWALL		1014	03	039	FM 740

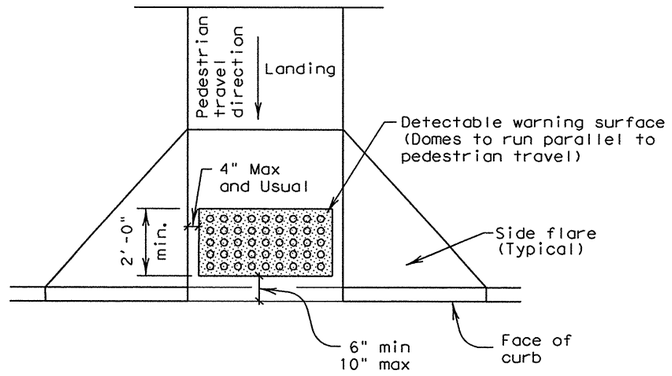
DETECTABLE WARNINGS

General Notes for Detectable Warnings

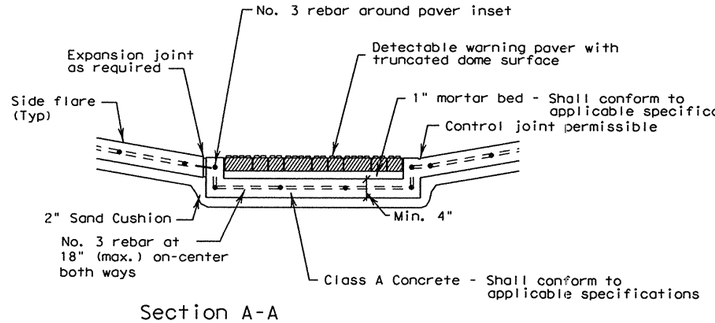
1. Curb ramps must contain a detectable warning surface that consists of raised truncated domes complying with Section 4.29 of the Texas Accessibility Standards (TAS). The surface must contrast visually with adjoining surfaces, including side flares. Furnish dark brown or dark red detectable warning surface adjacent to uncolored concrete, unless specified elsewhere in the plans.
2. Detectable warning surfaces must be slip resistant and not allow water to accumulate.
3. Align truncated domes in the direction of pedestrian travel when entering the street.
4. Shaded areas on Sheet 1 of 4 indicate the approximate location for the detectable warning surface for each curb ramp type.
5. Detectable warning surfaces shall be a minimum of 24" in depth in the direction of pedestrian travel, and extend the full width of the curb ramp or landing where the pedestrian access route enters the street.
6. Detectable warning surfaces shall be located so that the edge nearest the curb line is a minimum of 6" and a maximum of 10" from the extension of the face of curb. Detectable warning surfaces may be curved along the corner radius.
7. TxDOT maintains a list of Qualified Detectable Warning Materials. Details are provided herein for the placement of landscape pavers. For other materials, refer to the manufacturer's product manual for proper installation.



Typical placement of detectable warning surface on landing at street edge.



Typical placement of detectable warning surface on sloping ramp run.

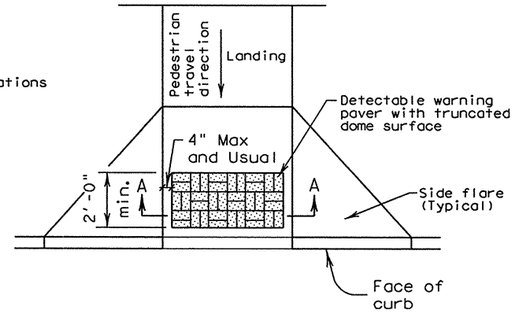


Section A-A

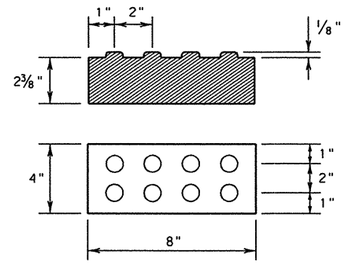
General Notes (Pavers)

Furnish detectable warning paver units meeting all requirements of ASTM C-936, C-33. Lay in a two by two unit basket weave pattern or as directed.

Lay full-size units first followed by closure units consisting of at least 25 percent of a full unit. Cut detectable warning paver units using a power saw.



Truncated Dome Pattern Curb Ramp



Detectable Warning Paver

DETECTABLE WARNING PAVER (OPTION)

Pedestrian Facilities General Notes

1. All slopes are maximum allowable. The least possible slope that will still drain properly should be used. Adjust curb ramp length or grade of approach sidewalks as directed.
2. The minimum sidewalk width is 5'. Where the sidewalk is adjacent to the back of curb, a 6' sidewalk width is encouraged. Where a 5' sidewalk can not be provided due to site constraints, a minimum 3' sidewalk with 5'x 5' passing areas at intervals not to exceed 200' is required.
3. Landings shall be 5'x 5' minimum with a maximum 2% slope in any direction.
4. Maneuvering space at the bottom of curb ramps shall be a minimum of 4'x 4' wholly contained within the crosswalk and wholly outside the parallel vehicular travel path.
5. Maximum allowable cross slope on sidewalk and curb ramp surfaces is 2%.
6. Curb ramps with returned curbs may be used only where pedestrians would not normally walk across the ramp, either because the adjacent surface is planting or other non-walking surface or because the side approach is substantially obstructed. Otherwise, provide flared sides.
7. Additional information on curb ramp location, design, light reflective value and texture may be found in the current edition of the Texas Accessibility Standards (TAS) and 16 TAC §68.102.
8. To serve as a pedestrian refuge area, the median should be a minimum of 5' wide. Medians should be designed to provide accessible passage over or through them.
9. Small channelization islands, which do not provide a minimum 5'x 5' landing at the top of curb ramps, shall be cut through level with the surface of the street.
10. Crosswalk dimensions, crosswalk markings and stop bar locations shall be as shown elsewhere in the plans. At intersections where crosswalk markings are not required, curb ramps shall be aligned with theoretical crosswalks, or as directed by the Engineer.
11. Existing features that comply with TAS may remain in place unless otherwise shown on the plans.
12. Handrails are not required on curb ramps. Provide curb ramps wherever on accessible route crosses (penetrates) a curb.
13. Curb ramps and landings shall be constructed and paid for in accordance with Item 531 "Sidewalks".
14. Separate curb ramp and landings from adjacent sidewalk and any other elements with premold or board joint of ¾" unless otherwise directed by the Engineer.
15. Provide a smooth transition where the curb ramps connect to the street.
16. Curbs shown on sheet 1 within the limits of payment are considered part of the curb ramp for payment, whether it is concrete curb, gutter, or combined curb and gutter.
17. Flare slope shall not exceed 10% measured along curb line.

LEVELS DISPLAYED

1

Texas Department of Transportation
Design Division (Roadway)

PEDESTRIAN FACILITIES

GENERAL NOTES AND DETECTABLE WARNINGS

PED-05

FILE: ped05.dgn	DN: EH	CK:	DW: BGD	CK:	
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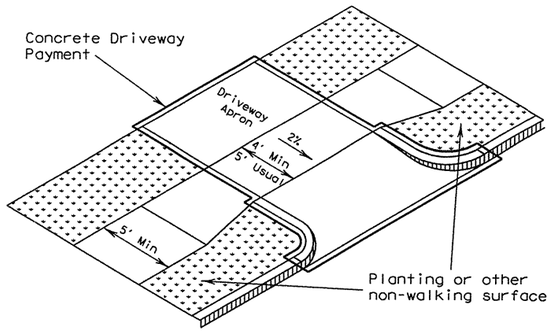
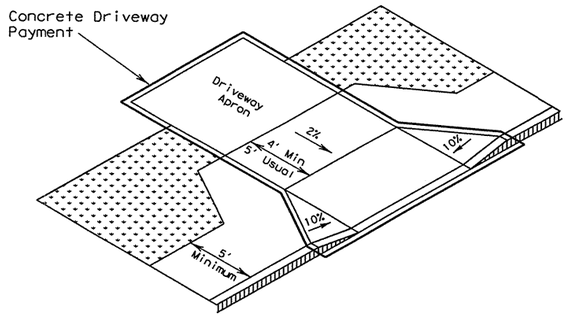
REVISIONS	DAL	(SEE TITLE SHEET)			175
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	ROCKWALL		1014	03	039	FM 740

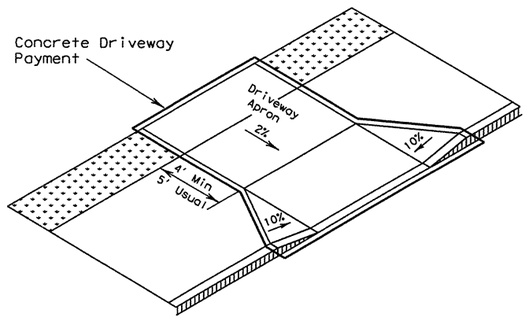
LEVELS DISPLAYED



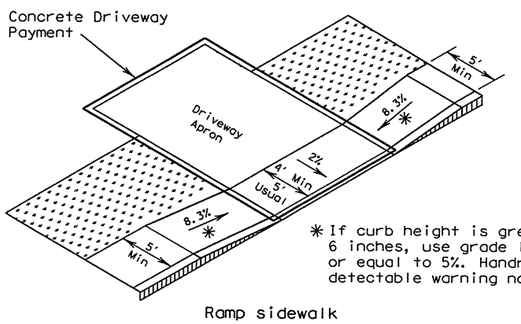
Setback sidewalk



Apron offset sidewalk



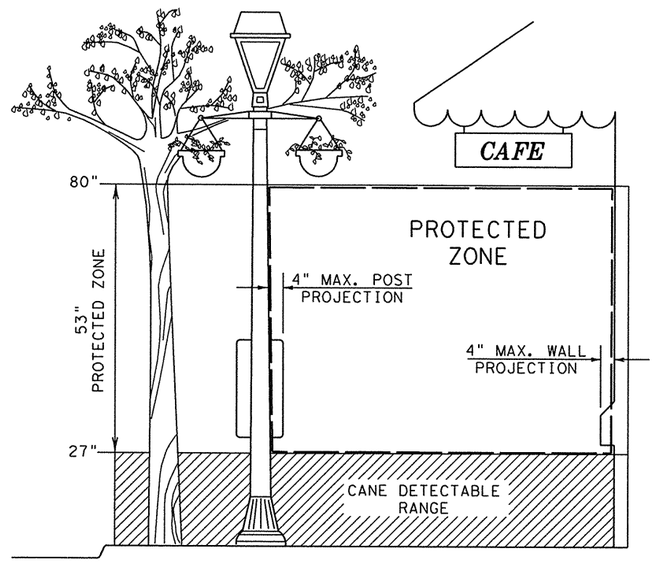
Wide sidewalk



*If curb height is greater than 6 inches, use grade less than or equal to 5%. Handrail and detectable warning not required.

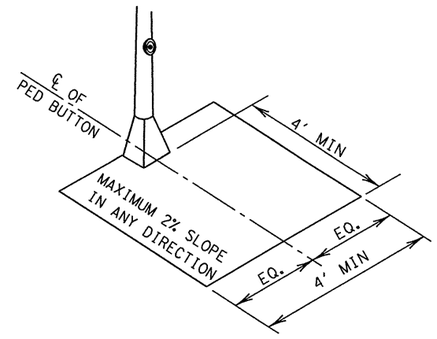
Ramp sidewalk

SIDEWALK TREATMENT AT DRIVEWAYS

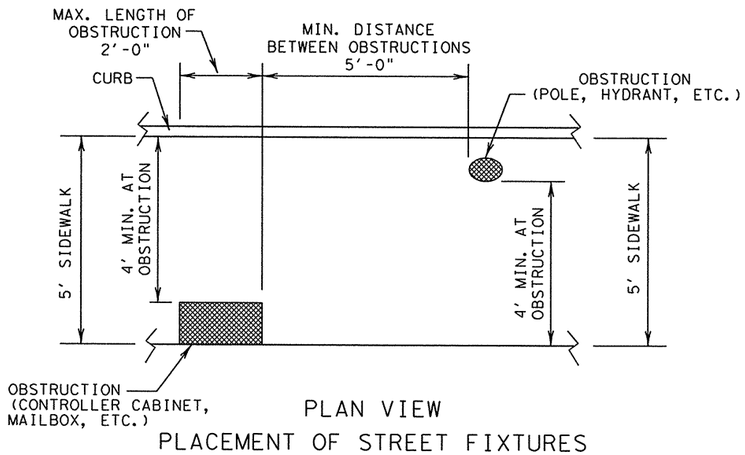


PROTECTED ZONE

In pedestrian circulation area, maximum 4" projection for post or wall mounted objects between 27"and 80" above the surface.



CLEAR GROUND SPACE CENTERED AT PEDESTRIAN PUSH BUTTON



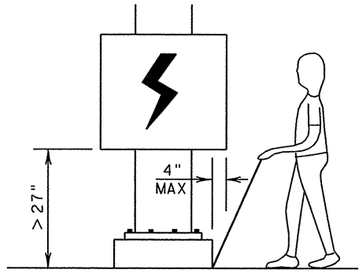
PLAN VIEW

PLACEMENT OF STREET FIXTURES

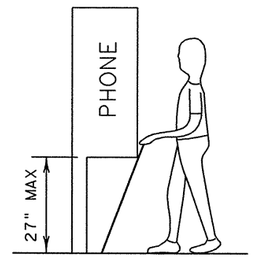
(ITEMS NOT INTENDED FOR PUBLIC USE. MINIMUM 4' x 4' CLEAR GROUND SPACE REQUIRED AT PUBLIC USE FIXTURES.)

General Notes

1. All slopes are maximum allowable. The least possible slope that will still drain properly should be used.
2. Place traffic signal or illumination poles, ground boxes, controller boxes, signs, drainage facilities and other items so as not to obstruct the accessible route or clear ground space.
3. Usual sidewalk cross slope equals 1.5%. The maximum allowable sidewalk cross slope equals 2%.
4. Street grades and cross slopes shall be as shown elsewhere in the plans.
5. Existing features that comply with TAS may remain in place unless otherwise shown on the plans.
6. Changes in level greater than ¼inch are not permitted.
7. The least possible grade should be used to maximize accessibility. The running slope of sidewalks and crosswalks, within the public right of way, may follow the grade of the parallel roadway. Where a continuous grade greater than 5% must be provided, handrails may be desirable on one or both sides of the sidewalk to improve accessibility. Handrails may also be needed to protect pedestrians from potentially hazardous conditions. If provided, handrails must comply with TAS 4.8.5.
8. Handrail extensions shall not protrude into the usable landing area or into intersecting pedestrian routes.
9. Driveways and turnouts shall be constructed and paid for in accordance with Item, "Driveways and Turnouts". Sidewalks shall be constructed and paid for in accordance with Item, "Sidewalks".
10. Sidewalk details are shown elsewhere in the plans.



When an obstruction of a height greater than 27" from the surface would create a protrusion of more than 4" into the pedestrian circulation area, construct additional curb or foundation at the bottom to provide a maximum 4" overhang.



Protruding objects of a height ≤ 27" are detectable by cane and do not require additional treatment.

DETECTION BARRIER FOR VERTICAL CLEARANCE < 80"

Texas Department of Transportation
Design Division (Roadway)

PEDESTRIAN FACILITIES
SIDEWALKS

PED-05

SHEET 3 OF 4

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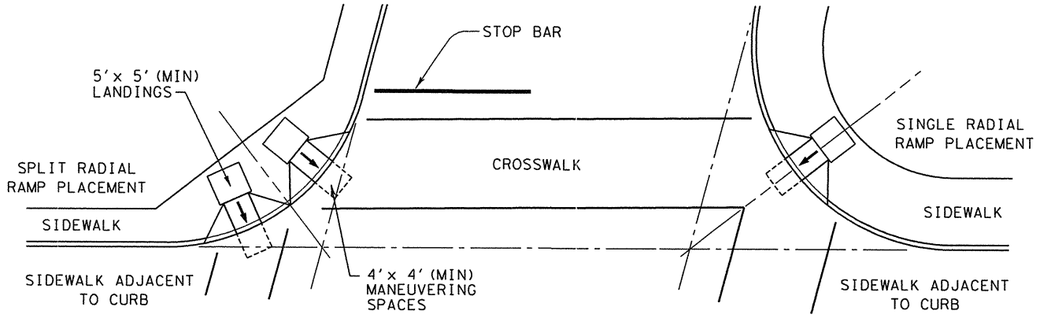
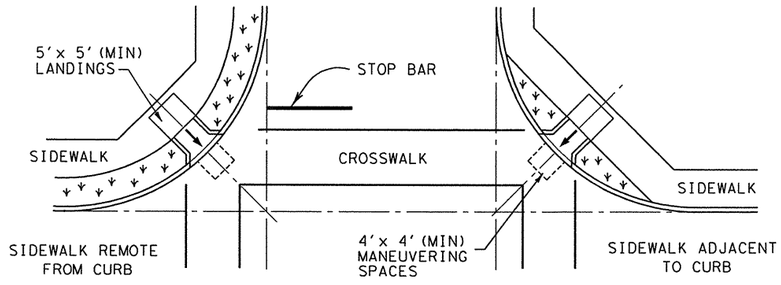
REVISIONS	DAL	(SEE TITLE SHEET)			
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	ROCKWALL		1014	03	039	FM 740



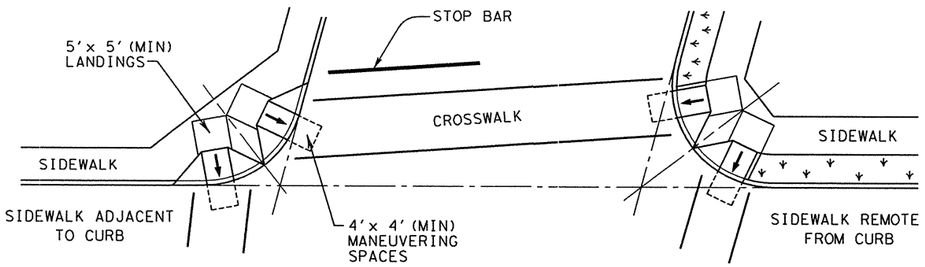
SKEWED INTERSECTION WITH "LARGE" RADIUS



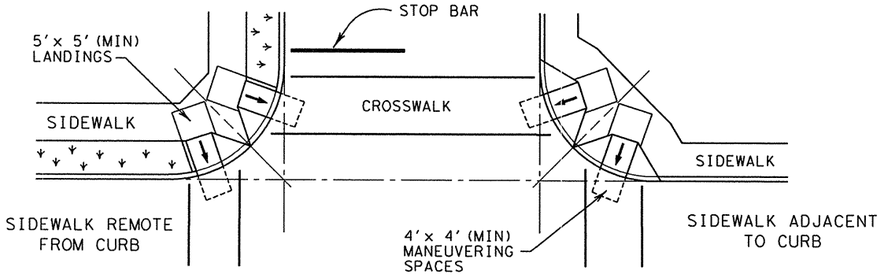
NORMAL INTERSECTION WITH "LARGE" RADIUS

General Notes

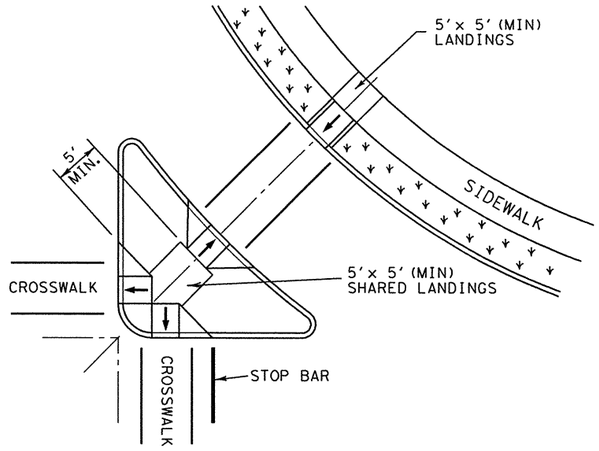
1. Street grades and cross slopes shall be as shown elsewhere in the plans.
2. Ramps are shown here without detectable warnings for simplicity. Detectable warnings are required at the locations shown on the PED Standard (Sheets 1 and 2 of 4) and in accordance with the details shown below.
3. Small channelization islands, which can not provide a minimum 5' x 5' landing at the top of ramps, shall be cut through level with the surface of the street.



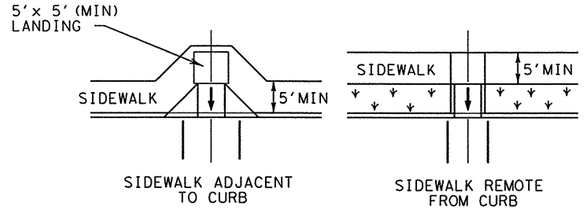
SKEWED INTERSECTION WITH "SMALL" RADIUS



NORMAL INTERSECTION WITH "SMALL" RADIUS



AT INTERSECTION
W/FREE RIGHT TURN & ISLAND



MID-BLOCK PLACEMENT
PERPENDICULAR RAMPS

TYPICAL CROSSING LAYOUTS

SEE SHEET 1 OF 4 FOR DETAILS AND DIMENSIONS

LEVELS DISPLAYED

Texas Department of Transportation
Design Division (Roadway)

PEDESTRIAN FACILITIES

INTERSECTION LAYOUTS

PED-05

SHEET 4 OF 4

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REVISIONS	DAL	(SEE TITLE SHEET)				
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