CMAQ, PROJECT 29

JIM Sherman
972-965-3681
Rebcon

DURABLE JEFF BRYAN
972 296 6324

972
880-5457

CMAR
SIGNAL

~~[illegible]~~ A
LUMINARES
& MAST ARM LENGTH

CHARLES
MITCHELL

Signal Poles For CMOQ Project

Midway Rd @ Spring Valley Rd
Traffic Signal Pole (18.3M) Lum (60FT LUM) 3 eq.

Midway Rd @ Lindbergh Dr.
Traffic Signal Pole (14.6M) LUM (48FT LUM) 1 eq
Traffic Signal Pole (12.2M) LUM (40FT LUM) 1 eq

→ Plan sheet shows 9.8m Lum which we think is wrong

To: Town of ADDISON
Attn: Steve Chutchian
FAX 1-972-450-2837

DURABLE SPECIALTIES, INC.

FAX ROUTE SHEET

DATE:

FAX # 972-450-2837

TO: Town of Addison

ATTN: Steve Crutchind

FROM: J. Bryan

SUBJ:

3 NO. OF PAGES INCLUDING COVER:

Additional Listing of Materials

If you do not receive all copies, notify sender at (972) 296-6324.

Our RETURN fax is (972) 780-7411

Thank you!

P.O. BOX 381788 • DUNCANVILLE, TX 75138 • PHONE 1-972-296-6324 • FAX 1-972-780-7411

Midway Rd @ Spring Valley Rd.

TRAFFIC SIGNAL PLANS SUMMARY SHEET

ITEM	DESC CODE	DESCRIPTION	UNIT	QUANTITY
502	5001	BARRICADES, SIGNS, AND TRAFFIC HANDLING	WK	0
618	5008	CONDUIT (PVC) (SCH 40) (50MM)	M	63.4
618	5013	CONDUIT (PVC) (SCH40) (75MM)	M	4
618	5014	CONDUIT (PVC) (SCH40) (100MM)	M	6.2
618	5032	CONDUIT (PVC) (SCH40) (50MM) (BORE)	M	7.3
618	5034	CONDUIT (PVC) (SCH40) (75MM) (BORE)	M	132.2
618	5035	CONDUIT (PVC) (SCH40) (100MM) (BORE)	M	0
620	5004	ELECTRICAL CONDUCTOR (NO. 6 BARE)	M	255.4m
620	5009	ELECTRICAL CONDUCTOR (NO. 8 XHHW)	M	456
620	5010	ELECTRICAL CONDUCTOR (NO. 6 XHHW	M	21
624	5001	GROUND BOX TYPE A w/ APRON	EA	6
624	5003	GROUND BOX TYPE C w/ APRON	EA	
628	5200	ELEC SERV TY D 120/240 070 NS SS E GC O	EA	1
656	5003	FND FOR TRAF SIG (600MM DRILL SHAFT)	M	3.5
656	5013	TRAFFIC SIG CNTRL FND	M3	1.85
656	5032	FND FOR TRAF SIG (TYA) (1200MM DRILL SHAFT)	M	20.1
680	5001	INSTAL OF TRAF SIG (ISOLATED)	EA	1
		CONTROLLER FULL- ACTUATED	EA	1
		SIGN (STREET NAME) "SPRING VALLEY RD"	EA	1
		SIGN (STREET NAME) "MIDWAY RD"	EA	2
		SIGN, "LANE CONTROL" (750X750) (R3-8LL)	EA	4
		SIGN "LEFT TURN SIGNAL" (625X750) (R10-10L)	EA	4
		OPTICOM DETECTOR	EA	3
		4 CNDR #22 AWG SHIELDED (OPTICOM CABLE)	M	284.1
		SIGN, "PUSH BUTTON FOR WALK SIGNAL" (225X300) (R10-4b)	EA	6
682		VEH SIG SEC (300 MM) W/O LENS & REFL	EA	78
682	5024	PED SIG SEC (2 INDICATION IN 1SEC) W/O LENS & REFL	EA	6
682	5009	BACK PLATE (3 SEC) (300 MM)	EA	22
682	5010	BACK PLATE (4 SEC) (300 MM)	EA	3
684	5061	TRAF SIG CBL (TY A) (5 CONDR) (14 AWG)	M	644.3
684	5067	TRAF SIG CBL (TY A) (7 CONDR) (14 AWG)	M	12
684	5069	TRAF SIG CBL (TY A) (9 CONDR) (14 AWG)	M	66
684	5071	TRAF SIG CBL (TY A) (20 CONDR) (14 AWG)	M	216
684	5046	TRAF SIG CBL (TY C) (2 CONDR) (8 AWG)	M	9.6
686		TRAF SIG POLE ASM (STL) 1 ARM (8.3M) LUM	EA	3
688	5001	PED DETECT (PUSH BTN)	EA	8
6607	5001	PEDESTAL POLE ASSEM	EA	5
6008	5001	SALV TRAF SIGNALS	EA	1
		VIVIDS DETECTOR SYSTEM COMPLETE WITH 4 CAMERAS	EA	1
		VIVIDS COMMUNICATION CABLE (COAXIAL)	M	182.4

* EQUIPMENT SUPPLIED TO THE CONTRACTOR BY THE CITY

620	ELECTRICAL CONDUCTOR (NO. 12 XHHW)	M	109.6
6298	300MM LED TRAF SIG LAMP (RED)	EA	25
6298	300MM LED TRAF SIG LAMP (YELLOW)	EA	17
6298	300MM LED TRAF SIG LAMP (GREEN)	EA	17
6298	300MM LED TRAF SIG LAMP (YELARW)	EA	8
6298	300MM LED TRAF SIG LAMP (GRNARW)	EA	11
6554	LED PED SIG LAMP (SYM B) (2 IND/1SEC)	EA	6

Midway Rd @ Lindbergh Dr.

TRAFFIC SIGNAL PLANS SUMMARY SHEET

ITEM	DESC CODE	DESCRIPTION	UNIT	QUANTITY
502	5001	BARRICADES, SIGNS, AND TRAFFIC HANDLING	WK	
618	5011	CONDUIT (PVC) (SCH 40) (50MM)	M	19
618	5013	CONDUIT (PVC) (SCH40) (75MM)	M	11
618	5034	CONDUIT (PVC) (SCH40) (75MM) (BORE)	M	88
620	5004	ELECTRICAL CONDUCTOR (NO. 6 BARE)	M	127.6
620	5009	ELECTRICAL CONDUCTOR (NO. 8 XHHW)	M	144.4
620	5010	ELECTRICAL CONDUCTOR (NO. 6 XHHW)	M	28.8
624	5001	GROUND BOX TYPE A W/APRON	EA	5
624	5003	GROUND BOX TYPE C W/APRON	EA	1
628	5260	ELEC SERV TY D 120/240 070 (NS) SS E GC 0	EA	1
656	5005	FND FOR TRAF SIG (TYA) (900MM DRILL SHAFT)	M	8.0
656	5013	TRAFFIC SIG CNTRL FND	M3	1.85
680	5001	INSTAL OF TRAF SIG (ISOLATED)	EA	1
*		CONTROLLER FULL-ACTUATED	EA	1
*		SIGN (STREET NAME) "MIDWAY RD"	EA	2
		SIGN "LEFT TURN YIELD ON GREEN BALL" (750X900) (R10-12)	EA	2
*		OPTICOM DETECTOR	EA	4
*		4 CNDR #22 AWG SHIELDED OPTICOM CABLE	M	181.5
		SIGN, "PUSH BUTTON FOR WALK SIGNAL" (225X300) (R10-4b)	EA	4
* 682	5002	VEH SIG SEC (300 MM)	EA	20
682	5006	PED SIG SEC (2 INDICATION IN 1 SEC)	EA	4
682	5009	BACK PLATE (3 SEC) (300 MM)	EA	4
682	5010	BACK PLATE (4 SEC) (300 MM)	EA	2
684	5061	TRAF SIG CBL (TY A) (5 CONDR) (14 AWG)	M	105.2
684	5047	TRAF SIG CBL (TY A) (7 CONDR) (14 AWG)	M	120.4
684	5069	TRAF SIG CBL (TY A) (15 CONDR) (14 AWG)	M	154.1
684	5046	TRAF SIG CBL (TY C) (2 CONDR) (18 AWG)	M	9.6
* 686		TRAF SIG POLE ASM (STL) 1 ARM (14.6M) LUM	EA	1
* 686		TRAF SIG POLE ASM (STL) 1 ARM (12.2M) LUM	EA	1
688	5001	PED DETECT (PUSH BTN)	EA	4
6008	5001	SALV TRAF SIGNALS	EA	1
		VIVIDS DETECTOR SYSTEM COMPLETE WITH 3 CAMERAS	EA	1
		VIVIDS COMMUNICATION CABLE (COAXIAL)	M	212.6
620	5007	ELECTRICAL CONDUCTOR NO. 12 XHHW	M	[illegible]
6293	5001	300MM LED TRAF SIG LAMP (RED)	EA	6
6293	5002	300MM LED TRAF SIG LAMP (YELLOW)	EA	6
6293	5003	300MM LED TRAF SIG LAMP (GREEN)	EA	6
6293	5004	300MM LED TRAF SIG LAMP (YEL ARW)	EA	—
6293	5005	300MM LED TRAF SIG LAMP (GRN ARW)	EA	2
6554	5001	LED PED SIG LAMP (3X MAN) (2IND/SEC)	EA	4

* EQUIPMENT SUPPLIED TO THE CONTRACTOR BY THE CITY

December 8, 2000

#20

Jim – Jim Pierce asked that we obtain a copy of the legal description and r.o.w. map for the proposed intersection improvements along the southbound frontage road of the North Tollway, at Keller Springs Rd. I contacted Mr. Jack Loggins, with Parsons Brinckerhoff-214-747-6336, and asked for this information. He sent us the attached information related to the right-of-way acquisition along Keller Springs and Knoll Trail. This location is approximately one block away from the site we were requesting. Will you contact Jack and explain what happened, and ask for the legal description and right-of-way map for the frontage road & Keller Springs site. Thanks.

Steve C.

Called on 12/8 at 2:00 PM
Mr. Jack Loggins said he would get corrected drawings in a day or 2.
—Jim

Transmittal

Parsons Brinckerhoff
1701 N. Market Street
Suite 410
Dallas, TX 75202
214-747-6336
Fax: 214-741-1937
E-mail: cmaq@onramp.net

To:	Steve Chutchian	**From**	Jack W. Loggins
Agency:	Addison	**Date**	December 5, 2000
		Project	CMAQ Program
		Project No.:	29

via:	for your:	the following:		
☐ mail	☐ information/use	☐ shop drawings	☐ change order	☐ specifications
☒ messenger	☒ approval	☐ copy of letter	☐ plans	☒ other See Below
☐ fedex	☐ review/comment	☐ prints	☐ samples	

drawing	rev.	description	copies	date
		Preliminary Right of Way	1	1/20/00

If enclosures are not as noted, kindly notify us at once.

Comments:

Steve,

Here is the preliminary ROW documents for Project 29. We expect the final submittal in a couple of weeks.

copies to: **P29-P05** signature: Jack W. Loggins

Steve Chutchian

From: Robin Jones
Sent: Thursday, December 01, 2005 7:48 AM
To: Steve Chutchian
Subject: RE: CMAQ Mtg.

Steve,
Are we getting reimbursed for whatever equipment we buy? If so, you better check with whoever is reimbursing us about what they consider proper procurement procedures before talking to Shanna. If we're not being reimbursed, where are the funds coming from? If this job has been bid and let, you might look into who's doing the inspection. Also, find out what the contractor thinks he's getting from the Town. An estimated construction schedule might be helpful.

I'm not trying to tell you what to do, these are just some thoughts.
Robin

-----Original Message-----
From: Steve Chutchian
Sent: Wednesday, November 30, 2005 4:04 PM
To: Robin Jones
Subject: FW: CMAQ Mtg.
Importance: High

Robin:

I guess we need to get together on this. I have no idea what quantities are required. I definitely can check the procurement procedure with Shanna.

Steve C.

-----Original Message-----
From: Nancy Cline
Sent: Wednesday, November 30, 2005 4:02 PM
To: Steve Chutchian
Subject: RE: CMAQ Mtg.

Steve,

Robin is not doing anything yet. Please coordinate this with him. You should work out what the quantities are and let him get the prices. I am not sure the propert procurement route for this stuff. You may need to talk to Shanna.

Nancy

-----Original Message-----
From: Steve Chutchian
Sent: Wednesday, November 30, 2005 3:54 PM
To: Nancy Cline
Subject: CMAQ Mtg.

Nancy:

I talked with Jack Antebi this afternoon about the CMAQ meeting next Tuesday. The only thing he needs from us at the meeting is a list of items the Town will provide and an associated cost. Is

DALLAS COUNTY
PUBLIC WORKS

June 3, 2004

Mr. Mike Murphy, P.E.
Town of Addison
16801 Westgrove Drive
Addison, Texas 75001-9010

Subject: Congestion Mitigation Air Quality Control (CMAQ) Program
Notice of Condemnation Action for Parcel 3 and 3TEA – (Project 12)

Dear Mr. Murphy:

Attached, please find that Dallas County is preparing to acquire through condemnation proceedings Parcel 3 and 3TEA, located at the intersection of Midway Road at Keller Springs in the Town of Addison.

Dallas County is the local sponsor for this "Off System" intersection and at this time no additional funds are needed to continue the acquisition process. If you have any questions or concerns regarding the provided materials, please contact this office at 214-653-7460 or Sam Wilson at 214-653-6421.

Sincerely,

Craig J. Goodroad

Craig J. Goodroad
Program Manager

Attachments:
1. Copy of memo from Selas C. to Craig G. dated 5/27/04
2. Copy of memo from Sam W. to Selas C. dated 6/3/04
3. Copy of signed and sealed legal and plat dated 6/4/99
4. Copy of Temporary retaining wall construction Area "A" dated 9/15/03

cc: Sam Wilson, P.E., Assistant Director, Transportation and Planning, w/o attachments
Suja Mathew, P.E., TxDOT Roadway Design, w/o attachments
Steven Chutchian, P.E., Town of Addison, w/o attachment
Sélas Camarillo, P.E., R.P.L.S., Dallas Co. Asst. Dir., Property Div., w/ attachments(original)
Sid Horner, Dallas County Senior Right of Way Agent, w/o attachments
Craig Marek, Dallas County Chief Property Appraiser, w/o attachments
Eric Starnater, P.E., Carter & Burgess, Inc., w/o attachments

S:\General\G04CORR\G4-1OUT\ADDISON\2004\027_P12 Parcel 3 and 3TEA, ED proceeding Midway at Keller Springs.doc

DALLAS COUNTY
PUBLIC WORKS

Steve

June 3, 2004

Mr. Mike Murphy, P.E.
Town of Addison
16801 Westgrove Drive
Addison, Texas 75001-9010

Subject: Congestion Mitigation Air Quality Control (CMAQ) Program
Notice of Condemnation Action for Parcel 3 and 3TEA – (Project 12)

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cc: Sam Wilson, P.E., Assistant Director, Transportation and Planning, w/o attachments
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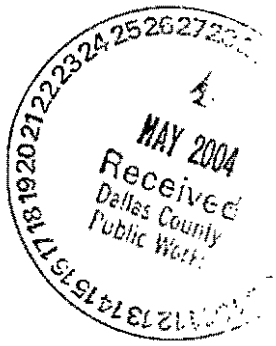
Sid Horner, Dallas County Senior Right of Way Agent, w/o attachments
Craig Marek, Dallas County Chief Property Appraiser, w/o attachments
Eric Starnater, P.E., Carter & Burgess, Inc., w/o attachments

S:\General\G04CORR\G4-1OUT\ADDISON\2004\027_P12 Parcel 3 and 3TEA, ED proceeding Midway at Keller Springs.doc

Dallas County
Public Works



DATE: May 27, 2004

MEMORANDUM:

TO: Craig Goodroad epg 6/3/04
CMAQ Program Manager, Transportation and Planning

THROUGH: Sam Wilson, P.E.
Assistant Director of Transportation and Planning

FROM: Selas Camarillo, P.E., R.P.L.S.
Assistant Director - Property Division

SUBJECT: Plat(s) and Conveyance(s) for Condemnation Action

Project: CMAQ #12 91-835/00835B
Limits: (Midway Road @ Keller Springs Road)
Parcel: 3 & 3-TEA

AGENT: Carter Ferguson

We are preparing to transmit to the District Attorney the necessary information required for acquisition of the referenced parcel through the courts. Attached are the plat(s) and conveyance(s) which we have been furnished to define the property and/or property rights to be acquired.

We are unaware of any additional requirements related to this parcel; however, if any additional requirement exists it will be necessary to furnish a plat, field notes and the purpose of the requirement.

Please review the material we have furnished and advise us within the next five days as to its completeness and accuracy, together with any additional requirements that may exist.

Driveway adjustments require field notes and a plat when the parcel is secured through the eminent domain procedures.

Please expedite your reply.

Attachments

Dallas County
Public Works

DATE: 6/3/04

MEMORANDUM:

TO: Selas Camarillo, P.E., R.P.L.S
Assistant Director - Property Division

FROM: Sam Wilson, P.E.
Assistant Director of Transportation and Planning

SUBJECT: Plat(s) and Conveyance(s) for Condemnation Action

PROJECT: CMAQ #12 91-835/00835B
(Midway Road @ Keller Springs Road)

PARCEL: 3 & 3-TEA

AGENT: Carter Ferguson

☑ I have reviewed the attached field notes and plat(s) and find that they are correct, complete and no additional requirements are needed of this parcel for completion of this project.

☐ Attached are the revised field notes and plat(s) dated _____ that are correct, complete and no additional requirements are needed of this parcel for completion of this project.

☐ Attached are field notes and plat(s) for the additional requirements needed of this parcel for completion of this project.

Sam Wilson

Sam Wilson, P.E.
Assistant Director of Transportation and Planning

EXHIBIT "A"

County Dallas
Parcel 3
Highway Intersection of Keller Springs Road at Midway Road
CSJ:
Account:

D-15-
June 4, 1999

Legal Land Description for Parcel 3

BEING 392.77 square meters [4228 square feet] of land in the David Myers Survey, Abstract No. 923 in Dallas County, Texas and being a portion of that 2.86431 hectares [7.0780 acres] parcel of land conveyed to Lanny Houllion (Houllion tract) as recorded in Volume 93035, Page 0038 of the Deed Records of Dallas County Texas (D.R.D.C.T.), said Houllion tract being Lot A of the Beltwood North-Midway Addition as recorded in Volume 80003, Page 0738 of the Map Records of Dallas County Texas (M.R.D.C.T.), said 392.77 square meters [4228 square feet] of land, being more particularly described by metes and bounds as follows:

COMMENCING at an "X" cut found at the southwest corner of said Houllion tract, THENCE, North 00 degrees 07 minutes 35 seconds West, along the west property line of said Houllion tract, for a distance of 97.535 meters [320.00 feet] to the northwest corner of said Houllion tract on the existing south right-of-way line of Keller Springs Road, THENCE, North 89 degrees 52 minutes 25 seconds East, along the north property line of said Houllion tract and the existing south right-of-way line of Keller Springs Road, for a distance of 105.895 meters [347.42 feet] to a one half inch iron rod with cap marked AB&A set for corner on the new southerly right-of-way line of Keller Springs Road, being the **Point of Beginning** of the tract of land herein described;

1. **THENCE,** North 89 degrees 52 minutes 25 seconds East, continuing along the north property line of said Houllion tract and the existing south right-of-way line of Keller Springs Road, for a distance of 147.854 meters [485.08 feet] to the most northerly northeast corner of said Houllion tract;

2. **THENCE,** South 58 degrees 17 minutes 03 seconds East, a distance of 10.192 meters [33.44 feet] to a one half inch iron rod with cap marked AB&A set for corner on the existing west right-of-way line of Midway Road and the new southerly right-of-way line of Keller Springs Road;

3. **THENCE,** North 79 degrees 46 minutes 24 seconds West, along the new southerly right-of-way line of Keller Springs Road, for a distance of 4.523 meters [14.84 feet] to a one half inch iron rod with cap marked AB&A set for corner;

4. **THENCE,** South 89 degrees 45 minutes 31 seconds West, continuing along the new southerly right-of-way line of Keller Springs Road, for a distance of 31.315 meters [102.74 feet] to a one half inch iron rod with cap marked AB&A set for corner;

County Dallas
Parcel 3
Highway Intersection of Keller Springs Road at Midway Road
CSJ:
Account:

Legal Land Description for Parcel 3

5. **THENCE,** North 87 degrees 07 minutes 38 seconds West, continuing along the new southerly right-of-way line of Keller Springs Road, for a distance of 34.559 meters [113.38 feet] to a one half inch iron rod with cap marked AB&A set for corner;

6. **THENCE,** North 88 degrees 15 minutes 14 seconds West, continuing along the new southerly right-of-way line of Keller Springs Road, for a distance of 86.282 meters [283.08] to the **Point of Beginning.**

The above described tract of land contains 392.77 square meters [4228 square feet] of land more or less.

A plat of even survey date herewith accompanies this legal description.

The basis of bearings for this intersection is the north property line of Volume 97251, Page 2877 D.R.D.C.T.

All dimensions are in meters unless otherwise noted.

English units are given for information only.

Company Name: Arredondo, Brunz & Associates, Inc.

By: Eddie L. Dunn

Date: 6-04-99

Surveyor's Name: Eddie L. Dunn R.P.L.S.
Registered Professional Land Surveyor
Texas Registration No. 4580

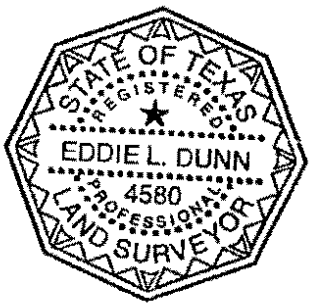
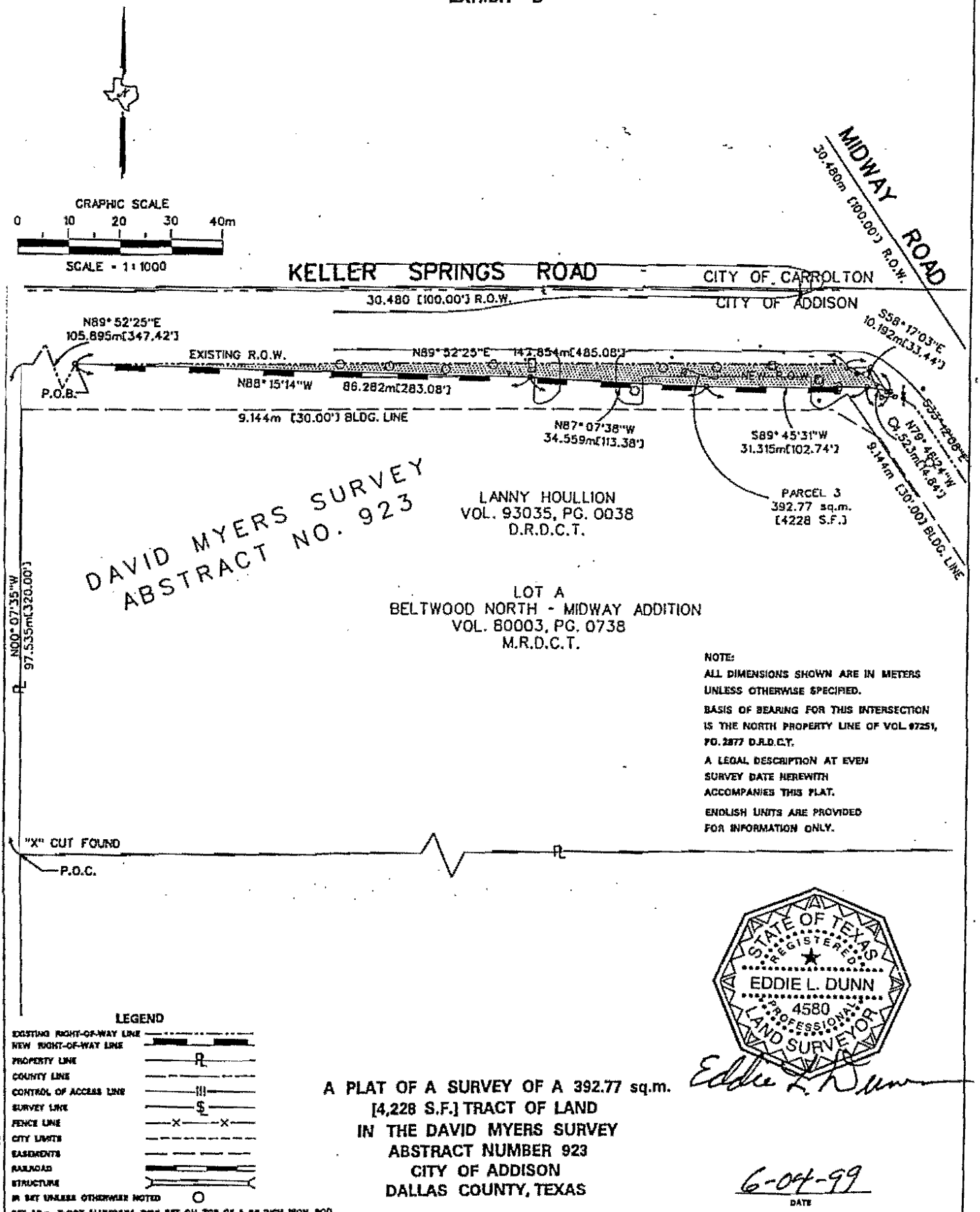


EXHIBIT "B"



NOTE:
ALL DIMENSIONS SHOWN ARE IN METERS UNLESS OTHERWISE SPECIFIED.

BASIS OF BEARING FOR THIS INTERSECTION IS THE NORTH PROPERTY LINE OF VOL. 97251, PG. 2877 D.R.D.C.T.

A LEGAL DESCRIPTION AT EVEN SURVEY DATE HEREWITH ACCOMPANIES THIS PLAT.

ENGLISH UNITS ARE PROVIDED FOR INFORMATION ONLY.

LEGEND

- EXISTING RIGHT-OF-WAY LINE
- NEW RIGHT-OF-WAY LINE
- PROPERTY LINE
- COUNTY LINE
- CONTROL OF ACCESS LINE
- SURVEY LINE
- FENCE LINE
- CITY LIMITS
- EASEMENTS
- RAILROAD
- STRUCTURE
- IR SET UNLESS OTHERWISE NOTED
- SET AD= TxDOT ALUMINUM DISK SET ON TOP OF A 5/8-INCH IRON ROD
- SET BD= TxDOT BRONZE DISK SET IN CONCRETE

STATE OF TEXAS
REGISTERED
EDDIE L. DUNN
4580
PROFESSIONAL
LAND SURVEYOR

Eddie L. Dunn

A PLAT OF A SURVEY OF A 392.77 sq.m. [4,228 S.F.] TRACT OF LAND IN THE DAVID MYERS SURVEY ABSTRACT NUMBER 923 CITY OF ADDISON DALLAS COUNTY, TEXAS

6-04-99
DATE

PARCEL 3

EXHIBIT "A"

CMAQ Project 12
Keller Springs Road at
Midway Road
Parcel 3TEA
Retaining Wall "A"
Construction Area
September 15, 2003

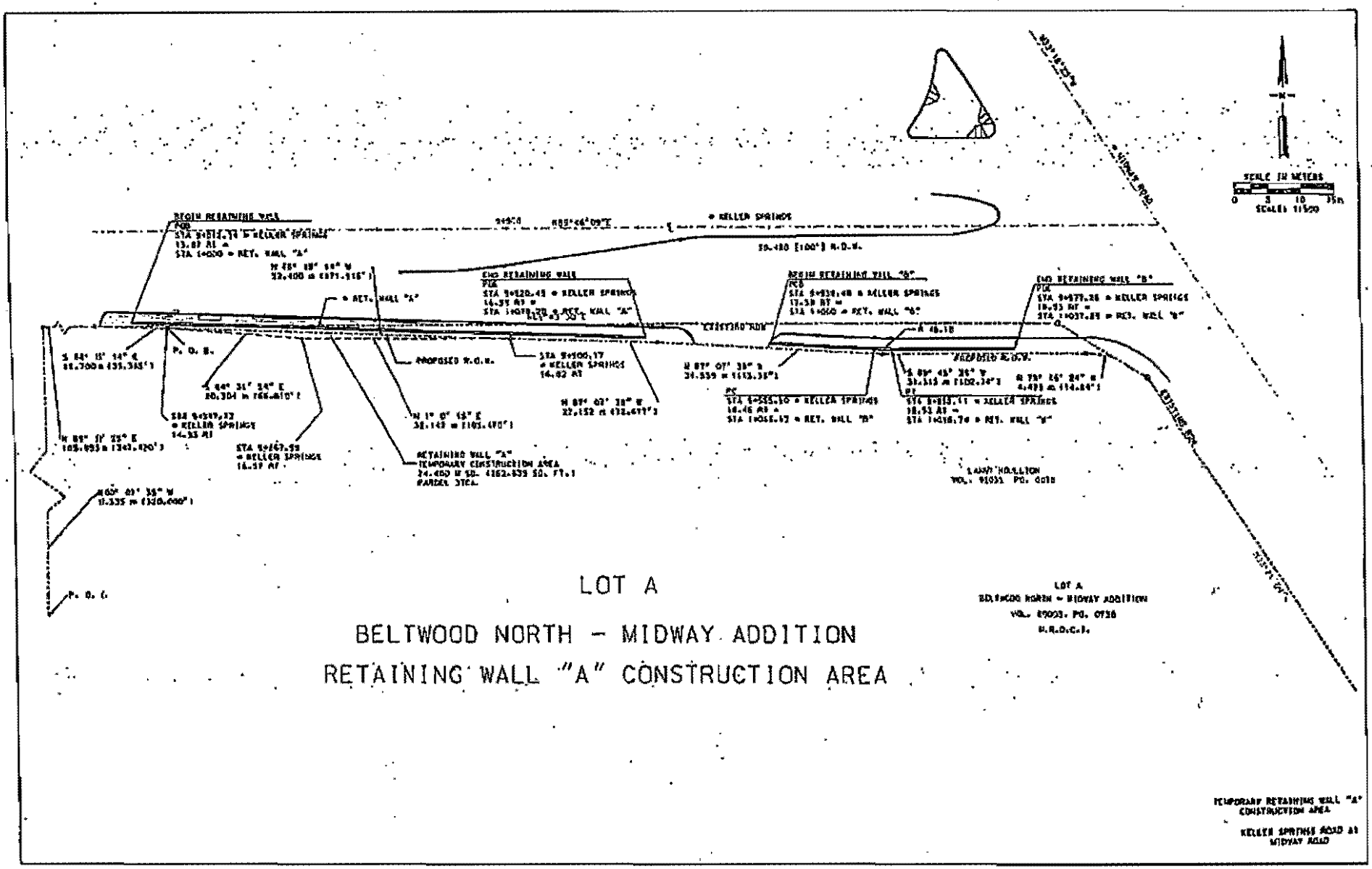
BEING a tract of land in the David Myers Survey, Abstract No. 923 in Dallas County, Texas and being a portion of land conveyed to Lanny Houllion (Houllion tract) as recorded in Volume 93035, Page 0038 of the Deed Records of Dallas County Texas (D.R.D.C.T), said Houllion tract being Lot A of the Beltwood North - Midway Addition as recorded in Volume 80003, Page 0738 of the Map Records of Dallas County Texas (M.R.D.C.T.), and being more particularly described by metes and bounds as follows:

COMMENCING at an "X" cut found at the southwest corner of said Houllion tract, THENCE, North 00 degrees 07 minutes 35 seconds West, along the west property line of said Houllion tract, for a distance of 97.535 meters (320.000 feet) to the northwest corner of said Houllion tract on the existing south right of way line of Keller Springs Road, THENCE, North 89 degrees 52 minutes 25 seconds East, along the north property line of said Houllion tract and the existing south right of way line of Keller Springs Road for a distance of 105.895 meters (347.420 feet) to a one half inch iron rod with cap marked AB&A set for a corner on the south right of way line of Keller Springs Road, THENCE, North 88 degrees, 15 minutes, 14 seconds East continuing along the new north property line of said Houllion tract and the new southerly right of way line of Keller Springs Road, for a distance of 11.700 meters (38.385 feet); said point also being the **Point of Beginning** of the temporary retaining wall "A" construction area herein described;

1. **THENCE,** South 84 degrees 31 minutes 54 seconds East, along a new southerly temporary retaining wall construction area, for a distance of 20.304 meters (66.610 feet) to a point;

2. **THENCE,** North 01 degrees 00 minutes 15 seconds East, along a new southerly temporary retaining wall construction area, for a distance of 32.147 meters (105.470 feet) to a point being on the new northerly line of said Houllion tract and the new southerly line of Keller Springs Road;

3. **THENCE,** North 88 degrees 15 minutes 14 seconds West, along the new northerly line of said Houllion tract and the new southerly right-of-way line of Keller Springs Road, for a distance of 52.400 meters (171.916 feet) to the Point of Beginning; said point also being the **Point of Beginning** of the temporary retaining wall construction area, and containing 24.400 square meters (262.639 square feet) or .0060 acres of land more or less.



...\Keller at Midway Parcel 3TEA-6 8/15/2003 9:57:14 AM

DALLAS COUNTY
PUBLIC WORKS

June 23, 2003

Mr. Suja Mathew, P.E.
Texas Department of Transportation
4777 East Highway 80
Mesquite, Texas 75150

Subject: Congestion Mitigation Air Quality (CMAQ) Program
Revisions of ROW Documents and Plan Set – Project 12 (5 Intersections)

Dear Ms. Mathew:

Attached please find the revised Parcel 2 ROW documents for the intersection of Keller Springs Road at Midway Road, and revisions to the construction plan set per amendment 07 for Project 12 in the Cities and Towns of Farmers Branch, Addison, and Carrollton. Services that were performed by Carter & Burgess, Inc. included the modification of the design of the intersection Midway Road at Keller Springs Road which shortened the northbound right turn lane and revised the related Right of Way documents, and updated the plan set to conform to the current TxDOT standard sheets. The plan set was previously sent by the PM/E to your office for bid letting and submittal.

If you have any questions or concerns, please call me at this office at 214-653-7460 or Sam Wilson at 214-653-6421.

Sincerely,

Craig J. Goodroad
Program Manager

Attachments: (1.) Mylar Plan Sheets 2, 6-7, 12-13, 22, 37, 41, 44-47, 51-52, 64, 66, 71, 73-75, 77-78, 80-88, 90, 92, 102-105, 108, 112-124, 131-132, 137-145, 154-159 and 161-163 – 1 copy
(2.) Paper Copy of the above sheets – 5 copies
(3.) CD of the Revised Construction Plans – 5 copies
(4.) Revised Engineers Estimate – 5 copies
(5.) Revised Parcel 2 of Legal, Plat and Calculations – 2 originals
(6.) 22"x 34" Right-of-Way Map (Mylar) and Paper – 1 copy
(7.) 11"x 17" Right-of-Way Map (Paper) – 2 copies
(8.) CD of ROW Documents Parcel 2 – 1 copy

cc: Sam Wilson, P.E., Dallas County, Asst. Dir., Trans. & Plan., w/o attachments
Sam Moghadassi, P.E., TxDOT Roadway Design, w/o attachments
Jonathan Cox, R.P.L.S., TxDOT Right-of-Way Division, w/o attachments
Jerry Murawski, P.E., City of Farmers Branch, w/2 copies attachments 2, 4-5, & 7
Dave Davis, P.E., City of Farmers Branch, w/o attachments
Mike Murphy, P.E., Town of Addison, w/2 copies attachments 2, 4-5, & 7
Sélas Camarillo, P.E., R.P.L.S., Asst. Director, w/2 attachments 2, 5, 6 paper copy and 7
Sid Horner, Dallas County Property Division, w/o attachments
Steven Chutchian, P.E., Town of Addison, w/o attachments
Nancy Cline, P.E., City of Carrollton, w/2 copies attachments 2, 4-5, & 7
Cesar Molina, P.E., City of Carrollton, w/o attachments
Eric Starnater, P.E., Carter Burgess, Inc., w/o attachments

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DALLAS COUNTY
PUBLIC WORKS

June 23, 2003

Mr. Suja Mathew, P.E.
Texas Department of Transportation
4777 East Highway 80
Mesquite, Texas 75150

Subject: Congestion Mitigation Air Quality (CMAQ) Program
Revisions of ROW Documents and Plan Set – Project 12 (5 Intersections)

Dear Ms. Mathew:

Attached please find the revised Parcel 2 ROW documents for the intersection of Keller Springs Road at Midway Road, and revisions to the construction plan set per amendment 07 for Project 12 in the Cities and Towns of Farmers Branch, Addison, and Carrollton. Services that were performed by Carter & Burgess, Inc. included the modification of the design of the intersection Midway Road at Keller Springs Road which shortened the northbound right turn lane and revised the related Right of Way documents, and updated the plan set to conform to the current TxDOT standard sheets. The plan set was previously sent by the PM/E to your office for bid letting and submittal.

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Craig J. Goodroad
Program Manager

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Midway Road Corridor Intersection In
Design Cost Estimate
Design, Construction, and R.O.W. Acquisition
Midway at McEwen

Date: 6/17/2003

Item No.	Desc. Code	Item Description	Unit	Unit Price	Quantity	Amount
100	5002	PREP ROW	KM	$34,184.12	0.2	$6,905.19
104	5001	REMOV CONC(PAV)	M^2	$10.00	62.0	$620.00
104	5005	REMOV CONC (MEDIAN)	M^2	$12.00	182.0	$2,184.00
104	5009	REMOV CONC (SDWLK)	M^2	$30.00	38.0	$1,140.00
104	5016	REMOVE CONC (RETAIN WALL)	M^2	$60.00	39.1	$2,346.60
110	5001	EXCAVATION (RDWY)	M^3	$3.00	33.0	$98.87
160	5002	FURN AND PLAC TPSL (CL 2) (150MM)	M^2	$1.90	186.0	$353.40
162	5008	BLOCK SOD (BERMUDA)	M^2	$2.58	186.0	$479.88
340	5041	ASPH CONC (TY B) (BASE)	MGR	$60.00	52.0	$3,120.00
360	5011	MONO CURB (150MM)	M	$50.00	89.0	$4,450.00
360	5017	CONC PAV (CPCD) (200 MM)	M^2	$45.00	296.0	$13,320.00
400	5003	STRUCT EXCAV (CULV SMALL)	M^3	$6.00	23.1	$138.60
423	5008	RETAINING WALL (CAST-IN-PLACE)	M^2	$420.00	76.0	$31,920.00
464	5005	RC PIPE (CL III) (600MM)	M	$125.00	16.1	$2,007.50
465	5001	INLET (COMPL) (TY C)	EA	$2,425.00	2.0	$4,850.00
496	5007	REMOV OLD STR (SMALL) (INLET)	EA	$280.00	2.0	$560.00
502	5001	BARRICADES, SIGNS AND TRAF HANDLE	MO	$3,000.00	1.0	$3,000.00
531	5002	CONCRETE SIDEWALKS	M^2	$10.00	36.0	$360.00
536	5002	CONC MEDIAN	M^2	$30.00	100.0	$3,000.00
618	5013	CONDUIT (PVC) (SCHD 40) (75 MM)	M	$16.00	3.0	$48.00
618	5034	CONDUIT (PVC) (SCHD 40) (BORE) (75 MM)	M	$50.00	30.0	$1,500.00
620	5004	ELEC CONDUCTOR (NO. 6) BARE	M	$1.50	33.0	$49.50
624	5006	GROUND BOX TY A (122311)	EA	$465.00	1.0	$465.00
649	5006	RELOC SMALL RDSD SGN ASSMS	EA	$300.00	3.0	$900.00
656	5005	FND FOR TRAF SIG (TYA) (900 MM DRIL SHFT)	M	$405.00	4.0	$1,620.00
662	5023	WRK ZN PAV MRK REMOV (Y) (SLD) (100MM)	M	$1.29	172.0	$221.09
666	5004	REFL PAV MRK TY I (W) (SLD) (150MM)	M	$4.70	74.5	$350.15
666	5012	REFL PAV MRK TY I (W) (SLD) (600MM)	M	$16.00	25.0	$400.00
666	5038	REFL PAV MRK TY II (W) (SLD) (150MM)	M	$2.52	74.5	$187.74
666	5044	REFL PAV MRK TY II (W) (SLD) (600MM)	M	$6.00	25.0	$150.00
668	5071	PREFAB PAV MRK TY C (W) (ARROW)	EA	$160.00	2.0	$320.00
668	5075	PREFAB PAV MRK TY C (W) (WORD)	EA	$195.00	1.0	$195.00
672	5006	RAIS PAV MRKR CL B (REFL) TY I - A	EA	$2.50	17.0	$42.50
672	5007	RAIS PAV MRKR CL B (REFL) TY I - C	EA	$3.00	7.0	$21.00
672	5009	RAIS PAV MRKR CL B (REFL) TY II - A - A	EA	$2.50	32.0	$80.00
672	5016	RAIS PAV MRKR CL C (TRAF BTN) TY W	EA	$1.58	141.0	$222.78
672	5017	RAIS PAV MRKR CL C (TRAF BTN) TY Y	EA	$1.51	82.0	$123.82
677	5001	ELIM EXT PAV MRK & MRKR (100MM)	M	$1.45	185.0	$268.25
677	5002	ELIM EXT PAV MRK & MRKR (150MM)	M	$3.00	45.0	$135.00
677	5005	ELIM EXT PAV MRK & MRKR (450MM)	M	$7.00	173.0	$1,211.00
678	5002	PAV SURF PREP FOR MRKS (150MM)	M	$2.40	74.5	$178.80
678	5006	PAV SURF PREP FOR MRKS (600MM)	M	$1.50	25.0	$37.50
678	5007	PAV SURF PREP FOR MRKS (ARROW)	EA	$12.00	2.0	$24.00
678	5008	PAV SURF PREP FOR MRKS (WORD)	EA	$13.00	1.0	$13.00
680	5001	INSTAL OF HWY TRAF SIG (ISOLATED)	EA	$13,000.00	1.0	$13,000.00
682	5002	VEH SIG SEC (300 MM)	EA	$160.00	11.0	$1,760.00
682	5005	PED SIG SEC (2 INDICATIONS IN 1 SEC)	EA	$378.00	2.0	$756.00
682	5009	BACK PLATE (3 SEC) (300 MM)	EA	$48.00	3.0	$144.00
682	5011	BACK PLATE (5 SEC) (300 MM)	EA	$50.00	1.0	$50.00
684	5052	TRAF SIG CBL (TY A) (5 CONDR) (16 AWG)	M	$2.50	19.7	$49.25
684	5053	TRAF SIG CBL (TY A) (7 CONDR) (16 AWG)	M	$2.25	18.4	$41.40
684	5056	TRAF SIG CBL (TY A) (3 CONDR) (16 AWG)	M	$2.50	8.0	$20.00
686	5072	TRAF SIG POLE ASM (STL) 1 ARM (13.4 M) LUM	EA	$3,600.00	2.0	$7,200.00
688	5001	PED DETECT (PUSH BTN)	EA	$107.00	2.0	$214.00
5433	5002	CURB RAMP AND LANDING (TY 2)	EA	$1,000.00	1.0	$1,000.00
6008	5001	SALV TRAF SIGNALS	EA	$2,115.00	1.0	$2,115.00
		SUBTOTAL				$115,967.82
500	5001	MOBILIZATION (EST @ 10% ALL ITEMS)				$11,596.78
		Total				**$127,564.60**

Midway Road Corridor Intersection Improvements
Design Cost Estimate
Design, Construction, and R.O.W. Acquisition
Midway at Spring Valley

Date: 6/17/2003

Item No.	Desc. Code	Item Description	Unit	Unit Price	Quantity	Amount
100	5002	PREP ROW	KM	$34,184.12	0.6	$20,339.55
104	5001	REMOV CONC (PAV)	M^2	$10.00	1399.0	$13,990.00
104	5005	REMOV CONC (MED)	M^2	$12.00	888.0	$10,656.00
104	5009	REMOV CONC (SDWLK)	M^2	$30.00	331.0	$9,930.00
104	5011	REMOV CONC (DRVWY)	M^2	$9.20	177.0	$1,628.40
110	5001	EXCAVATION (RDWY)	M^3	$3.00	311.0	$931.76
160	5002	FURN AND PLAC TPSL (CL 2) (150MM)	M^2	$1.90	900.0	$1,710.00
162	5008	BLOCK SOD (BERMUDA)	M^2	$2.58	900.0	$2,322.00
340	5041	ASPH CONC (TY B) (BASE)	MGR	$60.00	529.0	$31,740.00
360	5011	MONO CURB (150MM)	M	$50.00	1368.0	$68,400.00
360	5017	CONC PAV (CPCD) (200 MM)	M^2	$45.00	2967.0	$133,515.00
400	5003	STRUCT EXCAV (CULV SMALL)	M^3	$6.00	49.6	$298.80
423	5008	RETAINING WALL (CAST-IN-PLACE)	M^2	$420.00	166.0	$69,720.00
464	5003	RC PIPE (CL III) (450MM)	M	$87.00	21.0	$1,825.26
464	5005	RC PIPE (CL III) (600MM)	M	$125.00	9.0	$1,121.25
464	5009	RC PIPE (CL III) (900MM)	M	$180.00	3.2	$574.20
465	5001	INLET (COMPL) (TY C)	EA	$2,425.00	7.0	$16,975.00
496	5007	REMOV OLD STR (SMALL) (INLET)	EA	$280.00	7.0	$1,960.00
502	5001	BARRICADES, SIGNS AND TRAF HANDLE	MO	$3,000.00	3.0	$9,000.00
530	5001	DRVWYS (CONC) (150MM)	M^2	$38.00	70.0	$2,660.00
531	5002	CONCRETE SIDEWALKS	M^2	$30.00	291.0	$8,730.00
5433	5002	CURB RAMP AND LANDING (TY 2)	EA	$1,000.00	1.0	$1,000.00
536	5008	CONC MEDIAN (MONO NOSE)	M^2	$77.00	9.6	$739.20
618	5011	CONDUIT (PVC) (SCHD 40) (50 MM)	M	$12.50	63.4	$792.50
618	5013	CONDUIT (PVC) (SCHD 40) (75 MM)	M	$16.00	4.0	$64.00
618	5014	CONDUIT (PVC) (SCHD 40) (100 MM)	M	$23.50	6.2	$145.70
618	5032	CONDUIT (PVC) (SCHD 40) (BORE) (50 MM)	M	$51.00	7.8	$397.80
618	5034	CONDUIT (PVC) (SCHD 40) (BORE) (75 MM)	M	$50.00	132.2	$6,610.00
620	5004	ELEC CONDUCTOR (NO. 6) BARE	M	$1.50	255.4	$383.10
620	5011	ELEC CONDUCTOR (NO. 4) INSULATED	M	$2.80	21.0	$58.80
620	5009	ELEC CONDUCTOR (NO. 8) INSULATED	M	$1.70	565.6	$961.52
624	5006	GROUND BOX TY A (122311)	EA	$465.00	6.0	$2,790.00
624	5008	GROUND BOX TY C (162911)	EA	$650.00	1.0	$650.00
628	5063	ELEC SERV TY T (120) 000 (NS) AL (E) OT (O)	EA	$3,200.00	1.0	$3,200.00
644	5054	SM RD SGN ASSM TY 10BWG (1) SA (P)	EA	$415.00	14.0	$5,810.00
649	5006	RELOC SMALL RDSD SGN ASSMS	EA	$300.00	5.0	$1,500.00
656	5003	FND FOR TRAF SIG (600 MM DRIL SHFT)	M	$260.00	15.3	$3,978.00
656	5026	TRAF SIG CNTRL FND	M^3	$964.00	1.9	$1,783.40
656	5032	FND FOR TRAF SIG (1200 MM DRIL SHFT)	M	$500.00	20.3	$10,150.00
662	5002	WRK ZN PAV MRK REMOV (W) (BRKN) (100MM)	M	$2.94	648.0	$1,902.75
662	5003	WRK ZN PAV MRK REMOV (W) (DOT) (100MM)	M	$3.35	38.0	$127.30
666	5004	REFL PAV MRK TY I (W) (SLD) (150MM)	M	$4.70	291.0	$1,367.70
666	5012	REFL PAV MRK TY I (W) (SLD) (600MM)	M	$16.00	80.0	$1,280.00
666	5003	REFL PAV MRK TY I (W) (DOT) (100MM)	M	$2.70	50.0	$135.00
666	5037	REFL PAV MRK TY II (W) (DOT) (100MM)	M	$1.00	50.0	$50.00
666	5038	REFL PAV MRK TY II (W) (SLD) (150MM)	M	$2.52	291.0	$733.24
666	5044	REFL PAV MRK TY II (W) (SLD) (600MM)	M	$6.00	79.9	$479.58
668	5071	PREFAB PAV MRK TY C (W) (ARROW)	EA	$160.00	18.0	$2,880.00
668	5075	PREFAB PAV MRK TY C (W) (WORD)	EA	$195.00	9.0	$1,755.00
672	5007	RAIS PAV MRKR CL B (REFL) TY I - C	EA	$3.00	79.0	$237.00
672	5009	RAIS PAV MRKR CL B (REFL) TY II - A - A	EA	$2.50	178.0	$445.00
672	5016	RAIS PAV MRKR CL C (TRAF BTN) TY W	EA	$1.58	1537.0	$2,428.46
677	5001	ELIM EXT PAV MRK & MRKR (100MM)	M	$1.45	1663.0	$2,411.35
677	5005	ELIM EXT PAV MRK & MRKR (450MM)	M	$7.00	65.0	$455.00
678	5001	PAV SURF PREP FOR MRKS (100MM)	M	$0.15	50.0	$7.50
678	5002	PAV SURF PREP FOR MRKS (150MM)	M	$2.40	291.0	$698.33
678	5006	PAV SURF PREP FOR MRKS (600MM)	M	$1.50	79.9	$119.90
678	5007	PAV SURF PREP FOR MRKS (ARROW)	EA	$12.00	18.0	$216.00
678	5008	PAV SURF PREP FOR MRKS (WORD)	EA	$13.00	9.0	$117.00
680	5001	INSTAL OF HWY TRAF SIG (ISOLATED)	EA	$13,000.00	1.0	$13,000.00
682	5005	PED SIG SEC (2 INDICATIONS IN 1 SEC)	EA	$378.00	6.0	$2,268.00
682	5009	BACK PLATE (3 SEC) (300 MM)	EA	$48.00	22.0	$1,056.00
682	5010	BACK PLATE (4 SEC) (300 MM)	EA	$50.00	3.0	$150.00
684	5014	TRAF SIG CBL (TY A) (14 CONDR) (12 AWG)	M	$6.75	86.0	$580.50
684	5020	TRAF SIG CBL (TY A) (20 CONDR) (12 AWG)	M	$9.25	216.0	$1,998.00
684	5046	TRAF SIG CBL (TY C) (2 CONDR) (18 AWG)	M	$1.50	9.6	$14.40
684	5052	TRAF SIG CBL (TY A) (5 CONDR) (16 AWG)	M	$3.00	596.0	$1,788.00
684	5053	TRAF SIG CBL (TY A) (7 CONDR) (16 AWG)	M	$3.25	12.0	$39.00
686	5118	TRF SIG POLE ASM (STL) (1 ARM) (18.3 M) LUM	EA	$9,200.00	3.0	$27,600.00
688	5001	PED DETECT (PUSH BTN)	EA	$107.00	6.0	$642.00
5027	5001	LANDSCAPE PAVERS	M^2	$50.00	221.0	$11,050.00
6006	5001	PEDESTAL POLE ASSEM	EA	$610.00	5.0	$3,050.00
6008	5001	SALV TRAF SIGNALS	EA	$2,115.00	1.0	$2,115.00
6438	XXXX	VIVDS DETECTOR SYST COMPL W/ 4 CAMERAS	EA	$38,000.00	1.0	$38,000.00
6438	5005	VIVDS COMMUNICATION CABLE (COAXIAL)	M	$2.00	252.8	$505.60
		Subtotal				$571,812.47
500	5001	MOBILIZATION (EST @ 10% ALL ITEMS)				$57,181.25
		Total				$628,993.72

Midway Road Corridor Intersection Improvements
Design Cost Estimate
Design, Construction, and R.O.W. Acquisition
Midway at Lindbergh

Date: 6/17/2003

Item No.	Desc. Code	Item Description	Unit	Unit Price	Quantity	Amount
100	5002	PREP ROW	KM	$34,184.12	0.2	$5,982.22
104	5001	REMOV CONC (PAV)	M^2	$10.00	34.0	$340.00
104	5011	REMOV CONC (DRVWY)	M^2	$9.20	104.0	$956.80
105	5004	RMV STAB BS & / OR ASPH PAV (CL 2) VAR DEP	M^2	$2.52	17.0	$42.92
110	5001	EXCAVATION (RDWY)	M^3	$3.00	28.0	$83.89
160	5002	FURN AND PLAC TPSL (CL 2) (150MM)	M^2	$1.90	235.0	$446.50
162	5008	BLOCK SOD (BERMUDA)	M^2	$2.58	235.0	$606.30
340	5041	ASPH CONC (TY B) (BASE)	MGR	$60.00	22.0	$1,320.00
360	5011	MONO CURB (150MM)	M	$50.00	77.0	$3,850.00
360	5017	CONC PAV (CPCD) (200 MM)	M^2	$45.00	117.0	$5,265.00
400	5003	STRUCT EXCAV (CULV SMALL)	M^3	$6.00	1.3	$7.80
464	5005	RC PIPE (CL III) (600MM)	M	$125.00	1.0	$124.25
465	5001	INLET (COMPL) (TY C)	EA	$2,425.00	1.0	$2,425.00
496	5007	REMOV OLD STR (SMALL) (INLET)	EA	$280.00	1.0	$280.00
502	5001	BARRICADES, SIGNS AND TRAF HANDLE	MO	$3,000.00	1.0	$3,000.00
530	5001	DRVWYS (CONC) (150MM)	M^2	$38.00	78.0	$2,964.00
618	5011	CONDUIT (PVC) (SCHD 40) (50 MM)	M	$12.50	22.0	$275.00
618	5013	CONDUIT (PVC) (SCHD 40) (75 MM)	M	$16.00	8.0	$128.00
618	5034	CONDUIT (PVC) (SCHD 40) (BORE) (75 MM)	M	$50.00	88.0	$4,400.00
620	5004	ELEC CONDUCTOR (NO. 6) BARE	M	$1.50	127.6	$191.40
620	5011	ELEC CONDUCTOR (NO. 4) INSULATED	M	$2.80	28.8	$80.64
620	5009	ELEC CONDUCTOR (NO. 8) INSULATED	M	$1.70	199.2	$338.64
624	5006	GROUND BOX TY A (122311)	EA	$465.00	5.0	$2,325.00
624	5008	GROUND BOX TY C (162911)	EA	$650.00	1.0	$650.00
628	5063	ELEC SERV TY T (120) 000 (NS) AL (E) OT (O)	EA	$3,200.00	1.0	$3,200.00
644	5054	SM RD SGN ASSM TY 10BWG (1) SA (P)	EA	$415.00	2.0	$830.00
649	5006	RELOC SMALL RDSD SGN ASSMS	EA	$300.00	3.0	$900.00
656	5004	FND FOR TRAF SIG (750 MM DRIL SHFT)	M	$375.00	3.4	$1,275.00
656	5005	FND FOR TRAF SIG (TYA) (900 MM DRIL SHFT)	M	$405.00	4.0	$1,620.00
656	5026	TRAF SIG CNTRL FND	M^3	$964.00	1.9	$1,783.40
662	5023	WRK ZN PAV MRK REMOV (Y) (SLD) (100mm)	M	$1.29	224.0	$287.93
666	5004	REFL PAV MRK TY I (W) (SLD) (150MM)	M	$4.70	176.9	$831.24
666	5012	REFL PAV MRK TY I (W) (SLD) (600MM)	M	$16.00	45.7	$731.52
666	5003	REFL PAV MRK TY I (W) (DOT) (100MM)	M	$2.70	5.8	$15.63
666	5037	REFL PAV MRK TY II (W) (DOT) (100MM)	M	$1.00	5.8	$5.79
666	5038	REFL PAV MRK TY II (W) (SLD) (150MM)	M	$2.52	176.9	$445.69
666	5044	REFL PAV MRK TY II (W) (SLD) (600MM)	M	$6.00	45.7	$274.32
668	5071	PREFAB PAV MRK TY C (W) (ARROW)	EA	$160.00	6.0	$960.00
668	5075	PREFAB PAV MRK TY C (W) (WORD)	EA	$195.00	2.0	$390.00
672	5009	RAIS PAV MRKR CL B (REFL) TY II - A - A	EA	$2.50	60.0	$150.00
672	5016	RAIS PAV MRKR CL C (TRAF BTN) TY W	EA	$1.58	83.0	$131.14
672	5017	RAIS PAV MRKR CL C (TRAF BTN) TY Y	EA	$1.51	98.0	$147.98
677	5001	ELIM EXT PAV MRK AND MRKR (100MM)	M	$1.45	229.0	$332.05
677	5005	ELIM EXT PAV MRK AND MRKR (450MM)	M	$7.00	41.0	$287.00
678	5001	PAV SURF PREP FOR MRKS (100MM)	M	$0.15	5.8	$0.87
678	5002	PAV SURF PREP FOR MRKS (150MM)	M	$2.40	176.9	$424.46
678	5006	PAV SURF PREP FOR MRKS (600MM)	M	$1.50	45.7	$68.58
678	5007	PAV SURF PREP FOR MRKS (ARROW)	EA	$12.00	6.0	$72.00
678	5008	PAV SURF PREP FOR MRKS (WORD)	EA	$13.00	2.0	$26.00
680	5001	INSTAL OF HWY TRAF SIG (ISOLATED)	EA	$13,000.00	1.0	$13,000.00
682	5005	PED SIG SEC (2 INDICATIONS IN 1 SEC)	EA	$378.00	4.0	$1,512.00
682	5009	BACK PLATE (3 SEC) (300 MM)	EA	$48.00	4.0	$192.00
682	5010	BACK PLATE (4 SEC) (300 MM)	EA	$50.00	2.0	$100.00
684	5016	TRAF SIG CBL (TY A) (16 CONDR) (12 AWG)	M	$6.75	151.4	$1,021.95
684	5046	TRAF SIG CBL (TY C) (2 CONDR) (18 AWG)	M	$1.50	9.6	$14.40
684	5052	TRAF SIG CBL (TY A) (5 CONDR) (16 AWG)	M	$2.50	105.2	$263.00
684	5053	TRAF SIG CBL (TY A) (7 CONDR) (16 AWG)	M	$2.25	120.4	$270.90
688	5001	PED DETECT (PUSH BTN)	EA	$107.00	4.0	$428.00
6008	5001	SALV TRAF SIGNALS	EA	$2,115.00	1.0	$2,115.00
6438	XXXX	VIVDS DETECTOR SYST COMPL W/ 4 CAMERAS	EA	$38,000.00	1.0	$38,000.00
6438	5005	VIVDS COMMUNICATION CABLE (COAXIAL)	M	$2.00	188.2	$376.40
		Subtotal				$108,567.61
500	5001	MOBILIZATION (EST @ 10% ALL ITEMS)				$10,856.76
		Total				**$119,424.37**

Midway Road Corridor Intersection Improvements
Design Cost Estimate
Design, Construction, and R.O.W. Acquisition
Midway at Keller Springs

Date: 6/17/2003

Item No.	Desc. Code	Item Description	Unit	Unit Price	Quantity	Amount
100	5002	PREP ROW	KM	$34,184.12	0.6	$20,305.37
104	5001	REMOV CONC (PAV)	M^2	$10.00	1177.0	$11,770.00
104	5005	REMOV CONC (MED)	M^2	$12.00	259.0	$3,108.00
104	5011	REMOV CONC (DRVWY)	M^2	$9.20	324.0	$2,980.80
104	5021	REMOVE CONC (CURB OR C & G)	M	$13.00	9.0	$117.00
110	5001	EXCAVATION (RDWY)	M^3	$3.00	289.0	$865.84
160	5002	FURN AND PLAC TPSL (CL 2) (150MM)	M^2	$1.90	1341.0	$2,547.90
162	5008	BLOCK SOD (BERMUDA)	M^2	$2.58	1341.0	$3,459.78
340	5041	ASPH CONC (TY B) (BASE)	MGR	$60.00	458.0	$27,480.00
360	5011	MONO CURB (150MM)	M	$50.00	1062.0	$53,100.00
360	5017	CONC PAV (CPCD) (200 MM)	M^2	$45.00	2622.0	$117,990.00
400	5003	STRUCT EXCAV (CULV SMALL)	M^3	$6.00	14.1	$84.60
423	5008	RETAINING WALL (CAST-IN-PLACE)	M^2	$420.00	89.0	$37,380.00
464	5004	RC PIPE (CL III) (525MM)	M	$102.32	3.6	$368.35
464	5005	RC PIPE (CL III) (600MM)	M	$125.00	5.7	$712.50
465	5001	INLET (COMPL) (TY C)	EA	$2,425.00	4.0	$9,700.00
496	5007	REMOV OLD STR (SMALL) (INLET)	EA	$280.00	4.0	$1,120.00
502	5001	BARRICADES, SIGNS AND TRAF HANDLE	MO	$3,000.00	3.0	$9,000.00
530	5001	DRVWYS (CONC) (150MM)	M^2	$38.00	150.0	$5,700.00
5433	5011	CURB RAMP AND LANDING (TY 22)	EA	$2,000.00	2.0	$4,000.00
536	5002	CONC MEDIAN	M^2	$30.00	5.0	$150.00
618	5011	CONDUIT (PVC) (SCHD 40) (50 MM)	M	$12.50	25.0	$312.50
618	5013	CONDUIT (PVC) (SCHD 40) (75 MM)	M	$16.00	18.4	$294.40
618	5034	CONDUIT (PVC) (SCHD 40) (BORE) (75 MM)	M	$50.00	133.0	$6,650.00
618	XXXX	CONDUIT (PVC) (SCHD 40) (25 MM)	M	$13.30	30.0	$399.00
620	5004	ELEC CONDUCTOR (NO. 6) BARE	M	$1.50	166.4	$249.60
620	5011	ELEC CONDUCTOR (NO. 4) INSULATED	M	$2.80	15.0	$42.00
620	5009	ELEC CONDUCTOR (NO. 8) INSULATED	M	$1.70	672.2	$1,142.74
624	5006	GROUND BOX TY A (122311)	EA	$465.00	7.0	$3,255.00
624	5008	GROUND BOX TY C (162911)	EA	$650.00	1.0	$650.00
628	5053	ELEC SERV TY T (120) 000 (NS) AL (E) OT (O)	EA	$3,200.00	1.0	$3,200.00
644	5054	SM RD SGN ASSM TY 10BWG (1) SA (P)	EA	$415.00	12.0	$4,980.00
649	5006	RELOC SMALL RDSD SGN ASSMS	EA	$300.00	17.0	$5,100.00
656	5005	FND FOR TRAF SIG (TYA) (900 MM DRIL SHFT)	M	$405.00	4.0	$1,620.00
656	5026	TRAF SIG CNTRL FND	M^3	$964.00	1.9	$1,783.40
656	5032	FND FOR TRAF SIG (1200 MM DRIL SHFT)	M	$500.00	20.1	$10,050.00
662	5001	WRK ZN PAV MRK REMOV (W) (SLD) (100MM)	M	$1.41	68.0	$95.75
662	5002	WRK ZN PAV MRK REMOV (W) (BRK) (100MM)	M	$2.94	259.0	$760.51
662	5012	WRK ZN PAV MRK REMOV (W) (ARROW)	EA	$215.00	4.0	$860.00
662	5016	WRK ZN PAV MRK REMOV (W) (WORD)	EA	$275.00	2.0	$550.00
666	5012	REFL PAV MRK TY I (W) (SLD) (600MM)	M	$16.00	340.1	$5,441.28
666	5003	REFL PAV MRK TY I (W) (DOT) (100MM)	M	$2.70	64.5	$174.15
666	5037	REFL PAV MRK TY II (W) (DOT) (100MM)	M	$1.00	64.5	$64.50
666	5044	REFL PAV MRK TY II (W) (SLD) (600MM)	M	$6.00	340.1	$2,040.48
668	5071	PREFAB PAV MRK TY C (W) (ARROW)	EA	$160.00	18.0	$2,880.00
668	5075	PREFAB PAV MRK TY C (W) (WORD)	EA	$195.00	10.0	$1,950.00
672	5007	RAIS PAV MRKR CL B (REFL) TY I -C	EA	$3.00	46.0	$138.00
672	5009	RAIS PAV MRKR CL B (REFL) TY I I - A - A	EA	$2.50	163.0	$407.50
672	5016	RAIS PAV MRKR CL C (TRAF BTN) TY W	EA	$1.58	1074.0	$1,696.92
677	5001	ELIM EXT PAV MRK & MRKR (100MM)	M	$1.45	1056.0	$1,531.20
677	5005	ELIM EXT PAV MRK & MRKR (450MM)	M	$7.00	52.0	$364.00
678	5001	PAV SURF PREP FOR MRKS (100MM)	M	$0.15	64.5	$9.68
678	5006	PAV SURF PREP FOR MRKS (600MM)	M	$1.50	340.1	$510.12
678	5007	PAV SURF PREP FOR MRKS (ARROW)	EA	$12.00	18.0	$216.00
678	5008	PAV SURF PREP FOR MRKS (WORD)	EA	$13.00	10.0	$130.00
680	5001	INSTAL OF HWY TRAF SIG (ISOLATED)	EA	$13,000.00	1.0	$13,000.00
682	5002	VEH SIG SEC (300 MM)	EA	$160.00	46.0	$7,360.00
682	5005	PED SIG SEC (2 INDICATIONS IN 1 SEC)	EA	$378.60	8.0	$3,024.00
682	5009	BACK PLATE (3 SEC) (300 MM)	EA	$48.00	14.0	$672.00
682	5010	BACK PLATE (4 SEC) (300 MM)	EA	$50.00	1.0	$50.00
684	5056	TRAF SIG CBL (TY A) (3 CONDR) (16 AWG)	M	$2.50	32.0	$80.00
684	5020	TRAF SIG CBL (TY A) (20 CONDR) (12 AWG)	M	$9.25	240.2	$2,221.85
684	5046	TRAF SIG CBL (TY C) (2 CONDR) (18 AWG)	M	$1.50	420.8	$631.20
684	5052	TRAF SIG CBL (TY A) (5 CONDR) (16 AWG)	M	$2.50	263.2	$658.00
686	5072	TRAF SIG POLE ASM (STL) 1 ARM (13.4 M) LUM	EA	$3,600.00	1.0	$3,600.00
686	5118	TRAF SIG POLE ASM (STL) (1 ARM) (18.3 M) LUM	EA	$4,500.00	3.0	$13,500.00
686	5117	TRF SIG POLE ASM (STL) (1 ARM) (16.7 M) LUM	EA	$5,200.00	2.0	$10,400.00
688	5001	PED DETECT (PUSH BTN)	EA	$107.00	8.0	$856.00
688	5011	VEH DETECT (SAWCUT)	M	$18.25	656.4	$11,979.30
5027	5001	LANDSCAPE PAVERS	M^2	$50.00	307.0	$15,350.00
6008	5001	SALV TRAF SIGNALS	EA	$2,115.00	1.0	$2,115.00
6557	5001	SPREAD SPECTRUM RADIO	EA	$2,400.00	1.0	$2,400.00
6557	5002	ANTENNA (UNIDIRECTIONAL)	EA	$1,400.00	1.0	$1,400.00
6557	5004	COAXIAL CABLE	M	$3.00	27.2	$81.60
		Subtotal				$460,867.82
500	5001	MOBILIZATION (EST @ 10% ALL ITEMS)				$46,086.78
		Total				$506,954.60

Midway Road Corridor Intersection Improvements
Design Cost Estimate
Design, Construction, and R.O.W. Acquisition
Midway at Sojourn

Date: 6/17/2003

Item No.	Desc. Code	Item Description	Unit	Unit Price	Quantity	Amount
100	5002	PREP ROW	KM	$34,184.12	0.5	$16,886.96
104	5001	REMOV CONC (PAV)	M^2	$10.00	323.0	$3,230.00
104	5005	REMOV CONC (MED)	M^2	$12.00	417.0	$5,004.00
104	5009	REMOV CONC (SDWLK)	M^2	$30.00	447.0	$13,410.00
104	5011	REMOV CONC (DRVWY)	M^2	$9.20	124.0	$1,140.80
110	5001	EXCAVATION (RDWY)	M^3	$3.00	205.0	$614.18
160	5002	FURN AND PLAC TPSL (CL 2) (150MM)	M^2	$1.90	418.0	$794.20
162	508	BLOCK SOD (BERMUDA)	M^2	$2.58	418.0	$1,078.44
340	5041	ASPH CONC (TY B) (BASE)	MGR	$60.00	240.0	$14,400.00
360	5011	MONO CURB (150MM)	M	$50.00	589.0	$29,450.00
360	5017	CONC PAV (CPCD) (200 MM)	M^2	$45.00	1355.0	$60,975.00
400	5003	STRUCT EXCAV (CULV SMALL)	M^3	$6.00	11.3	$67.80
464	5003	RC PIPE (CL III) (450MM)	M	$87.00	1.1	$91.35
464	5004	RC PIPE (CL III) (525MM)	M	$125.00	7.7	$962.50
465	5001	INLET (COMPL) (TY C)	EA	$2,425.00	2.0	$4,850.00
496	5007	REMOV OLD STR (SMALL) (INLET)	EA	$280.00	2.0	$560.00
502	5001	BARRICADES, SIGNS AND TRAF HANDLE	MO	$3,000.00	3.0	$9,000.00
530	5001	DRVWYS (CONC) (150MM)	M^2	$38.00	68.0	$2,584.00
531	5002	CONCRETE SIDEWALKS	M^2	$30.00	343.0	$10,290.00
5433	5002	CURB RAMP AND LANDING (TY 2)	EA	$1,000.00	3.0	$3,000.00
618	5011	CONDUIT (PVC) (SCHD 40) (50 MM)	M	$12.50	13.4	$167.50
618	5013	CONDUIT (PVC) (SCHD 40) (75 MM)	M	$16.00	12.0	$192.00
618	5034	CONDUIT (PVC) (SCHD 40) (BORE) (75 MM)	M	$50.00	89.0	$4,450.00
618	XXXX	CONDUIT (PVC) (SCHD 40) (25 MM)	M	$13.30	30.0	$399.00
620	5004	ELEC CONDUCTOR (NO. 6) BARE	M	$1.50	119.8	$179.70
620	5011	ELEC CONDUCTOR (NO. 4) INSULATED	M	$2.80	13.2	$36.96
620	5009	ELEC CONDUCTOR (NO. 8) INSULATED	M	$1.70	416.0	$707.20
624	5006	GROUND BOX TY A (122311)	EA	$465.00	4.0	$1,860.00
624	5008	GROUND BOX TY C (162911)	EA	$650.00	1.0	$650.00
628	5063	ELEC SERV TY T (120) 000 (NS) AL (E) OT (O)	EA	$3,200.00	1.0	$3,200.00
644	5054	SM RD SGN ASSM TY 10BWG (1) SA (P)	EA	$415.00	1.0	$415.00
649	5006	RELOC SMALL RDSD SGN ASSMS	EA	$300.00	7.0	$2,100.00
658	5005	FND FOR TRAF SIG (TY A) (900 MM DRIL SHFT)	M	$405.00	8.0	$3,240.00
656	5032	FND FOR TRAF SIG (1200 MM DRIL SHFT)	M	$550.00	13.4	$7,370.00
656	5026	TRAF SIG CNTRL FND	M^3	$964.00	1.9	$1,783.40
666	5004	REFL PAV MRK TY I (W) (SLD) (150MM)	M	$4.70	217.0	$1,019.71
666	5012	REFL PAV MRK TY I (W) (SLD) (600MM)	M	$16.00	53.6	$857.28
666	5038	REFL PAV MRK TY II (W) (SLD) (150MM)	M	$2.52	217.0	$546.74
666	5044	REFL PAV MRK TY II (W) (SLD) (600MM)	M	$6.00	53.6	$321.48
668	5071	PREFAB PAV MRK TY C (W) (ARROW)	EA	$34.00	8.0	$272.00
668	5075	PREFAB PAV MRK TY C (W) (WORD)	EA	$15.00	2.0	$30.00
672	5006	RAIS PAV MRKR CL B (REFL) TY I - A	EA	$2.50	42.0	$105.00
672	5007	RAIS PAV MRKR CL B (REFL) TY I - C	EA	$3.00	5.0	$15.00
672	5009	RAIS PAV MRKR CL B (REFL) TY II - A - A	EA	$2.50	58.0	$145.00
672	5016	RAIS PAV MRKR CL C (TRAF BTN) TY W	EA	$1.58	232.0	$366.56
672	5017	RAIS PAV MRKR CL C (TRAF BTN) TY Y	EA	$1.51	126.0	$190.26
677	5005	ELIM EXT PAV MRK & MRKR (450MM)	M	$7.00	41.0	$287.00
678	5002	PAV SURF PREP FOR MRKS (150MM)	M	$2.40	217.0	$520.70
678	5006	PAV SURF PREP FOR MRKS (600MM)	M	$1.50	53.6	$80.37
678	5007	PAV SURF PREP FOR MRKS (ARROW)	EA	$12.00	8.0	$96.00
678	5008	PAV SURF PREP FOR MRKS (WORD)	EA	$13.00	2.0	$26.00
680	5001	INSTAL OF HWY TRAF SIG (ISOLATED)	EA	$13,000.00	1.0	$13,000.00
682	5002	VEH SIG SEC (300 MM)	EA	$160.00	44.0	$7,040.00
682	5005	PED SIG SEC (2 INDICATIONS IN 1 SEC)	EA	$378.00	8.0	$3,024.00
682	5009	BACK PLATE (3 SEC) (300 MM)	EA	$48.00	8.0	$384.00
682	5011	BACK PLATE (5 SEC) (300 MM)	EA	$50.00	4.0	$200.00
684	5056	TRAF SIG CBL (TY A) (3 CONDR) (18 AWG)	M	$2.50	32.0	$80.00
684	5052	TRAF SIG CBL (TY A) (5 CONDR) (16 AWG)	M	$2.25	129.4	$291.15
684	5053	TRAF SIG CBL (TY A) (7 CONDR) (16 AWG)	M	$12.00	84.6	$1,015.20
684	5016	TRAF SIG CBL (TY A) (16 CONDR) (12 AWG)	M	$9.25	121.8	$1,126.65
684	5046	TRAF SIG CBL (TY C) (2 CONDR) (18 AWG)	M	$1.50	299.2	$448.80
686	5072	TRAF SIG POLE ASM (STL) 1 ARM (13.4 M) LUM	EA	$3,600.00	2.0	$7,200.00
686	5117	TRF SIG POLE ASM (STL)(1 ARM) (16.7 M) LUM	EA	$5,200.00	2.0	$10,400.00
688	5001	PED DETECT (PUSH BTN)	EA	$107.00	8.0	$856.00
688	5011	VEH DETECT (SAWCUT)	M	$18.25	539.0	$9,836.75
5027	5001	LANDSCAPE PAVERS	M^2	$50.00	36.0	$1,800.00
6008	5001	SALV TRAF SIGNALS	EA	$2,115.00	1.0	$2,115.00
6557	5001	SPREAD SPECTRUM RADIO	EA	$2,400.00	1.0	$2,400.00
6557	5002	ANTENNA (UNIDIRECTIONAL)	EA	$1,400.00	1.0	$1,400.00
6557	5004	COAXIAL CABLE	M	$3.00	15.2	$45.60
		Subtotal				$272,682.24
500	5001	MOBILIZATION (EST @ 10% ALL ITEMS)				$27,268.22
		Total				**$299,950.46**

TOTALS:							
	McEWEN						$127,564.60
	SPRING VALLEY						$628,993.72
	LINDBERGH						$119,424.37
	KELLER SPRINGS						$506,954.60
	SOJOURN						$299,950.46
					JOB TOTAL		$1,682,887.77

Midway Road Corridor Intersection Im
Design Cost Estimate
Design, Construction, and R.O.W. Acquisition
Midway at McEwen

Date: 6/17/2003

Item No.	Desc. Code	Item Description	Unit	Unit Price	Quantity	Amount
100	5002	PREP ROW	KM	$34,184.12	0.2	$6,905.19
104	5001	REMOV CONC(PAV)	M^2	$10.00	62.0	$620.00
104	5005	REMOV CONC (MEDIAN)	M^2	$12.00	182.0	$2,184.00
104	5009	REMOV CONC (SDWLK)	M^2	$30.00	38.0	$1,140.00
104	5016	REMOVE CONC (RETAIN WALL)	M^2	$60.00	39.1	$2,346.60
110	5001	EXCAVATION (RDWY)	M^3	$3.00	33.0	$98.87
160	5002	FURN AND PLAC TPSL (CL 2) (150MM)	M^2	$1.90	186.0	$353.40
162	5008	BLOCK SOD (BERMUDA)	M^2	$2.58	186.0	$479.88
340	5041	ASPH CONC (TY B) (BASE)	MGR	$60.00	52.0	$3,120.00
360	5011	MONO CURB (150MM)	M	$50.00	89.0	$4,450.00
360	5017	CONC PAV (CPCD) (200 MM)	M^2	$45.00	296.0	$13,320.00
400	5003	STRUCT EXCAV (CULV SMALL)	M^3	$6.00	23.1	$138.60
423	5008	RETAINING WALL (CAST-IN-PLACE)	M^2	$420.00	76.0	$31,920.00
464	5005	RC PIPE (CL III) (600MM)	M	$125.00	16.1	$2,007.50
465	5001	INLET (COMPL) (TY C)	EA	$2,425.00	2.0	$4,850.00
496	5007	REMOV OLD STR (SMALL) (INLET)	EA	$280.00	2.0	$560.00
502	5001	BARRICADES, SIGNS AND TRAF HANDLE	MO	$3,000.00	1.0	$3,000.00
531	5002	CONCRETE SIDEWALKS	M^2	$10.00	36.0	$360.00
536	5002	CONC MEDIAN	M^2	$30.00	100.0	$3,000.00
618	5013	CONDUIT (PVC) (SCHD 40) (75 MM)	M	$16.00	3.0	$48.00
618	5034	CONDUIT (PVC) (SCHD 40) (BORE) (75 MM)	M	$50.00	30.0	$1,500.00
620	5004	ELEC CONDUCTOR (NO. 6) BARE	M	$1.50	33.0	$49.50
624	5006	GROUND BOX TY A (122311)	EA	$465.00	1.0	$465.00
649	5006	RELOC SMALL RDSD SGN ASSMS	EA	$300.00	3.0	$900.00
656	5005	FND FOR TRAF SIG (TYA) (900 MM DRIL SHFT)	M	$405.00	4.0	$1,620.00
662	5023	WRK ZN PAV MRK REMOV (Y) (SLD) (100MM)	M	$1.29	172.0	$221.09
666	5004	REFL PAV MRK TY I (W) (SLD) (150MM)	M	$4.70	74.5	$350.15
666	5012	REFL PAV MRK TY I (W) (SLD) (600MM)	M	$16.00	25.0	$400.00
666	5038	REFL PAV MRK TY II (W) (SLD) (150MM)	M	$2.52	74.5	$187.74
666	5044	REFL PAV MRK TY II (W) (SLD) (600MM)	M	$6.00	25.0	$150.00
668	5071	PREFAB PAV MRK TY C (W) (ARROW)	EA	$160.00	2.0	$320.00
668	5075	PREFAB PAV MRK TY C (W) (WORD)	EA	$195.00	1.0	$195.00
672	5006	RAIS PAV MRKR CL B (REFL) TY I - A	EA	$2.50	17.0	$42.50
672	5007	RAIS PAV MRKR CL B (REFL) TY I - C	EA	$3.00	7.0	$21.00
672	5009	RAIS PAV MRKR CL B (REFL) TY II - A - A	EA	$2.50	32.0	$80.00
672	5016	RAIS PAV MRKR CL C (TRAF BTN) TY W	EA	$1.58	141.0	$222.78
672	5017	RAIS PAV MRKR CL C (TRAF BTN) TY Y	EA	$1.51	82.0	$123.82
677	5001	ELIM EXT PAV MRK & MRKR (100MM)	M	$1.45	185.0	$268.25
677	5002	ELIM EXT PAV MRK & MRKR (150MM)	M	$3.00	45.0	$135.00
677	5005	ELIM EXT PAV MRK & MRKR (450MM)	M	$7.00	173.0	$1,211.00
678	5002	PAV SURF PREP FOR MRKS (150MM)	M	$2.40	74.5	$178.80
678	5006	PAV SURF PREP FOR MRKS (600MM)	M	$1.50	25.0	$37.50
678	5007	PAV SURF PREP FOR MRKS (ARROW)	EA	$12.00	2.0	$24.00
678	5008	PAV SURF PREP FOR MRKS (WORD)	EA	$13.00	1.0	$13.00
680	5001	INSTAL OF HWY TRAF SIG (ISOLATED)	EA	$13,000.00	1.0	$13,000.00
682	5002	VEH SIG SEC (300 MM)	EA	$160.00	11.0	$1,760.00
682	5005	PED SIG SEC (2 INDICATIONS IN 1 SEC)	EA	$378.00	2.0	$756.00
682	5009	BACK PLATE (3 SEC) (300 MM)	EA	$48.00	3.0	$144.00
682	5011	BACK PLATE (5 SEC) (300 MM)	EA	$50.00	1.0	$50.00
684	5052	TRAF SIG CBL (TY A) (5 CONDR) (16 AWG)	M	$2.50	19.7	$49.25
684	5053	TRAF SIG CBL (TY A) (7 CONDR) (16 AWG)	M	$2.25	18.4	$41.40
684	5056	TRAF SIG CBL (TY A) (3 CONDR) (16 AWG)	M	$2.50	8.0	$20.00
686	5072	TRAF SIG POLE ASM (STL) 1 ARM (13.4 M) LUM	EA	$3,600.00	2.0	$7,200.00
688	5001	PED DETECT (PUSH BTN)	EA	$107.00	2.0	$214.00
5433	5002	CURB RAMP AND LANDING (TY 2)	EA	$1,000.00	1.0	$1,000.00
6006	5001	SALV TRAF SIGNALS	EA	$2,115.00	1.0	$2,115.00
		SUBTOTAL				$115,967.82
500	5001	MOBILIZATION (EST @ 10% ALL ITEMS)				$11,596.78
		Total				**$127,564.60**

Midway Road Corridor Intersection Improvements
Design Cost Estimate
Design, Construction, and R.O.W. Acquisition
Midway at Spring Valley

Date: 6/17/2003

Item No.	Desc. Code	Item Description	Unit	Unit Price	Quantity	Amount
100	5002	PREP ROW	KM	$34,184.12	0.6	$20,339.55
104	5001	REMOV CONC (PAV)	M^2	$10.00	1399.0	$13,990.00
104	5005	REMOV CONC (MED)	M^2	$12.00	888.0	$10,656.00
104	5009	REMOV CONC (SDWLK)	M^2	$30.00	331.0	$9,930.00
104	5011	REMOV CONC (DRVWY)	M^2	$9.20	177.0	$1,628.40
110	5001	EXCAVATION (RDWY)	M^3	$3.00	311.0	$931.76
160	5002	FURN AND PLAC TPSL (CL 2) (150MM)	M^2	$1.90	900.0	$1,710.00
162	5008	BLOCK SOD (BERMUDA)	M^2	$2.58	900.0	$2,322.00
340	5041	ASPH CONC (TY B) (BASE)	MGR	$60.00	529.0	$31,740.00
360	5011	MONO CURB (150MM)	M	$50.00	1368.0	$68,400.00
360	5017	CONC PAV (CPCD) (200 MM)	M^2	$45.00	2967.0	$133,515.00
400	5003	STRUCT EXCAV (CULV SMALL)	M^3	$6.00	49.8	$298.80
423	5008	RETAINING WALL (CAST-IN-PLACE)	M^3	$420.00	166.0	$69,720.00
464	5003	RC PIPE (CL III) (450MM)	M	$87.00	21.0	$1,825.26
464	5005	RC PIPE (CL III) (600MM)	M	$125.00	9.0	$1,121.25
464	5009	RC PIPE (CL III) (900MM)	M	$180.00	3.2	$574.20
465	5001	INLET (COMPL) (TY C)	EA	$2,425.00	7.0	$16,975.00
496	5007	REMOV OLD STR (SMALL) (INLET)	EA	$280.00	7.0	$1,960.00
502	5001	BARRICADES, SIGNS AND TRAF HANDLE	MO	$3,000.00	3.0	$9,000.00
530	5001	DRVWYS (CONC) (150MM)	M^2	$38.00	70.0	$2,660.00
531	5002	CONCRETE SIDEWALKS	M^2	$30.00	291.0	$8,730.00
5433	5002	CURB RAMP AND LANDING (TY 2)	EA	$1,000.00	1.0	$1,000.00
536	6008	CONC MEDIAN (MONO NOSE)	M^2	$77.00	9.6	$739.20
618	5011	CONDUIT (PVC) (SCHD 40) (50 MM)	M	$12.50	63.4	$792.50
618	5013	CONDUIT (PVC) (SCHD 40) (75 MM)	M	$16.00	4.0	$64.00
618	5014	CONDUIT (PVC) (SCHD 40) (100 MM)	M	$23.50	6.2	$145.70
618	5032	CONDUIT (PVC) (SCHD 40) (BORE) (50 MM)	M	$51.00	7.8	$397.80
618	5034	CONDUIT (PVC) (SCHD 40) (BORE) (75 MM)	M	$50.00	132.2	$6,610.00
620	5004	ELEC CONDUCTOR (NO. 6) BARE	M	$1.50	255.4	$383.10
620	5011	ELEC CONDUCTOR (NO. 4) INSULATED	M	$2.80	21.0	$58.80
620	5009	ELEC CONDUCTOR (NO. 6) INSULATED	M	$1.70	565.6	$961.52
624	5006	GROUND BOX TY A (122311)	EA	$465.00	6.0	$2,790.00
624	5008	GROUND BOX TY C (162911)	EA	$650.00	1.0	$650.00
626	5063	ELEC SERV TY T (120) 000 (NS) AL (E) OT (O)	EA	$3,200.00	1.0	$3,200.00
644	5054	SM RD SGN ASSM TY 10BWG (1) SA (P)	EA	$415.00	14.0	$5,810.00
649	5006	RELOC SMALL RDSD SGN ASSMS	EA	$300.00	5.0	$1,500.00
656	5003	FND FOR TRAF SIG (600 MM DRIL SHFT)	M	$260.00	15.3	$3,978.00
656	5026	TRAF SIG CNTRL FND	M^3	$964.00	1.9	$1,783.40
656	5032	FND FOR TRAF SIG (1200 MM DRIL SHFT)	M	$500.00	20.3	$10,150.00
662	5002	WRK ZN PAV MRK REMOV (W) (BRKN) (100MM)	M	$2.94	648.0	$1,902.75
662	5003	WRK ZN PAV MRK REMOV (W) (DOT) (100MM)	M	$3.35	38.0	$127.30
666	5004	REFL PAV MRK TY I (W) (SLD) (150MM)	M	$4.70	291.0	$1,367.70
666	5012	REFL PAV MRK TY I (W) (SLD) (600MM)	M	$16.00	80.0	$1,280.00
666	5003	REFL PAV MRK TY I (W) (DOT) (100MM)	M	$2.70	50.0	$135.00
666	5037	REFL PAV MRK TY II (W) (DOT) (100MM)	M	$1.00	50.0	$50.00
666	5038	REFL PAV MRK TY II (W) (SLD) (150MM)	M	$2.52	291.0	$733.24
666	5044	REFL PAV MRK TY II (W) (SLD) (600MM)	M	$6.00	79.9	$479.58
668	5071	PREFAB PAV MRK TY C (W) (ARROW)	EA	$160.00	18.0	$2,880.00
668	5075	PREFAB PAV MRK TY C (W) (WORD)	EA	$195.00	9.0	$1,755.00
672	5007	RAIS PAV MRKR CL B (REFL) TY I - C	EA	$3.00	79.0	$237.00
672	5009	RAIS PAV MRKR CL B (REFL) TY II - A - A	EA	$2.50	178.0	$445.00
672	5016	RAIS PAV MRKR CL C (TRAF BTN) TY W	EA	$1.58	1537.0	$2,428.46
677	5001	ELIM EXT PAV MRK & MRKR (100MM)	M	$1.45	1663.0	$2,411.35
677	5005	ELIM EXT PAV MRK & MRKR (450MM)	M	$7.00	65.0	$455.00
678	5001	PAV SURF PREP FOR MRKS (100MM)	M	$0.15	50.0	$7.50
678	5002	PAV SURF PREP FOR MRKS (150MM)	M	$2.40	291.0	$698.33
678	5006	PAV SURF PREP FOR MRKS (600MM)	M	$1.50	79.9	$119.80
678	5007	PAV SURF PREP FOR MRKS (ARROW)	EA	$12.00	18.0	$216.00
678	5008	PAV SURF PREP FOR MRKS (WORD)	EA	$13.00	9.0	$117.00
680	5001	INSTAL OF HWY TRAF SIG (ISOLATED)	EA	$13,000.00	1.0	$13,000.00
682	5005	PED SIG SEC (2 INDICATIONS IN 1 SEC)	EA	$378.00	6.0	$2,268.00
682	5009	BACK PLATE (3 SEC) (300 MM)	EA	$48.00	22.0	$1,056.00
682	5010	BACK PLATE (4 SEC) (300 MM)	EA	$50.00	3.0	$150.00
684	5014	TRAF SIG CBL (TY A) (14 CONDR) (12 AWG)	M	$6.75	86.0	$580.50
684	5020	TRAF SIG CBL (TY A) (20 CONDR) (12 AWG)	M	$9.25	216.0	$1,998.00
684	5046	TRAF SIG CBL (TY C) (2 CONDR) (18 AWG)	M	$1.50	9.6	$14.40
684	5052	TRAF SIG CBL (TY A) (5 CONDR) (16 AWG)	M	$3.00	586.0	$1,788.00
684	5053	TRAF SIG CBL (TY A) (7 CONDR) (16 AWG)	M	$3.25	12.0	$39.00
685	5116	TRF SIG POLE ASM (STL) (1 ARM) (18.3 M) LUM	EA	$9,200.00	3.0	$27,600.00
688	5001	PED DETECT (PUSH BTN)	EA	$107.00	6.0	$642.00
5027	5001	LANDSCAPE PAVERS	M^3	$50.00	221.0	$11,050.00
6006	5001	PEDESTAL POLE ASSEM	EA	$610.00	5.0	$3,050.00
6008	5001	SALV TRAF SIGNALS	EA	$2,115.00	1.0	$2,115.00
6438	XXXX	VIVDS DETECTOR SYST COMPL W/ 4 CAMERAS	EA	$38,000.00	1.0	$38,000.00
6438	5005	VIVDS COMMUNICATION CABLE (COAXIAL)	M	$2.00	252.8	$505.60
		Subtotal				$571,812.47
500	5001	MOBILIZATION (EST @ 10% ALL ITEMS)				$57,181.25
		Total				**$628,993.72**

Midway Road Corridor Intersection Improvements
Design Cost Estimate
Design, Construction, and R.O.W. Acquisition
Midway at Lindbergh

Date: 6/17/2003

Item No.	Desc. Code	Item Description	Unit	Unit Price	Quantity	Amount
100	5002	PREP ROW	KM	$34,184.12	0.2	$5,982.22
104	5001	REMOV CONC (PAV)	M^2	$10.00	34.0	$340.00
104	5011	REMOV CONC (DRVWY)	M^2	$9.20	104.0	$956.80
105	5004	RMV STAB BS & / OR ASPH PAV (CL 2) VAR DEP	M^2	$2.52	17.0	$42.92
110	5001	EXCAVATION (RDWY)	M^3	$3.00	28.0	$83.89
160	5002	FURN AND PLAC TPSL (CL 2) (150MM)	M^2	$1.90	235.0	$446.50
162	5008	BLOCK SOD (BERMUDA)	M^2	$2.58	235.0	$606.30
340	5041	ASPH CONC (TY B) (BASE)	MGR	$60.00	22.0	$1,320.00
360	5011	MONO CURB (150MM)	M	$50.00	77.0	$3,850.00
360	5017	CONC PAV (CPCD) (200 MM)	M^2	$45.00	117.0	$5,265.00
400	5003	STRUCT EXCAV (CULV SMALL)	M^3	$6.00	1.3	$7.80
464	5005	RC PIPE (CL III) (600MM)	M	$125.00	1.0	$124.25
465	5001	INLET (COMPL) (TY C)	EA	$2,425.00	1.0	$2,425.00
496	5007	REMOV OLD STR (SMALL) (INLET)	EA	$280.00	1.0	$280.00
502	5001	BARRICADES, SIGNS AND TRAF HANDLE	MO	$3,000.00	1.0	$3,000.00
530	5001	DRVWYS (CONC) (150MM)	M^2	$38.00	78.0	$2,964.00
618	5011	CONDUIT (PVC) (SCHD 40) (50 MM)	M	$12.50	22.0	$275.00
618	5013	CONDUIT (PVC) (SCHD 40) (75 MM)	M	$16.00	8.0	$128.00
618	5034	CONDUIT (PVC) (SCHD 40) (BORE) (75 MM)	M	$50.00	88.0	$4,400.00
620	5004	ELEC CONDUCTOR (NO. 6) BARE	M	$1.50	127.6	$191.40
620	5011	ELEC CONDUCTOR (NO. 4) INSULATED	M	$2.80	28.8	$80.64
620	5009	ELEC CONDUCTOR (NO. 8) INSULATED	M	$1.70	199.2	$338.64
624	5006	GROUND BOX TY A (122311)	EA	$465.00	5.0	$2,325.00
624	5008	GROUND BOX TY C (162911)	EA	$650.00	1.0	$650.00
628	5063	ELEC SERV TY T (120) 000 (NS) AL (E) OT (O)	EA	$3,200.00	1.0	$3,200.00
644	5054	SM RD SGN ASSM TY 10BWG (1) SA (P)	EA	$415.00	2.0	$830.00
649	5006	RELOC SMALL RDSD SGN ASSMS	EA	$300.00	3.0	$900.00
656	5004	FND FOR TRAF SIG (750 MM DRIL SHFT)	M	$375.00	3.4	$1,275.00
656	5005	FND FOR TRAF SIG (TYA) (900 MM DRIL SHFT)	M	$405.00	4.0	$1,620.00
656	5026	TRAF SIG CNTRL FND	M^3	$964.00	1.9	$1,783.40
662	5023	WRK ZN PAV MRK REMOV (Y) (SLD) (100mm)	M	$1.29	224.0	$287.93
666	5004	REFL PAV MRK TY I (W) (SLD) (150MM)	M	$4.70	176.9	$831.24
666	5012	REFL PAV MRK TY I (W) (SLD) (600MM)	M	$16.00	45.7	$731.52
666	5003	REFL PAV MRK TY I (W) (DOT) (100MM)	M	$2.70	5.8	$15.63
666	5037	REFL PAV MRK TY II (W) (DOT) (100MM)	M	$1.00	5.8	$5.79
666	5038	REFL PAV MRK TY II (W) (SLD) (150MM)	M	$2.52	176.9	$445.69
666	5044	REFL PAV MRK TY II (W) (SLD) (600MM)	M	$6.00	45.7	$274.32
668	5071	PREFAB PAV MRK TY C (W) (ARROW)	EA	$160.00	6.0	$960.00
668	5075	PREFAB PAV MRK TY C (W) (WORD)	EA	$195.00	2.0	$390.00
672	5009	RAIS PAV MRKR CL B (REFL) TY II - A - A	EA	$2.50	60.0	$150.00
672	5016	RAIS PAV MRKR CL C (TRAF BTN) TY W	EA	$1.58	83.0	$131.14
672	5017	RAIS PAV MRKR CL C (TRAF BTN) TY Y	EA	$1.51	98.0	$147.98
677	5001	ELIM EXT PAV MRK AND MRKR (100MM)	M	$1.45	229.0	$332.05
677	5005	ELIM EXT PAV MRK AND MRKR (450MM)	M	$7.00	41.0	$287.00
678	5001	PAV SURF PREP FOR MRKS (100MM)	M	$0.15	5.8	$0.87
678	5002	PAV SURF PREP FOR MRKS (150MM)	M	$2.40	176.9	$424.46
678	5006	PAV SURF PREP FOR MRKS (600MM)	M	$1.50	45.7	$68.58
678	5007	PAV SURF PREP FOR MRKS (ARROW)	EA	$12.00	6.0	$72.00
678	5008	PAV SURF PREP FOR MRKS (WORD)	EA	$13.00	2.0	$26.00
680	5001	INSTAL OF HWY TRAF SIG (ISOLATED)	EA	$13,000.00	1.0	$13,000.00
682	5005	PED SIG SEC (2 INDICATIONS IN 1 SEC)	EA	$378.00	4.0	$1,512.00
682	5009	BACK PLATE (3 SEC) (300 MM)	EA	$48.00	4.0	$192.00
682	5010	BACK PLATE (4 SEC) (300 MM)	EA	$50.00	2.0	$100.00
684	5016	TRAF SIG CBL (TY A) (16 CONDR) (12 AWG)	M	$6.75	151.4	$1,021.95
684	5046	TRAF SIG CBL (TY C) (2 CONDR) (18 AWG)	M	$1.50	9.6	$14.40
684	5052	TRAF SIG CBL (TY A) (5 CONDR) (16 AWG)	M	$2.50	105.2	$263.00
684	5053	TRAF SIG CBL (TY A) (7 CONDR) (16 AWG)	M	$2.25	120.4	$270.90
688	5001	PED DETECT (PUSH BTN)	EA	$107.00	4.0	$428.00
6008	5001	SALV TRAF SIGNALS	EA	$2,115.00	1.0	$2,115.00
6438	XXXX	VIVDS DETECTOR SYST COMPL W/ 4 CAMERAS	EA	$38,000.00	1.0	$38,000.00
6438	5005	VIVDS COMMUNICATION CABLE (COAXIAL)	M	$2.00	188.2	$376.40
		Subtotal				$108,567.61
500	5001	MOBILIZATION (EST @ 10% ALL ITEMS)				$10,856.76
		Total				**$119,424.37**

Midway Road Corridor Intersection Improvements
Design Cost Estimate
Design, Construction, and R.O.W. Acquisition
Midway at Keller Springs

Date: 6/17/2003

Item No.	Desc. Code	Item Description	Unit	Unit Price	Quantity	Amount
100	5002	PREP ROW	KM	$34,184.12	0.6	$20,305.37
104	5001	REMOV CONC (PAV)	M^3	$10.00	1177.0	$11,770.00
104	5005	REMOV CONC (MED)	M^2	$12.00	259.0	$3,108.00
104	5011	REMOV CONC (DRVWY)	M^2	$9.20	324.0	$2,980.80
104	5021	REMOVE CONC (CURB OR C & G)	M	$13.00	9.0	$117.00
110	5001	EXCAVATION (RDWY)	M^3	$3.00	289.0	$865.84
160	5002	FURN AND PLAC TPSL (CL 2) (150MM)	M^2	$1.90	1341.0	$2,547.90
162	5006	BLOCK SOD (BERMUDA)	M^2	$2.58	1341.0	$3,459.78
340	5041	ASPH CONC (TY B) (BASE)	MGR	$60.00	458.0	$27,480.00
360	5011	MONO CURB (150MM)	M	$50.00	1062.0	$53,100.00
360	5017	CONC PAV (CPCD) (200 MM)	M^2	$45.00	2622.0	$117,990.00
400	5003	STRUCT EXCAV (CULV SMALL)	M^3	$6.00	14.1	$84.60
423	5006	RETAINING WALL (CAST-IN-PLACE)	M^2	$420.00	89.0	$37,380.00
464	5004	RC PIPE (CL III) (525MM)	M	$102.32	3.6	$368.35
464	5005	RC PIPE (CL III) (600MM)	M	$125.00	5.7	$712.50
465	5001	INLET (COMPL) (TY C)	EA	$2,425.00	4.0	$9,700.00
496	5007	REMOV OLD STR (SMALL) (INLET)	EA	$280.00	4.0	$1,120.00
502	5001	BARRICADES, SIGNS AND TRAF HANDLE	MO	$3,000.00	3.0	$9,000.00
530	5001	DRVWYS (CONC) (150MM)	M^2	$38.00	150.0	$5,700.00
5433	5011	CURB RAMP AND LANDING (TY 22)	EA	$2,000.00	2.0	$4,000.00
536	5002	CONC MEDIAN	M^2	$30.00	5.0	$150.00
618	5011	CONDUIT (PVC) (SCHD 40) (50 MM)	M	$12.50	25.0	$312.50
618	5013	CONDUIT (PVC) (SCHD 40) (75 MM)	M	$16.00	18.4	$294.40
618	5034	CONDUIT (PVC) (SCHD 40) (BORE) (75 MM)	M	$50.00	133.0	$6,650.00
618	XXXX	CONDUIT (PVC) (SCHD 40) (25 MM)	M	$13.30	30.0	$399.00
620	5004	ELEC CONDUCTOR (NO. 6) BARE	M	$1.50	166.4	$249.60
620	5011	ELEC CONDUCTOR (NO. 4) INSULATED	M	$2.80	15.0	$42.00
620	5009	ELEC CONDUCTOR (NO. 8) INSULATED	M	$1.70	672.2	$1,142.74
624	5006	GROUND BOX TY A (122311)	EA	$465.00	7.0	$3,255.00
624	5008	GROUND BOX TY C (162911)	EA	$650.00	1.0	$650.00
628	5063	ELEC SERV TY T (120) 000 (NS) AL (E) OT (O)	EA	$3,200.00	1.0	$3,200.00
644	5054	SM RD SGN ASSM TY 10BWG (1) SA (P)	EA	$415.00	12.0	$4,980.00
649	5006	RELOC SMALL RDSD SGN ASSMS	EA	$300.00	17.0	$5,100.00
656	5005	FND FOR TRAF SIG (TYA) (900 MM DRIL SHFT)	M	$405.00	4.0	$1,620.00
656	5026	TRAF SIG CNTRL FND	M^3	$964.00	1.9	$1,783.40
656	5032	FND FOR TRAF SIG (1200 MM DRIL SHFT)	M	$500.00	20.1	$10,050.00
662	5001	WRK ZN PAV MRK REMOV (W) (SLD) (100MM)	M	$1.41	68.0	$95.76
662	5002	WRK ZN PAV MRK REMOV (W) (BRK) (100MM)	M	$2.94	259.0	$760.51
662	5012	WRK ZN PAV MRK REMOV (W) (ARROW)	EA	$215.00	4.0	$860.00
662	5016	WRK ZN PAV MRK REMOV (W) (WORD)	EA	$275.00	2.0	$550.00
666	5012	REFL PAV MRK TY I (W) (SLD) (600MM)	M	$16.00	340.1	$5,441.26
666	5003	REFL PAV MRK TY I (W) (DOT) (100MM)	M	$2.70	64.5	$174.15
666	5037	REFL PAV MRK TY II (W) (DOT) (100MM)	M	$1.00	64.5	$64.50
666	5044	REFL PAV MRK TY II (W) (SLD) (600MM)	M	$6.00	340.1	$2,040.48
668	5071	PREFAB PAV MRK TY C (W) (ARROW)	EA	$160.00	18.0	$2,880.00
668	5075	PREFAB PAV MRK TY C (W) (WORD)	EA	$195.00	10.0	$1,950.00
672	5007	RAIS PAV MRKR CL B (REFL) TY I -C	EA	$3.00	46.0	$138.00
672	5009	RAIS PAV MRKR CL B (REFL) TY I I - A - A	EA	$2.50	163.0	$407.50
672	5016	RAIS PAV MRKR CL C (TRAF BTN) TY W	EA	$1.58	1074.0	$1,696.92
677	5001	ELIM EXT PAV MRK & MRKR (100MM)	M	$1.45	1056.0	$1,531.20
677	5005	ELIM EXT PAV MRK & MRKR (450MM)	M	$7.00	52.0	$364.00
678	5001	PAV SURF PREP FOR MRKS (100MM)	M	$0.15	64.5	$9.68
678	5006	PAV SURF PREP FOR MRKS (600MM)	M	$1.50	340.1	$510.12
678	5007	PAV SURF PREP FOR MRKS (ARROW)	EA	$12.00	18.0	$216.00
678	5008	PAV SURF PREP FOR MRKS (WORD)	EA	$13.00	10.0	$130.00
680	5001	INSTAL OF HWY TRAF SIG (ISOLATED)	EA	$13,000.00	1.0	$13,000.00
682	5002	VEH SIG SEC (300 MM)	EA	$160.00	46.0	$7,360.00
682	5005	PED SIG SEC (2 INDICATIONS IN 1 SEC)	EA	$378.00	8.0	$3,024.00
682	5009	BACK PLATE (3 SEC) (300 MM)	EA	$48.00	14.0	$672.00
682	5010	BACK PLATE (4 SEC) (300 MM)	EA	$50.00	1.0	$50.00
684	5056	TRAF SIG CBL (TY A) (3 CONDR) (16 AWG)	M	$2.50	32.0	$80.00
684	5020	TRAF SIG CBL (TY A) (20 CONDR) (12 AWG)	M	$9.25	240.2	$2,221.85
684	5046	TRAF SIG CBL (TY C) (2 CONDR) (18 AWG)	M	$1.50	420.8	$631.20
684	5052	TRAF SIG CBL (TY A) (5 CONDR) (16 AWG)	M	$2.50	263.2	$658.00
686	5072	TRAF SIG POLE ASM (STL) 1 ARM (13.4 M) LUM	EA	$3,600.00	1.0	$3,600.00
686	5118	TRAF SIG POLE ASM (STL) (1 ARM) (18.3 M) LUM	EA	$4,500.00	3.0	$13,500.00
686	5117	TRF SIG POLE ASM (STL) (1 ARM) (16.7 M) LUM	EA	$5,200.00	2.0	$10,400.00
688	5001	PED DETECT (PUSH BTN)	EA	$107.00	8.0	$856.00
688	5011	VEH DETECT (SAWCUT)	M	$18.25	656.4	$11,979.30
5027	5001	LANDSCAPE PAVERS	M^2	$50.00	307.0	$15,350.00
6008	5001	SALV TRAF SIGNALS	EA	$2,115.00	1.0	$2,115.00
6557	5001	SPREAD SPECTRUM RADIO	EA	$2,400.00	1.0	$2,400.00
6557	5002	ANTENNA (UNIDIRECTIONAL)	EA	$1,400.00	1.0	$1,400.00
6557	5004	COAXIAL CABLE	M	$3.00	27.2	$81.60
		Subtotal				$460,867.82
500	5001	MOBILIZATION (EST @ 10% ALL ITEMS)				$46,086.78
		Total				$506,954.60

Midway Road Corridor Intersection Improvements
Design Cost Estimate
Design, Construction, and R.O.W. Acquisition
Midway at Sojourn

Date: 6/17/2003

Item No.	Desc. Code	Item Description	Unit	Unit Price	Quantity	Amount
100	5002	PREP ROW	KM	$34,184.12	0.5	$16,886.96
104	5001	REMOV CONC (PAV)	M^2	$10.00	323.0	$3,230.00
104	5005	REMOV CONC (MED)	M^2	$12.00	417.0	$5,004.00
104	5009	REMOV CONC (SDWLK)	M^2	$30.00	447.0	$13,410.00
104	5011	REMOV CONC (DRVWY)	M^2	$9.20	124.0	$1,140.80
110	5001	EXCAVATION (RDWY)	M^3	$3.00	205.0	$614.18
160	5002	FURN AND PLAC TPSL (CL 2) (150MM)	M^2	$1.90	418.0	$794.20
162	508	BLOCK SOD (BERMUDA)	M^2	$2.58	418.0	$1,078.44
340	5041	ASPH CONC (TY B) (BASE)	MGR	$60.00	240.0	$14,400.00
360	5011	MONO CURB (150MM)	M	$50.00	589.0	$29,450.00
360	5017	CONC PAV (CPCD) (200 MM)	M^2	$45.00	1355.0	$60,975.00
400	5003	STRUCT EXCAV (CULV SMALL)	M^3	$6.00	11.3	$67.80
464	5003	RC PIPE (CL III) (450MM)	M	$87.00	1.1	$91.35
464	5004	RC PIPE (CL III) (525MM)	M	$125.00	7.7	$962.50
465	5001	INLET (COMPL) (TY C)	EA	$2,425.00	2.0	$4,850.00
496	5007	REMOV OLD STR (SMALL) (INLET)	EA	$280.00	2.0	$560.00
502	5001	BARRICADES, SIGNS AND TRAF HANDLE	MO	$3,000.00	3.0	$9,000.00
530	5001	DRVWYS (CONC) (150MM)	M^2	$38.00	68.0	$2,584.00
531	5002	CONCRETE SIDEWALKS	M^2	$30.00	343.0	$10,290.00
5433	5002	CURB RAMP AND LANDING (TY 2)	EA	$1,000.00	3.0	$3,000.00
618	5011	CONDUIT (PVC) (SCHD 40) (50 MM)	M	$12.50	13.4	$167.50
618	5013	CONDUIT (PVC) (SCHD 40) (75 MM)	M	$16.00	12.0	$192.00
618	5034	CONDUIT (PVC) (SCHD 40) (BORE) (75 MM)	M	$50.00	89.0	$4,450.00
618	XXXX	CONDUIT (PVC) (SCHD 40) (25 MM)	M	$13.30	30.0	$399.00
620	5004	ELEC CONDUCTOR (NO. 6) BARE	M	$1.50	119.8	$179.70
620	5011	ELEC CONDUCTOR (NO. 4) INSULATED	M	$2.80	13.2	$36.96
620	5009	ELEC CONDUCTOR (NO. 8) INSULATED	M	$1.70	416.0	$707.20
624	5006	GROUND BOX TY A (122311)	EA	$465.00	4.0	$1,860.00
624	5008	GROUND BOX TY C (162911)	EA	$650.00	1.0	$650.00
628	5063	ELEC SERV TY T (120) 000 (NS) AL (E) OT (O)	EA	$3,200.00	1.0	$3,200.00
644	5054	SM RD SGN ASSM TY 10BWG (1) SA (P)	EA	$415.00	1.0	$415.00
649	5006	RELOC SMALL RDSD SGN ASSMS	EA	$300.00	7.0	$2,100.00
656	5005	FND FOR TRAF SIG (TY A) (900 MM DRIL SHFT)	M	$405.00	8.0	$3,240.00
656	5032	FND FOR TRAF SIG (1200 MM DRIL SHFT)	M	$550.00	13.4	$7,370.00
656	5026	TRAF SIG CNTRL FND	M^3	$964.00	1.9	$1,783.40
666	5004	REFL PAV MRK TY I (W) (SLD) (150MM)	M	$4.70	217.0	$1,019.71
666	5012	REFL PAV MRK TY I (W) (SLD) (600MM)	M	$16.00	53.6	$857.28
666	5038	REFL PAV MRK TY II (W) (SLD) (150MM)	M	$2.52	217.0	$546.74
666	5044	REFL PAV MRK TY II (W) (SLD) (600MM)	M	$6.00	53.6	$321.48
668	5071	PREFAB PAV MRK TY C (W) (ARROW)	EA	$34.00	8.0	$272.00
668	5075	PREFAB PAV MRK TY C (W) (WORD)	EA	$15.00	2.0	$30.00
672	5006	RAIS PAV MRKR CL B (REFL) TY I - A	EA	$2.50	42.0	$105.00
672	5007	RAIS PAV MRKR CL B (REFL) TY I - C	EA	$3.00	5.0	$15.00
672	5009	RAIS PAV MRKR CL B (REFL) TY II - A - A	EA	$2.50	58.0	$145.00
672	5016	RAIS PAV MRKR CL C (TRAF BTN) TY W	EA	$1.58	232.0	$366.56
672	5017	RAIS PAV MRKR CL C (TRAF BTN) TY Y	EA	$1.51	126.0	$190.26
677	5005	ELIM EXT PAV MRK & MRKR (450MM)	M	$7.00	41.0	$287.00
678	5002	PAV SURF PREP FOR MRKS (150MM)	M	$2.40	217.0	$520.70
678	5006	PAV SURF PREP FOR MRKS (600MM)	M	$1.50	53.6	$80.37
678	5007	PAV SURF PREP FOR MRKS (ARROW)	EA	$12.00	8.0	$96.00
678	5008	PAV SURF PREP FOR MRKS (WORD)	EA	$13.00	2.0	$26.00
680	5001	INSTAL OF HWY TRAF SIG (ISOLATED)	EA	$13,000.00	1.0	$13,000.00
682	5002	VEH SIG SEC (300 MM)	EA	$160.00	44.0	$7,040.00
682	5005	PED SIG SEC (2 INDICATIONS IN 1 SEC)	EA	$378.00	8.0	$3,024.00
682	5009	BACK PLATE (3 SEC) (300 MM)	EA	$48.00	8.0	$384.00
682	5011	BACK PLATE (5 SEC) (300 MM)	EA	$50.00	4.0	$200.00
684	5056	TRAF SIG CBL (TY A) (3 CONDR) (16 AWG)	M	$2.50	32.0	$80.00
684	5052	TRAF SIG CBL (TY A) (5 CONDR) (16 AWG)	M	$2.25	129.4	$291.15
684	5053	TRAF SIG CBL (TY A) (7 CONDR) (16 AWG)	M	$12.00	84.6	$1,015.20
684	5016	TRAF SIG CBL (TY A) (16 CONDR) (12 AWG)	M	$9.25	121.8	$1,126.65
684	5046	TRAF SIG CBL (TY C) (2 CONDR) (18 AWG)	M	$1.50	299.2	$448.80
686	5072	TRAF SIG POLE ASM (STL) 1 ARM (13.4 M) LUM	EA	$3,600.00	2.0	$7,200.00
686	5117	TRF SIG POLE ASM (STL)(1 ARM) (16.7 M) LUM	EA	$5,200.00	2.0	$10,400.00
688	5001	PED DETECT (PUSH BTN)	EA	$107.00	8.0	$856.00
688	5011	VEH DETECT (SAWCUT)	M	$18.25	539.0	$9,836.75
5027	5001	LANDSCAPE PAVERS	M^2	$50.00	36.0	$1,800.00
6008	5001	SALV TRAF SIGNALS	EA	$2,115.00	1.0	$2,115.00
6557	5001	SPREAD SPECTRUM RADIO	EA	$2,400.00	1.0	$2,400.00
6557	5002	ANTENNA (UNIDIRECTIONAL)	EA	$1,400.00	1.0	$1,400.00
6557	5004	COAXIAL CABLE	M	$3.00	15.2	$45.60
		Subtotal				$272,682.24
500	5001	MOBILIZATION (EST @ 10% ALL ITEMS)				$27,268.22
		Total				$299,950.46

TOTALS:							
	McEWEN						$127,564.60
	SPRING VALLEY						$628,993.72
	LINDBERGH						$119,424.37
	KELLER SPRINGS						$506,954.60
	SOJOURN						$299,950.46
					JOB TOTAL		$1,682,887.77

EXHIBIT "A"

County Dallas | Page 1 of 2
Parcel 2 | D-15-
Highway Intersection of Keller Springs Road at Midway Road | June 7, 1999
CSJ: | Revised: May 15, 2003
Account:

Field Note Description for Parcel 2

BEING 179.12 square meters [1,928 square feet] of land in the David Myers Survey, Abstract No. 923 in Dallas County, Texas and being a portion of that 1.21646 hectares [3.0060 acres] parcel of land as described as Tract II in a deed to M & F DEVELOPMENT COMPANY, INC. (M & F tract) as recorded in Volume 90081, Page 3202 of the Deed Records of Dallas County Texas (D.R.D.C.T.), said M & F tract being in Lot 2 of the Midway Park No. 2 as recorded in Volume 83035, Page 1180 of the Map Records of Dallas County Texas (M.R.D.C.T.), and being more particularly described by metes and bounds as follows:

BEGINNING at an "X" cut on concrete found at the southwest corner of said M & F tract on the existing west right-of-way line of Midway Road,

1. **THENCE**, North 33 degrees 21 minutes 06 seconds West, along the west property line of said M & F tract and said existing east right-of-way line of Midway Road, for a distance of 82.987 meters [272.27 feet] to a one-half inch steel rebar with yellow plastic cap marked "A.Z.B." set for the intersection of said existing east right-of-way line of Midway Road and the existing south right-of-way line of Keller Springs Road as described in Volume 97009, Page 03547 D.R.D.C.T.;

2. **THENCE**, North 56 degrees 37 minutes 56 seconds East, along said existing south right-of-way line of Keller Springs Road, a distance of 5.533 meters [18.15 feet] to an "X" cut on concrete set for corner on the new easterly right-of-way line of Midway Road;

3. **THENCE**, South 33 degrees 21 minutes 18 seconds East, along the new easterly right-of-way line of Midway Road, for a distance of 1.182 meters [3.88 feet] to a one-half inch steel rebar with yellow plastic cap marked "A.Z.B." set for corner;

4. **THENCE**, South 25 degrees 05 minutes 29 seconds East, continuing along said new easterly right-of-way line of Midway Road, a distance of 22.379 meters [73.42 feet] to a one-half inch steel rebar with yellow plastic cap marked "A.Z.B." set for corner;

5. **THENCE**, South 31 degrees 39 minutes 26 seconds East, continuing along said new easterly right-of-way line of Midway Road, a distance of 59.687 meters [195.82 feet] to an "X" cut on concrete set for corner;

EXHIBIT "A"

County Dallas
Parcel 2
Highway Intersection of Keller Springs Road at Midway Road
CSJ:
Account:

D-15-
June 7, 1999
Revised: May 15, 2003

Field Note Description for Parcel 2

6. **THENCE**, South 56 degrees 41 minutes 04 seconds West, continuing along said new easterly right-of-way line of Midway Road, a distance of 0.553 meters [1.81 feet] to the **POINT OF BEGINNING.**

The above described tract of land contains 179.12 square meters [1,928 square feet] of land more or less.

A plat of even survey date herewith accompanies this legal description.

The basis of bearings for this intersection is the north property line of Volume 97251, Page 2877 D.R.D.C.T.

All dimensions are in meters unless otherwise noted.

English units are given for information only.

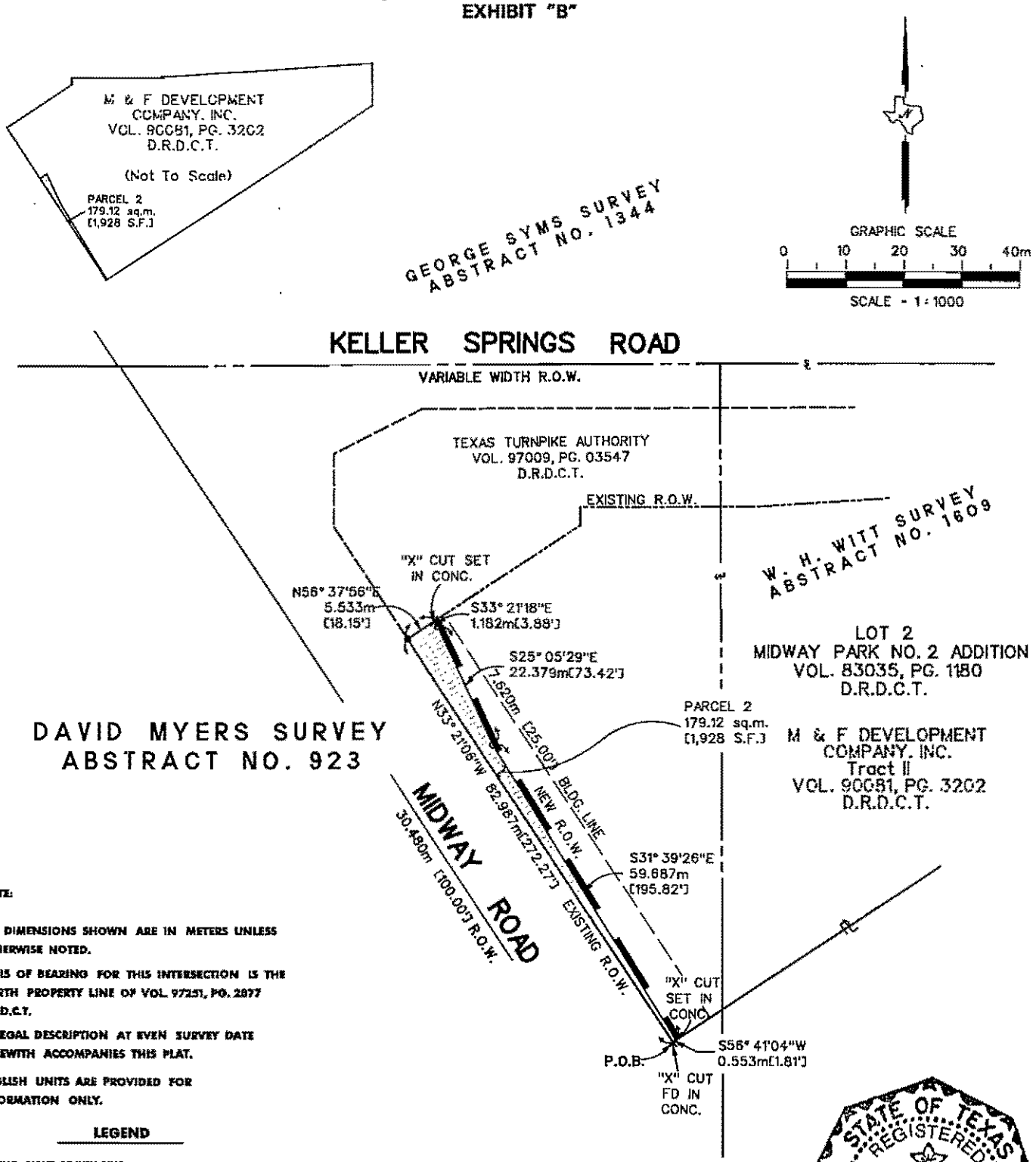
Company Name: Arredondo, Brunz & Associates, Inc.

By: John F. Pierce

Date: MAY 15, 2003

Surveyor's Name: John F. Pierce, R.P.L.S.
Registered Professional Land Surveyor
Texas Registration No. 2011

EXHIBIT "B"



NOTE:

ALL DIMENSIONS SHOWN ARE IN METERS UNLESS OTHERWISE NOTED.

BASIS OF BEARING FOR THIS INTERSECTION IS THE NORTH PROPERTY LINE OF VOL. 97251, PG. 2877 D.R.D.C.T.

A LEGAL DESCRIPTION AT EVEN SURVEY DATE HEREWITH ACCOMPANIES THIS PLAT.

ENGLISH UNITS ARE PROVIDED FOR INFORMATION ONLY.

LEGEND

- EXISTING RIGHT-OF-WAY LINE
- NEW RIGHT-OF-WAY LINE
- PROPERTY LINE
- COUNTY LINE
- CONTROL OF ACCESS LINE
- SURVEY LINE
- FENCE LINE
- CITY LIMITS
- EASEMENTS
- RAILROAD
- STRUCTURE
- 1/2" STEEL REBAR SET WITH YELLOW PLASTIC CAP MARKED "AZB", SET UNLESS OTHERWISE NOTED. ○
- SET AD= TxDOT ALUMINUM DISK SET ON TOP OF A 5/8-INCH IRON ROD
- SET BD= TxDOT BRONZE DISK SET IN CONCRETE

A PLAT OF A SURVEY OF A 179.12 sq.m. [1,928 S.F.] TRACT OF LAND IN THE DAVID MYERS SURVEY ABSTRACT NUMBER 923 AND BEING PART OF LOT 2 OF THE MIDWAY PARK NO.2 ADDITION CITY OF CARROLTON DALLAS COUNTY, TEXAS

STATE OF TEXAS
REGISTERED
JOHN F. PIERCE
2011
PROFESSIONAL
LAND SURVEYOR

05-15-03
DATE

JUNE 07, 1999
REVISED MAY 15, 2003

16 MAY 2003 11:20:01

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©TRANSIT

MAP CHECK TRAVERSE/CLOSURE AND AREA

Tract name : P2-KM

Origin :			
Northing / Easting	:	13,897.671	14,102.466
Course 1 : Northwest			
Azimuth/Distance	:	N 33° 21' 6.0" W , 272.267'	82.987m
Delta North/Delta East	:	69.320	-45.624
Northing / Easting	:	13,966.991	14,056.842
Course 2 : Northeast			
Azimuth/Distance	:	N 56° 37' 56.0" E , 18.153'	5.533m
Delta North/Delta East	:	3.043	4.621
Northing / Easting	:	13,970.034	14,061.463
Course 3 : Southeast			
Azimuth/Distance	:	S 33° 21' 18.0" E , 3.878'	1.182m
Delta North/Delta East	:	-0.987	0.650
Northing / Easting	:	13,969.047	14,062.113
Course 4 : Southeast			
Azimuth/Distance	:	S 25° 5' 28.6" E , 73.422'	22.379m
Delta North/Delta East	:	-20.267	9.490
Northing / Easting	:	13,948.780	14,071.603
Course 5 : Southeast			
Azimuth/Distance	:	S 31° 39' 26.3" E , 195.823'	59.687m
Delta North/Delta East	:	-50.806	31.326
Northing / Easting	:	13,897.974	14,102.929
Course 6 : Southwest			
Azimuth/Distance	:	S 56° 41' 3.6" W , 1.814'	0.553m
Delta North/Delta East	:	-0.304	-0.462
Northing / Easting	:	13,897.670	14,102.466

TOTAL LENGTH OF TRAVERSE = 172.321 m
CLOSURE : N 34° 19' 43.7" W , 0.001m
0.003'

Ratio : 1 in 208,638
Parcel Area = 179.111 SQ. METERS
Parcel Area = 0.0179 HECTARES

EXHIBIT "A"

County Dallas | Page 1 of 2
Parcel 2 | D-15-
Highway Intersection of Keller Springs Road at Midway Road | June 7, 1999
CSJ: | Revised: May 15, 2003
Account:

Field Note Description for Parcel 2

BEING 179.12 square meters [1,928 square feet] of land in the David Myers Survey, Abstract No. 923 in Dallas County, Texas and being a portion of that 1.21646 hectares [3.0060 acres] parcel of land as described as Tract II in a deed to M & F DEVELOPMENT COMPANY, INC. (M & F tract) as recorded in Volume 90081, Page 3202 of the Deed Records of Dallas County Texas (D.R.D.C.T.), said M & F tract being in Lot 2 of the Midway Park No. 2 as recorded in Volume 83035, Page 1180 of the Map Records of Dallas County Texas (M.R.D.C.T.), and being more particularly described by metes and bounds as follows:

BEGINNING at an "X" cut on concrete found at the southwest corner of said M & F tract on the existing west right-of-way line of Midway Road,

1. **THENCE**, North 33 degrees 21 minutes 06 seconds West, along the west property line of said M & F tract and said existing east right-of-way line of Midway Road, for a distance of 82.987 meters [272.27 feet] to a one-half inch steel rebar with yellow plastic cap marked "A.Z.B." set for the intersection of said existing east right-of-way line of Midway Road and the existing south right-of-way line of Keller Springs Road as described in Volume 97009, Page 03547 D.R.D.C.T.;

2. **THENCE**, North 56 degrees 37 minutes 56 seconds East, along said existing south right-of-way line of Keller Springs Road, a distance of 5.533 meters [18.15 feet] to an "X" cut on concrete set for corner on the new easterly right-of-way line of Midway Road;

3. **THENCE**, South 33 degrees 21 minutes 18 seconds East, along the new easterly right-of-way line of Midway Road, for a distance of 1.182 meters [3.88 feet] to a one-half inch steel rebar with yellow plastic cap marked "A.Z.B." set for corner;

4. **THENCE**, South 25 degrees 05 minutes 29 seconds East, continuing along said new easterly right-of-way line of Midway Road, a distance of 22.379 meters [73.42 feet] to a one-half inch steel rebar with yellow plastic cap marked "A.Z.B." set for corner;

5. **THENCE**, South 31 degrees 39 minutes 26 seconds East, continuing along said new easterly right-of-way line of Midway Road, a distance of 59.687 meters [195.82 feet] to an "X" cut on concrete set for corner;

County Dallas
Parcel 2
Highway Intersection of Keller Springs Road at Midway Road
CSJ:
Account:

D-15-
June 7, 1999
Revised: May 15, 2003

Field Note Description for Parcel 2

6. **THENCE**, South 56 degrees 41 minutes 04 seconds West, continuing along said new easterly right-of-way line of Midway Road, a distance of 0.553 meters [1.81 feet] to the **POINT OF BEGINNING.**

The above described tract of land contains 179.12 square meters [1,928 square feet] of land more or less.

A plat of even survey date herewith accompanies this legal description.

The basis of bearings for this intersection is the north property line of Volume 97251, Page 2877 D.R.D.C.T.

All dimensions are in meters unless otherwise noted.

English units are given for information only.

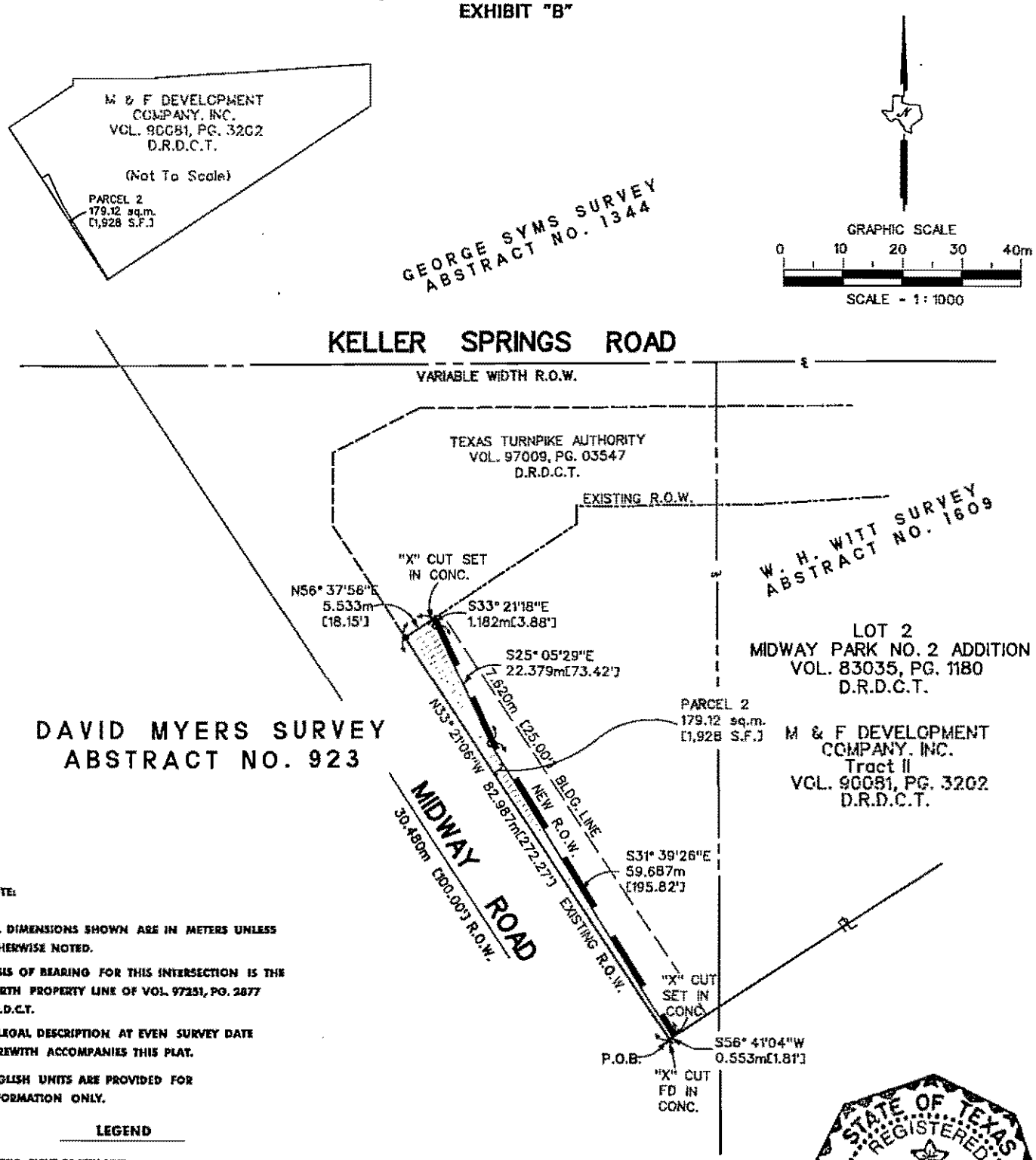
Company Name: Arredondo, Brunz & Associates, Inc.

By: John F. Pierce

Date: MAY 15, 2003

Surveyor's Name: John F. Pierce, R.P.L.S.
Registered Professional Land Surveyor
Texas Registration No. 2011

EXHIBIT "B"



NOTE:

ALL DIMENSIONS SHOWN ARE IN METERS UNLESS OTHERWISE NOTED.

BASIS OF BEARING FOR THIS INTERSECTION IS THE NORTH PROPERTY LINE OF VOL. 97251, PG. 2877 D.R.D.C.T.

A LEGAL DESCRIPTION AT EVEN SURVEY DATE HEREWITH ACCOMPANIES THIS PLAT.

ENGLISH UNITS ARE PROVIDED FOR INFORMATION ONLY.

LEGEND

- EXISTING RIGHT-OF-WAY LINE
- NEW RIGHT-OF-WAY LINE
- PROPERTY LINE
- COUNTY LINE
- CONTROL OF ACCESS LINE
- SURVEY LINE
- FENCE LINE
- CITY LIMITS
- EASEMENTS
- RAILROAD
- STRUCTURE
- 1/2" STEEL REBAR SET WITH YELLOW PLASTIC CAP MARKED "AZB", SET UNLESS OTHERWISE NOTED. ○
- SET AD= TxDOT ALUMINUM DISK SET ON TOP OF A 5/8-INCH IRON ROD
- SET BD= TxDOT BRONZE DISK SET IN CONCRETE

A PLAT OF A SURVEY OF A 179.12 sq.m. [1,928 S.F.] TRACT OF LAND IN THE DAVID MYERS SURVEY ABSTRACT NUMBER 923 AND BEING PART OF LOT 2 OF THE MIDWAY PARK NO.2 ADDITION CITY OF CARROLTON DALLAS COUNTY, TEXAS

STATE OF TEXAS
REGISTERED
JOHN F. PIERCE
2011
PROFESSIONAL
LAND SURVEYOR

05-15-03
DATE

JUNE 07, 1999
REVISED MAY 15, 2003

16 MAY 2003 11:20:01

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©TRANSIT

PARCEL 2

MAP CHECK TRAVERSE/CLOSURE AND AREA

Tract name : P2-KM

Origin :			
Northing / Easting	:	13,897.671	14,102.466
Course 1 : Northwest			
Azimuth/Distance	:	N 33° 21' 6.0" W , 272.267'	82.987m
Delta North/Delta East	:	69.320	-45.624
Northing / Easting	:	13,966.991	14,056.842
Course 2 : Northeast			
Azimuth/Distance	:	N 56° 37' 56.0" E , 18.153'	5.533m
Delta North/Delta East	:	3.043	4.621
Northing / Easting	:	13,970.034	14,061.463
Course 3 : Southeast			
Azimuth/Distance	:	S 33° 21' 18.0" E , 3.878'	1.182m
Delta North/Delta East	:	-0.987	0.650
Northing / Easting	:	13,969.047	14,062.113
Course 4 : Southeast			
Azimuth/Distance	:	S 25° 5' 28.6" E , 73.422'	22.379m
Delta North/Delta East	:	-20.267	9.490
Northing / Easting	:	13,948.780	14,071.603
Course 5 : Southeast			
Azimuth/Distance	:	S 31° 39' 26.3" E , 195.823'	59.687m
Delta North/Delta East	:	-50.806	31.326
Northing / Easting	:	13,897.974	14,102.929
Course 6 : Southwest			
Azimuth/Distance	:	S 56° 41' 3.6" W , 1.814'	0.553m
Delta North/Delta East	:	-0.304	-0.462
Northing / Easting	:	13,897.670	14,102.466

TOTAL LENGTH OF TRAVERSE = 172.321 m
CLOSURE : N 34° 19' 43.7" W , 0.001m
0.003'

Ratio : 1 in 208,638
Parcel Area = 179.111 SQ. METERS
Parcel Area = 0.0179 HECTARES

Parsons Brinckerhoff

CMAQ Program Office
1701 N. Market Street
Suite 410
Dallas, TX 75202
214-747-6336
Fax: 214-741-1937
cmaq@onramp.net

November 17, 2000

Mr. Steven Z. Chutchian, P.E.
Town of Addison
16801 Westgrove Drive
Addison, Texas 75001-9010

Subject: Congestion Mitigation Air Quality (CMAQ) Program
Signature Of Final Plans For Project 29 (4 Intersections)

Dear Mr. Chutchian:

We have received the final plans for CMAQ Project 29 in your City. The plans have been reviewed by the PM/E for format and completeness and are ready for PS&E assembly and submittal to TxDOT - Austin for bid letting. The CSJ, intersection name, and City are shown below:

CSJ Number	Intersection Name	City
0918-45-355	Coit Road at Frankford Road	Dallas
0918-45-355	Frankford Road at Dallas North Tollway	Dallas
0918-45-355	Trinity Mills Road at Dallas North Tollway	Dallas
0918-45-355	Keller Springs Road/Knoll Trail at Dallas North Tollway	Dallas

A paper copy of the plans is attached for your review and files. We sent the plans to TxDOT without the signed title sheet for checking and placement on the letting schedule. The attached mylar cover sheet is enclosed for signature. We request you obtain the signature from your Director of Public Works on the title sheet and return immediately so we can proceed with this project. The signature should be made using a "Sharpie" like pen with black permanent type ink.

If you have any other questions about this matter, please call me at 747-6336 ext. 26 or Jack Loggins at ext. 28.

Sincerely,

Jack W. Loggins for

Ivan F. Nicodemus, P.E.
Program Manager

Attachments:
1.) Mylar Cover Sheet – 1 each
2.) Paper Copy of Sealed Plans – 2 Sets
3.) Cost Estimates – 2 sets
4.) Contract Time Estimate – 2 sets
5.) Civil General Notes – 2 sets
6.) Traffic General Notes – 2 sets

cc: Don L. Cranford, P.E., Dallas County, Asst. Dir., Trans. & Plan., w/o attachments
Moosa Saghian, P.E., TxDOT Special Projects Office, w/o attachments
Fraydoon Nafissi, P.E., TxDOT Special Projects Office, w/o attachments
Maher Ghanayem, P.E., TxDOT Traffic Office, w/o attachments
Alan Hendrix, P.E., Dallas, w/o attachments
Tim Starr, P.E., Dallas, w/o attachments
Jon Engelke, P.E. EarthTech, Inc., w/o attachments

Parsons Brinckerhoff

CMAQ Program Office
1701 N. Market Street
Suite 410
Dallas, TX 75202
214-747-6336
Fax: 214-741-1937
cmaq@onramp.net

December 7, 2000

Mr. Alan Hendrix, P.E.
City of Dallas
1500 Marilla, L1BN
Dallas, Texas 75201

Subject: Congestion Mitigation Air Quality (CMAQ) Program
Signature Of Final Plans For Project 29 (4 Intersections)

Dear Mr. Hendrix:

We have received the final plans for CMAQ Project 29 in your City. The plans have been reviewed by the PM/E for format and completeness and are ready for PS&E assembly and submittal to TxDOT - Austin for bid letting. The CSJ, intersection name, and City are shown below:

CSJ Number	Intersection Name	City
0918-45-355	Coit Road at Frankford Road	Dallas
0918-45-355	Frankford Road at Dallas North Tollway	Dallas
0918-45-355	Trinity Mills Road at Dallas North Tollway	Dallas
0918-45-355	Keller Springs Road/Knoll Trail at Dallas North Tollway	Dallas

A paper copy of the plans was previously sent for your review and files. We sent the plans to TxDOT without the signed title sheet for checking and placement on the letting schedule. The Town of Addison has provided their signature. We request you obtain the signature from your Director of Public Works on the title sheet and return at your earliest convenience

If you have any other questions about this matter, please call me at 747-6336 ext. 26 or Jack Loggins at ext. 28.

Sincerely,

Ivan F. Nicodemus, P.E.
Program Manager

Attachment: Mylar title sheet

cc: Don L. Cranford, P.E., Dallas County, Asst. Dir., Trans. & Plan., w/o attachments
Moosa Saghian, P.E., TxDOT Special Projects Office, w/o attachments
Fraydoon Nafissi, P.E., TxDOT Special Projects Office, w/o attachments
Maher Ghanayem, P.E., TxDOT Traffic Office, w/o attachments
Tim Starr, P.E., Dallas, w/o attachments
Steven Chutchian, P.E., Town of Addison, w/ attachments
Jon Engelke, P.E. EarthTech, Inc., w/o attachments

Steve – KSRE Toll Rd

Loggins called.
They have the
ROW they need
Have sent maps

Do you have them?

JP

December 1, 2000

Mike – attached is an original cover sheet for proposed CMAQ, Project 29 improvements. The only affect on the Town of Addison is a proposed right-turn lane along the southbound lane of Dallas Parkway. A portion of this right-turn lane is in Addison and the remainder is in Dallas. The design appears to be adequate. Consequently, it is recommended that we sign-off on the cover sheet and approve the construction at this location. Thanks.

Steve C.

Parsons Brinckerhoff

CMAQ Program Office
1701 N. Market Street
Suite 410
Dallas, TX 75202
214-747-6336
Fax: 214-741-1937
cmaq@onramp.net

November 17, 2000

Mr. Alan Hendrix, P.E.
City of Dallas
1500 Marilla, L1BN
Dallas, Texas 75201

Subject: Congestion Mitigation Air Quality (CMAQ) Program
Signature Of Final Plans For Project 29 (4 Intersections)

Dear Mr. Hendrix:

We have received the final plans for CMAQ Project 29 in your City. The plans have been reviewed by the PM/E for format and completeness and are ready for PS&E assembly and submittal to TxDOT - Austin for bid letting. The CSJ, intersection name, and City are shown below:

CSJ Number	Intersection Name	City
0918-45-355	Coit Road at Frankford Road	Dallas
0918-45-355	Frankford Road at Dallas North Tollway	Dallas
0918-45-355	Trinity Mills Road at Dallas North Tollway	Dallas
0918-45-355	Keller Springs Road/Knoll Trail at Dallas North Tollway	Dallas

A paper copy of the plans is attached for your review and files. We sent the plans to TxDOT without the signed title sheet for checking and placement on the letting schedule. The mylar cover sheet has been sent to the Town of Addison for their signature. We request you review the plans for signature. We will forward the cover sheet to your offices to obtain the signature from your Director of Public Works on the title sheet as soon as we receive the cover sheet back form the Town of Addison.

If you have any other questions about this matter, please call me at 747-6336 ext. 26 or Jack Loggins at ext. 28.

Sincerely,

Ivan F. Nicodemus, P.E.
Program Manager

Attachments:
1.) Paper Copy of Sealed Plans – 2 Sets
2.) Cost Estimates – 2 sets
3.) Contract Time Estimate – 2 sets
4.) Civil General Notes – 2 sets
5.) Traffic General Notes – 2 sets

cc: Don L. Cranford, P.E., Dallas County, Asst. Dir., Trans. & Plan., w/o attachments
Moosa Saghian, P.E., TxDOT Special Projects Office, w/o attachments
Fraydoon Nafissi, P.E., TxDOT Special Projects Office, w/o attachments
Maher Ghanayem, P.E., TxDOT Traffic Office, w/o attachments
Tim Starr, P.E., Dallas, w/o attachments
Steven Chutchian, P.E., Town of Addison, w/ attachments
Jon Engelke, P.E. EarthTech, Inc., w/o attachments

Parsons Brinckerhoff

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1701 N. Market Street
Suite 410
Dallas, TX 75202
214-747-6336
Fax: 214-741-1937
cmaq@onramp.net

November 17, 2000

Mr. Moosa Saghian, P.E.
Texas Department of Transportation
PO Box 3067
Dallas, Texas. 75202

Subject: Congestion Mitigation Air Quality (CMAQ) Program
Final Plans and Compact Disk Of Files - Project 29 (4 Locations)

Dear Mr. Saghian:

Attached please find the Final PS&E construction documents for Project 29 in the City of Dallas. The plans have been reviewed by the PM/E for format and completeness and are ready for PS&E assembly and submittal to TxDOT - Austin for bid letting. The CSJ, intersection name, and City are shown below:

CSJ Number	Intersection Name	City
0918-45-355	Coit Road at Frankford Road	Dallas
0918-45-355	Frankford Road at Dallas North Tollway	Dallas
0918-45-355	Trinity Mills Road at Dallas North Tollway	Dallas
0918-45-355	Keller Springs Road/Knoll Trail at Dallas North Tollway	Dallas

The package includes one set of 11"x17" original signature sealed mylar plan sheets and 5 paper copies of the sealed drawings, for further processing. The Title Sheet has been removed and sent to the City of Dallas and Addison to obtain the required signature. It is our understanding that these documents will be checked and reviewed by the Special Projects Office for completeness, as the PS&E package is assembled for letting in Austin.

If you have any questions regarding the provided materials, please contact me at 747-6336 ext. 26 or Jack Loggins at ext. 28.

Sincerely,

Jack W. Loggins for

Ivan F. Nicodemus, P.E.
Program Manager

Attachments:
1.) Construction Plans - Original signature sealed mylar copy - 1 Copy
2.) Paper Copy of Sealed Plans – 5 Sets
3.) CD of Final Plans – 1 copy
4.) Cost Estimates – 5 sets
5.) Contract Time Estimate – 5 sets
6.) Civil General Notes – 5 sets
7.) Traffic General Notes – 5 sets

cc: Don L. Cranford, P.E., Dallas County, Asst. Dir., Transp. & Plan., w/o attachments
Fraydoon Nafissi, P.E., TxDOT Special Projects Office, w/o attachments
Maher Ghanayem, P.E., TxDOT Traffic Office, w/o attachments
Alan Hendrix, P.E., Dallas, w/o attachments
Tim Starr, P.E., Dallas, w/o attachments
Steven Chutchian, P.E., Town of Addison, w/ attachments
Jon Engelke, P.E. EarthTech, Inc., w/o attachments

GENERAL NOTES AND SPECIFICATION DATA--

ITEM 618, CONDUIT:, CONT'D

THE CONTRACTOR SHALL INSTALL A NON-METALLIC PULL ROPE IN CONDUIT RUNS IN EXCESS OF 15.2M (50 FEET).

A COLORED CLEANER-PRIMER SHALL BE USED ON ALL PVC TO PVC JOINTS BEFORE APPLICATION OF PVC CEMENT.

WHEN HOLES ARE REQUIRED TO BE DRILLED THROUGH CONCRETE STRUCTURES, A CORING DEVICE SHALL BE USED. MASONRY OR CONCRETE DRILLS SHALL BE PROHIBITED.

STRUCTURALLY MOUNTED JUNCTION BOXES SHALL BE AS DETAILED IN THE PLANS. WHEN USED FOR TRAFFIC SIGNAL INSTALLATIONS, THESE BOXES SHALL BE 305MM X 305MM X 203MM (12"X12"X8)", AND SHALL BE APPROVED BY THE ENGINEER. THE BOXES SHALL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED SUBSIDIARY TO THIS ITEM.

WHEN HANGING CONDUIT FROM STRUCTURES, CONDUIT HANGERS SHALL BE USED FOR 75MM (3 INCH) AND LARGER CONDUITS.

CONDUIT PLACED UNDER THE RAILROAD TRACKS SHALL MAINTAIN A MINIMUM DEPTH OF 1.1M (42") BELOW THE BOTTOM OF THE TIES.

ALL PROPOSED CONDUIT SHALL BE PLACED BY THE OPEN TRENCH METHOD BELOW THE PROPOSED SUBGRADE, UNLESS OTHERWISE INDICATED IN THE PLANS. IF THE CONTRACTOR FAILS TO PLACE THE CONDUIT AS PROPOSED , THEN HE CAN CHOOSE OTHER METHODS SUCH AS BORING OR OPEN CUTTING NEW PAVEMENT AS APPROVED BY THE ENGINEER, AND AT NO ADDITIONAL COST TO THE STATE.

CONDUIT INSTALLED FOR FUTURE USE SHALL HAVE NON-METALLIC PULL ROPES INSTALLED AND SHALL BE CAPPED USING STANDARD WEATHER TIGHT CONDUIT CAPS, AS APPROVED BY THE ENGINEER. THIS WORK SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM.

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT CERTAIN EXISTING CONDUIT IS PROPOSED FOR REUSE. IF THE EXISTING CONDUIT CANNOT BE USED, THE CONTRACTOR WILL BE REQUIRED TO REPAIR AND/OR REPLACE THIS CONDUIT AS DIRECTED BY THE ENGINEER. REPAIR OF THIS CONDUIT WILL BE PAID FOR AS "EXTRA WORK" ON A "FORCE ACCOUNT BASIS." THE CONTRACTOR SHALL PROBE THE EXISTING CONDUIT WHEN LOCATING DRILL SHAFTS SO THAT ITS CONDITION WILL BE KNOWN BEFORE IT IS NEEDED.

WHEN USING EXISTING CONDUIT, THE CONTRACTOR SHALL ENSURE THAT ALL CONDUIT HAVE BUSHINGS AND ARE CLEANED OF MUD AND DEBRIS. CONDUIT THAT IS BEING RELOCATED TO NEW TIMBER POLES SHALL BE RESTRAPPED AS IF IT WERE A NEW INSTALLATION. THIS WORK WILL NOT BE PAID FOR DIRECTLY, BUT

GENERAL NOTES AND SPECIFICATION DATA--

ITEM 618, CONDUIT:, CONT'D
SHALL BE CONSIDERED SUBSIDIARY TO ITEM 618.

ITEM 624, GROUND BOX:

WHEN USING EXISTING GROUND BOXES, THE CONTRACTOR SHALL ENSURE THAT THE GROUND BOXES ARE CLEAN, PROPERLY SECURED, AND HAVE A MINIMUM OF 229MM (9INCHES) OF GRAVEL AS A BASE. THIS WORK WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO ITEM 624.

~~ALL JUNCTION BOXES MOUNTED ON BRIDGES AND UNDERPASSES SHALL BE NOT TO BE GROUNDED WITH A GROUND ROD. 229MM~~

~~ALL GROUND BOXES USED FOR ILLUMINATION SHALL HAVE "TXDOT-ILLUMINATION" IMPRINTED ON THE COVER. 229MM~~

~~ITEM 627, TREATED TIMBER POLES:~~

~~THE TIMBER POLE HEIGHTS SHOWN IN THE PLANS AND IN THE MATERIAL SUMMARY ARE TO BE USED FOR BIDDING PURPOSES ONLY. PRIOR TO CONSTRUCTION, THE CONTRACTOR IN COOPERATION WITH THE ENGINEER, SHALL MAKE FIELD MEASUREMENTS TO DETERMINE THE ACTUAL POLE HEIGHT NECESSARY TO ENSURE A VERTICAL CLEARANCE OF 5.2M (17 FEET) MINIMUM, 5.8M (19 FEET) MAXIMUM FROM THE HIGHEST POINT ON THE ROADWAY SURFACE TO THE SPAN. THESE FIELD MEASUREMENTS AND ELEVATIONS SHALL BE DETERMINED FROM THE ACTUAL FIELD LOCATION OF THE POLES, CONSIDERING ALL ABOVE AND BELOW GROUND UTILITIES AND THE EXISTING ROADWAY ELEVATIONS.~~

ITEM 628, ELECTRICAL SERVICES:

~~CONCRETE FOR SERVICE POLE FOUNDATIONS, WHEN REQUIRED, SHALL BE CLASS A AND SHALL BE IN ACCORDANCE WITH ITEM 421, "PORTLAND CEMENT CONCRETE", EXCEPT THAT CONCRETE WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO ITEM 628. REINFORCING STEEL FOR SERVICE POLE FOUNDATIONS, WHEN REQUIRED, SHALL BE IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL", EXCEPT THAT REINFORCING STEEL WILL NOT PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO ITEM 628.~~

CONDUIT AND CONDUCTORS ATTACHED TO THE SERVICE POLE AND UNDERGROUND WITHIN 305MM (12 INCHES) OF THE SERVICE POLE WILL NOT BE PAID FOR

GENERAL NOTES AND SPECIFICATION DATA--

ITEM 628, ELECTRICAL SERVICES:, CONT'D
DIRECTLY, BUT SHALL BE CONSIDERED SUDSIDIARY TO THIS ITEM.

SERVICE ENCLOSURE SHALL BE ATTACHED WITH GALVANIZED CHANNEL (UNISTRUT, KINDORF, OR EQUAL). THE POLE SHALL BE NOTCHED IN TWO PLACES TO PROVIDE FLAT SURFACES. ENDS OF THE CHANNEL SHALL BE PAINTED WITH ZINC RICH PAINT.

NEW
THE ELECTRICAL SERVICES FOR THIS PROJECT SHALL BE BILLED IN THE NAME OF THE ~~XXXXXXXX~~ CITY OF DALLAS.

ITEM 644, SMALL ROADSIDE SIGN ASSEMBLIES:

THE CONTRACTOR SHALL PROVIDE FIELD GALVANIZING AND METALLIZING EQUIPMENT, AS PER ITEM 445, AT ALL TIMES AND MAKE REPAIRS TO GALVANIZED SURFACES ACCORDING TO THE ABOVE SPECIFICATION ITEM AT INTERVALS AS DIRECTED BY THE ENGINEER.

ANY SIGNS REQUIRED THAT ARE NOT DETAILED ON THE PLAN SHEETS SHALL BE IN CONFORMANCE WITH THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AND THE "STANDARD HIGHWAY SIGN DESIGNS FOR TEXAS".

INDIVIDUAL UNITS REQUIRING CLEANING SHALL BE WASHED WITH AN APPROVED CLEANING SOLUTION TO REMOVE ALL GREASE, OIL, DIRT, SMEARS, STREAKS AND OTHER FOREIGN PARTICLES.

ITEM 656, FOUND. FOR SIGNS, TRAFFIC SIGNALS & RDWY ILLUM ASSEMBLIES:

THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF DALLAS ~~XXXXXXXXXXX~~ WHEN PLACING THE CONCRETE FOR THE CONTROLLER FOUNDATION TO ENSURE THE ANCHOR BOLT SPACING WILL MATCH THE ANCHOR BOLTS AND CABINET SUPPLIED BY THE CITY.

THE TOP 50MM (2 INCHES) OF DRILL SHAFTS SHALL BE FORMED OR PROVIDED A SMOOTH FINISH SATISFACTORY TO THE ENGINEER. THE COST OF THE WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THIS ITEM.

A 19MM (3/4 INCH) CHAMFER SHALL BE FORMED ON THE TOP EDGE OF EACH SIGNAL POLE FOUNDATION.

GENERAL NOTES AND SPECIFICATION DATA--

ITEM 656, FOUND. FOR SIGNS, TRAFFIC SIGNALS & RDWY ILLUM ASSEMBLIES:, CONT'D

THE CONTRACTOR SHALL PROBE BEFORE DRILLING FOUNDATIONS TO DETERMINE THE LOCATION OF UTILITIES AND STRUCTURES. FOUNDATIONS SHALL BE PAID FOR ONCE REGARDLESS OF EXTRA WORK CAUSED BY OBSTRUCTIONS. ~~THE CONTRACTOR SHALL CALL THE DISTRICT UTILITY SECTION AT 214 320 6270 FOR STATE MAINTAINED UTILITY LOCATIONS.~~

ITEM 680, INSTALLATION OF HIGHWAY TRAFFIC SIGNALS:

THIS PROJECT SHALL CONSIST OF FURNISHING AND INSTALLING ALL MATERIALS AND EQUIPMENT NECESSARY FOR A COMPLETE SIGNAL SYSTEM AT THE PROPOSED LOCATION. IN ADDITION TO THESE ITEMS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING:

1. FURNISHING AND INSTALLING ALL SIGNS FOR MOUNTING ON SIGNAL POLES AND MAST ARMS. THESE SIGNS SHALL BE FURNISHED IN ACCORDANCE WITH ITEM 636, WILL NOT BE PAID FOR DIRECTLY, AND SHALL BE CONSIDERED SUBSIDIARY TO ITEM 680. SIGNS SHALL BE MOUNTED WITH ASTRO-SIGN BRAC OR SIGNFIX ALUMINUM CHANNEL OR EQUAL AS APPROVED BY THE ENGINEER. FIVE (5) SETS OF SHOP DRAWINGS SHALL BE SUBMITTED FOR STREET NAME SIGNS.

2. SUBMITTAL LITERATURE SHALL BE PROVIDED FOR ALL TRAFFIC SIGNAL EQUIPMENT PRIOR TO INSTALLATION.

3. THE CONTRACTOR SHALL HAVE A QUALIFIED TECHNICIAN ON THE PROJECT SITE TO PLACE THE TRAFFIC SIGNALS IN OPERATION.

4. DURING THE THIRTY DAY TEST PERIOD, THE CONTRACTOR SHALL UTILIZE QUALIFIED PERSONNEL TO RESPOND TO AND DIAGNOSE ALL TROUBLE CALLS. HE SHALL REPAIR ANY MALFUNCTIONS TO SIGNAL EQUIPMENT HE SUPPLIED ON THE PROJECT. A LOCAL TELEPHONE NUMBER (NOT SUBJECT TO FREQUENT CHANGES) WHERE TROUBLE CALLS ARE TO BE RECEIVED ON A 24-HOUR BASIS SHALL BE PROVIDED TO THE ENGINEER BY THE CONTRACTOR. THE CONTRACTOR'S RESPONSE TIME TO REPORTED CALLS SHALL BE WITHIN A REASONABLE TRAVEL TIME FROM A DALLAS ADDRESS, BUT NOT MORE THAN TWO (2) HOURS MAXIMUM. APPROPRIATE REPAIRS SHALL BE MADE WITHIN 24 HOURS. THE CONTRACTOR SHALL PLACE A LOG BOOK IN EACH CONTROLLER CABINET AND KEEP A RECORD OF EACH TROUBLE CALL REPORTED. HE SHALL NOTIFY THE ENGINEER OF EACH TROUBLE CALL. THE ERROR LOG IN THE CONFLICT MONITOR SHALL NOT BE CLEARED DURING THE THIRTY DAY TEST PERIOD WITHOUT THE APPROVAL OF THE ENGINEER.

GENERAL NOTES AND SPECIFICATION DATA--

ITEM 680, INSTALLATION OF HIGHWAY TRAFFIC SIGNALS: CONT'D

~~CAPABLE OF BOOSTING THE INCOMING LINE VOLTAGE TO THE~~ CONTROLLER HOUSE BY 20 VOLTS MAXIMUM WITH SMALLER INCREMENTS OF LINE VOLTAGE BOOSTS ALSO SELECTABLE. THE TRANSFORMER SHALL BE MOUNTED IN THE HOUSE AND CONNECTED TO THE POWER SERVICE FEEDER AS IT ENTERS THE HOUSE FROM THE SERVICE POLE.

*******FOR CITY OF GRAND PRAIRIE********

13. THE LOCATION AND DEPTH OF ALL UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THERE MAY BE OTHER UNKNOWN UTILITIES EXISTING NOT SHOWN ON THE PLANS THAT SHOULD BE FIELD VERIFIED AND PROTECTED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE FOLLOWING UTILITY COMPANIES 48 HRS PRIOR TO DOING ANY WORK IN THE AREA:

A) LONE STAR GAS - MR. DALE KENDRICK, PH 214-263-3444
B) SOUTHWESTERN BELL - MR. MARC CARNEY, PH 817-493-5415
C) STORER CABLE- MR. GLENN ARANDA, PH 817-882-2388
D) TU ELECTRIC - MR. NORMAN WATSON, PH 817-882-6157
E) GR PRAIRIE DISPOSAL - MR. LES WHITWORTH, PH 817-261-8812
F) CITY UTILITY MAINS (WATER, SEWER) - MR RAY MORENO, PH 214-263-9766

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM THE FOLLOWING AT NO ADDITIONAL COMPENSATION:

A) PREVENT ANY PROPERTY DAMAGE TO PROPERTY OWNER'S POLES, FENCES, SHRUBS, MAILBOXES, ETC.
B) PROVIDE ACCESS TO ALL DRIVEWAYS DURING CONSTRUCTION.
C) PROTECT ALL UNDERGROUND AND OVERHEAD UTILITIES AND REPAIR ANY DAMAGES.

NO EXTRA COMPENSATION WILL BE ALLOWED FOR FULFILLING THE REQUIREMENTS STATED ABOVE.

~~*******FOR CITY SUPPLIED EQUIPMENT********~~

1. THE CONTRACTOR SHALL INSTALL THE ~~STREET NAME SIGNS AND LEFT TURN SIGNAL~~ SIGNS SUPPLIED BY THE CITY FOR MOUNTING ON SIGNAL MAST ARMS. ~~ALL OTHER SIGNS SHALL BE FURNISHED IN ACCORDANCE WITH ITEM 636, WILL NOT BE PAID FOR DIRECTLY, AND SHALL BE CONSIDERED SUBSIDIARY TO ITEM 680.~~ ALL MOUNTING HARDWARE FOR ALL SIGNS SHALL BE FURNISHED BY THE CONTRACTOR CITY. ~~SIGNS SHALL BE MOUNTED WITH ASTRO SIGN BRAC OR SIGNEX~~

THESE

THE CONTRACTOR SHALL RELOCATE EXISTING SIGNS AS SHOWN ON THE PLANS.

GENERAL NOTES AND SPECIFICATION DATA--

ITEM 680, INSTALLATION OF HIGHWAY TRAFFIC SIGNALS: CONT'D

~~ALUMINUM CHANNEL OR EQUAL AS APPROVED BY THE ENGINEER.~~

2. SUBMITTAL LITERATURE SHALL BE PROVIDED FOR ALL CONTRACTOR FURNISHED TRAFFIC SIGNAL EQUIPMENT PRIOR TO INSTALLATION.

3. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF DALLAS ~~XXXXXXXXXX~~ TO HAVE A QUALIFIED TECHNICIAN ON THE PROJECT SITE TO PLACE THE TRAFFIC SIGNALS IN OPERATION.

4. DURING THE THIRTY DAY TEST PERIOD, THE CONTRACTOR SHALL UTILIZE QUALIFIED PERSONNEL TO RESPOND TO AND DIAGNOSE ALL TROUBLE CALLS. HE SHALL REPAIR ANY MALFUNCTIONS TO SIGNAL EQUIPMENT HE SUPPLIED ON THE PROJECT. A LOCAL TELEPHONE NUMBER (NOT SUBJECT TO FREQUENT CHANGES) WHERE TROUBLE CALLS ARE TO BE RECEIVED ON A 24-HOUR BASIS SHALL BE PROVIDED TO THE ENGINEER BY THE CONTRACTOR. THE CONTRACTOR'S RESPONSE TIME TO REPORTED CALLS SHALL BE WITHIN A REASONABLE TRAVEL TIME FROM A DALLAS ADDRESS, BUT NOT MORE THAN TWO (2) HOURS MAXIMUM., APPROPRIATE REPAIRS SHALL BE MADE WITHIN 24 HOURS. THE CONTRACTOR SHALL PLACE A LOG BOOK IN EACH CONTROLLER CABINET AND KEEP A RECORD OF EACH TROUBLE CALL REPORTED. HE SHALL NOTIFY THE ENGINEER OF EACH TROUBLE CALL. IF, AFTER DIAGNOSING THE PROBLEM, THE QUALIFIED TECHNICIAN DETERMINES THE PROBLEM IS IN THE EQUIPMENT SUPPLIED BY OTHERS, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER.

5. THE ~~CITY OF XXXXXXXXXXXXX WILL FURNISH THE~~ CONTRACTOR SHALL RELOCATE THE EXISTING TRAFFIC SIGNAL CONTROLLER ~~AND~~ CABINETS. THE CONTRACTOR SHALL CONNECT ALL FIELD WIRING TO THE CONTROLLER ASSEMBLY. THE CITY WILL ASSIST IN DETERMINING HOW THE DETECTOR LOOP LEAD-IN CABLES ARE TO BE CONNECTED (I.E., SERIES OR PARALLEL). THE CITY WILL PROGRAM THE CONTROLLER FOR OPERATION, HOOK UP THE CONFLICT MONITOR, DETECTOR UNITS, AND OTHER EQUIPMENT IN THE CONTROLLER CABINET AND TURN ON THE CONTROLLER. ~~THE CONTRACTOR SHALL OBTAIN THE SIGNAL CABINET FROM THE CITY OF XXXXXXXXXXXX SIGNAL SHOP.~~

6. THE CONTRACTOR SHALL PLACE DUCT SEAL AT THE ENDS OF ALL CONDUIT WHERE CONDUCTORS AND/OR CABLES ARE PRESENT AND REQUIRED FOR THE INTENDED OPERATION OF THE TRAFFIC SIGNALS.

~~7. THE EXISTING STOP SIGN PANELS, AS SHOWN ON THE PLANS, SHALL BE REMOVED AFTER THE TRAFFIC SIGNALS ARE IN OPERATION.~~

~~8. THE CONTRACTOR SHALL INSTALL THE OPTICOM EQUIPMENT SUPPLIED~~

7. WHEN SHOWN IN THE PLANS, THE CONTRACTOR SHALL CONNECT EXISTING ELECTRIC POWER CONDUCTORS TO NEW ELECTRICAL SERVICES.

AT KELLER SPRINGS AND DALLAS PARKWAY AND ALSO AT KELLER SPRINGS AND KNOLL TRAIL.

NO EXTRA COMPENSATION WILL BE ALLOWED FOR FULFILLING THE REQUIREMENTS STATED ABOVE.

GENERAL NOTES AND SPECIFICATION DATA--

ITEM 682, VEHICLE AND PEDESTRIAN SIGNAL HEADS:

ALL SIGNAL HEAD ATTACHMENTS SHALL BE DESIGNED SUCH THAT THE WIRING TO EACH SIGNAL HEAD SHALL PASS FROM THE MAST ARM THROUGH THE SIGNAL HEAD BRACING OR ATTACHMENT HARDWARE TO THE SIGNAL HEAD. NO EXPOSED CABLE OR WIRING WILL BE PERMITTED.

THE SIGNAL HEAD-TO-MAST ARM CONNECTION MUST ALLOW FOR ADJUSTMENT ABOUT THE HORIZONTAL AND VERTICAL AXIS.

FOR THIS PROJECT, A PEDESTRIAN SIGNAL HEAD ASSEMBLY HAVING A ONE PIECE REFLECTOR ASSEMBLY AND A FLUSH, "EGGCRATED" OR "Z" PATTERN VISOR WILL BE REQUIRED.

TRAFFIC SIGNAL HEADS FOR THIS PROJECT SHALL BE YELLOW ~~ALUMINUM~~ POLYCARBONATE WITH BLACK POLYCARBONATE BACK PLATES. SIGNAL LENSES SHALL BE GLASS.

TRAFFIC SIGNAL LAMPS SHALL BE 135 WATT AND PEDESTRIAN SIGNAL LAMPS SHALL BE 69 WATT, FOR YELLOW AND GREEN "BALLS" EXCEPT FOR THE LED LAMPS.

ALL MAST ARM MOUNTED SIGNAL HEADS SHALL BE TURNED DOWN AND ALL OTHER SIGNAL HEADS SHALL BE COVERED WITH BURLAP OR OTHER MATERIAL APPROVED BY THE ENGINEER UNTIL PLACED INTO OPERATION.

SIGNAL HEADS MOUNTED ON POLES AND MAST ARMS SHALL BE LEVEL AND PLUMB AND AIMED AS DIRECTED BY THE ENGINEER.

LOUVERS SHALL BE PROVIDED FOR THOSE SIGNAL SECTIONS INDICATED IN THE PLANS. ALL LOUVERS SHALL BE OF SUCH DESIGN AS TO PROVIDE VISIBILITY OF THE LENS FOR THE INTENDED LANE OF TRAFFIC AS INDICATED BY THE PLANS AND BLOCK VISIBLITY TO ALL OTHER LANES.

THE INTERNAL ARRANGEMENTS OF EACH LOUVER SHALL CONSIST OF 5 VANES WITH 5 DEGREE CUT-OFFS RIGHT OF CENTER. ALL LOUVERS SHALL HAVE A FLAT BLACK FINISH ON THE INSIDE SURFACES. EACH LOUVER SHALL BE OF SUITABLE WEIGHT AND SIZE TO FIT INSIDE THE FULL CIRCLE VISOR FURNISHED FOR THE INTENDED SIGNAL SECTION.

A HARDWARE CLOTH SCREEN WITH 16MM (5/8") OR SMALLER MESH SIZE TO PREVENT ENTRY BY BIRDS SHALL BE SECURELY FASTENED TO THE FRONT FACE OF EACH LOUVER.

GENERAL NOTES AND SPECIFICATION DATA--

UNLESS OTHERWISE SHOWN IN THE PLANS, SPLICES ARE NOT ALLOWED. WHEN NEW CABLE IS SHOWN TO BE INSTALLED IN EXISTING CONDUIT, UNUSED EXISTING CABLE SHALL BE REMOVED AND DISPOSED OF BY CONTRACTOR.

ITEM 684, TRAFFIC SIGNAL CABLES:

THE INTERCONNECT CABLE SHALL BE 12 TWISTED PAIR OF NO.16 AWG SOLID COPPER CONDUCTORS WITH POLYETHYLENE INSULATION RATED AT 300 VOLTS. THE CABLE SHALL CONFORM TO IMSA SPEC 40-2.

THE TYPE C CABLE FOR LOOP DETECTOR LEAD-IN SHALL BE NO. 18 AWG WIRE.

THE CONDUCTORS IN THE TRAFFIC SIGNAL CABLE SHALL BE STRANDED FOR THIS PROJECT. INDIVIDUAL CONDUCTORS SHALL BE NO. 12 AWG.

THE MULTICONDUCTOR SIGNAL CABLE SHOWN ON THE PLANS SHALL BE TERMINATED ON THE TERMINAL STRIP IN THE HAND HOLE OF MAST ARM SIGNAL POLES.

A SEPARATE MULTICONDUCTOR CABLE (16 AWG) SHALL BE USED INSIDE PEDESTAL POLES AND MAST ARM SIGNAL POLES FROM THE TERMINAL STRIP TO EACH SIGNAL HEAD AS FOLLOWS:

HEAD TYPE	CONDUCTOR SIZE
H3/V3	5 CNDR
H5LT/V5RT	7 CNDR
143C	5 CNDR (2 EA)
152A	5 CNDR

SPLICES IN THE CONDUCTORS FROM THE TERMINAL STRIP AT THE HAND HOLE TO THE SIGNAL HEADS WILL NOT BE PERMITTED IN THE POLE SHAFT OR IN THE MAST ARM.

EACH CABLE SHALL BE IDENTIFIED AS SHOWN ON THE PLANS (CABLE 1, ETC.) WITH PERMANENT MARKING LABELS (PANDUIT TYPE PLM STANDARD SINGLE MARKER TIE, THOMAS & BETTS TYPE 548M OR EQUIVALENT) AT EACH GROUND BOX, POLE BASE AND CONTROLLER.

ITEM 686, TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL):

TERMINAL STRIPS IN THE SIGNAL POLE ACCESS COMPARTMENT SHALL BE 12 CIRCUIT BUCHANAN TYPE 112SN, KULKA TYPE 985-GP-12 OR EQUIVALENT. WHEN MORE THAN 12 CIRCUITS ARE REQUIRED, ADDITIONAL TERMINAL STRIPS OF 8 CIRCUITS EACH SHALL BE ADDED.

ALL POLE SHAFTS AND MAST ARMS FOR THIS PROJECT SHALL BE MARKED WITH THE IDENTIFICATION NUMBERS FROM THE LAYOUT SHEETS ON THE PLANS TO

SPECIFICATION DATA

GENERAL NOTES AND SPECIFICATION DATA--

ITEM 686, TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL): CONT'D
FACILITATE ASSEMBLY OF THESE ITEMS IN THE FIELD. THE IDENTIFICATION NUMBERS SHALL BE MARKED ON THE POLE SHAFTS AND MAST ARMS PRIOR TO SHIPMENT FROM THE FABRICATOR. FOR PROJECTS WITH MULTIPLE INTERSECTIONS, THE POLE SHAFTS AND MAST ARMS SHALL BE IDENTIFIED BY INTERSECTION.

POLES SHALL HAVE NUTS ON TOP AND BOTTOM (DOUBLE NUTS) OF THE BASE PLATE.

ANCHOR BOLTS FOR MAST ARM SIGNAL POLES SHALL BE SET SO THAT TWO ARE IN TENSION AND TWO ARE IN COMPRESSION.

THE TRAFFIC SIGNAL POLE HEIGHTS AND MAST ARM LENGTHS SHOWN ON THE PLANS AND IN THE MATERIAL SUMMARY ARE TO BE USED FOR BIDDING PURPOSES ONLY. PRIOR TO FABRICATION, THE CONTRACTOR, IN COOPERATION WITH THE ENGINEER, SHALL MAKE FIELD MEASUREMENTS TO DETERMINE THE ACTUAL POLE HEIGHT NECESSARY TO ENSURE A VERTICAL CLEARANCE OF 5.2M (17 FEET) MINIMUM, AND 5.8M (19 FEET) MAXIMUM FROM THE ROADWAY SURFACE TO THE BOTTOM OF THE LOWEST POINT ON THE SIGNAL HEAD ASSEMBLY OR MAST ARM AND TO DETERMINE THE MAST ARM LENGTHS REQUIRED TO MOUNT THE TRAFFIC SIGNAL HEADS OVER THE TRAFFIC LANES. THE MAST ARMS SHALL BE STRAIGHT AND LEVEL IN THE AREA WHERE THE SIGNAL HEADS ARE ATTACHED. THESE FIELD MEASUREMENTS AND ELEVATIONS SHALL BE DETERMINED FROM THE ACTUAL FIELD LOCATION OF THE POLE FOUNDATIONS, CONSIDERING ALL ABOVE AND BELOW GROUND UTILITIES AND THE EXISTING ROADWAY ELEVATIONS AND LANE WIDTHS.

ITEM 686 SHEET NO. 8

ALL STEEL MAST ARMS RANGING FROM 8.5M (28') TO 14.6M (48') IN LENGTH SHALL BE PROVIDED WITH VIBRATION DAMPERS. DAMPERS SHALL BE INSTALLED USING ASTRO-SIGN BRAC OR SIGNFIX ALUMINUM CHANNEL OR EQUAL, A MAXIMUM OF 0.91M (3 FEET) FROM THE END OF THE MAST ARM.

ON EXISTING SIGNAL POLES, THE CONTRACTOR WILL NOT BE REQUIRED TO INSTALL NEW CONDUCTORS FROM THE TERMINAL STRIP OR TRANSFORMER BASE INSIDE THE POLE TO THE SIGNAL HEADS.

~~ALL STEEL STRAIN POLES SHALL BE PROVIDED WITH 3 PIPE PLUGS FOR WIRING ACCESS.~~

********** FOR SH 190 - BROWN PAINTED SIGNAL POLES **********

STEEL SHALL BE COATED WITH A MINIMUM OF 3.0 MILS DRY FILM THICKNESS OF A POLYAMIDE CURED EPOXY ZINC RICH PRIMER HAVING A MINIMUM OF 84% METALLIC ZINC. PRIMER SHALL BE FOLLOWED BY 2.0 MILS DRY FILM THICKNESS OF A POLYMIDE CURED EPOXY INTERMEDIATE COAT WITH CORROSION INHIBITIVE PIGMENT. TOPCOAT SHALL BE AN ACRYLIC CURED ALIPHATIC URETHANE APPLIED

SPECIFICATION DATA

GENERAL NOTES AND SPECIFICATION DATA--

ITEM 686, TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL): CONT'D
AT A MINIMUM OF 3.0 MILS DRY FILM THICKNESS. THE COLOR OF THE TOPCOAT SHALL BE SIMILAR TO THE COLOR AUBURN(SW 2729) AS DEFINED BY BY SHERWIN WILLIAMS EXTERIOR COLORS OR ANY OTHER COLOR APPROVED BY THE ENGINEER. ALL THREE COATINGS SHALL BE SUPPLIED BY THE SAME MANUFACTURER FOR THE USE AS A SYSTEM.

ITEM 688, TRAFFIC SIGNAL DETECTORS:

THIS PROJECT REQUIRES THAT SEVERAL LOOPS IN THE STREET SHARE THE SAME GROUND BOX FOR CONNECTIONS TO THE LOOP LEAD-IN CABLE. THE LEAD-IN SAW CUTS FROM THE STREET TO THE GROUND BOX SHALL MAINTAIN A MINUMUM SEPARATION FROM OTHER LOOPS OF 305MM (12 INCHES) AND A MINIMUM SEPARATION OF 152MM (6 INCHES) FROM OTHER LEAD-IN SAW CUTS.

LOOP WIRE SHALL BE USED FOR CONCRETE PAVEMENT AND LOOP DUCT SHALL BE USED FOR HOT MIX ASPHALTIC CONCRETE PAVEMENTS.

ALL LOOP WIRE FROM THE LOOP IN THE STREET TO THE GROUND BOX SHALL BE TIGHTLY TWISTED A MINIMUM OF 16 TIMES PER METER (5 TIMES PER FOOT) AS IT IS PLACED IN THE LEAD-IN SAW CUT.

THE LOOP DUCT FROM THE LOOP IN THE STREET TO THE GROUND BOX SHALL BE TIGHTLY TWISTED A MINIMUM OF 7 TIMES PER METER (2 TIMES PER FOOT) AS IT IS PLACED IN THE LEAD-IN SAW CUT.

THE LOOP DUCT OUTER TUBE SHALL BE MADE OF FLEXIBLE VINYL AND LOOP DUCT CONDUCTOR SHALL CONFORM TO TYPE XHHW OR XLPE SPECIFICATIONS.

GROUNDED SHIELDS ARE REQUIRED ON THE DETECTOR LEAD-IN CABLE AT THE CONTROLLER ONLY. DETECTOR LEAD-IN CABLES SHALL BE RUN CONTINUOUSLY WITHOUT SPLICES FROM THE CURBSIDE GROUND BOX TO THE CONTROLLER WHERE POSSIBLE. IF SPLICES MUST BE MADE, THEY SHOULD BE MADE IN A POLE BASE, IF POSSIBLE. SPLICES SHALL BE SOLDER CONNECTED (INCLUDING THE GROUND WIRE) AND THE SPLICE CONNECTION SHALL BE INSULATED WITH THERMO-SETTING MATERIALS. SPLICES AT THE CURB SIDE GROUND BOXES SHALL ALSO BE MADE IN THE SAME MANNER.

DETECTOR LEAD-IN CABLES SHALL BE IDENTIFIED AS SHOWN ON THE PLANS (PHASE 1, ETC.) WITH PERMANENT MARKING LABELS (PANDUIT TYPE PLM, THOMAS & BETTS TYPE 543M STANDARD SINGLE MARKER TIE OR EQUIVALENT) AT EACH GROUND BOX, POLE BASE, AND CONTROLLER.

GENERAL NOTES AND SPECIFICATION DATA--

ITEM 688, TRAFFIC SIGNAL DETECTORS: CONT'D
INSTALLATION OF THE LOOP DETECTORS SHALL BE MADE DURING OFF-PEAK TRAFFIC PERIODS.

PEDESTRIAN PUSH BUTTONS SHALL BE IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT.

PEDESTRIAN PUSH BUTTONS SHALL BE MOUNTED AT A HEIGHT OF 1.1M (3'-6") ABOVE THE SIDEWALK AND SHALL BE OF THE TYPE THAT HAVE PERMANENT-TYPE SIGNS WITHIN THE DETECTOR UNIT WHICH EXPLAINS THEIR PURPOSE AND INDICATES WHICH CROSSWALK SIGNAL IS ACTUATED.

THE PUSH BUTTON SHALL BE ACTIVATED BY A MINIMUM OF 50MM (2") CONVEX PLUNGER. A PROTECTIVE SHROUD SHALL ENCIRCLE THE PLUNGER TO DETER VANDALISM. THE SHROUD SHALL BE CAST AS PART OF THE HOUSING COVER. THE PLUNGER SHALL PROTRUDE BEYOND THE PROTECTIVE SHROUD A DISTANCE ADEQUATE TO ACCOMMODATE THE SWITCH TRAVEL.

WHILE STAKING THE POLE LOCATIONS, THE CONTRACTOR, ALONG WITH THE ENGINEER, SHALL VERIFY THE LOCATION OF THE PUSH BUTTONS AND THE DIRECTION OF THE ARROWS ON THE SIGNS PRIOR TO INSTALLATION.

TESTING:

PRIOR TO TERMINATION OF THE SHIELDED, TWISTED PAIR LOOP LEAD-IN CABLES AT THE CONTROLLER CABINET, INSULATION TESTS SHALL BE MADE WITH AN INSULATION TEST SET APPLYING NOT LESS THAN 500 VOLTS D.C. TO THE COMPLETED LOOP DETECTOR. A MINIMUM RESISTANCE OF 50 MEGAOHM SHALL BE OBTAINED.

AFTER THE ABOVE INSULATION TESTS ARE COMPLETED AND THE LOOP LEAD-IN CABLE HAS BEEN TERMINATED IN THE CABINET, THE CONTRACTOR SHALL ASSIST THE ENGINEER IN DETERMINING THE LOOP INDUCTANCE OF EACH LOOP DETECTOR INSTALLATION. THE CONTRACTOR SHALL FURNISH A LOOP DETECTOR ANALYZER WHICH SHALL DETERMINE THE TOTAL INDUCTANCE OF THE LOOP IN THE PAVEMENT AND THE ASSOCIATED LEAD-IN CABLE AND SHALL ALSO BE USED IN DETERMINING THE PERCENTAGE SHIFT IN LOOP INDUCTANCE FOR VARIOUS SIZE VEHICLES THAT MAY BE ACTUATING THE DETECTOR.

ALL SIGNAL CABLES AND POWER CONDUCTORS SHALL BE CHECKED FOR INSULATION RESISTANCE UPON INSTALLATION AND PRIOR TO TERMINATION. THE TESTS SHALL BE MADE WITH A TEST SET OPERATING AT A MINIMUM OF 500 VOLTS D.C. APPLIED TO THE CONDUCTORS.

GENERAL NOTES AND SPECIFICATION DATA--

TESTING: CONT'D

EACH CONDUCTOR IN THE MULTICONDUCTOR SIGNAL CABLES SHALL BE TESTED FOR INSULATION RESISTANCE RELATIVE TO EACH OTHER AND TO THE OUTER COVERING OF THE CABLE. THE MINIMUM ACCEPTABLE VALUE FOR INSULATION RESISTANCE SHALL BE 50 MEGAOHMS.

ITEM 6002, FLASHER CONTROLLER ASSEMBLY:

~~A SOLID STATE TIME CLOCK WILL NOT BE REQUIRED ON THIS PROJECT.~~

ITEM 6008 ~~(6013)~~, SALVAGING TRAFFIC SIGNALS:

THE EXISTING TRAFFIC SIGNALS ~~AT XXXXXXXXXXXXX~~ CITY SHALL BE REMOVED AFTER THE PROPOSED SIGNALS ARE FULLY OPERATIONAL. THE EQUIPMENT SHALL BE SALVAGED AND REMAIN THE PROPERTY OF THE ~~STATE~~ EQUIPMENT TO BE SALVAGED SHALL CONSIST OF POLES, CABINETS, ~~FOUNDATIONS~~, GROUND BOXES, SERVICE POLES OR EQUIPMENT, EXPOSED CONDUIT AND ANY OTHER EQUIPMENT AS DIRECTED BY THE ENGINEER. THIS EQUIPMENT SHALL BE STOCKPILED AT THE ~~TXDOT MAINTENANCE YARD AT 593 EAST SH 121 IN LEWISVILLE~~. CITY OF DALLAS SIGNAL SHOP (BECKLEY YARD). FORTY EIGHT (48) HOURS ADVANCE NOTICE SHALL BE GIVEN TO THE CITY BEFORE DELIVERY. FOUNDATIONS AND OTHER NON-RETURNABLE EQUIPMENT AND MATERIALS SHALL BE REMOVED AND DISPOSED OF OUTSIDE THE CITY'S ROW BY THE CONTRACTOR. FOUNDATIONS SHALL BE REMOVED ACCORDING TO ITEM 104, BUT SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM FOR MEASUREMENT AND PAYMENT.

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

SPECIFICATION DATA

DESCRIPTION	UNIT	QUANTITY
250W HPS LUMINAIRE	EA	3
Relocate Pole/Mast Arm Sign	EA	2
Install Sign Furnished by City	EA	16
Vibration Dampner	EA	8
Relocate Base-Mt Controller	EA	2

LIST OF MATERIAL

FURNISHED BY THE CITY OF DALLAS

St. Name Sign	EA	10
Sign R10-12 Special	EA	2
Sign R6-2L	EA	2
Sign R6-2R	EA	2

Date : September , 1999 **CMAQ**

Description : Intersection Improvements **CONTRACT TIME ESTIMATE WORKSHEET**

Project : KELLER SPRINGS ROAD / KNOLL TRAIL @DNT

Id No.	Work Item	Unit	Quantity	Daily Production	Duration (Days)	Predcsr. No.	%	Start Day	Finish Day
1	MOBILIZATION	LS	1		2			1	3
2	INITIAL TRAFFIC CONTROL & SW3P	LS	1		2	1	100	3	5
3	ROW PREP - CLEAR & GRUB	LS	1		2	2	100	5	7
4	REMOV CONC (PAV)	M^2	300.6	200	2	3	100	7	9
5	REMOV CONC (MED/SDWLK/DRVWY)	M^2	396.5	100	4	3	100	9	13
6	REMOV STAB BS &/OR ASPH PAV	M^2	300.6	1000	1	4	100	13	14
7	EXCAVATION	M^3	141.3	200	1	6	100	14	15
8	DRAINAGE STRUCTURES	LS	1		3	4,5,6,7	25	15	18
9	ASPH CONC	M^3	192.7	250	1	8	100	18	19
10	CONC PAV	M^2	1323.2	200	7	9	100	19	26
11	MONO CURB	M	361.0	50	9	9	100	26	35
12	CONC SDWLK & WHLCHR RAMP	M^2	318.2	50	10	9	100	35	45
13	LANDSCAPE	LS	1		2	10,11,12	100	45	47
14	SIGNS, SIGNALS & PVMNT MARKINGS	LS	1		15	13	100	47	62
15	FINAL CLEANUP	LS	1		2	14	100	62	64

***TOTAL WORK DAYS : 64 WORK DAYS**

TOTAL CALENDAR DAYS : 113 CALENDAR DAYS

***NOTE : BASED ON 17 WORKING DAYS/MONTH (NO WORK ON WEEKENDS, HOLIDAYS, OR WEATHER DAYS)**

Date : October , 1999 CMAQ
Description : Intersection Improvements CONTRACT TIME ESTIMATE WORKSHEET

Project : TRINITY MILLS ROAD @ DNT

Id No.	Work Item	Unit	Quantity	Daily Production(2)	Duration (Days)	Predcsr. No.	%	Start Day	Finish Day
1	MOBILIZATION	LS	1		2			1	3
2	INITIAL TRAFFIC CONTROL & SW3P	LS	1		2	1	100	3	5
3	ROW PREP - CLEAR & GRUB	LS	1		2	2	100	5	7
4	REMOV CONC (PAV)	M^2	73.3	200	1	3	100	7	8
5	REMOV CONC (MED/SDWLK/DRVWY)	M^2	135.1	100	2	3	100	8	10
6	REMOV STAB BS &/OR ASPH PAV	M^2	73.3	1000	1	4	100	10	11
7	EXCAVATION	M^3	52.2	200	1	6	100	11	12
8	DRAINAGE STRUCTURES	LS	1		3	4,5,6,7	25	12	15
9	RETAINING WALL	M^2	26	n/a	2	7	100	15	17
10	ASPH CONC	M^3	57.4	250	1	8	100	17	18
11	CONC PAV	M^2	419.5	200	3	10	100	18	21
12	MONO CURB	M	137.3	50	3	10	100	21	24
13	CONC SDWLK & WHLCHR RAMP	M^2	129.0	50	3	10	100	24	26
14	LANDSCAPE	LS	1		2	11,12,13	100	26	28
15	SIGNS, SIGNALS & PVMNT MARKINGS	LS	1		15	14	100	28	43
16	FINAL CLEANUP	LS	1		2	15	100	43	45

TOTAL WORK DAYS : 45 WORK DAYS
***TOTAL CALENDAR DAYS : 80 CALENDAR DAYS**

NOTE : * BASED ON 17 WORKING DAYS/MONTH (NO WORK ON WEEKENDS, HOLIDAYS, OR WEATHER DAYS)

Date : September , 1999 **CMAQ**
Description : Intersection Improvements **CONTRACT TIME ESTIMATE WORKSHEET**

Project : FRANKFORD ROAD @ DNT

Id No.	Work Item	Unit	Quantity	Daily Production	Duration (Days)	Predcsr. No.	%	Start Day	Finish Day
1	MOBILIZATION	LS	1		2			1	3
2	INITIAL TRAFFIC CONTROL & SW3P	LS	1		2	1	100	3	5
3	ROW PREP - CLEAR & GRUB	LS	1		2	2	100	5	7
4	REMOV CONC (PAV)	M^2	91.3	200	1	3	100	7	8
5	REMOV CONC (SDWLK/DRVWY)	M^2	275.3	100	3	3	100	8	11
6	REMOV STAB BS &/OR ASPH PAV	M^2	91.3	1000	1	4	100	11	12
7	EXCAVATION	M^3	46.1	200	1	6	100	12	13
8	DRAINAGE STRUCTURES	LS	1		3	4,5,6,7	25	13	16
9	RETAINING WALL	M^2	36.6	n/a	2	7	10	16	18
10	ASPH CONC	M^3	64.1	250	1	8	100	18	19
11	CONC PAV	M^2	399.3	200	2	10	100	19	21
12	MONO CURB	M	96.5	50	2	10	100	21	23
13	CONC SDWLK/ WHLCHR RAMP/DRVWY	M^2	259.3	50	6	10	100	23	29
14	LANDSCAPE	LS	1		2	11,12,13	100	29	31
15	SIGNS, SIGNALS & PVMNT MARKINGS	LS	1		15	14	100	31	46
16	FINAL CLEANUP	LS	1		2	15	100	46	48

***TOTAL WORK DAYS : 48 WORK DAYS**
TOTAL CALENDAR DAYS : 84 CALENDAR DAYS

***NOTE : BASED ON 17 WORKING DAYS/MONTH (NO WORK ON WEEKENDS, HOLIDAYS, OR WEATHER DAYS)**

Date : November, 1999 CMAQ
Description : Intersection Improvements CONTRACT TIME ESTIMATE WORKSHEET

Project : FRANKFORD ROAD @ Coit

Id No.	Work Item	Unit	Quantity	Daily Production	Duration (Days)	Predcsr. No.	%	Start Day	Finish Day
1	MOBILIZATION	LS	1		2			1	3
2	INITIAL TRAFFIC CONTROL & SW3P	LS	1		2	1	100	3	5
3	ROW PREP - CLEAR & GRUB	LS	1		2	2	100	5	7
4	REMOV CONC (PAV)	M^2	98.8	200	1	3	100	7	8
5	REMOV CONC (SDWLK/DRVWY)	M^2	80.3	100	1	3	100	8	9
6	REMOV STAB BS &/OR ASPH PAV	M^2	98.8	1000	1	4	100	9	10
7	EXCAVATION	M^3	144.0	200	1	6	100	10	11
8	DRAINAGE STRUCTURES	LS	1		3	4,5,6,7	25	11	14
9	ASPH CONC	M^3	50.0	250	1	8	100	14	15
10	CONC PAV	M^2	362.2	200	2	10	100	15	17
11	MONO CURB	M	169.6	50	2	10	100	17	19
12	CONC SDWLK/ WHLCHR RAMP/DRVWY	M^2	96.7	50	6	10	100	19	25
13	LANDSCAPE	LS	1		2	11,12,13	100	25	27
14	SIGNS, SIGNALS & PVMNT MARKINGS	LS	1		15	14	100	27	42
15	FINAL CLEANUP	LS	1		2	15	100	42	44

***TOTAL WORK DAYS : 44 WORK DAYS**
TOTAL CALENDAR DAYS : 77 CALENDAR DAYS

***NOTE : BASED ON 17 WORKING DAYS/MONTH (NO WORK ON WEEKENDS, HOLIDAYS, OR WEATHER DAYS)**

FINAL REVIEW SUBMITTAL CONSTRUCTION COST ESTIMATE

PROJECT: CMAQ PROJECT #29
CONTROL: 0198-45-355
INTERSECTION: KELLER SPRINGS AT DNT and KNOLL TR.
COUNTY: DALLAS
DISTRICT: DALLAS
CONSULTANT: EARTH TECH

ITEM	CODE	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
100	5001	PREP ROW	KM	0.44	$20,000.00	$8,800.00
104	5001	REMOV CONC (PAV)	M2	300.60	$10.00	$3,006.00
104	5005	REMOV CONC (MED)	M2	16.80	$16.00	$268.80
104	5009	REMOV CONC (SDWLK)	M2	160.80	$12.00	$1,929.60
104	5011	REMOV CONC (DWY)	M2	216.80	$13.00	$2,844.40
110	5001	EXCAVATION (RDWY)	M3	141.30	$11.00	$1,554.30
160	5006	FURN AND PLAC TPSL (CL 2) (100mm)	M2	764.50	$24.00	$18,348.00
162	5008	BLOCK SOD (BERMUDA)	M2	764.50	$4.00	$3,058.00
340	5041	ASPH CONC (TY B) (BASE)	MGR	359.00	$59.56	$21,381.20
360	5010	MONO CURB TY II (125mm)	M	361.00	$4.00	$1,444.00
360	5017	CONC PAV (CPCD)(200mm)	M2	1323.20	$40.00	$52,928.00
400	5001	STRUCT EXCAV	M3	12.86	$4.56	$58.66
464	5003	RC PIPE (CL III) (450mm)	M	1.354	$160.00	$216.64
464	5004	RC PIPE (CL III) (525mm)	M	6.528	$180.00	$1,175.04
464	5005	RC PIPE (CL III) (600mm)	M	5.724	$200.00	$1,144.80
464	5019	RC PIPE (CL IV) (450mm)	EA	4.701	$240.00	$1,128.24
465	XXXX	INLET (COMPL)(REC)(1.5 M)	EA	1.00	$1,900.00	$1,900.00
465	XXXX	INLET (COMPL)(REC)(TWO)(2.4M)	EA	4.00	$3,500.00	$14,000.00
465	XXXX	INLET (COMPL)(REC)(3.0 M)	EA	2.00	$2,400.00	$4,800.00
479	529	ADJUST MANHOLE (RIM)	EA	1.00	$100.00	$100.00
496	5002	REMOV OLD STRUCT (SMALL) (CONC INLET)	EA	5.00	$800.00	$4,000.00
500	5001	MOBILIZATION (10%)	LS	1.00	$27,000.00	$27,000.00
502	5001	BARRICADES, SIGNS AND TRAF HANDLE	MO	3.80	$4,000.00	$15,200.00
530	5009	DRVWYS (CONC) (TY I)	M2	161.30	$37.00	$5,968.10
531	5002	CONCRETE SIDEWALK (100 mm)	M2	248.20	$24.00	$5,956.80
531	XXXX	CONC SDWK WHEELCHAIR RAMP (COD STND)	M2	70.00	$62.00	$4,340.00
618	5002	CONDUIT (RM)(25mm)	M	6.50	$9.84	$63.96
618	5011	CONDUIT (PVC)(SCH 40)(50mm)	M	135.50	$8.20	$1,111.10
618	5013	CONDUIT (PVC)(SCH 40)(75mm)	M	66.00	$10.83	$714.78
618	5014	CONDUIT (PVC)(SCH 40)(100mm)	M	97.00	$13.12	$1,272.64
618	5032	CONDUIT (PVC)(SCH 40)(BORE)(50mm)	M	69.50	$31.17	$2,166.32
618	5035	CONDUIT (PVC)(SCH 40)(BORE)(100mm)	M	176.50	$46.00	$8,119.00
618	5045	CONDUIT (PVC)(SCH 40)(25mm)	M	88.00	$8.90	$783.20
620	5004	ELEC CONDUCTOR (NO.6)BARE	M	413.50	$2.19	$905.57
620	5007	ELEC CONDUCTOR (NO.12)INSULATED	M	96.00	$1.31	$125.76
620	5009	ELEC CONDUCTOR (NO.8)INSULATED	M	508.00	$2.12	$1,076.96
620	5010	ELEC CONDUCTOR (NO.6)INSULATED	M	82.00	$2.02	$165.64
620	5011	ELEC CONDUCTOR (NO.4)INSULATED	M	129.00	$2.07	$267.03
624	5001	GROUND BOX TY A (122311) w/ APRON	EA	16.00	$414.00	$6,624.00
624	5003	GROUND BOX TY C (162911) w/ APRON	EA	2.00	$461.00	$922.00
628	5063	ELEC SERV TY T(120)000(NS)AL(E)OT(O)	EA	2.00	$625.00	$1,250.00
649	5006	RELOC SMALL RDSD SGN ASSMS	EA	2.00	$62.26	$124.52
656	5003	FND FOR TRAF SIG (600 mm DRIL SHFT)	M	6.80	$287.00	$1,951.60
656	5004	FND FOR TRAF SIG (750 mm DRIL SHFT)	M	13.60	$295.27	$4,015.67
656	5024	FND FOR TRAF SIG (900 mm DRIL SHFT)	M	12.00	$453.52	$5,442.28
656	5026	TRAF SIG CONTRL FND	EA	2.00	$700.00	$1,400.00
662	5001	WK ZN PAV MRK REMOV (W)(SLD)(100mm)	M	75.00	$2.50	$187.50
662	5002	WK ZN PAV MRK REMOV (W)(BRK)(100mm)	M	135.00	$2.70	$364.50
666	5001	REFL PAV MRK TY I (W)(SLD)(100mm)	M	77.00	$0.90	$69.30
666	5002	REFL PAV MRK TY I (W)(BRK)(100mm)	M	175.00	$1.20	$210.00
666	5004	REFL PAV MRK TY I (W)(SLD)(150mm)	M	540.00	$4.40	$2,376.00
666	5011	REFL PAV MRK TY I (W)(SLD)(450mm)	M	60.00	$12.00	$720.00
666	5024	REFL PAV MRK TY I (Y)(SLD)(100mm)	M	740.00	$0.90	$666.00
666	5035	REFL PAV MRK TYII (W)(SLD)(100mm)	M	77.00	$0.60	$46.20
666	5036	REFL PAV MRK TYII (W)(BRK)(100mm)	M	175.00	$0.80	$140.00
666	5038	REFL PAV MRK TYII (W)(SLD)(150mm)	M	540.00	$2.90	$1,566.00
666	5043	REFL PAV MRK TYII (W)(SLD)(450mm)	M	60.00	$8.00	$480.00
666	5056	REFL PAV MRK TYII (Y)(SLD)(100mm)	M	740.00	$0.60	$444.00
668	5011	PREFAB PAV MRK TY C (W) (ARROW)	EA	10.00	$8.00	$80.00
668	5015	PREFAB PAV MRK TY C (W) (WORD)	EA	5.00	$8.00	$40.00
672	5006	RAIS PAV MRKR CL B (REFL) TY I-A	EA	20.00	$4.00	$80.00
672	5007	RAIS PAV MRKR CL B (REFL) TY I-C	EA	215.00	$5.00	$1,075.00

FINAL REVIEW SUBMITTAL CONSTRUCTION COST ESTIMATE

PROJECT: CMAQ PROJECT #29
CONTROL: 0198-45-355
INTERSECTION: KELLER SPRINGS AT DNT and KNOLL TR.
COUNTY: DALLAS
DISTRICT: DALLAS
CONSULTANT: EARTH TECH

ITEM	CODE	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
672	5009	RAIS PAV MRKR CL B (REFL) TY II-A-A	EA	190.00	$2.40	$456.00
672	5010	RAIS PAV MRKR CL B (REFL) TY II-C-R	EA	59.00	$3.80	$224.20
678	5001	PAV SURF PREP FOR MRKS (100 MM)	M	992.00	$0.04	$39.68
678	5002	PAV SURF PREP FOR MRKS (150 MM)	M	540.00	$0.05	$27.00
678	5005	PAV SURF PREP FOR MRKS (450 MM)	M	60.00	$0.07	$4.20
678	5007	PAV SURF PREP FOR MRKS (ARROW)	EA	10.00	$7.00	$70.00
678	5008	PAV SURF PREP FOR MRKS (WORD)	EA	5.00	$7.00	$35.00
680	5001	INSTALL OF HWY TRAF SIG (ISOLATED)	EA	2.00	$1,700.00	$3,400.00
682	5002	VEH SIG SEC (300mm)	EA	95.00	$137.50	$13,062.50
682	5005	PED SIG SEC (2 INDICATIONS IN 1 SEC)	EA	14.00	$335.00	$4,690.00
682	5009	BACK PLATE (3 SEC) (300mm)	EA	25.00	$30.00	$750.00
682	5011	BACK PLATE (5 SEC) (300mm)	EA	4.00	$40.00	$160.00
682	XXXX	LOUVER (5 DEG) (300 mm)	EA	27.00	$53.00	$1,431.00
684	5010	TRAF SIG CBL (TY A)(9 CONDR)(12 AWG)	M	69.50	$4.43	$307.89
684	5015	TRAF SIG CBL (TY A)(15 CONDR)(12 AWG)	M	319.00	$4.75	$1,515.25
684	5020	TRAF SIG CBL (TY A)(20 CONDR)(12 AWG)	M	158.00	$6.56	$1,036.48
684	5046	TRAF SIG CBL (TY C)(2 CONDR)(18 AWG)	M	1561.00	$1.00	$1,561.00
684	5052	TRAF SIG CBL (TY A)(5 CONDR)(16 AWG)	M	283.60	$2.36	$669.30
684	5053	TRAF SIG CBL (TY A)(7 CONDR)(16 AWG)	M	151.70	$2.61	$395.94
686	5011	TRAF SIG POLE ASM (STL) 1 ARM (9.8 M)	EA	2.00	$2,100.00	$4,200.00
686	5012	TRF SIG POLE ASM (STL) 1 ARM (11.0 M)	EA	1.00	$2,200.00	$2,200.00
686	5069	TRF SIG POLE ASM (STL)1 ARM(9.8 M)LUM	EA	2.00	$2,500.00	$5,000.00
686	5070	TRF SIG POLE ASM(STL)1 ARM(11.0M)LUM	EA	2.00	$2,700.00	$5,400.00
688	5001	PED DETECT (PUSH BTN)	EA	14.00	$65.00	$910.00
688	5011	VEH DETECT (SAWCUT)	M	832.50	$13.12	$10,922.40
5003	5001	BALED HAY FOR EROSN & SEDM CONTROL	EA	10.00	$8.00	$80.00
5003	5003	BALED HAY EROSN & SEDM CONT (REMOVE)	EA	10.00	$5.00	$50.00
5004	5001	TEMP SEDM CONT FENCE	M	142.00	$6.00	$852.00
5004	5003	TEMP SEDM CONT FENCE (REMOVE)	M	142.00	$2.40	$340.80
5036	XXXX	ADJUST SAN. SEWER CLEANOUT	EA	1.00	$120.00	$120.00
5037	XXXX	ADJUST WATER METER	EA	2.00	$150.00	$300.00
6008	5001	SALV TRAF SIGNALS	EA	2.00	$1,000.00	$2,000.00
6023	5001	PEDESTAL POLE ASSEM	EA	4.00	$480.00	$1,920.00
6251	XXXX	PED SIG SEC (ORANGE LED)	EA	14.00	$140.00	$1,960.00
6298	XXXX	VEH SIG SEC (300mm RED LED)	EA	29.00	$204.50	$5,930.50
					CONSTRUCTION SUBTOTAL	**$321,618.23**
					15% CONTINGENCY	$48,242.73
					TOTAL ESTIMATED CONSTRUCTION COST	**$369,861**

FINAL REVIEW SUBMITTAL CONSTRUCTION COST ESTIMATE

PROJECT: CMAQ PROJECT NO. 29
CONTROL: 0198-45-355
INTERSECTION: TRINITY MILLS @ DALLAS NORTH TOLLWAY
COUNTY: DALLAS
DISTRICT: DALLAS
CONSULTANT: EARTH TECH

ITEM	CODE	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
100	5001	PREP ROW	KM	0.188	$20,000.00	$3,760.00
104	5001	REMOV CONC (PAV)	M2	73.30	$10.00	$733.00
104	5005	REMOVE CONC (MED)	M2	128.90	$16.00	$2,062.40
104	5009	REMOV CONC (SDWLK)	M2	2.90	$12.00	$34.80
104	5011	REMOV CONC (DRVWY)	M2	3.30	$13.00	$42.90
104	5014	REMOV CONC (CURB)	M	8.00	$4.00	$32.00
110	5001	EXCAVATION (RDWY)	M3	52.20	$11.00	$574.20
160	5006	FURN AND PLAC TPSL (CL 2) (100mm)	M2	99.00	$24.00	$2,376.00
162	5008	BLOCK SOD (BERMUDA)	M2	99.00	$4.00	$396.00
340	5041	ASPH CONC (TY B) (BASE)	MGR	115.30	$59.56	$6,867.00
360	5010	MONO CURB TY II (125mm)	M	137.30	$4.00	$549.20
360	5017	CONC PAV (CPCD) (200mm) (MOD)	M2	419.50	$40.00	$16,780.00
400	5001	STRUCT EXCAV	M3	3.41	$4.56	$15.55
423	5008	RETAINING WALL (CAST-IN-PLACE)	M2	26.30	$300.00	$7,890.00
450	5060	RAIL (TY PR 1)	M	45.30	$180.00	$8,154.00
464	5004	RC PIPE (CL III) (525mm)	M	4.214	$180.00	$758.52
465	XXXX	INLET (COMPL)(REC)(3.0M)	EA	1.00	$2,400.00	$2,400.00
496	5002	REMOV OLD STRUCT (SMALL) (CONC INLET)	EA	1.00	$800.00	$800.00
500	5001	MOBILIZATION (10%)	LS	1.00	$8,000.00	$8,000.00
502	5001	BARRICADES, SIGNS AND TRAF HANDLE	MO	2.70	$4,000.00	$10,800.00
530	5009	DRVWYS (CONC) (TY 1)	M2	2.80	$37.00	$103.60
531	5002	CONCRETE SIDEWALK (100 mm)	M2	91.20	$24.00	$2,188.80
531	XXXX	CONC SDWK WHEELCHAIR RAMP (COD STND)	M2	37.80	$350.00	$13,230.00
536	5004	CONCRETE MEDIAN (100 mm)	M2	30.40	$32.00	$972.80
618	5013	CONDUIT (PVC)(SCH 40)(75mm)	M	20.00	$10.83	$216.60
624	5001	GROUND BOX TY A (122311) w/ APRON	EA	2.00	$414.00	$828.00
628	5063	ELEC SERV TY T(120)000(NS)AL(E)OT(O)	EA	1.00	$625.00	$625.00
648	5002	REPLAC SMALL RDSD SIGNS	EA	1.00	$300.00	$300.00
649	5006	RELOC SMALL RDSD SGN ASSMS	EA	2.00	$62.26	$124.52
656	5005	FND FOR TRAF SIG (TY A) (900 mm DRIL SHFT)	M	4.00	$369.09	$1,476.36
662	5001	WRK ZN PAV MRK REMOV (W)(SLD)(100mm)	M	60.00	$2.50	$150.00
662	5002	WRK ZN PAV MRK REMOV (W)(BRK)(100mm)	M	60.00	$2.70	$162.00
666	5001	REFL PAV MRK TY I (W)(SLD)(100mm)	M	125.00	$0.90	$112.50
666	5002	REFL PAV MRK TY I (W)(BRK)(100mm)	M	60.00	$1.20	$72.00
666	5003	REFL PAV MRK TY I (W)(DOT)(100mm)	M	8.00	$2.20	$17.60
666	5004	REFL PAV MRK TY I (W)(SLD)(150mm)	M	330.00	$4.40	$1,452.00
666	5011	REFL PAV MRK TY I (W)(SLD)(450mm)	M	42.00	$12.00	$504.00
666	5024	REFL PAV MRK TY I (Y)(SLD)(100mm)	M	80.00	$0.90	$72.00
666	5035	REFL PAV MRK TY II (W)(SLD)(100mm)	M	125.00	$0.60	$75.00
666	5036	REFL PAV MRK TY II (W)(BRK)(100mm)	M	60.00	$0.80	$48.00
666	5037	REFL PAV MRK TY II (W)(DOT)(100mm)	M	8.00	$1.50	$12.00
666	5038	REFL PAV MRK TY II (W)(SLD)(150mm)	M	330.00	$2.90	$957.00
666	5043	REFL PAV MRK TY II (W)(SLD)(450mm)	M	42.00	$8.00	$336.00
666	5056	REFL PAV MRK TY II (Y)(SLD)(100mm)	M	80.00	$0.60	$48.00
668	5011	PREFAB PAV MRK TY A (W) (ARROW)	EA	12.00	$8.00	$96.00
668	5015	PREFAB PAV MRK TY A (W) (WORD)	EA	5.00	$8.00	$40.00
672	5007	RAIS PAV MRKR CL B (REFL) TY I-C	EA	160.00	$5.00	$800.00
672	5009	RAIS PAV MRKR CL B (REFL) TY II-A-A	EA	115.00	$2.40	$276.00
672	5010	RAIS PAV MRKR CL B (REFL) TY II-C-R	EA	155.00	$3.80	$589.00
678	5001	PAV SURF PREP FOR MRKS (100mm)	M	273.00	$0.04	$10.92
678	5002	PAV SURF PREP FOR MRKS (150mm)	M	330.00	$0.05	$16.50
678	5005	PAV SURF PREP FOR MRKS (450mm)	M	42.00	$0.07	$2.94
678	5007	PAV SURF PREP FOR MRKS (ARROW)	EA	12.00	$7.00	$84.00
678	5008	PAV SURF PREP FOR MRKS (WORD)	EA	5.00	$7.00	$35.00
680	5001	INSTALL OF HWY TRAF SIG (ISOLATED)	EA	1.00	$1,700.00	$1,700.00
682	5002	VEH SIG SEC (300mm)	EA	19.00	$137.50	$2,612.50
682	5005	PED SIG SEC (2 INDICATIONS IN 1 SEC)	EA	2.00	$335.00	$670.00
682	5009	BACK PLATE (3 SEC) (300mm)	EA	3.00	$30.00	$90.00
682	5011	BACK PLATE (5 SEC) (300mm)	EA	2.00	$40.00	$80.00
684	5015	TRF SIG CBL (TY A)(15 CONDR)(12 AWG)	M	88.00	$4.75	$418.00

FINAL REVIEW SUBMITTAL CONSTRUCTION COST ESTIMATE

PROJECT: CMAQ PROJECT NO. 29
CONTROL: 0198-45-355
INTERSECTION: TRINITY MILLS @ DALLAS NORTH TOLLWAY
COUNTY: DALLAS
DISTRICT: DALLAS
CONSULTANT: EARTH TECH

ITEM	CODE	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
684	5052	TRF SIG CBL (TY A)(5 CONDR)(16 AWG)	M	88.00	$2.36	$207.68
684	5053	TRF SIG CBL (TY A)(7 CONDR)(16 AWG)	M	22.20	$2.61	$57.94
686	5013	TRAF SIG POLE ASM (STL) 1 ARM (12.2 M)	EA	1.00	$2,500.00	$2,500.00
688	5001	PED DETECT (PUSH BTN)	EA	2.00	$65.00	$130.00
5003	5001	BALED HAY FOR EROSN & SEDM CONTROL	EA	10.00	$8.00	$80.00
5003	5003	BALED HAY EROSN & SEDM CONT (REMOVE)	EA	10.00	$5.00	$50.00
5004	5001	TEMP SEDM CONT FENCE	M	34.00	$6.00	$204.00
5004	5003	TEMP SEDM CONT FENCE (REMOVE)	M	34.00	$2.40	$81.60
6008	5001	SALV TRAF SIGNALS	EA	1.00	$1,000.00	$1,000.00
6251	XXXX	PED SIG SEC (ORANGE LED)	EA	2.00	$140.00	$280.00
6298	XXXX	VEH SIG SEC (300mm RED LED)	EA	5.00	$204.50	$1,022.50
XXXX	XXXX	RELOCATE LIGHT POLE	EA	1.00	$800.00	$800.00

CONSTRUCTION SUBTOTAL **$111,043.94**

15% CONTINGENCY $16,657

TOTAL ESTIMATED CONSTRUCTION COST **$127,701**

FINAL REVIEW SUBMITTAL CONSTRUCTION COST ESTIMATE

PROJECT: CMAQ PROJECT #29
CONTROL: 0198-45-355
INTERSECTION: FRANKFORD ROAD @ DALLAS NORTH TOLLWAY
COUNTY: COLLIN
DISTRICT: DALLAS
CONSULTANT: EARTH TECH

ITEM		CODE		ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
100		5001		PREP ROW	KM	0.13	$20,000.00	$2,600.00
104		5001		REMOV CONC (PAV)	M2	91.30	$10.00	$913.00
104		5009		REMOV CONC (SDWLK)	M2	148.30	$12.00	$1,779.60
104		5011		REMOV CONC (DRWY)	M2	127.00	$13.00	$1,651.00
110		5001		EXCAVATION (RDWY)	M3	46.10	$11.00	$507.10
160		5006		FURN AND PLAC TPSL (CL 2) (100mm)	M2	63.80	$24.00	$1,531.20
162		5008		BLOCK SOD (BERMUDA)	M2	63.80	$4.00	$255.20
340		5041		ASPH CONC (TY B) (BASE)	MGR	131.30	$59.56	$7,819.92
360		5010		MONO CURB TY II (125mm)	M	96.50	$4.00	$386.00
360		5017		CONC PAV (CPCD)(200mm)	M2	399.30	$40.00	$15,972.00
400		5001		STRUCT EXCAV	M3	2.92	$4.56	$13.32
423		5008		RETAINING WALL (CAST-IN-PLACE)	M2	10.10	$300.00	$3,030.00
450		5060		RAIL (TY PR 1)	M	33.60	$180.00	$6,048.00
464		5003		RC PIPE (CL III) (450mm)	M	5.783	$160.00	$925.28
465		XXXX		INLET (COMPL) (REC) (2.4 M)	EA	1.00	$2,200.00	$2,200.00
496		5002		REMOV OLD STRUCT (SMALL) (CONC INLET)	EA	1.00	$800.00	$800.00
500		5001		MOBILIZATION (10%)	LS	1.00	$6,500.00	$6,500.00
502		5001		BARRICADES, SIGNS AND TRAF HANDLE	MO	2.80	$4,000.00	$11,200.00
530		5009		DRVWYS (CONC) (TY 1)	M2	97.30	$37.00	$3,600.10
531		5002		CONCRETE SIDEWALK (100mm)	M2	153.60	$24.00	$3,686.40
531		XXXX		CONC SDWK WHEELCHAIR RAMP (COD STND)	M2	8.40	$35.00	$294.00
618		5011		CONDUIT (PVC)(SCH 40)(50 mm)	M	6.00	$8.20	$49.20
618		5013		CONDUIT (PVC)(SCH 40)(75 mm)	M	26.50	$10.83	$287.00
618		5045		CONDUIT (PVC)(SCH 40)(25 mm)	M	2.00	$8.90	$17.80
620		5004		ELEC CONDUCTOR (NO. 6) BARE	M	48.00	$2.19	$105.12
620		5009		ELEC CONDUCTOR (NO. 8) INSULATED	M	134.00	$2.12	$284.08
620		5010		ELEC CONDUCTOR (NO. 6) INSULATED	M	96.00	$2.02	$193.92
624		5001		GROUND BOX TY A (122311) w/ APRON	EA	1.00	$414.00	$414.00
628		5063		ELEC SERV TY T(120)000(NS)AL(E)OT(O)	EA	1.00	$625.00	$625.00
649	#			RELOC SMALL RDSD SGN ASSMS	EA	2.00	$62.26	$124.52
656		5003		FND FOR TRAF SIG (600 mm DRIL SHFT)	M	1.70	$287.00	$487.90
662		5001		WRK ZN PAV MRK REMOV (W)(SLD)(100mm)	M	30.00	$2.50	$75.00
662		5002		WRK ZN PAV MRK REMOV (W)(BRK)(100mm)	M	90.00	$2.70	$243.00
666		5001		REFL PAV MRK TY I(W)(SLD)(100mm)	M	30.00	$0.90	$27.00
666		5002		REFL PAV MRK TY I(W)(BRK)(100mm)	M	63.00	$1.20	$75.60
666		5004		REFL PAV MRK TY I(W)(SLD)(150mm)	M	270.00	$4.40	$1,188.00
666		5011		REFL PAV MRK TY I (W)(SLD)(450mm)	M	18.00	$12.00	$216.00
666		5035		REFL PAV MRK TY II(W)(SLD)(100mm)	M	30.00	$0.60	$18.00
666		5036		REFL PAV MRK TY II(W)(BRK)(100mm)	M	63.00	$0.80	$50.40
666		5038		REFL PAV MRK TY II(W)(SLD)(150mm)	M	270.00	$2.90	$783.00
666		5034		REFL PAV MRK TY II(W)(SLD)(450mm)	M	18.00	$8.00	$144.00
668		5011		PREFAB PAV MRK TY A (W) (ARROW)	EA	2.00	$8.00	$16.00
668		5015		PREFAB PAV MRK TY A (W) (WORD)	EA	2.00	$8.00	$16.00
672		5010		RAIS PAV MRKR CL B (REFL) TY II-C-R	EA	22.00	$3.80	$83.60
678		5001		PAV SURF PREP FOR MRKS (100mm)	M	93.00	$0.04	$3.72
678		5002		PAV SURF PREP FOR MRKS (150mm)	M	270.00	$0.05	$13.50
678		5005		PAV SURF PREP FOR MRKS (450mm)	M	18.00	$0.07	$1.26
678		5007		PAV SURF PREP FOR MRKS (ARROW)	EA	2.00	$7.00	$14.00
678		5008		PAV SURF PREP FOR MRKS (WORD)	EA	2.00	$7.00	$14.00
680		5001		INSTALL OF HWY TRAF SIG (ISOLATED)	EA	1.00	$1,700.00	$1,700.00
684		5010		TRF SIG CBL (TY A)(9 CONDR)(12 AWG)	M	44.00	$4.43	$194.92
684		5015		TRF SIG CBL (TY A)(15 CONDR)(12 AWG)	M	123.00	$4.75	$584.25
684		5046		TRF SIG CBL (TY C)(2 CONDR)(18 AWG)	M	560.00	$1.00	$560.00
684		5052		TRF SIG CBL (TY A)(5 CONDR)(16 AWG)	M	6.20	$2.36	$14.63
688		5011		VEH DETECT (SAWCUT)	M	22.00	$13.12	$288.64
5003		5001		BALED HAY FOR EROSN & SEDM CONTROL	EA	10.00	$8.00	$80.00
5003		5003		BALED HAY EROSN & SEDM CONT (REMOVE)	EA	10.00	$5.00	$50.00
5004		5001		TEMP SEDM CONT FENCE	M	25.00	$6.00	$150.00
5003		5003		TEMP SEDM CONT FENCE (REMOVE)	M	25.00	$2.40	$60.00

FINAL REVIEW SUBMITTAL CONSTRUCTION COST ESTIMATE

PROJECT: CMAQ PROJECT #29
CONTROL: 0198-45-355
INTERSECTION: FRANKFORD ROAD @ DALLAS NORTH TOLLWAY
COUNTY: COLLIN
DISTRICT: DALLAS
CONSULTANT: EARTH TECH

ITEM	CODE	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT_PRICE	AMOUNT
6008	5001	SALV TRAF SIGNALS	EA	1.00	$1,000.00	$1,000.00
6023	5001	PEDESTAL POLE ASSEM	EA	1	$480.00	$480.00
					CONSTRUCTION SUBTOTAL	**$82,445.18**
					15% CONTINGENCY	$12,367
					TOTAL ESTIMATED CONSTRUCTION COST	**$94,812**

PRELIMINARY (95% SUBMITTAL) CONSTRUCTION COST ESTIMATE

PROJECT: CMAQ PROJECT #29
CONTROL: 1980-45-358
INTERSECTION: FRANKFORD AT COIT
COUNTY: COLLIN
DISTRICT: DALLAS
CONSULTANT: EARTH TECH

ITEM	CODE	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
100	5002	PREP ROW	KM	0.13	$20,000.00	$2,520.00
104	5001	REMOV CONC (PAV)	M2	98.80	$10.00	$988.00
104	5005	REMOV CONC (MED)	M2	52.10	$16.00	$833.60
104	5009	REMOV CONC (SDWLK)	M2	80.34	$12.00	$964.08
104	5011	REMOV CONC (DRVWY)	M2	226.90	$13.00	$2,949.70
110	5001	EXCAVATION (RDWY)	M3	109.00	$11.00	$1,199.00
160	5006	FURN AND PLAC TPSL (CL 2) (100mm)	M2	70.00	$24.00	$1,680.00
162	5008	BLOCK SOD (BERMUDA)	M2	70.00	$4.00	$280.00
340	5041	ASPH CONC (TY B)(BASE)(100mm)	M3	89.8	$85.00	$7,633.00
360	5010	MONO CURB (TY II) (125mm)	M	169.60	$4.00	$678.40
360	5017	CONC PAV (CPCD) (200mm) (MOD)	M2	362.20	$40.00	$14,488.00
400	5001	STRUCT EXCAV	M3	3.30	$4.56	$15.05
464	5003	RC PIPE (CL III) (450mm)	M	4.00	$160.00	$640.00
465	XXXX	INLET (COMPL)(REC)(3.0m)	EA	2.00	$2,400.00	$4,800.00
496	5002	REMOV OLD STRUCT (SMALL) (CONC INLET)	EA	2.00	$800.00	$1,600.00
496	5004	REMOV OLD STRUCT (SMALL)(PIPE)	M	4.00	$25.00	$100.00
500	5001	MOBILIZATION (10%)	LS	1.00		$0.00
502	5001	BARRICADES, SIGNS AND TRAF HANDLE	MO	2.60	$4,000.00	$10,400.00
530	5009	DRVWYS (CONC) (TY 1)	M2	183.00	$37.00	$6,771.00
531	5002	CONCRETE SIDEWALK (100mm)	M2	96.90	$24.00	$2,325.60
531	XXXX	CONC SDWK WHEELCHAIR RAMP (COD STND)	M2	12.10	$62.00	$750.20
536	5004	CONCRETE MEDIAN (100mm)	M2	50.80	$32.00	$1,625.60
618	5013	CONDUIT (PVC)(SCH 40) (75mm)	M	10.00	$10.83	$108.30
618	5045	CONDUIT (PVC)(SCH 40) (25mm)	M	20.00	$8.90	$178.00
628	5063	ELEC SERV TY T(120)000(NS)AL(E)OT(O)	EA	1.00	$625.00	$625.00
644	5001	SMALL RDSD SGN ASSM (TY A)	EA	2.00	$350.00	$700.00
648	5002	REPLAC SMALL RDSD SGN	EA	1.00	$350.00	$350.00
666	5001	REFL PAV MRK TY I (W) (100mm) (SLD)	M	48.60	$0.90	$43.74
666	5002	REFL PAV MRK TY I (W) (100mm) (BRK)	M	78.00	$1.20	$93.60
666	5004	REFL PAV MRK TY I (W) (150mm) (SLD)	M	126.50	$4.40	$556.60
666	5011	REFL PAV MRK TY I (W) (450mm) (SLD)	M	18.00	$12.00	$216.00
666	5024	REFL PAV MRK TY I (Y) (100mm) (SLD)	M	122.00	$0.90	$109.80
666	5035	REFL PAV MRK TY II (W) (100mm) (SLD)	M	48.60	$0.60	$29.16
666	5036	REFL PAV MRK TY II (W) (100mm) (BRK)	M	78.00	$0.80	$62.40
666	5038	REFL PAV MRK TY II (W) (150mm) (SLD)	M	126.50	$2.90	$366.85
666	5043	REFL PAV MRK TY II (W) (450mm) (SLD)	M	18.00	$8.00	$144.00
666	5056	REFL PAV MRK TY II (Y) (100mm) (SLD)	M	122.00	$0.60	$73.20
668	5011	PREFAB PAV MRK TY C (W) (ARROW)	EA	2.00	$8.00	$16.00
668	5015	PREFAB PAV MRK TY C (W) (WORD)	EA	1.00	$8.00	$8.00
672	5006	RAIS PAV MRKR CL B (REFL) TY I-A	EA	10.00	$4.00	$40.00
672	5007	RAIS PAV MRKR CL C (REFL) TY I-C	EA	168.0	$5.00	$840.00
672	5010	RAIS PAV MRKR CL B (REFL) TYII-C-R	EA	25.0	$3.80	$95.00
677	XXXX	ELIM EXT PAV MRK & MRKR	M	191.0	$2.86	$546.76
678	5001	PAV SURF PREP MRKS (100mm)	M	234.0	$0.04	$9.36
678	5002	PAV SURF PREP MRKS (150mm)	M	55.0	$0.05	$2.75
678	5005	PAV SURF PREP MRKS (450mm)	M	18.0	$0.07	$1.26
678	5006	PAV SURF PREP MRKS (600mm)	M	120.0	$0.25	$30.00
678	5007	PAV SURF PREP MRKS (ARROW)	EA	2.0	$7.00	$14.00
678	5008	PAV SURF PREP MRKS (WORD)	EA	1.0	$7.00	$7.00
680	5001	INSTALL HWY TRAF SIG (ISOLATED)	EA	1.0	$1,700.00	$1,700.00
682	5002	VEH SIG SEC (300mm)	EA	5.0	$137.50	$687.50
682	5011	BACK PLATE (5 SEC) (300mm)	EA	1.0	$40.00	$40.00
684	5046	TRF SIG CBL (TY C)(2 CONDR)(18 AWG)	M	6.0	$1.00	$6.00
684	5052	TRF SIG CBL (TY A)(5 CONDR)(16 AWG)	M	48.0	$2.36	$113.28
684	5053	TRF SIG CBL (TY A)(7 CONDR)(16 AWG)	M	4.0	$2.61	$10.44
688	5011	VEH DETECT (SAWCUT)	M	48.0	$13.12	$629.76
5003	5001	BALED HAY FOR EROSN & SEDM CONTROL	EA	8.0	$8.00	$64.00
5003	5003	BALED HAY EROSN & SEDM CONT (REMOVE)	EA	8.0	$5.00	$40.00

PRELIMINARY (95% SUBMITTAL) CONSTRUCTION COST ESTIMATE

PROJECT: CMAQ PROJECT #29
CONTROL: 1980-45-358
INTERSECTION: FRANKFORD AT COIT
COUNTY: COLLIN
DISTRICT: DALLAS
CONSULTANT: EARTH TECH

6008	5001	SALVAGE TRAFFIC SIGNALS	EA	1.0	$1,000.00	$1,000.00
6298	XXXX	VEH SIG SEC (300mm RED LED))	EA	1.0	$204.50	$204.50
XXXX	XXXX	RELOCATE WATER METER	EA	4.0	$150.00	$600.00
XXXX	XXXX	RELOCATE FIRE HYDRANT	EA	1.0	$1,778.50	$1,778.50
					CONSTRUCTION SUBTOTAL	**$75,381.99**
					15% CONTINGENCY	$11,307
					TOTAL ESTIMATED CONSTRUCTION COST	**$86,689**

CMAQ PROJECT 29 (MARK-UPS)

CSJ-0918-45-355
CSJ-0918-45-358

65% SUBMITTAL
JUNE 17, 99
EARTH TECH

```
#$       SPECIFICATION DATA
#        SPEC1
SPEC1    4*****************************************************************
         4*                      SPECIFICATION DATA                       *
         4*  TEST TO BE IN ACCORDANCE WITH TEXAS DEPARTMENT OF TRANSPORTATION *
         4*                     STANDARD TEST METHODS                     *
         4*****************************************************************
         4*    *                    *GRADING REQUIREMENTS* CONSTANTS *BALL*NOTE*
         4*    *                    *********************************MILL*    *
         4*ITEM*    DESCRIPTION     *                    *LL *  PI   *    *    *
         4*    *                    * % RETAINED, SIEVES *****************    *
         4*    *                    *                    *MAX*MAX*MIN*MAX *    *
         4*****************************************************************
         4*    *                    *                    *   *       *    *    *
         4* 132*EMBK (DENS CONT)    *                    *   * 40  8 *    *    *
         4*    *  (TY C)            *                    *   *       *    *    *
         4*    *                    *                    *   *       *    *    *
         4* 132*EMBK (DENS CONT)    *                    *   * 20  8 *    *    *
         4*    *  (TY C) (MOD)      *                    *   *       *    *    *
         4*    *                    *                    *   *       *    *    *
         4*****************************************************************
         4
         4
         4*****************************************************
         4*    MINIMUM COMPACTION REQUIREMENTS FOR BASE COURSES     *
         4* % DENSITY AS DETERMINED BY COMPACTION RATIO (TEX-113-E)*
         4*****************************************************
         4*    *                    *  ROADWAY     *    RAMPS      *
         4*ITEM*     MATERIAL       ***************************
         4*    *                    *COURSE*DENSITY*COURSE*DENSITY*
         4*****************************************************
         4*    *                    *      *       *      *       *
         4* 247* FLEX BASE (DEL)    * ALL  *  95   * ALL  *  95   *
         4*    *                    *      *       *      *       *
         4* 260* LIME TREAT SUBGR   * ALL  *  95   * ALL  *  95   *
         4*    *                    *      *       *      *       *
         4*****************************************************
         4
#        SPEC2
SPEC2    4         BASIS OF ESTIMATE FOR PERMANENT CONSTRUCTION
         4         ============================================
         4
         4 ITEM      DESCRIPTION           RATE        UNIT       QUANTITY
         4 ----    ----------------     ---------   --------   ----------
         4  162   MULCH SOD                 4"          -        ___.__ SY
         4  164   BRDCST SEED            SEE SPECS               ___.__ SY
         4  166 * FERT (12-12-12)        ___ #/AC    ___.__ AC   ___.__ TON
         4  168   VEGETATIVE WATERING    ___ MG/AC   ___.__ AC   ___.__ MG
         4  204   SPRINK (DUST CONT)     ___ GAL/STA ___.__ STA  ___.__ MG
         4  247   FLEX BASE (DEL)        _.__ T/CY   ___.__ CY   ___.__ TON
         4  260   LIME (TY A SLURRY)     _.__ %BY WT ___.__ SY   ___.__ TON
         4        OR (TY B)
         4  310   PRIME COAT (MC-30)     _.__ GAL/SY ___.__ SY   ___.__ GAL
         4
         4   NOTE:
```

2

```
         4      (1) BASE MATERIAL WEIGHT BASED ON ______ T/CY (DRY COMPACTED)
         4      (2) SUBGRADE WEIGHT BASED ON ______ T/CY (DRY COMPACTED)
         4
#        SPEC3
SPEC3    4
         4          BASIS OF ESTIMATE FOR TEMPORARY EROSION CONTROL ITEMS
         4          =====================================================
         4
         4 ITEM     DESCRIPTION              RATE         UNIT        QUANTITY
         4 ----   -----------------       ---------    --------    ----------
         4  158   BACKHOE WORK            ____ CY/HR   ____ CY     ____ HR
         4  164   BRDGST SEED             SEE SPECS    ____ SY     ____ SY
         4  166 * FERT (12-12-12)         ____ #/AC    ____ AC     ____ TON
         4  168   VEGETATIVE WATERING     ____ MG/AC   ____ AC     ____ MG
         4
         4      *  FOR CONTRACTOR'S INFORMATION ONLY.
         4
#$       GENERAL REQUIREMENTS
#        GEN 0
GEN 0    2  GENERAL:
         4  --------
         4  (WILL LATER BE RENUMBERED)
#        GEN 1
GEN 1    3BENCH MARKS WILL BE SET BY TEXAS DEPARTMENT OF TRANSPORTATION
         3FORCES PRIOR TO THE BEGINNING OF CONSTRUCTION.
         4
#        GEN 2
GEN 2    3PRIOR TO CONTRACT LETTING, REPRODUCIBLE EARTHWORK CROSS SECTIONS
         3WILL BE AVAILABLE AT THE DISTRICT OFFICE FOR BORROWING BY
         3COPYING-SERVICE COMPANIES FOR THE PURPOSE OF MAKING COPIES FOR THE
         3PROSPECTIVE BIDDERS, AT THE PROSPECTIVE BIDDER'S EXPENSE.
         4
#        GEN 3
GEN3     3IN ADDITION, A DOS FORMATED DISKETTE CONTAINING THE FOLLOWING
         3DATA FILES WITH DISCLAIMER WILL BE AVAILABLE AT THE DISTRICT
         3OFFICE FOR THE PURPOSE OF MAKING COPIES FOR PROSPECTIVE BIDDERS,
         3AT NO CHARGE:
         4-  CROSS SECTION CENTERLINE (HORIZONTAL ALIGNMENT G)
         4-  ORIGINAL GROUND CROSS SECTION
         4-  PROPOSED DESIGN CROSS SECTION
         3(THE DATA ON THIS DISKETTE IS FOR NON-CONSTRUCTION PURPOSES ONLY
         3AND IT IS THE RESPONSIBILITY OF THE PROSPECTIVE BIDDER TO VALIDATE
         3THE ENCLOSED DATA WITH APPROPRIATE PLANS, SPECIFICATIONS AND
         3ESTIMATE FOR THE PROJECT(S). PLEASE NOTE ALSO THAT THE TXDOT
         3WORKSTATION VERSION OF RDS IS NOT COMPATIBLE WITH THE PC AASHTO
         3VERSION OF RDS DUE TO INFORMATION PLACED IN DIFFERENT COLUMNS.)
         4
#        GEN 4 2
GEN 4    3THE CONSTRUCTION, OPERATION AND MAINTENANCE OF THIS PROPOSED PROJECT
         3WILL BE CONSISTENT WITH THE STATE IMPLEMENTATION PLAN AS PREPARED BY
         3THE TEXAS AIR CONTROL BOARD.
         4
#        GEN 5
GEN 5    3THE CONTRACTOR'S ATTENTION IS CALLED TO THE TRAFFIC-CONTROL DETAILS
         3FOR SEAL COAT OPERATIONS SHEET ELSEWHERE IN THE PLANS. THIS SHEET
```

A SEPARATE PAY ITEM TO REMOVE EXISTING LIME STABLIZED SUBGRADE AND PLACE NEW ASPHALT CONCRETE BASE IS INCLUDED. MINOR ~~AND MINOR~~ DRIVEWAY EXCAVATION HAVE BEEN INCLUDED IN THE CONTRACT UNDER ROADWAY EXCAVATION PAY ITEM

EARTHWORK FOR PARKWAY AND

3INCLUDES PROVISIONS FOR CERTAIN SIGNS TO BE INSTALLED BY THE CONTRACTOR
3WHICH ARE TO REMAIN IN PLACE AFTER COMPLETION OF THE SEAL COAT
3OPERATION UNTIL STANDARD PAVEMENT MARKINGS ARE PLACED, BUT NOT LONGER
3THAN THREE (3) DAYS. THESE SIGNS ARE IN ADDITION TO THE SIGNS AND
3BARRICADES THAT MAY BE REQUIRED ON SHEETS BC(1-9)-94.
4

\#
GEN 6 3THE DETERMINATION OF THE LIQUID LIMIT OF SOILS SHALL BE IN-
3ACCORDANCE WITH TEST METHOD TEX-104-E.
4

\#
GEN 7 3THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AN ACCURATE
3VERTICAL AND HORIZONTAL CONTROL THROUGHOUT THE CONTRACT.
3SURVEY MONUMENTS, FURNISHED BY THE DEPARTMENT, SHALL BE PLACED
3BY THE CONTRACTOR AT POINTS INDICATED AND AS DETAILED IN THE
3PLANS OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL
3FURNISH THE RESIDENT ENGINEER SURFACE COORDINATES AND THE
3ELEVATION OF THE SET MONUMENT AND AN AZIMUTH FROM THE MONUMENT
3TO SOME PROMINENT PHYSICAL FEATURE, PREFERABLY ANOTHER SURVEY
3MONUMENT ON THE PROJECT. THIS WORK WILL NOT BE PAID FOR
3DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID
3ITEMS.
4

\#
GEN 8 3UPON REQUEST OF THE ENGINEER, THE CONTRACTOR SHALL FURNISH TO
3THE ENGINEER A TYPED NARRATIVE REPORT, SIGNED AND DATED BY THE
3CONTRACTOR, OUTLINING THE MANNER OF PROSECUTION OF WORK THAT
3HE INTENDS TO FOLLOW IN THE SUBSEQUENT THIRTY DAY PERIOD.
4

\#
GEN 9 3IF AT ANY TIME DURING THE CONSTRUCTION OF THIS PROJECT THE CONTRACTOR
3FALLS MORE THAN 30 DAYS BEHIND HIS SCHEDULE SUBMITTED UNDER PROVISIONS
3OF ARTICLE 8.2, HE SHALL FURNISH THE ENGINEER WITH AN UPDATED REALISTIC
3CONSTRUCTION SCHEDULE.
4

\#
GEN 10 3EXISTING ROADS WITHIN THE LIMITS OF THE PROJECT THAT ARE TO REMAIN
3TEMPORARILY FOR THE PURPOSE OF HANDLING TRAFFIC THROUGH THE PROJECT
3WILL BE MAINTAINED BY THE CONTRACTOR IN A MANNER THAT IS ACCEPTABLE
3TO THE ENGINEER. THIS WORK WILL NOT BE PAID FOR DIRECTLY, BUT SHALL
3BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.
4

\#
GEN 11 3ERECTION OF POLES, LUMINAIRES AND STRUCTURES LOCATED NEAR ANY OVERHEAD
3OR UNDERGROUND UTILITIES SHALL BE ACCOMPLISHED USING ESTABLISHED
3INDUSTRY AND UTILITY SAFETY PRACTICES. THE CONTRACTOR SHALL CONSULT
3WITH THE APPROPRIATE UTILITY COMPANY PRIOR TO BEGINNING SUCH WORK.
4

\#
GEN 12 3THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PRESERVE EXISTING TREES
3DESIGNATED BY THE ENGINEER TO REMAIN/FOLLOWING CONSTRUCTION. THE
3CONTRACTOR IS REQUESTED TO FOLLOW THE TEXAS DEPARTMENT OF
3TRANSPORTATION'S PRUNING GUIDELINES AND OBSERVE RECOGNIZED TREE SURGERY
3PRACTICES. ADDITIONALLY, CARE SHALL BE TAKEN TO MINIMIZE DISRUPTION
3OR DAMAGE TO THE ROOT SYSTEM OF THESE DESIGNATED TREES.

BLOCK SOD

4
\# GEN 13
GEN 13 3THE CONTRACTOR IS RESPONSIBLE FOR STABILIZING ALL UNPAVED AREAS OF
3THE PROJECT WITH ~~A MINIMUM 70% DENSITY OF VEGETATIVE COVER.~~ THIS IS
3TO BE ACCOMPLISHED UTILIZING THE ITEMS IN THIS CONTRACT.
4
\# GEN 14
GEN 14 3THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE POSSIBLE PRESENCE OF
3UNDERGROUND UTILITIES OWNED BY THE TEXAS DEPARTMENT OF TRANSPORTATION
3(IRRIGATION, SIGNAL, ILLUMINATION AND/OR SURVEILLANCE, COMMUNICATION
3AND CONTROL) ON THE RIGHT OF WAY ON THIS PROJECT. IT IS THE
3RESPONSIBILITY OF THE CONTRACTOR TO CALL FOR LOCATES AT THE TXDOT
3UTILITY SECTION (320-6270) 48 HOURS IN ADVANCE OF EXCAVATION.
4
\# GEN 15
GEN 15 3THE CONTRACTOR SHALL TAKE EXTREME CARE WHEN EXCAVATING IN THE VICINITY
3OF UTILITIES. THE CONTRACTOR MAY BE REQUIRED TO PROBE OR EXPOSE THESE
3FACILITIES. THE CONTRACTOR WILL BE RESPONSIBLE FOR DAMAGES TO THE
3STATE'S UTILITIES IF THE DAMAGE IS CAUSED BY NEGLIGENCE OR A FAILURE
3TO HAVE TXDOT LOCATES PERFORMED.
4
\# GEN 16
GEN 16 3WHEN WORK ON THIS PROJECT IS COMPLETED, THE ENGINEER SHALL CONTACT
3THE DISTRICT ROW DESIGN SECTION. THIS SECTION WILL ARRANGE FOR
3PLACEMENT OF PERMANENT RIGHT OF WAY MARKERS BY OTHERS.
4
\# GEN 17 *(WILL LATER BE RENUMBERED)*
GEN 17 3THE FOLLOWING STANDARD DETAIL SHEETS HAVE BEEN MODIFIED:
4
\#$ ~~EARTHWORK~~
\# 100-0
100-0 2 ITEM 100:
4 --------
4
\# 100-1
100-1 3ALL EXISTING ROADWAY SIGNS WILL BE REMOVED BY THE CONTRACTOR DURING
3CONSTRUCTION AND PLACED WITHIN THE RIGHT OF WAY AS DIRECTED BY THE
3ENGINEER.
4
\# 100-2
100-2 ~~3ALL EXISTING ROADWAY SIGNS WILL BE REMOVED BY STATE MAINTENANCE FORCES~~
~~3DURING CONSTRUCTION.~~
4
\# 100-3
100-3 3ALL OF THE EXISTING MUSHROOM TRAFFIC BUTTONS ON THIS PROJECT SHALL BE
3REMOVED IN A MANNER APPROVED BY THE ENGINEER AND WILL BECOME THE
3PROPERTY OF THE CONTRACTOR TO BE DISPOSED OF BY HIM OUTSIDE THE LIMITS
3OF THE RIGHT-OF-WAY AT HIS OWN EXPENSE.
4
\# 100-4
100-4 3THE LIMITS OF PREPARING RIGHT-OF-WAY WILL BE MEASURED ~~FROM STA.~~
3~~TO STA.~~ ALONG THE CENTERLINE OF CONSTRUCTION *AS SHOWN ON THE PLANS.*
4
\# 100-5 *MISCELLANEOUS TREE AND SHRUB REMOVAL AS WELL AS*
100-5 ~~3TIMBER SHALL BE CLEARED ONLY FROM THOSE AREAS~~
MINOR LANDSCAPING AND IRRIGATION ITEMS THAT ARE TO BE REMOVED ARE SHOWN ON THE PLANS AND ARE PAID FOR DIRECTLY. ~~[illegible]~~

~~AND PAYMENT~~ PAY ITEM.

~~3DESIGNATED BY THE ENGINEER.~~
4
100-6
100-6 3ALL MAILBOXES WITHIN THE PROPOSED CONSTRUCTION SHALL BE REMOVED AND
3RESET BY THE CONTRACTOR. THIS WORK WILL NOT BE PAID FOR DIRECTLY, BUT
3SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
4
100,104-0
100,104 2 ITEMS 100 AND 104:
-0 4 ----------
4
100,104-1
100,104 3"REMOVING CONCRETE" WILL BE PAID FOR ON EXISTING CONCRETE STREETS, MEDIANS, SIDEWALKS AND DRIVEWAYS
-1 3ONLY. REMOVAL OF ALL OTHER AREAS OF CONCRETE SHALL BE INCLUDED UNDER
3ITEM 100.
4
100,104-2 REMOVAL OF EXISTING ATTACHED CONCRETE CURB ON CONCRETE PAVEMENT OR MEDIAN
100,104 3~~"REMOVING CONCRETE CURB AND GUTTER"~~ WILL BE ~~PAID FOR~~ ALONG
-2 3~~EXISTING CONCRETE STREETS ONLY. ALL OTHER CURB AND GUTTER~~ WILL BE
3CONSIDERED AS SUBSIDIARY TO ITEM ~~100~~ 104.
4
104-0
104-0 2 ITEM 104:
4 --------
4
104-1
104-1 3REMOVAL OF MONOLITHIC CONCRETE CURB SHALL BE ACCOMPLISHED BY ANY ~~METHOD~~
3APPROVED BY THE ENGINEER. IN THOSE AREAS WHERE THE PAVEMENT IS NOT TO
3BE OVERLAID, A SMOOTH SURFACE WILL BE REQUIRED AFTER THE CURB REMOVAL
3OPERATION HAS BEEN COMPLETED. PLANING OR GRINDING WILL BE CONSIDERED AS
3AN ACCEPTABLE METHOD AT THESE LOCATIONS. MEASUREMENT AND PAYMENT SHALL
3BE IN ACCORDANCE WITH THIS ITEM.
4
104-2
104-2 3SAWING OF CONCRETE, WHERE PORTIONS ARE TO BE LEFT IN PLACE, WILL NOT
3BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
4
4
104-3
104-3 3~~DRIVEWAYS INDICATED ON THE "REMOVAL ITEMS SHEETS" SHALL BE INCLUDED IN~~
3THE UNIT PRICE BID PER SQUARE ~~YARD~~ OF "REMOVING OLD CONC (PAV)".
4
104,496-0
104,496 2 ITEMS 104 AND 496:
-0 4 ----------
4
104,496-1
104,496 3CONCRETE PAVEMENT REMOVED AS A RESULT OF REMOVING THE INLETS WILL NOT
-1 3BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED AS
3SUBSIDIARY TO ITEM 496.
4
110-0
110-0 2 ITEM 110:
4 ---------
4

```
#       110-1
110-1   3EXCAVATION FOR DRIVEWAYS AND INTERSECTIONS WILL NOT BE PAID FOR
        3DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
        4
#       110-2
110-2   3EXCAVATION FOR DRIVEWAYS, SLEEPER SLABS, ALLEYS AND INTERSECTIONS WILL
        3NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THIS
        3ITEM.
        4
#       110,260-0
110,260 2  ITEMS 110 AND 260:
-0      4  -----------------
        4
#       110,260-1
110,260 3THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FURNISHING,
-1      3MAINTENANCE AND STORAGE OF ONE NUCLEAR DENSITY GAUGE
        3ON THE PROJECT DURING THE PLACEMENT OF THE LIME TREATED SUBGRADE,
        3ACP AND EMBANKMENT.
        4
#       110,260-2
110,260 3ALL EQUIPMENT, STORAGE AND REQUIRED LICENSE AND SAFETY FEES INCURRED
-2      3BY THE CONTRACTOR SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID
        3ITEMS AND WILL NOT BE PAID FOR DIRECTLY.
        4
#       132-0
132-0   2  ITEM 132:
        4  ---------
        4
#       132-1
132-1   3THIS MATERIAL SHALL CONSIST OF SUITABLE EARTH MATERIAL SUCH AS
        3LOAM, CLAY OR OTHER MATERIALS THAT WILL FORM A STABLE
        3EMBANKMENT AND BE FREE FROM VEGETATION OR OTHER OBJECTIONABLE
        3MATTER AND, WHEN TESTED BY TEXAS DEPARTMENT OF TRANSPORTATION METHODS,
        3SHALL MEET THE SOIL CONSTANT REQUIREMENTS ON SHEET "A"
        3IN ITS NATURAL STATE OR AFTER THE ADDITION OF LIME. FURNISHING,
        3APPLICATION AND MIXING OF LIME WILL NOT BE PAID FOR DIRECTLY BUT
        3WILL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
        4
#       132-2
132-2   3WHEN THE MOISTURE CONTENT OF THE EMBANKMENT EXCEEDS THE
        3SPECIFIED OPTIMUM CONTENT, AS DETERMINED BY THE ENGINEER, IT
        3SHALL BE AERATED BY DISKING, HARROWING, BLADING OR OTHER
        3MEANS SATISFACTORY TO THE ENGINEER, TO REDUCE THE MOISTURE
        3CONTENT TO THE OPTIMUM CONDITION BEFORE ROLLING COMMENCES.
        3THE CONTRACTOR WILL NOT BE PERMITTED TO AERATE WET MATERIAL
        3WITH COMPACTION EQUIPMENT SUCH AS SHEEPSFOOT ROLLERS OR
        3OTHER DEVICES THAT TEND TO OVER-COMPACT THE PREVIOUS LAYER
        3OF MATERIAL.  SUCH AERATION WILL BE CONSIDERED AS
        3SUBSIDIARY TO THIS ITEM AND WILL NOT BE PAID FOR DIRECTLY.
        4
#       132-3
132-3   3SHALE WILL NOT BE CONSIDERED AS SUITABLE MATERIAL.  SHALEY CLAYS MAY
        3NOT BE USED IN EMBANKMENTS UNLESS APPROVED IN WRITING BY THE ENGINEER.
        4
#       150-0
```

110-1 PRIOR TO PLACEMENT OF THE ASPHALT CONCRETE BASE, COMPACT SUBGRADE TO 95% DENSITY.

132-1 EXISTING EXCAVATED MATERIAL FROM THE PARKWAY IS TO BE REUSED AND COMPACTED FOR RECONSTRUCTION OF PARKWAY. THE EMBANKMENT SHALL BE COMPACTED TO 95% DENSITY SUBSIDIARY TO ALL OTHER ITEMS

```
150-0    2  ITEM 150:
         4  --------
         4
#        150-1
150-1    3CLEARING AND GRUBBING WILL NOT BE PAID FOR DIRECTLY
         3BUT SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
         4
#        160-0
160-0    2  ITEM 160:
         4  --------
         4
#        160-1
160-1    3THE CONTRACTOR WILL BE REQUIRED, WHERE POSSIBLE, TO ARRANGE THE
         3SEQUENCE OF HIS OPERATIONS IN SUCH A MANNER THAT TOPSOIL WILL BE
         3SALVAGED FROM ONE LOCATION AND PLACED DIRECTLY ON NEARBY SLOPE AREAS TO
         3RECEIVE THIS ITEM. STOCKPILING OF TOPSOIL AND GRASS SOD SHALL BE KEPT
         3TO A MINIMUM AND SHALL BE AS APPROVED BY THE ENGINEER.
         4
#        160-2
160-2    3THE TOPSOIL REQUIRED FOR THIS ITEM SHALL BE SALVAGED FROM THE RIGHT OF
         3WAY ON THIS PROJECT AS DIRECTED BY THE ENGINEER AND SHALL BE FERTILE
         3LOAM OR CLAY FROM NOT MORE THAN 2 FEET BELOW NATURAL GROUND.
         4
#        162-0
162-0    2  ITEM 162:
         4  --------
         4
#        162-1
162-1    3BLOCK SOD SHALL BE PLACED IN STRIPS TWO (2) FEET WIDE ON EACH SIDE OF
         3THE RIPRAP AT BRIDGE ENDS.
         4
#        162,164,166-0
162,164,2  ITEMS 162, 164 AND 166:
166-0    4  ----------------------
         4
#        162,164,166-1
162,164,3MULCH SOD, BROADCAST SEEDING AND FERTILIZER SHALL BE PLACED ON ALL
166-1    3UNSURFACED DISTURBED AREAS WITHIN THE LIMITS OF THE RIGHT-OF-WAY,
         3AS DIRECTED BY THE ENGINEER.
         4
#        162,164,166-2
162,164,3SEEDING, SODDING AND FERTILIZER SHALL BE PLACED
166-2    3ON ALL UNPAVED AREAS WITHIN THE RIGHT-OF-WAY
         4
#        162,164,166-3
162,164,3THE CONTRACTOR WILL BE REQUIRED TO ARRANGE HIS SEEDING OPERATION AFTER
166-3    3THE COMPLETION OF EACH CONSTRUCTION STAGE DEPENDANT UPON THE PLANTING
         3DATE REQUIREMENTS STIPULATED BY THIS ITEM. NO ADDITIONAL COMPENSATION
         3WILL BE GRANTED TO THE CONTRACTOR FOR THE ADDITIONAL MOVE-INS.
         4
#        162,166-0
162,166  2  ITEMS 162 AND 166:
-0       4  ----------------
         4
#        162,166-1
```

3.0m

IF ADEQUATE ONSITE TOPSOIL IS NOT AVAILABLE, APPROVED TOPSOIL IS TO BE FURNISHED BY THE CONTRACTOR AND PAID FOR AS PART OF THIS ITEM

160-2 TOPSOIL SHALL BE COMPACTED AS DIRECTED BY THE ENGINEER. SPRINKLING AND ROLLING, AS REQUIRED WILL BE SUBSIDIARY TO THIS ITEM AND WILL NOT BE PAID FOR DIRECT

AS DIRECTED BY THE ENGINEER

162,166 ALL DISTURBED AND UNPAVED AREAS OF THE PARKWAYS ARE TO BE SODDED. ALL SODDING SHALL BE "COMMON BERMUDA" SOD AND SHALL BE 100MM IN DEPTH. SOD SHALL BE KEPT IN A MOIST CONDITION. NO SOD SHALL BE PLACED BETWEEN SEPTEMBER 27 AND MARCH 27 UNLESS SPECIFICALLY AUTHORIZED OR DIRECTED BY THE ENGINEER IN WRITING.

```
162,166 3MULCH SOD AND FERTILIZER SHALL BE PLACED ON ALL UNSURFACED AREAS
-1      3WITHIN THE LIMITS OF THE RIGHT-OF-WAY, AS DIRECTED BY THE ENGINEER.
        4
#       162,166-2
162,166 3BLOCK SOD AND FERTILIZER SHALL BE PLACED IN STRIPS TWO (2) FEET
-2      3WIDE ON EACH SIDE OF THE RIPRAP AT SHOULDER DRAINS.
        4
#       164,166-0
164,166 2  ITEMS 164 AND 166:
-0      4  ----------------
        4
#       164,166-1
164,166 3SEEDING AND FERTILIZER SHALL BE PLACED ON ALL
-1      3SLOPES AND DITCHES, EXCLUDING AREAS TO BE PAVED.
        4
#       164,166-2
164,166 3BROADCAST SEEDING AND FERTILIZER SHALL BE PLACED ON ALL
-2      3UNSURFACED DISTURBED AREAS AS DIRECTED BY THE ENGINEER.
        4
#       164,166-3
164,166 3BROADCAST SEEDING AND FERTILIZER SHALL BE USED FOR TEMPORARY
-3      3EROSION CONTROL. THE PURE LIVE SEED, OF THE COOL SEASON PLANTS,
        3PLANTED PER ACRE SHALL BE EITHER ANNUAL RYE OR SUDANGRASS.
        4
#       164,166-4
164,166 3SEEDING AND FERTILIZER WILL BE PLACED AS A WATER SLURRY.
-4      4
#       166-0
166-0   2  ITEM 166:
        4  --------
        4
#       166-1
166-1   3THE MINIMUM RATE OF APPLICATION FOR FERTILIZER SHALL BE 400 LB/AC.
        4
#       166-2
166-2   3THE ANALYSIS OF THE FERTILIZER AS SPECIFIED IN ARTICLE 166.2
        3WILL BE (12-12-12) UNLESS OTHERWISE APPROVED BY THE ENGINEER.
        4
#$      SUBBASE AND BASE COURSES
#       204-0
204-0   2  ITEM 204:
        4  --------
        4
#       204-1
204-1   3SPRINKLING, AS ORDERED BY THE ENGINEER TO CONTROL DUST ON THIS
        3PROJECT, SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.
        4
#       247-0
247-0   2  ITEM 247:
        4  --------
        4
#       247-1
247-1   3THE FOUNDATION COURSE SHALL BE OF SUCH QUALITY THAT WHEN
        3REPRESENTATIVE SAMPLES OF RAW MATERIALS, TO BE SUBMITTED
        3BY THE CONTRACTOR, ARE MIXED WITH THE QUANTITY OF LIME
```

112 KILOGRAMS OF NITROGEN PER HECTARE

AMOUNT OF FERTILIZER FOR THIS PROJECT WILL BE REQUIRED. NO SEPARATE PAYMENT WILL BE MADE FOR AND FERTILIZER IS SUBSIDIARY TO ITEM 162.

MISCELLANEOUS

3SHOWN ON THE PLANS, TRIAXIAL CLASS 2 MATERIAL (OR BETTER) WILL RESULT
3WHEN TESTED BY TEST METHOD TEX-121-E. THE SAMPLE TO BE
3SUBMITTED BY THE CONTRACTOR SHALL BE SECURED FROM THE CRUSHER
3OR BY A DRILLING METHOD APPROVED BY THE ENGINEER SUCH THAT
3THE SAMPLED MATERIAL WILL BE REPRESENTATIVE OF THE PROPOSED
3QUARRY.
4???? SPECIFY TRIAXIAL CLASS 1 FOR ???
4???? ROADWAYS ABOVE 70,000 ADT. ???
4

\# 247-2

247-2 3FOUNDATION COURSE QUANTITIES ARE BASED ON 1 C.Y. = 115 LBS.
3COMPACTED DRY WEIGHT.
4

\# 247-3

247-3 3WHEN TESTED BY TEST METHOD TEX-121-E, THE MATERIAL SHALL BE OF SUCH
3QUALITY THAT WHEN REPRESENTATIVE SAMPLES OF RAW MATERIAL, TO BE
3SUBMITTED BY THE CONTRACTOR, ARE MIXED WITH THE QUANTITY OF LIME
3SHOWN ELSEWHERE IN THE PLANS, A TRIAXIAL CLASS I MATERIAL WILL RESULT.
4

\# 247-4

247-4 3THE CONTRACTOR WILL BE REQUIRED TO PROVIDE ACCESS TO PRIVATE PROPERTY
3AT ALL TIMES. BASE MATERIAL USED IN TEMPORARY DRIVEWAYS WILL BE PAID
3FOR BY THE TON. DRIVEWAYS WILL BE PLACED ACCORDING TO THE ENGINEER.
3TEMPORARY DRIVEWAYS WILL BE CONSTRUCTED IMMEDIATELY AFTER THE
3CONTRACTOR HAS DISTURBED OR ALTERED THE ADJACENT PROPERTY OWNER'S
3ACCESS TO HIS PROPERTY.
4

\# 247-5

247-5 3TOLERANCES SPECIFIED IN THIS ITEM WILL BE PERMITTED ON THIS PROJECT.
4

\# 247-6

247-6 3TYPE D MATERIAL WILL BE CRUSHED CONCRETE.
4

\# 251-0

251-0 2 ITEM 251:
4 --------
4

\# 251-1

251-1 3ALL EXCAVATION REQUIRED BY THIS ITEM IN THE PREPARATION OF THE
3SUBGRADE WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED
3SUBSIDIARY TO ~~THIS ITEM~~. OTHER ITEMS
4

\# 251-2

251-2 3THE SALVAGED BASE SHALL BE SALVAGED FROM THE EXISTING SHOULDERS
3WITHIN THE LIMITS DESIGNATED BY THE ENGINEER AND SHALL
3BE PLACED ON THE FRONTAGE ROAD.
4

\# 251-3

251-3 3THIS ITEM CONSISTS OF SALVAGING AND REPLACING THE BASE MATERIAL IN THE
3EXISTING SHOULDERS AND TRANSITIONS. THE CONTRACTOR WILL BE PERMITTED
3TO COMPACT THE SALVAGED BASE TO BE REPLACED WITH ANY TYPE OF EQUIPMENT
3ACCEPTABLE TO THE ENGINEER.
4

\# 251-4

251-4 3THE PRICE BID PER STATION FOR "REWORKING BASE MATERIAL (TYPE B)" SHALL

```
        3INCLUDE THE SALVAGING OF BOTH EXISTING SHOULDERS, AS DIRECTED BY THE
        3ENGINEER.  NO BASE WILL BE SALVAGED BELOW SUBGRADE ELEVATION.
        3STOCKPILING OF SALVAGED MATERIAL MAY BE USED AS APPROVED BY THE
        3ENGINEER, IN ORDER TO PRESERVE AND PROTECT THE MATERIAL UNTIL IT
        3CAN BE USED IN THE PROPER SEQUENCE OF CONSTRUCTION.
        4
#       251-5
251-5   3SALVAGED BASE, NOT USED AS SET OUT ABOVE, SHALL BECOME THE PROPERTY OF
        3THE CONTRACTOR AND BE DISPOSED OF BY HIM OUTSIDE THE LIMITS OF THE
        3RIGHT-OF-WAY AT HIS OWN EXPENSE IN A MANNER SATISFACTORY
        3TO THE ENGINEER.  THIS WORK WILL NOT BE PAID FOR DIRECTLY,
        3BUT SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
        4
#       251-6
251-6   3EXISTING ASPHALT TO BE REMOVED SHALL BE SAWED ALONG NEAT LINES
        3WHERE PORTIONS ARE TO BE LEFT IN PLACE TEMPORARILY OR PERMANENTLY.
        3SAWING WILL BE CONSIDERED SUBSIDIARY TO THIS ITEM AND NO
        3DIRECT PAYMENT WILL BE MADE.
        4
#       251,260-0
251,260 2  ITEMS 251 AND 260:
-0      4  -----------------
        4
#       251,260-1
251,260 3SALVAGED AND REPLACED BASE SHALL BE COMPACTED IN ACCORDANCE WITH
-1      3THE DENSITY REQUIREMENTS SHOWN IN ITEM 260, "LIME
        3TREATMENT FOR MATERIALS USED AS SUBGRADE (ROAD MIXED)".
        4
#       260-0
260-0   2  ITEM 260:
        4  --------
        4
#       260-1
260-1   3THE STANDARD PLATFORM TRUCK SCALES WILL BE REQUIRED FOR THIS PROJECT
        3AND SHALL BE LOCATED AT A POINT APPROVED BY THE ENGINEER.  CERTIFIED
        3PUBLIC SCALES, WHEN APPROVED BY THE ENGINEER, MAY BE USED, PROVIDING
        3THEY CONFORM TO THE REQUIREMENTS SET FORTH IN ARTICLE 520.3(1).
        4
#       260-2
260-2   3THE LIMITS OF PAYMENT FOR THIS ITEM SHALL BE
        3TO THE DIRT CROWN LINE ON BLANKET SECTIONS.
        4
#       260-3
260-3   3THE LIMITS OF PAY ON THIS ITEM SHALL BE FROM A POINT 2.0 FEET FROM THE
        3BACK OF CURB ON CURBED SECTIONS.
        4
#       260-4
260-4   3UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN WRITING, LIME SHALL BE
        3CURED WITH MS-2 ASPHALT APPLIED AT A RATE OF 0.25 GAL/SY.
        4
#       260-5
260-5   3LIME SHALL BE PLACED BY THE "SLURRY PLACING" METHOD.
        4
#       260,262-0
260,262 2  ITEMS 260 AND 262:
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```
-0      4  ----------------
        4
#       260,262-1
260,262 3THE FINISHED GRADE OF "LIME TREAT SUBGR (DENS CONT)"
-1      3SHALL BE TO THE SECTION OF THE BOTTOM OF THE ASPHALTIC CONCRETE
        3PAVEMENT AND CONCRETE PAVEMENT AS SHOWN ON THE PLANS, OR LOWER.
        3PATCHING OF CURED BASE SECTIONS WILL NOT BE ALLOWED, BUT SHALL BE
        3FILLED WITH EXTRA DEPTH ASPHALTIC CONCRETE PAVEMENT OR BE REWORKED
        3COMPLETELY BY SCARIFYING, ADDING MATERIAL, APPLYING LIME SLURRY AND
        3RECOMPACTING.  NO ADDITIONAL COMPENSATION WILL BE MADE FOR THE WORK
        3REQUIRED TO REWORK A SECTION OF SUBGRADE.
        4
#$      SURFACE COURSES OR PAVEMENT
#       301,3063-0
301,30632  ITEMS 301 AND 3063:
-0      4  -------------------
        4
#       301,3063-1
301,30633AN APPROVED ANTISTRIPPING AGENT WILL BE REQUIRED. TEST METHOD
-1      3TEX-530-C IS REQUIRED FOR EVALUATION TESTING DURING DESIGN AND
        3ALSO FOR PRODUCTION STAGES.
        4
#       301,3063-2
301,30633THE EFFECTIVENESS OF THE ANTISTRIPPING AGENT WILL BE EVALUATED
-2      3ONLY AT THE RATE SHOWN AS FOLLOWS:
        4LIME AT 1% AND 2% OF THE TOTAL AGGREGATE TO BE PLACED IN SLURRY FORM,
        4OR LIQUID AGENTS AT 0.5% AND 1% OF THE ASPHALT IN THE MIX.
        4
#       302,303-0
302,303,2  ITEMS 302 AND 309:
-0      4  -----------------
        4
#       302,303-1
302,303 3WHEN TESTED BY TEST METHOD TEX-224-F, THE FLAKINESS INDEX SHALL
-1      3NOT BE GREATER THAN 16.
        4
#       305 AND 354
305-354 2  ITEM 305 AND 354:
-0      4  -----------------
        4
#       305,354-1
305-354 3EXISTING ASPHALT PAVEMENT TO BE SALVAGED WITHIN THE LIMITS OF
-1      3THE PROJECT AND ASPHALT PAVEMENT SALVAGED FROM DETOURS CONSTRUCTED
        3WITHIN THE PROJECT IS ALLOWED, AT THE CONTRACTOR'S OPTION, FOR USE AS
        3STATE OWNED RECLAIMED ASPHALT PAVEMENT (RAP) IN NON-SURFACE COURSES OF
        3ASPHALT PAVEMENT.
        4$$$$PROVIDE APPROXIMATE MATERIAL PROPERTIES$$$$
        4$$$$OF THE EXISTING PAVEMENT.$$$$
        4
#       310-0
310-0   2  ITEM 310:
        4  --------
        4
#       310-1
310-1   3THE USE OF CUT BACK ASPHALTS OTHER THAN MC-30 FOR PRIMING BASE
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         3COURSES WILL BE PROHIBITED BETWEEN APRIL 16 AND SEPTEMBER 15
         3UNLESS APPROVED IN WRITING BY THE ENGINEER.
         3 ????--USE-IN-DALLAS-COUNTY-ONLY---????
         4
310,316  2  ITEMS 310 AND 316:
-0       4  -----------------
         4
#        310 AND 316-1
310,316  3NO ASPHALT MATERIAL SHALL BE PLACED BETWEEN OCTOBER 1 AND APRIL 1,
-1       3EXCEPT BY WRITTEN PERMISSION OF THE ENGINEER.
         4
#        316-0
316-0    2  ITEM 316:
         4  --------
         4
#        316-1
316-1    3THE CONTRACTOR SHALL PLAN HIS OPERATIONS SO THAT THE
         3SEAL COAT SHALL NOT BE OPEN TO TRAFFIC MORE THAN
         3FIVE DAYS BEFORE BEING OVERLAYED AND SHALL BE
         3OVERLAYED WITH ASPHALTIC CONCRETE PAVEMENT PRIOR
         3TO SUSPENSION OF ASPHALT OPERATIONS FOR THE WINTER
         4
#        316-2
316-2    3AFTER COMPLETION OF ANY SECTION OF SEAL COAT,
         3AGGREGATE WILL BE PROPERLY
         3ROLLED AND SWEPT OFF AS SOON AS PRACTICAL PRIOR TO OPENING FOR
         3TRAFFIC.  ALL SEAL COAT OPERATIONS WILL BE PLANNED SO THAT ROLLING
         3AND SWEEPING OFF EXCESS AGGREGATE WILL BE ACCOMPLISHED BEFORE
         3THE END OF EACH DAY'S OPERATION.
         4
#        316-3
316-3    3THE CONTRACTOR WILL BLADE OFF HIGH POINTS AND PERFORM NECESSARY
         3PATCHING PRIOR TO BEGINNING HIS OPERATIONS.  THIS WORK
         3WILL NOT BE PAID FOR DIRECTLY, BUT SHALL
         3BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.
         4
#        316-4
316-4    3WHEN WIND VELOCITIES ARE
         3SUFFICIENT TO PRODUCE NOTICEABLE DISTORTION OF THE SPRAY FROM THE
         3DISTRIBUTOR BAR, ASPHALTIC MATERIALS CANNOT BE PLACED.
         4
#        316-5
316-5    3PRESENTLY SURFACED INTERSECTIONS WILL BE SEALED.
         4
#        316-6
316-6    3EMULSION SEAL COAT SHALL BE APPLIED AT ONE-HALF ROADWAY WIDTH, EXCEPT
         3FOR SHOULDERS, AND SHALL BE ALLOWED TO CURE A MINIMUM OF TWO (2) HOURS,
         3OR AS DIRECTED BY THE ENGINEER, BEFORE IT IS OPENED TO TRAFFIC. DURING
         3THIS CURING TIME, TRAFFIC SHALL BE HANDLED IN SUCH A MANNER AS TO NOT
         3DELAY IT FOR MORE THAN FOUR (4) MINUTES IN ANY ONE DIRECTION.
         4
#        316-7
316-7    3EXISTING REFLECTIVE PAVEMENT MARKERS SHALL BE COVERED BY A MATERIAL
         3APPROVED BY THE ENGINEER PRIOR TO THE PLACEMENT OF THE SEAL COAT. THIS
         3TEMPORARY COVERING SHALL BE REMOVED PRIOR TO THE OPENING OF THE ROADWAY
```

ANY PRIME COAT?

3TO TRAFFIC. MATERIALS AND WORK INVOLVED WILL NOT BE MEASURED AND PAID
3FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
4

\# 316-8
316-8 3THE ENGINEER WILL APPROVE THE TYPE AND GRADE OF ASPHALT TO BE
3USED. AC WILL NORMALLY BE USED WHEN THE TEMPERATURE IS ABOVE
370 DEGREES F. THE ESTIMATED QUANTITY SHOWN FOR THE BID ITEM
3"ASPH (AC, RC-250 OR EMUL)" IS BASED ON AN AVERAGE OF THE
3ESTIMATED RATES OF APPLICATION FOR AC, RC-250 AND EMUL.
4

\# 354-0
354-0 2 ITEM 354:
4 --------
4

\# 354-1
354-1 3EXISTING ASPHALT TO BE REMOVED SHALL BE SAWED ALONG NEAT LINES
3WHERE PORTIONS ARE TO BE LEFT IN PLACE TEMPORARILY OR PERMANENTLY.
3SAWING WILL BE CONSIDERED SUBSIDIARY TO THIS ITEM AND NO
3DIRECT PAYMENT WILL BE MADE.
4
4

\# 354-2
354-2 3EXISTING ASPHALT PAVEMENT SHALL BE REMOVED SEPARATELY FROM THE BASE
3MATERIAL. THE ASPHALT PAVEMENT WILL BE STOCKPILED AT A SITE
3LOCATED NEAR VALLEY VIEW LANE JUST SOUTH OF IH 635 AS DESIGNATED
3BY THE ENGINEER AND SHALL CONFORM TO THE DIMENSIONS AND
3REQUIREMENTS ESTABLISHED BY THE ENGINEER.
4???? THE DESIGNER SHALL SPECIFY A ????
4???? STOCKPILE LOCATION. ????
4

\# 354-3
354-3 3IF, IN THE OPINION OF THE ENGINEER, THE EXISTING CONCRETE PAVEMENT
3SURFACE IS CUT TO AN EXCESSIVE DEPTH DUE TO EQUIPMENT MALFUNCTIONS
3OR NEGLIGENCE ON THE PART OF THE CONTRACTOR, THE PAVEMENT SHALL BE
3PATCHED USING AN EPOXY MATERIAL ACCEPTABLE TO THE ENGINEER. THE
3AREA SHALL THEN BE REPLANED TO PROVIDE A PAVEMENT SURFACE ACCEPTABLE
3TO THE ENGINEER. THIS PATCHING AND RE-PLANING WILL NOT BE PAID FOR
3DIRECTLY BUT WILL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
4

\# 354-4
354-4 3FOR OPEN SHOULDER SECTIONS, THE SURFACE SHALL BE PLANED IN SUCH A
3MANNER THAT A FLUSH SHOULDER WHICH WILL NOT BLOCK THE FLOW OF WATER
3ACROSS THE SURFACE WILL RESULT. ADDITIONAL PLANING (UP TO A MAXIMUM
3WIDTH OF THREE FEET) NECESSARY TO ACCOMPLISH THIS WORK OUTSIDE OF THE
3NEAT LINES SHOWN ON THE PLANS WILL NOT BE PAID FOR DIRECTLY BUT SHALL
3BE CONSIDERED AS SUBSIDIARY TO THE VARIOUS BID ITEMS.
4

\# 354-5
354-5 3THE AREAS INDICATED ON THE TYPICAL RAMP DETAILS AND LISTED IN THE
3SUMMARY OF RAMP FINAL PLAN QUANTITIES WILL BE CONSIDERED AS FINAL
3QUANTITIES FOR AREA DETERMINATION AND NO ADDITIONAL MEASUREMENT WILL BE
3MADE. ANY PART OF A RAMP OR RAMP TAPER THAT IS ON A BRIDGE IS NOT
3INCLUDED IN THIS SUMMARY AND WILL BE MEASURED FOR PAYMENT WITH THE
3BRIDGE QUANTITIES.
4

```
#       354-6
354-6   3THE CONTRACTOR SHALL TAKE THE PROPER PRECAUTIONS TO ENSURE THAT NO
        3CONTINUOUS RIDGES OR GROOVES EXCEEDING 1/4 INCH VERTICAL DIMENSION ARE
        3PRODUCED DURING THE PLANING OPERATIONS ON CONCRETE PAVEMENT. THESE
        3IMPERFECTIONS RESULT FROM VARIATIONS IN THE WEAR OF CUTTING TEETH OR,
        3IN MANY CASES, TEETH THAT ARE MISSING. THE NEWLY PLANED SURFACE WILL BE
        3CONTINUOUSLY INSPECTED FOR VARIATIONS IN CUTTING DEPTH ACROSS THE
        3TEXTURED SURFACE. WHEN THE ABOVE CONTROL DIMENSION IS EXCEEDED, THE
        3PLANING DRUM WILL BE INSPECTED IMMEDIATELY AND ANY NECESSARY
        3REPLACEMENTS WILL BE MADE IN THE CUTTING TEETH. IF THE LENGTH OF
        3DISTORTED PAVEMENT SURFACE EXCEEDS 100 FEET, THE CONTRACTOR WILL BE
        3REQUIRED TO MAKE SURFACE CORRECTIONS AS DIRECTED BY THE ENGINEER.
        4
#       354-7
354-7   3MATERIALS REMOVED FROM THE EXISTING PAVEMENT AND BRIDGES BY THE PLANING
        3OPERATION WILL BE HAULED TO AND PLACED IN A STOCKPILE WITHIN THE STOCK-
        3PILE AREA SHOWN ON THE PLANS. THE MATERIALS SHALL NOT BE STOCKPILED
        3MORE THAN FIFTEEN (15) FEET HIGH. THE CONTRACTOR SHALL FURNISH ADEQUATE
        3EQUIPMENT AT THE STOCKPILE SITE TO KEEP AND LEAVE THE MATERIAL IN A
        3NEAT, ORDERLY CONDITION.
        4
#       354-8
354-8   3THE EXISTING LIGHTWEIGHT ACP IS COMPOSED OF LIGHTWEIGHT
        3AGGREGATE, LIMESTONE SCREENINGS, FIELD SAND AND ASPHALT.
        4
#       354-9
354-9   3IF THE PLANING CLEAN-UP OPERATIONS RESULT IN DUST BECOMING AN
        3ENVIRONMENTAL PROBLEM, THE ENGINEER MAY REQUIRE THE USE OF VACUUM-TYPE
        3SWEEPER EQUIPMENT TO REPLACE CONVENTIONAL SWEEPERS.
        4
#       360-0
360-0   2  ITEM 360:
        4  --------
        4
#       360-1
360-1   3THE DOWEL SUPPORT ASSEMBLIES USED IN CONCRETE PAVEMENT SHALL BE
        3CONSTRUCTED USING NO. 1/0 (0.306" DIAMETER) WIRE IN THE MAIN
        3VERTICAL MEMBERS.  DOWELS SHALL BE RIGIDLY SUPPORTED IN PARALLEL
        3POSITIONS AND SHALL BE WELDED ON ONE END TO THE SUPPORT FRAME.
        3THE WELD ATTACHMENT SHALL BE MADE ALTERNATELY ON OPPOSITE ENDS
        3OF SUCCESSIVE DOWELS.  THE SUPPORT ASSEMBLY SHALL BE SUBJECT
        3TO THE APPROVAL OF THE ENGINEER.
        4???? USE THE ABOVE NOTE WITH CPCD ONLY ????
        4
#       360-2
360-2   3WHEN USED, THREADED CONNECTOR TIEBARS SHALL BE CHAIRED AND/OR TIED
        3TO THE PAVEMENT REINFORCING STEEL.
        4
#       360-3
360-3   3ALL CURBS SHALL BE CONSTRUCTED MONOLITHICALLY
        3WITH THE CONCRETE PAVEMENT.
        3IF CONTINUOUS MONOLITHIC CURB HAS TO BE TEMPORARILY OMITTED FOR ANY
        3REASON, THE CONTRACTOR WILL BE REQUIRED TO DOWEL ON PROPOSED CURBS AS
        3DETAILED IN THE PLANS.  AN APPROVED EPOXY RESIN
        3SHALL BE APPLIED TO THE PAVEMENT TO RECEIVE THE CURB
```

3AS DIRECTED BY THE ENGINEER. THIS WORK AND
3MATERIALS SHALL BE SUBSIDIARY TO THIS ITEM AND WILL
3NOT BE PAID FOR DIRECTLY.
4

\# 360-4

360-4 3ALL CURBS SHALL BE CONSTRUCTED MONOLITHICALLY WITH THE CONCRETE
3PAVEMENT. IF CONTINUOUS MONOLITHIC CURB HAS TO BE TEMPORARILY
3OMITTED FOR ANY REASON, THE CONTRACTOR WILL BE REQUIRED TO DOWEL
3ON PROPOSED CURBS WITH 1/2" X 7" DOWELS ON 12" CENTERS AND ONE
3NUMBER 4 BAR SHALL BE PLACED LONGITUDINALLY IN THE CURB AND TIED
3OR WELDED TO THE DOWEL BARS. AN APPROVED EPOXY RESIN SHALL BE
3APPLIED TO THE PAVEMENT TO RECEIVE THE CURB AS DIRECTED BY THE
3ENGINEER. THIS WORK AND MATERIALS SHALL BE SUBSIDIARY TO THIS
3ITEM AND WILL NOT BE PAID FOR DIRECTLY.
4

\# 360-5

360-5 3~~ALL CURBS, EXCEPT DOWEL CURBS, SHALL BE CONSTRUCTED~~
3~~MONOLITHICALLY WITH CONCRETE PAVEMENT.~~
4

\# 360-6

360-6 3~~CONCRETE PAVEMENT TO BE OVERLAID WITH ASPHALTIC CONCRETE~~
3~~PAVEMENT SHALL BE CURED WITH MS-2.~~
4

\# 360-7

360-7 3CONCRETE AGGREGATES SHALL BE STOCKPILED AT THE PLANT SITE.
4

\# 360-8

360-8 3THE PAVEMENT WIDENING JOINT, DETAILED IN THE PLANS, IS TO BE USED
3AT ALL LOCATIONS WHERE CONCRETE PAVEMENT IS TO BE PLACED ADJACENT TO
3EXISTING CONCRETE PAVEMENT. PAYMENT FOR INSTALLATION
3OF THESE JOINTS WILL NOT BE
3MADE DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
4

\# 360-9

360-9 3PAYMENT FOR FURNISHING AND INSTALLING THE PREMOLDED EXPANSION JOINT
3MATERIAL BETWEEN THE RETAINING WALLS AND CONCRETE PAVEMENT WILL NOT BE
3PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
4

\# 360-10

360-10 3THE CURING MACHINE SHALL BE PROVIDED WITH RUBBER TIRES, OR ANOTHER
3ARRANGEMENT, APPROVED BY THE ENGINEER, SO THAT THE MACHINE WILL BRIDGE
3OVER OR SPAN THE PAVEMENT AND MONOLITHIC CURB OPERATIONS, IN A MANNER
3SATISFACTORY TO THE ENGINEER.
4

\# 360-11

360-11 3CURB TRANSITIONS WILL BE PAID FOR AS TYPE I CURB.
4

\# 360-12 10MM

360-12 3JOINTS ~~3/8"~~ AND LESS IN WIDTH SHALL BE FILLED WITH RUBBER JOINT
3SEALING COMPOUND OR PREFORMED NEOPRENE COMPRESSION SEAL.
4

\# 360-13

360-13 3THE INSTALLATION OF CURB OPENINGS SHALL NOT BE PAID FOR DIRECTLY,
3BUT SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
4

```
#       360-14
360-14  3THESE PLANS REQUIRE SAWED JOINTS. CONSTRUCTION, SAWED AND CONTRACTION
        3JOINTS SHALL BE PLACED IN ACCORDANCE WITH THE PAVEMENT DETAIL SHEET
        3AND AS DIRECTED BY THE ENGINEER. JOINT LOCATIONS, OTHER THAN AS SHOWN
        3ON THE PLANS, SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
        4
#       360-15
360-15  3THE CONTRACTOR WILL BE REQUIRED TO SAW TRANSVERSE JOINTS ACROSS
        3PAVEMENT AND CURBS.
        4
#       360-16
360-16  3THE CONTRACTOR WILL BE ALLOWED TO USE A DOWEL INSERTOR OF A DESIGN THAT
        3HAS PROVEN EFFECTIVE AND PERFORMS IN A MANNER ACCEPTABLE TO THE
        3ENGINEER.  THE CONTRACTOR, IF HE ELECTS TO USE SUCH A DOWEL INSERTOR,
        3WILL PROVIDE A DEVICE TO MEASURE THE DEPTH OF THE INSERTED DOWEL IN
        3PLACE.
        4
#       360-17
360-17  3PAVEMENT LEAVEOUTS WILL BE REQUIRED ON THIS PROJECT AS NECESSARY TO
        3PROVIDE FOR TRAFFIC AT DRIVEWAYS AND SIDE STREETS AS SHOWN IN THE PLANS
        3OR AS DIRECTED BY THE ENGINEER.  THE COST OF PROVIDING THESE LEAVEOUTS,
        3INCLUDING THE CONSTRUCTION OF A SUITABLE CROSSOVER CONNECTION AT EACH
        3SITE, WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY
        3TO THIS ITEM.
        4
#       360-18
360-18  3IF A TRAVELING FORM PAVER IS USED, IT SHALL BE EQUIPPED
        3WITH AN ELECTRONICALLY OPERATED HORIZONTAL CONTROL DEVICE.
        4
#       360-19
360-19  3TIEBARS USED IN LONGITUDINAL JOINTS SHALL NOT BE PLACED WITHIN 15-
        3INCHES OF TRANSVERSE JOINTS.                                      300mm
        4
#       360-20
360-20  3ANY AREA IN EXCESS OF THREE SQUARE YARDS WITH GROOVES LESS THAN 1/8"
        3DEEP WILL BE SAW GROOVED BY THE CONTRACTOR AT HIS OWN EXPENSE.    3mm
        4
#       360-21
360-21  3USE OF "MECHANICAL STEEL PLACING EQUIPMENT" WILL BE AT THE DISCRETION
        3OF THE ENGINEER ON THIS PROJECT.
        4
#       360-22
360-22  3MATERIALS OTHER THAN HOT APPLIED ASPHALT CEMENT MAY BE USED FOR
        3DOWEL COATINGS IN JOINTED PAVEMENT, WITH THE APPROVAL OF THE
        3ENGINEER.
        4
#       360,421-0
360,421 2  ITEMS 360 AND 421:
-0      4  -----------------
#       360,421-1
360,421 3THE ENGINEER WILL SAMPLE ALL CONCRETE AND MAKE AND TEST ALL
-1      3TEST BEAMS AND CYLINDERS IN ACCORDANCE WITH TEST METHODS
        3TEX-418-A AND TEX-448-A.
        4
#       360,421-2
```

```
360,421 3ALL TEST MOLDS WILL BE FURNISHED BY THE ENGINEER AND THE
-2      3CONTRACTOR SHALL MAINTAIN THEM IN THE PROPER CONDITION.  IN
        3ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING
        3PERSONNEL TO REMOVE THE TEST SPECIMENS FROM THE MOLDS AND TO
        3TRANSPORT THEM TO THE PROPER CURING LOCATION AT THE SCHEDULE
        3DESIGNATED BY THE ENGINEER AND IN ACCORDANCE WITH THE
        3GOVERNING SPECIFICATION.  FOR ALL CONCRETE ITEMS, THE
        3CONTRACTOR SHALL HAVE A WHEELBARROW OR OTHER CONTAINER,
        3ACCEPTABLE TO THE ENGINEER, AVAILABLE TO USE IN THE SAMPLING
        3OF THE CONCRETE.
        4
#       360,421,422-0
360,421 2  ITEMS 360,421 AND 422:
422-0   4  ---------------------
        4
#       360,421,422-1
360,421 3THE ACID INSOLUBLE RESIDUE OF THE FINE AGGREGATE USED IN SLAB
422-1   3CONCRETE SUBJECT TO DIRECT TRAFFIC SHALL BE NOT LESS THAN 60
        3PERCENT BY WEIGHT WHEN TESTED IN ACCORDANCE WITH TEST METHOD
        3TEX-612-J.
        4
#       360,421-0
360,421 2  ITEMS 360 AND 421:
-0      4  -----------------
        4
#       360,421-1
360,421 3THE COARSE AGGREGATE FROM EACH SOURCE MUST COMPLY WITH THE
-1      3SPECIFIED QUALITY TESTS.
        4
#$      STRUCTURES
#       400-0
400-0   2  ITEM 400:
        4  --------
        4
#       400-1
400-1   3STRUCTURAL EXCAVATION FOR ~~PIPE HEADWALLS~~ WILL BE PAID FOR
        3~~UNDER THIS ITEM.~~
        4
#       400-2
400-2   3~~STRUCTURAL EXCAVATION FOR HEADWALLS, INLETS AND MANHOLES WILL BE PAID~~
        3~~UNDER THIS ITEM.~~
        4
#       400-3
400-3   3CONCRETE SEWER PIPE PLACED ON SLOPES OF GREATER THAN 10 PERCENT SHALL
        3BE BACKFILLED WITH CEMENT STABILIZED BACKFILL TO A DEPTH SHOWN ON THE
        3PLANS.  THE MIX SHALL CONFORM TO ITEM 400.  THE AGGREGATE SHALL
        3CONFORM TO THE REQUIREMENTS OF ARTICLE 421.2(5).
        4
#       400,416-0
400,416 2  ITEMS 400 AND 416:
-0      4  -----------------
        4
#       400,416-1
400,416 3PRIOR TO ANY EXCAVATION OR DRILLING IN THE CLOSE VICINITY OF EXISTING
-1      3UTILITIES OR SEWERS, THE CONTRACTOR SHALL BE REQUIRED TO PROBE
```

INLETS NOT SEPARATELY.

3OR EXPOSE THESE FACILITIES TO DETERMINE THEIR EXACT LOCATION.
3ALL COSTS INVOLVED WILL BE SUBSIDIARY TO THE RELATED BID ITEMS.
4

\# 416-0
416-0 2 ITEM 416:
4 ---
4

\# 416-1
416-1 3COLUMNS SHALL BE FORMED TO A POINT 1 FOOT BELOW THE PROPOSED
3FUTURE OR EXISTING BOTTOM OF CHANNEL ELEVATION INDICATED ON THE BRIDGE
3LAYOUTS BY A METHOD ACCEPTABLE TO THE ENGINEER. NO ADDITIONAL
3PAYMENT WILL BE MADE FOR FORMING COLUMNS BELOW THE
3EXISTING OR PROPOSED GROUND LINE AS THIS WORK
3WILL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
4

\# 416-2
416-2 3THE TOP 2 INCHES OF ALL DRILLED SHAFTS FOR SIGNS, SIGNALS AND LIGHTS
3SHALL BE FORMED OR PROVIDED A SMOOTH FINISH SATISFACTORY TO THE
3ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT BID
3PRICE FOR THIS ITEM.
4

\# 420-0
420-0 2 ITEM 420:
4 ---
4

\# 420-1
420-1 3THE REQUIREMENTS FOR THE AVERAGE TEXTURE DEPTH OF THE SURFACE FINISH
3FOR THE ROADWAY SLAB, AS DESCRIBED IN ARTICLE 420.19, IS WAIVED ON THIS
3PROJECT. THE TEXTURE OF THE NEW ROADWAY SLAB SHALL MATCH THE TEXTURE OF
3THE EXISTING ROADWAY SLAB THAT IS TO REMAIN IN PLACE.
4

\# 421-0
421-0 2 ITEM 421:
4 ---
4 421-1 ALL CONCRETE FOR THIS JOB SHALL BE CLASS "A"

\# 421-1
421-1 3TYPE II CEMENT WILL BE REQUIRED IN CLASS "S" AND "C" CONCRETE BUT WILL
3BE PERMITTED IN ALL CONCRETE.
4

\# 421-2
421-2 3~~THE TREE WELLS DETAILED IN THE PLANS WILL NOT BE PAID FOR DIRECTLY~~
3~~BUT SHALL BE CONSIDERED AS SUBSIDIARY TO THIS ITEM.~~
4

\# 421-3
421-3 3~~CLASS OF CONCRETE SHALL BE INDICATED IN THE BID ITEM EXCEPT~~
3~~AS NOTED BELOW:~~
4 ~~CONCRETE FOR DRILLED SHAFT FOUNDATIONS SHALL BE CLASS "C"~~
~~4 CONCRETE FOR BRIDGE SLAB SHALL BE CLASS "S"~~
4

\# 421-4
421-4 ~~3METAL TRAVELING FORMS MAY BE USED IN THE CONSTRUCTION OF BOX~~
3~~CULVERTS ON THIS PROJECT IF APPROVED BY THE ENGINEER.~~
4

\# 421,522-0
421,522 2 ITEMS 421 AND 522:

```
-0      4  ----------------
        4
#       421,522-1
421,522 3CONCRETE FOR BRIDGES (EXCLUDING CULVERTS) AND/OR RETAINING
-1      3WALLS SHALL BE CENTRAL MIX CONCRETE CONFORMING TO ITEM 421,
        3ARTICLE 5, OR READY-MIX CONCRETE (ITEM 522, SECTION 2) FROM
        3A CLASS 3A OR 3B PLANT.  CONCRETE AGGREGATES SHALL BE STOCKPILED
        3AT THE PLANT SITE.
        4
#       423-0
423-0   2  ITEM 423:
        4  --------
        4
#       423-1
423-1   3THE FOLLOWING MECHANICALLY STABILIZED EARTH (MSE) WALL SYSTEMS
        3ARE APPROVED FOR THIS PROJECT:
        4
        4     REINFORCED EARTH WALLS
        4     THE REINFORCED EARTH COMPANY
        4     1909 CENTRAL DR. SUITE 200
        4     BEDFORD, TEXAS  76021
        4     (817) 283-5503
        4
        4     RETAINED EARTH WALLS
        4     THE VSL CORPORATION
        4     1414 POST AND PADDOCK
        4     GRAND PRAIRIE, TEXAS  75050
        4     (214) 647-0200
        4
        4     TEXAS WELDED WIRE, INC.
        4     645 W. HURST BLVD
        4     HURST, TEXAS  76053
        4     (817) 282-4560
        4
        4     STRENGTHENED EARTH WALLS
        4     GIFFORD-HILL AND COMPANY
        4     CONCRETE PRODUCTS DIVISION
        4     2515 MCKINNEY AVE.
        4     DALLAS, TEXAS  75201
        4     (214) 754-5500
        4
        4     TRICON PRECAST, INC.
        4     15055 HENRY ROAD
        4     HOUSTON, TEXAS 77060
        4     (281) 931-9832
        4
#       423-2
423-2   3BACKFILL FOR MECHANICALLY STABILIZED EARTH (MSE) WALLS ON THIS
        3PROJECT SHALL BE TYPE "A".
        4
#       423-3
423-3   3THE CONTRACTOR HAS THE OPTION OF CONSTRUCTING ANY OF THE TYPES OF
        3RETAINING WALLS FOR WHICH DETAILS AND SPECIFICATIONS ARE INCLUDED IN
        3THE PLANS.  HOWEVER, WHICHEVER OPTION OR OPTIONS IS CHOSEN, THE FACIA
        3PATTERN, I.E. RECTANGLES SUCH AS DOUBLE WALL, OCTAGON SUCH AS RETAINED
```

3EARTH, ETC., MUST BE THE SAME THROUGHOUT THE ENTIRE PROJECT, INCLUDING
3CAST IN PLACE FULL HEIGHT RETAINING WALL TYPE ABUTMENTS.
4

\# 423-4
423-4 3DETAILED DRAWINGS DEPICTING THE PATTERNS AND MATCHING OF PRECAST WITH
3CAST-IN-PLACE MUST BE SUBMITTED FOR APPROVAL.
4

\# 423-5
423-5 3THE MAP OF TEXAS EMBLEM SHALL BE FORMED INTO A WALL PANEL NEXT TO EACH
3BRIDGE ABUTMENT. THE EXACT LOCATION OF EACH EMBLEM SHALL BE APPROVED
3BY THE ENGINEER. THE COST OF FORMING EMBLEMS WILL NOT BE PAID FOR
3DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
4

\# 423-6
423-6 3THE MAP OF TEXAS SHALL BE INSET A MINIMUM OF 3/4 INCH INTO THE FACE
3OF THE PANEL, AND SHALL RECEIVE A SMOOTH FINISH. THE INSET AREA SHALL
3BE FINISHED WITH A CONTRASTING COLOR AS APPROVED BY THE ENGINEER.
4

\# 423-7
423-7 3ALL DAMAGE, SUCH AS CHIPS, TO THE PRECAST UNITS MUST BE REPATCHED AT
3THE CONTRACTOR'S EXPENSE AND MATCH THE FACIA PATTERN.
4

\# 427-0
427-0 2 ITEM 427:
4 --------
4

\# 427-1
427-1 3A STRIATED FINISH SHALL BE USED ON ALL RETAINING WALLS AND
3RETAINING WALL TYPE BRIDGE ABUTMENTS. THE FINISH SHALL BE
3SIMILAR TO THAT DERIVED FROM LITHOTEX FORMLINER PATTERN
3T-2150, "FRACTURED FIN GROOVED", BY THE L. M. SCOFIELD COMPANY,
3PATTERN P/C 30717, "3/4 INCH DEEP FRACTURED FIN", BY SIMONS, PATTERN
3373 "FRACTURED FIN", BY GREENSTREAK OR EQUAL. THE STRIATIONS
3SHALL NOT EXCEED 3/4 INCH IN DEPTH.
4

\# 427-2
427-2 3IF THE WALL IS CAST IN PLACE, THE TOP TWO FEET SHALL NOT BE STRIATED
3BUT BE CAST SMOOTH.
4

\# 427-3
427-3 3CONCRETE STRUCTURES SHALL RECEIVE A SURFACE AREA I, CLASS B,
4TYPE II SURFACE FINISH.
4

\# 427-4
427-4 3THE GRADE SEPARATION STRUCTURES AND RETAINING WALLS SHALL RECEIVE A
3SURFACE AREA I, CLASS B, TYPE II SURFACE FINISH.
4

\# 427-5
427-5 3RETAINING WALLS SHALL RECEIVE A SURFACE AREA I, CLASS B, TYPE II
3SURFACE FINISH.
4

\# 427-6
427-6 3THE FACE OF ABUTMENTS AND RETAINING WALLS SHALL HAVE A CORRUGATED
3SURFACE FINISH AS DETAILED IN THE PLANS.
4

```
#       427-7
427-7   3ALL OTHER STRUCTURES SHALL RECEIVE A SURFACE AREA II SURFACE FINISH.
        4
#       427,446-0
427,446 2  ITEMS 427 AND 446:
-0      4  -----------------
        4
#       427,446-1
427,446 3THE CONTRACTOR SHALL NOTIFY THE DIVISION OF MATERIALS AND
-1      3TESTS THROUGH THE ENGINEER A MINIMUM OF 30 DAYS IN ADVANCE
        3OF THE NEED FOR THE FINISH COAT AS TO WHO WILL PRODUCE THE
        3PAINT IN ORDER TO FACILITATE INSPECTION OF PAINT PRODUCTION.
        3IF THE PAINT PRODUCER IS OUTSIDE THE STATE OF TEXAS, ALL
        3INSPECTION AND TESTING COSTS SHALL BE BORNE BY THE CONTRACTOR.
        4
#       428-0
428-0   2  ITEM 428:
        4  --------
        4
#       428-1
428-1   3ON THE STRUCTURES TO BE WIDENED, CONCRETE SURFACE TREATMENT SHALL BE
        3APPLIED TO THE WIDENED PORTIONS OF THE BRIDGE ONLY.
        4
#       430-0
430-0   2  ITEM 430:
        4  --------
        4
#       430-1
430-1   3PORTIONS OF THE EXISTING BRIDGE DECK ON THE EXISTING STRUCTURES ARE
        3SCHEDULED TO BE REMOVED.  THE REMOVAL SHALL BE ACCOMPLISHED IN
        3SUCH A MANNER THAT NO DAMAGE WILL BE SUSTAINED BY THE EXISTING
        3STRUCTURE OR SUBSTRUCTURE WHICH REMAINS IN PLACE.  THE USE
        3OF A DEMOLITION BALL OR OTHER SWINGING WEIGHT WILL NOT BE PERMITTED.
        4
#       430-2
430-2   3ALL OF THE EXISTING OLD CONCRETE TO BE REMOVED ON THIS PROJECT WILL
        3BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF BY HIM OUTSIDE
        3THE LIMITS OF THE RIGHT-OF-WAY, AT HIS OWN EXPENSE.
        4
#       430,496-0
430,496 2  ITEMS 430 AND 496:
-0      4  -----------------
        4
#       430,496-1
430,496 3EXCEPT AS OTHERWISE PROVIDED, EXISTING STRUCTURES OR PARTS OF
-1      3STRUCTURES TO BE REMOVED SHALL BECOME THE PROPERTY OF THE
        3CONTRACTOR AND SHALL BE DISPOSED OF BY HIM OUTSIDE THE
        3LIMITS OF THE RIGHT-OF-WAY AT HIS OWN EXPENSE.
        4
#       432-0
432-0   2  ITEM 432:
        4  --------
        4
#       432-1
432-1   3PLACEMENT OF ACP AROUND THE COLUMNS OF THE STRUCTURES AS SHOWN ON THE
```

3MISCELLANEOUS DETAILS WILL BE CONSIDERED AS INCLUDED IN THE UNIT PRICE
3BID PER CUBIC YARD OF CONCRETE RIPRAP.
4

\# 442-0
442-0 2 ITEM 442:
4 --------
4

\# 442-1
442-1 3ALL NEW STRUCTURAL STEEL SHALL RECEIVE
3"PROTECTION SYSTEM I - ALUMINUM".
4

\# 442-2
442-2 3ALL NEW STRUCTURAL STEEL SHALL RECEIVE "PROTECTION SYSTEM I - GRAY".
4

\# 442-3
442-3 3ALL NEW STRUCTURAL STEEL SHALL RECEIVE "PROTECTION SYSTEM I - GREEN".
4

\# 442-4
442-4 3ALL NEW STRUCTURAL STEEL, EXCEPT ASTM A588 STRUCTURAL STEEL, SHALL
3RECEIVE "PROTECTION SYSTEM I - BROWN".
4

\# 442-5
442-5 3ALL STRUCTURAL STEEL SHALL BE PAINTED PROTECTION SYSTEM II -
3CINNAMON.
4

\# 442-6
442-6 3THE NEW STRUCTURAL STEEL AND ANY EXISTING STRUCTURAL STEEL DAMAGED
3DURING MODIFICATION OF THE BRIDGES, INCLUDING DIAFRAM AND BEARING
3CONNECTIONS TO EXISTING BEAMS, SHALL RECEIVE "PROTECTIVE SYSTEM I -
3GREEN" PAINT IN ACCORDANCE WITH ITEM 446.
4

\# 442-7
442-7 3ALL EXPOSED PORTIONS OF EXISTING PILING SHALL BE CLEANED AND PAINTED IN
3ACCORDANCE WITH ITEM 446, "CLEANING, PAINT AND PAINTING". PAINTING
3SHALL EXTEND TO A POINT ONE FOOT BELOW THE FINISHED GROUND LINE UNLESS
3THE PILE IS STANDING IN WATER, IN WHICH CASE THE PAINTING SHALL
3EXTEND TO THE LOW WATER LINE. EARTH REMOVED FOR THIS PAINTING SHALL BE
3REPLACED AFTER THE PAINT HAS HARDENED. THIS WORK WILL NOT BE PAID FOR
3DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.
4

\# 442-8
442-8 3THE BOTTOM AND OUTSIDE SURFACES OF THE OUTSIDE GIRDERS ONLY SHALL
3RECEIVE "BRUSH OFF" BLAST CLEANING AFTER ALL CONCRETE PLACEMENT HAS
3BEEN COMPLETED
4

\# 450-0
450-0 2 ITEM-450:
4 --------
4

\# 450-1
450-1 3METAL BEAM GUARD FENCE ANCHORS WILL BE REQUIRED.
4

\# 450-2
450-2 3IF PAINTED RAIL IS FURNISHED, "PROTECTIVE SYSTEM I - ALUMINUM" WILL BE
3REQUIRED, EXCEPT THAT DEEP BEAM MEMBERS SHALL BE GALVANIZED.

```
         4
#        453-0
453-0    2  ITEM 453:
         4  --------
         4
#        453-1
453-1    3RAILING REMOVED UNDER THIS ITEM SHALL BECOME
         3THE PROPERTY OF THE CONTRACTOR.
         4
#        453-2
453-2    3RAIL ELEMENTS FURNISHED BY THE CONTRACTOR SHALL CONFORM TO THE TYPE
         3SPECIFIED IN ITEM 540.
         4
#        453,542-0
453,542  2  ITEMS 453 AND 542:
-0       4  ----------------
         4
#        453,542-1
453,542  3THE RAIL ELEMENTS FOR ITEM 453 MAY BE OBTAINED FROM THE GUARD FENCE
-1       3REMOVED UNDER ITEM 542. UPON THE REMOVAL OF THE TEMPORARY RAILING, THE
         3RAIL ELEMENTS USED FROM ITEM 542 SHALL BE NEATLY STORED AT DESIGNATED
         3SITES AS DIRECTED BY THE ENGINEER.
         4
#        454-0
454-0    2  ITEM 454:
         4  --------
         4
#        454-1
454-1    3SEALED EXPANSION JOINTS SHALL RECEIVE "PROTECTION SYSTEM
         3I-PRIME COAT, EPOXY".
#        464-0
464-0    2  ITEM 464:
         4  --------
         4
#        464-1
464-1    3ANY ABANDONED UTILITIES OR DRAINAGE STRUCTURES THAT ARE ENCOUNTERED BY
         3THE CONTRACTOR SHALL BE REMOVED TO A MINIMUM OF ONE FOOT BELOW SUBGRADE
         3AND PLUGGED WITH A CONCRETE PLUG OF A THICKNESS EQUAL TO 1-1/2 INCHES
         3PER FOOT OF DIAMETER OF PIPE WITH A MINIMUM THICKNESS OF 3 INCHES.
         3THE COST OF THE PLUGS SHALL BE CONSIDERED SUBSIDIARY
         3TO THE VARIOUS BID ITEMS.
         4
#        464-2
464-2    3THE CONCRETE COLLARS AND THE CONNECTIONS OF PIPES TO EXISTING OR
         3PROPOSED CONCRETE BOXES OR PIPE SHALL BE CONSTRUCTED AS SHOWN IN THE
         3PLANS OR AS DIRECTED BY THE ENGINEER.
         4
#        464-3
464-3    3CONNECTIONS OF PIPES TO EXISTING OR PROPOSED CONCRETE BOXES OR
         3PIPE SHALL BE CONSTRUCTED AS SHOWN IN THE PLANS OR
         3AS DIRECTED BY THE ENGINEER.
         4
#        464-4
464-4    3WHERE STORM SEWERS DEAD-END, THEY SHALL BE PLUGGED WITH A CONCRETE
         3PLUG OF A THICKNESS EQUAL TO 1 1/2 INCHES PER FOOT OF DIAMETER OF
```

300 MM; 40 MM; 76 MM; INLETS; CONCRETE ENCASEMENT OF PIPE AT LOCATIONS SHOWN ON THE PLANS IS SUBSIDIARY TO ITEM 464.

3PIPE WITH A MINIMUM THICKNESS OF 3 INCHES. THE COST OF THE PLUGS SHALL BE
3INCLUDED IN THE UNIT PRICE BID PER FOOT OF THE VARIOUS SEWER PIPES.
4
471-0
471-0 2 ITEM 471:
4 --------
4
471-1
471-1 3ALL INLET GRATES AND MANHOLE COVERS SHALL BE TACKWELDED TO THE FRAME
3WITH TWO 1-INCH WELDS. PAYMENT SHALL BE SUBSIDIARY TO ITEM 465.
3NO PAINTING WILL BE REQUIRED FOR THE CAST IRON INLET GRATE AND
3FRAME OR FOR THE CAST IRON MANHOLE FRAME AND COVER.
4
471-2
471-2 3NO PAINTING WILL BE REQUIRED FOR GRATES.
4
471-3
471-3 3ALL GRATES AND COVERS SHALL BE TACK WELDED TO THE FRAME OR RING
3WITH TWO 1-INCH WELDS. PAYMENT FOR THE TACK WELDING WILL
3BE SUBSIDIARY TO ITEM 465.
4
471-4
471-4 3PAINTING WILL NOT BE REQUIRED FOR CAST IRON FRAMES, GRATES AND COVERS.
4
476-0
476-0 2 ITEM 476:
4 --------
4
476-1
476-1 3CONCRETE FOR TUNNELING SHALL BE GLASS "A" CONCRETE CONFORMING
4TO ITEM 421.
4
476-2
476-2 3AN AIR-ENTRAINING ADMIXTURE COMPLYING WITH THE REQUIREMENTS OF
3ITEM 437 WILL BE REQUIRED FOR ALL CONCRETE PLACED BY PUMPING METHODS.
4
479,496-0
479,496 2 ITEMS 479 AND 496:
-0 4 ----------
4
479,496-1
479,496 3EXISTING STRUCTURES OR PARTS OF STRUCTURES TO BE REMOVED, EXCEPT FOR
-1 3INLET GRATES, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE
3DISPOSED OF BY HIM OUTSIDE THE LIMITS OF THE RIGHT-OF-WAY AT HIS AN APPROVED DISPOSAL SITE.
3HIS OWN EXPENSE.
4
479,496-2
479,496 3ALL EXISTING INLET GRATES BEING REMOVED UNDER THESE ITEMS SHALL BE
-2 3SALVAGED AND STOCKPILED WITHIN THE RIGHT-OF-WAY AS DIRECTED BY THE
3ENGINEER.
4
496-0
496-0 2 ITEM 496:
4 --------
4

C.O.D.?

C.O.D.?

#
496-2 3STRUCTURES LISTED ON THE PLANS WILL BE REMOVED UNDER THIS ITEM. ALL 3OTHER STRUCTURES ENCOUNTERED SHALL BE REMOVED UNDER ITEM 100.
4

#
496-3 3EXCEPT AS OTHERWISE PROVIDED, EXISTING STRUCTURES OR PARTS OF THE 3EXISTING STRUCTURE TO BE REMOVED SHALL BECOME THE PROPERTY OF THE 3CONTRACTOR AND SHALL BE DISPOSED OF BY HIM OUTSIDE THE LIMITS 3OF THE RIGHT-OF-WAY AT HIS OWN EXPENSE.
4

#
496-4 3ALL MATERIALS IN THE EXISTING STRUCTURES SHALL BE SALVAGED AND 3CAREFULLY PLACED IN NEAT PILES ALONG THE RIGHT-OF-WAY AT CONVENIENT 3LOADING POINTS WHICH WILL NOT INTERFERE WITH TRAFEIC OR CONSTRUCTION.
4

#
496-5 3THE CONTRACTOR SHALL LOAD THE SALVAGED STRUCTURAL STEEL ON A STATE 3MAINTENANCE TRUCK AT THE TIME OF REMOVAL. IF NO TRUCK IS AVAILABLE, THE 3STEEL WILL BE STOCKPILED AT A LOCATION WITHIN THE RIGHT-OF-WAY 3DESIGNATED BY THE ENGINEER.
4

#
496-6 3THE STRUCTURAL STEEL I-BEAMS SHALL BE CUT AT THE ORIGINAL WELD JOINTS 3ONLY. WELDED CONNECTIONS ARE TO BE REMOVED BY OXYGEN GOUGING OR ARC-AIR 3GOUGING IN SUCH A MANNER THAT THE BASE METAL IS NOT NICKED OR UNDERCUT.
4

#
496-7 3ALL PIPE TO BE REMOVED AND NOT REPLACED SHALL BECOME THE PROPERTY OF 3THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM OUTSIDE THE LIMITS OF 3THE RIGHT-OF-WAY. EXISTING PIPE THAT IS LEFT IN PLACE SHALL BE PLUGGED 3WITH A CONCRETE PLUG OF THICKNESS EQUAL TO 1-1/2" PER FOOT OF DIAMETER 3OF PIPE WITH MINIMUM THICKNESS EQUAL TO 3 INCHES. THIS WORK SHALL BE 3CONSIDERED SUBSIDIARY TO THIS ITEM AND NO DIRECT PAYMENT SHALL BE 3MADE.
4

ALL PIPE SECTIONS THAT ARE TO REMAIN, SHALL BE KEPT CLEAN AND WITHOUT DAMAGE.

#
496-8 3THE STEEL MAT WILL CONSIST OF ONE-HALF INCH REINFORCING STEEL TIED ON 3TWELVE INCH CENTERS. THE PLUG WILL BE A MINIMUM THICKNESS OF SIX-INCH 3CLASS "A" CONCRETE OR AS DIRECTED BY THE ENGINEER. CONCRETE AND STEEL 3QUANTITIES SHOWN ON THE PLAN-PROFILE SHEETS ARE FOR THE CONTRACTOR'S 3INFORMATION ONLY. WORK AND MATERIALS NECESSARY FOR THIS CONSTRUCTION 3WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO 3THIS ITEM. THESE PLUGS WILL BE REQUIRED TO MEET ALL REQUIREMENTS 3SET FORTH UNDER ITEM 421 OF THE STANDARD SPECIFICATIONS.
4

#
496-9 3THE STRUCTURAL RAILING THAT IS TO BE RETAINED BY THE DEPARTMENT SHALL 3BE CAREFULLY REMOVED AND HAULED TO THE LOCATION DESIGNATED BY THE 3ENGINEER. PAYMENT FOR REMOVING AND HAULING THE STEEL SHALL BE MADE 3UNDER THIS ITEM.
4

#
496-10 3EXISTING PIPE THAT IS LEFT IN PLACE SHALL BE PLUGGED WITH A CONCRETE 3PLUG OF THICKNESS EQUAL TO 1-1/2" PER FOOT OF DIAMETER OF PIPE WITH 3MINIMUM THICKNESS EQUAL TO 3 INCHES. EXISTING BOX CULVERTS TO BE

```
         3ABANDONED SHALL BE PLUGGED WITH A CONCRETE PLUG WITH MINIMUM THICKNESS
         3EQUAL TO 6 INCHES.  PRIOR TO PLUGGING THE CULVERT, CURB SHALL BE
         3REMOVED SO AS TO PREVENT ENCROACHMENT INTO PROPOSED BASE AND PAVEMENT
         3AREAS.  PLUGGING OF PIPES OR BOX CULVERTS AND CURB REMOVAL SHALL BE
         3CONSIDERED SUBSIDIARY TO THIS ITEM AND NO DIRECT PAYMENT WILL BE MADE.
         4
#        496,497-0
496,497  2  ITEMS 496 AND 497:
-0       4  -----------------
         4
#        496,497-1
496,497  3EXISTING PARTS OF THE STRUCTURE TO BE REMOVED SHALL BECOME THE PROPERTY
-1       3OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM OUTSIDE THE
         3LIMITS OF THE RIGHT-OF-WAY AT HIS OWN EXPENSE, EXCEPT FOR SALVAGED
         3MATERIAL (CREDIT ITEM) AS NOTED ABOVE.
         4
#        496,5000-0
496,5000 2  ITEMS 496 AND 5000:
-0       4  ------------------
         4
#        496,5000-1
496,5000 3THE STRUCTURAL STEEL I-BEAMS, DIAPHRAMS AND RAILING THAT ARE TO BE
-1       3RETAINED BY THE DEPARTMENT SHALL BE CAREFULLY REMOVED AND HAULED TO
         3THE TEXAS DEPARTMENT OF TRANSPORTATION MAINTENANCE WAREHOUSE AT
         312000 GREENVILLE AVENUE, DALLAS, TEXAS.  PAYMENT FOR REMOVING THE
         3STRUCTURAL STEEL SHALL BE MADE UNDER ITEM 496.  PAYMENT FOR HAULING THE
         3STRUCTURAL STEEL WILL BE MADE UNDER ITEM 5000.
         4
#$       INCIDENTAL CONSTRUCTION
#        502-0
502-0    2  ITEM 502:
         4  -------
         4
#        502-1
502-1    3THE CONTRACTOR ON THIS PROJECT WILL BE REQUIRED TO CARRY ON A
         3CONTINUOUS WIDENING OPERATION IN ORDER TO PROTECT THE TRAVELING PUBLIC
         3FROM PAVEMENT DROP OFFS FOR AN EXTENDED PERIOD OF TIME. THE CONTRACTOR
         3SHALL PROVIDE IN HIS SEQUENCE OF WORK A DETAILED LIST OF LOCATIONS
         3(STATIONS, LANE DIRECTION AND SIDE OF ROADWAY) FOR EXCAVATION,
         3INSTALLATION OF DRAINAGE FACILITIES, ASPHALT BASE PLACEMENT AND
         3CONCRETE PAVEMENT PLACEMENT. THIS SEQUENCE OF WORK SHALL BE APPROVED
         3BY THE ENGINEER BEFORE CONSTRUCTION BEGINS. THE LENGTH OF ROADWAY
         3EXCAVATED SHALL BE A SERIES OF SHORT SECTIONS WITH THE ASPHALT AND
         3PAVING OF EACH SECTION TO FOLLOW IMMEDIATELY TO FORM A CONTINUOUS
         3WIDENING OPERATION. IF THE CONTRACTOR MOVES HIS EQUIPMENT OFF THE
         3WIDENING OPERATION OR DOES NOT IN THE OPINION OF THE ENGINEER CARRY ON
         3A CONTINUOUS OPERATION, HE WILL BE REQUIRED TO BACKFILL THE EDGE OF THE
         3EXISTING OR WIDENED PAVEMENT WITH CRUSHED STONE, FLEXIBLE BASE OR WHITE
         3ROCK WITH 2% LIME TO CREATE A (3:1) SLOPE AT HIS OWN EXPENSE.
         3THE WIDENING OPERATION SHALL NOT RESUME UNTIL HE HAS AGAIN COMPLIED
         3WITH THIS PARAGRAPH.                                        1:3
         4
#        502-2
502-2    3WHEN EXCAVATION IS REQUIRED NEXT TO A PAVEMENT LANE CARRYING TRAFFIC
         3AND WIDENING IS NOT COMPLETED WITHIN FORTY EIGHT (48) HOURS, SUFFICIENT
```

3BACKFILL SHALL BE PLACED AGAINST THE EDGE OF THE PAVEMENT TO PROVIDE A 3USUAL 3:1 SLOPE. THE BACKFILL USED BY THE CONTRACTOR SHALL BE A 3DURABLE CRUSHED STONE TYPE OF FLEXIBLE BASE. WHEN THE PAVEMENT IS TO 3BE CONSTRUCTED, THIS BACKFILL SHALL BE CAREFULLY REMOVED AND DISPOSED 3OF BY THE CONTRACTOR. MATERIALS AND LABOR FOR THIS WORK WILL NOT 3BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
4

\# 502-3

502-3 3BARRICADES AND WARNING SIGNS, AS APPROPRIATE, ARE TO BE PLACED AT 3STOCKPILES TO ADEQUATELY WARN MOTORISTS. AT ALL STOCKPILE SITES THAT 3ARE LESS THAN 30 FEET FROM THE EDGE OF ANY TRAVELLED LANE, A CLASS III 3BARRICADE SHALL BE ERECTED IMMEDIATELY IN FRONT OF OR AT EACH END IF 3REQUIRED. WHEN A STOCKPILE SITE EQUALS OR EXCEEDS 100 FEET IN LENGTH, 3ONE OBJECT MARKER (OM-2HP) PER 100 FEET SHALL BE PLACED ALONGSIDE THE 3THE STOCKPILE.
4

\# 502-4

502-4 3LANE CLOSURES ON THE FREEWAY, FRONTAGE ROADS, AND CROSS STREETS 3ARE RESTRICTED TO THE HOURS BETWEEN 9:00 AM AND 3:30 PM. THIS 3TIME RESTRICTION DOES NOT PRECLUDE THE CONTRACTOR FROM 3PERFORMING WORK IN OTHER AREAS OF THE PROJECT.
4

\# 502-5

502-5 3ONE FREEWAY LANE MAY BE TEMPORARILY CLOSED FOR SHORT PERIODS OF 3TIME BETWEEN THE HOURS OF 9:00 AM AND 3:30 PM TO FACILITATE 3PLACEMENT OF PORTABLE CONCRETE TRAFFIC BARRIERS REQUIRED IN EACH 3PHASE OF CONSTRUCTION.
4

\# 502-6

502-6 3THE CONTRACTOR SHALL PLAN HIS WORK SEQUENCE IN A MANNER THAT 3WILL CAUSE THE MINIMUM INTERFERENCE WITH TRAFFIC DURING 3CONSTRUCTION OPERATIONS. BEFORE BEGINNING WORK ON THIS PROJECT, 3THE CONTRACTOR SHALL SUBMIT, FOR APPROVAL BY THE ENGINEER, A 3PLAN OF CONSTRUCTION OPERATIONS OUTLINING IN DETAIL A SEQUENCE 3OF WORK TO BE FOLLOWED, SETTING OUT THE METHOD OF HANDLING 3TRAFFIC ALONG, ACROSS, AND ADJACENT TO THE WORK.
4

\# 502-7

502-7 3IF AT ANY TIME DURING CONSTRUCTION THE CONTRACTOR'S PROPOSED 3PLAN OF OPERATION FOR HANDLING TRAFFIC DOES NOT PROVIDE FOR 3SAFE, COMFORTABLE MOVEMENT, THE CONTRACTOR SHALL IMMEDIATELY 3CHANGE HIS OPERATIONS TO CORRECT THE UNSATISFACTORY CONDITION. 3THE SEQUENCE OF WORK AS OUTLINED IN THE PLANS AND BELOW IS A 3GUIDE ONLY AND MAY BE REVISED BY THE CONTRACTOR WITH THE 3APPROVAL OF THE ENGINEER.
4

\# 502-8

502-8 3SUBJECT TO THE APPROVAL OF THE ENGINEER, PORTIONS OF THIS 3PROJECT WHICH ARE NOT AFFECTED BY OR IN CONFLICT WITH THE 3PROPOSED METHOD OF HANDLING TRAFFIC OR UTILITY ADJUSTMENTS CAN 3BE CONSTRUCTED DURING ANY PHASE.
4

\# 502-9

502-9 3TEMPORARY SIGNS WILL BE REQUIRED DURING CONSTRUCTION FOR THE 3EXISTING SIGNING WHICH INTERFERES WITH THE CONSTRUCTION. THE

3EXISTING SIGN FACES ON TEMPORARY SUPPORTS MAY BE USED FOR THE
3TEMPORARY SIGNS AS LONG AS THEY ARE REMOVED AND ERECTED ON
3TEMPORARY MOUNTS ON THE SAME DAY. THE WARNING AND REGULATORY
3SIGNS MUST BE IN PLACE AT ALL TIMES.
4

\# 502-10

502-10 3DURING CONSTRUCTION, THE CONTRACTOR WILL BE REQUIRED TO FURNISH,
3PLACE, AND MAINTAIN IN ACCORDANCE WITH THE "TEXAS MANUAL ON
3UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS"
3VERTICAL PANELS ALONG THE EDGE OF PAVEMENTS AND FILLS. THE
3VERTICAL PANELS SHALL BE SUPPLEMENTED WITH LIGHTS AS DIRECTED BY
3THE ENGINEER.
4

\# 502-11

502-11 3BARRICADES AND SIGNS SHALL BE PLACED IN SUCH A MANNER AS NOT TO
3INTERFERE WITH THE SIGHT DISTANCE OF DRIVERS ENTERING THE
3HIGHWAY FROM DRIVEWAYS OR SIDE STREETS. TO FACILITATE SHIFTING,
3BARRICADES AND SIGNS USED IN LANE CLOSURES OR TRAFFIC STAGING
3MAY BE ERECTED AND MOUNTED ON PORTABLE SUPPORTS. THE DESIGN OF
3THESE SUPPORTS ARE SUBJECT TO THE APPROVAL OF THE ENGINEER.
4

\# 502-12

502-12 3A TYPE "C" FLASHING ARROW PANEL SHALL BE USED IN CONNECTION WITH
3THE LANE CLOSURE SIGNING. THE CONTRACTOR SHALL BE RESPONSIBLE
3FOR FURNISHING, MAINTAINING, AND OPERATING THESE DEVICES IN A
3MANNER ACCEPTABLE TO THE ENGINEER, AT HIS ENTIRE EXPENSE.
4

\# 502-13

502-13 3TEMPORARY FLEXIBLE-REFLECTIVE TABS WILL BE REQUIRED ON TOP
3OF THE PORTABLE CONCRETE TRAFFIC BARRIER USED DURING STAGE
3CONSTRUCTION TO IMPROVE NIGHTIME VISIBILITY. THE TABS SHALL
3BE PLACED AT 100-FOOT SPACING ON TANGENTS AND 50-FOOT SPACING
3ON CURVES.
4

\# 502-14

502-14 3THE CONTRACTOR SHALL PROVIDE AND MAINTAIN FLAGGERS AT SUCH POINTS
3AND FOR SUCH PERIODS OF TIME AS MAY BE REQUIRED TO PROVIDE FOR
3THE SAFETY AND CONVENIENCE OF PUBLIC TRAVEL AND CONTRACTOR'S
3PERSONNEL, AND AS SHOWN ON THE PLANS OR AS DIRECTED BY THE
3ENGINEER.
4

\# 502-15

502-15 3DURING CONSTRUCTION, THE CONTRACTOR WILL BE REQUIRED TO ERECT
3ACCURATE CLEARANCE SIGNS (D-25), IN ACCORDANCE WITH THE "TEXAS
3MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND
3HIGHWAYS", ON THE UNDERPASS STRUCTURE. FINAL CLEARANCE SIGNS
3SHALL BE IN ACCORDANCE WITH ITEM 444, "BRIDGE PROTECTIVE
3ASSEMBLY". TEMPORARY CLEARANCE SIGNS WILL NOT BE PAID FOR
3DIRECTLY BUT SHALL BE CONSIDERED AS SUBSIDIARY TO THE VARIOUS
3BID ITEMS.
4

\# 502-16

502-16 3DURING ALL STAGES OF CONSTRUCTION, EXTREME CARE SHALL BE TAKEN
3TO PREVENT DEBRIS FROM FALLING ONTO THE TRAVELED LANES OF
3ROADWAYS UNDER BRIDGES. BEFORE EXISTING SLAB REMOVAL AND AFTER

3PROPOSED BEAM ERECTION, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN
3SOME TYPE OF PROTECTIVE MATERIAL, AS APPROVED BY THE ENGINEER,
3UNDER THE BRIDGES AND OVER ROADWAYS AND SHOULDER AREAS WITHIN THE
3CLEARANCE LIMITS TO PREVENT THE DROPPING OR DRIPPING OF ANY
3OBJECTS OR MATERIALS INTO OR ONTO THE ROADWAYS AND TRAFFIC.
4

\# 502-17

502-17 3WHEREAS NO CONSTRUCTION PAVEMENT MARKINGS ARE TO BE USED ON THIS
3PROJECT, PERMANENT PAVEMENT MARKINGS ARE TO BE PLACED DURING
3EACH CONSTRUCTION SEQUENCE, WHERE APPROPRIATE, PRIOR TO OPENING
3THE ROADWAY TO TRAFFIC.
4

\# 502-18

502-18 3THE CONTRACTOR WILL NOT BE PERMITTED TO COMMENCE WORK ON THE
3ROAD BEFORE SUNRISE AND SHALL ARRANGE HIS WORK SO THAT NO
3MACHINERY OR EQUIPMENT SHALL BE CLOSER THAN 30 FEET TO THE
3TRAVELED ROADWAY AFTER SUNSET EXCEPT AS AUTHORIZED BY THE
3ENGINEER.
4

\# 502-19

502-19 3THE CONTRACTOR SHALL KEEP TRAVELED SURFACES USED IN HIS HAULING
3OPERATION CLEAR AND FREE OF DIRT OR OTHER MATERIAL.
4

\# 502-20

502-20 3THE USE OF RUBBER-TIRED EQUIPMENT WILL BE REQUIRED FOR MOVING
3DIRT OR OTHER MATERIALS ALONG OR ACROSS PAVED SURFACES.
4

\# 502-21

502-21 3WHERE THE CONTRACTOR DESIRES TO MOVE ANY EQUIPMENT NOT LICENSED
3FOR OPERATION ON PUBLIC HIGHWAYS ON OR ACROSS ANY PAVEMENT, HE
3SHALL PROTECT THE PAVEMENT FROM ALL DAMAGE AS DIRECTED BY THE
3ENGINEER.
4

\# 502-22

502-22 3LAYDOWN OPERATIONS FOR HOT MIX ASPHALTIC CONCRETE SHALL BE PERFORMED
3IN SUCH SEQUENCE THAT THE CENTER JOINT WILL BE CARRIED ALONG WITHOUT
3EXCESS DISTANCE OF LAPBACK, NOT TO EXCEED ONE DAY'S OPERATION.
4

\# 504-0

504-0 2 ITEM 504:
4 --------
4

\# 504-1

504-1 3THE CONTRACTOR WILL FURNISH ONE FIELD OFFICE AND LABORATORY
3(TYPE B) FOR THIS PROJECT.
4

\# 504-2

504-2 3THE CONTRACTOR WILL FURNISH ONE FIELD OFFICE (TYPE C) FOR THIS
3PROJECT.
4

\# 504-3

504-3 3THE CONTRACTOR WILL BE REQUIRED TO FURNISH ONE FIELD OFFICE AND
3LABORATORY (TYPE B) AT THE PROJECT SITE, ONE FIELD LABORATORY
3(TYPE A) AT THE CONCRETE BATCH PLANT AND ONE ASPHALT MIX CONTROL
3LABORATORY (TYPE D) AT THE ASPHALT MIXING PLANT.

```
        4
#       504-4
504-4   3THE ASPHALT MIX CONTROL LABORATORY (TYPE D) SHALL MEET THE
        3DIMENSIONAL REQUIREMENTS SPECIFIED FOR A FIELD LABORATORY (TYPE A).
        4
#       504-5
504-5   3TELEPHONE SERVICE SHALL BE PROVIDED AT EACH FIELD LABORATORY AND
        3OFFICE.
        4
#       504-6
504-6   3THE TYPE "E" FIELD OFFICE SHALL PROVIDE A MINIMUM OF FIVE
        3HUNDRED FORTY (540) SQUARE FEET OF GROSS FLOOR AREA.  THE
        3FLOOR AREA WILL BE PARTITIONED INTO A MINIMUM OF THREE ROOMS
        3FURNISHED WITH DOORS, AND A MINIMUM OF TWO WINDOWS IN EACH
        3ROOM.  THE BUILDING SHALL HAVE TWO EXTERIOR DOORS.  FURNITURE
        3FOR THE FIELD OFFICE SHALL INCLUDE TWO DESKS, ONE DRAFTING TABLE,
        3SIX CHAIRS, ONE METAL FILE CABINET, ONE PLAN RACK AND TWO
        3TELEPHONE JACKS.
        4
#       504-7
504-7   3IT SHALL BE THE ENTIRE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN
        3ALL FIELD OFFICES AS DIRECTED BY THE ENGINEER.
        4
#       504-8
504-8   3AN ALL WEATHER PARKING AREA FOR STATE VEHICLES SHALL BE
        3PROVIDED ADJACENT TO THE FIELD OFFICE.  THE ENTIRE AREA SHALL
        3BE ENCLOSED IN A 6-FOOT HIGH FENCE.  A LOCKABLE VEHICLE GATE
        3SHALL BE PROVIDED.  THIS PARKING AREA SHALL NOT BE PAID FOR
        3DIRECTLY BUT WILL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID
        3ITEMS.
        4
#       504-9
504-9   3WHEN THE CONTRACTOR FURNISHES BEAM CURING TANKS, THE TANKS
        3SHALL BE ELEVATED AS DIRECTED BY THE ENGINEER TO A MAXIMUM
        3HEIGHT OF ONE FOOT.
        4
#       508-0
508-0   2  ITEM 508:
        4  --------
        4
#       508-1
508-1   4THE VARIOUS MATERIALS USED IN THE CONSTRUCTION OF TEMPORARY DETOURS ON
        4THIS PROJECT WILL NOT REQUIRE NORMAL TESTING PROCEDURES AS REQUIRED
        4BY THE PERTINENT BID ITEMS THAT ARE USED IN PERMANENT CONSTRUCTION.
        4
#       508-2
508-2   3THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DETOURS IN GOOD CONDITION
        3(REPAIRING POTHOLES, ETC.) AT HIS OWN EXPENSE.
        4
#       512-0
512-0   2  ITEM 512:
        4  --------
        4
#       512-1
512-1   3THE PRECAST CONCRETE TRAFFIC BARRIER (TY 2 MOD) SHALL BE INSTALLED
```

3IN ITS PERMANENT ROADWAY POSITION WITH AN ASPHALT BOARD
3STRIP PLACED UNDER THE OUTSIDE EDGES OF THE BARRIER
3AND THE RECESSED PORTION ON THE BOTTOM OF THE BARRIER
3FILLED WITH GROUT AS DETAILED IN THE PLANS. THE GROUT SHALL
3BE A MIXTURE OF TWO PARTS SAND AND ONE PART CEMENT WITH SUFFICIENT
3WATER TO MAKE THE MIXTURE PLASTIC.
3FURNISHING AND PLACING THE ASPHALT BOARD AND GROUT SHALL BE
3CONSIDERED SUBSIDIARY TO THIS BID ITEM.
4

\# 512-2

512-2 3WHEN THE CONCRETE TRAFFIC BARRIER IS NO LONGER REQUIRED ON THE
3PROJECT, IT SHALL BE STOCKPILED BY THE CONTRACTOR AT A SITE
3BENEATH THE SL & SF RAILROAD OVERPASS ON IH 635 WEST OF IH 35E
3IN FARMERS BRANCH.
4

\# 512-3

512-3 3ALL CTB WILL BE NUMBERED AND REPAIRED TO THE ENGINEER'S SATISFACTION
3PRIOR TO ITS RETURN TO THE STOCKPILE. ANY DAMAGE DONE IN TRANSIT WILL
3BE REPAIRED AT THE STOCKPILE.
4

\# 512-4

512-4 3THE HARDWARE SHALL BE PLACED IN 55 GALLON DRUMS AND TAKEN TO THE
3NORTHSIDE MAINTENANCE YARD AT 12000 GREENVILLE AVE, DALLAS, TEXAS.
4

\# 514-0

514-0 2 ITEM 514:
4 ---------
4

\# 514-1

514-1 3ON THIS PROJECT, PRECAST CTB TY 2 & 3 WILL NOT BE ALLOWED.
4

\# 514-2

514-2 3ALL MATERIALS AND LABOR REQUIRED FOR PLACEMENT OF THE
3BONDBREAKER BETWEEN THE BARRIER AND THE CONCRETE PAVEMENT
3AS DETAILED IN THE PLANS WILL NOT BE PAID FOR DIRECTLY BUT
3SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
4

\# 529-0

529-0 2 ITEM 529:
4 --------
4

\# 529-1

529-1 3THE CONTRACTOR WILL BE REQUIRED TO DOWEL THE PROPOSED CURBS WITH
31/2" X 7" DOWELS ON 12" CENTERS AND ONE NUMBER 4 BAR SHALL BE PLACED
3IN THE CURB AND TIED OR WELDED TO THE DOWEL BARS. AN APPROVED
3EPOXY RESIN SHALL BE APPLIED TO THE PAVEMENT TO RECEIVE THE CURB
3AS DIRECTED BY THE ENGINEER.
3THIS WORK AND MATERIALS WILL BE SUBSIDIARY TO THIS ITEM.
4

\# 529-2

529-2 3THE DOWELED CURB SHALL HAVE GROOVED JOINTS PLACED AT 10-FOOT INTERVALS
3AND 3/4-INCH EXPANSION JOINT MATERIAL PROVIDED AT THE SAME
3LOCATIONS AS ON THE EXISTING PAVEMENT.
4

\# 529-3

529-3 3FOR TYPE I CURB AND GUTTER SECTIONS, GROOVED JOINTS SHALL BE
3PROVIDED AT 10-FOOT INTERVALS AND 3/4-INCH EXPANSION JOINT
3MATERIAL SHALL BE PLACED AT A MAXIMUM OF 50 FOOT CENTERS AND
3AT ALL RADIUS POINTS AND INLETS.
4

?

#
529-4
529-4 3CURB AND GUTTER TRANSITIONS, AS SHOWN ON PLANS, SHALL BE PAID FOR AS
3TYPE II CURB AND GUTTER. ALL EXTRA LABOR AND MATERIALS NECESSARY TO
3COMPLETE THESE TRANSITIONS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE
3CONSIDERED SUBSIDIARY TO THIS ITEM.
4

#
529-5
529-5 3FOR TYPE II CURB AND GUTTER SECTIONS, JOINTS SHALL BE SAWED AT THE SAME
3LOCATION AS ON THE EXISTING PAVEMENT.
4

#
530-0
530-0 2 ITEM 530:
4 --------
4

#
530-1
530-1 3CURBS FOR DRIVEWAYS AND ALLEY RETURNS, AS SHOWN ON MISCELLANEOUS DETAIL
3SHEETS, WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED AS
3SUBSIDIARY TO THIS ITEM.
4

COD/No <P>

#
530-2
530-2 3THE MONOLITHIC CURB TO BE CONSTRUCTED ON DRIVEWAYS WILL BE BUILT TO THE
3SAME DIMENSIONS AS "MONO CURB TY I". THIS CURB WILL NOT BE PAID FOR
3DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
4

#
530-3
530-3 3CURBS FOR DRIVEWAYS, AS SHOWN ON MISCELLANEOUS DETAIL SHEETS, WILL NOT
3BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED AS SUBSIDIARY TO THIS ITEM.
4

#
530-4
530-4 3DRIVEWAY LOCATIONS SHOWN ARE SUBJECT TO CHANGE TO SUIT ACTUAL FIELD
3CONDITIONS AT THE TIME OF CONSTRUCTION AND MAY BE SHIFTED AS
3DIRECTED BY THE ENGINEER.
4

#
531-0
531-0 2 ITEM 531:
4 --------
4

#
531-1
531-1 3THE CONCRETE SURFACE FOR WHEELCHAIR RAMPS SHALL HAVE A ~~ROUGH~~ RAISED TEXTURE AND
3NON-SKID TYPE FINISH AS SHOWN ON THE PLANS AND SUBSIDIARY TO ITEM 531
4

#
531-2
531-2 3CURBS FOR WHEELCHAIR RAMPS, AS SHOWN ON MISCELLANEOUS DETAIL SHEETS,
3WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED
3SUBSIDIARY TO THIS ITEM.
4

#
534-0
534-0 2 ITEM 534:
4 --------
4

```
#       534-1
534-1   3SUPPORT SLABS AT APPROACH SLABS SHALL BE PAID FOR AS "CONCRETE FOR
        3STRUCTURE APPROACH SLABS".  STRUCTURAL EXCAVATION ENCOUNTERED IN THE
        3CONSTRUCTION OF SUPPORT SLABS SHALL NOT BE PAID FOR DIRECTLY, BUT
        3SHALL BE CONSIDERED AS SUBSIDIARY TO THIS ITEM.
        4
#       536-0
536-0   2  ITEM 536:
        4  --------
        4
#       536-1
536-1   3CONCRETE DIRECTIONAL ISLANDS SHALL BE CLASS "B" CONCRETE.  A 3/4" 20 mm
        3EXPANSION JOINT MATERIAL SHALL BE PLACED AT 15 FOOT SPACING.
        4                                                  4.5m
#       536-2
536-2   3CONCRETE MEDIANS AND DIRECTIONAL ISLANDS SHALL BE CLASS "B" CONCRETE.
        3A 3/4" ASPHALT BOARD EXPANSION JOINT MATERIAL SHALL BE
        3PLACED AT 15-FOOT SPACING AND ADJACENT TO ALL CURBS.
        4
#       540-0
540-0   2  ITEM 540:
        4  --------
        4
#       540-1
540-1   3THE TOPS OF THE TIMBER POSTS SHALL BE DOMED.
        4
#       540-2
540-2   3ONE TYPE OF POST MUST BE FURNISHED THROUGHOUT THE PROJECT
        3EXCEPT AS SPECIFICALLY NOTED.
        4
#       540-4
540-4   3POSTS FOR METAL BEAM GUARD FENCE SHALL BE UNPAINTED TIMBER.
        4
#       540,550-0
540,550 2  ITEMS 540 AND 550:
-0      4  -----------------
        4
#       540,550-1
540,550 3MODIFICATIONS TO MEDIAN BARRIER GUARD FENCE AND CHAIN LINK FENCE,
-1      3MADE NECESSARY BY THE INSTALLATION OF MEDIAN MOUNTED ILLUMINATION
        3STANDARDS, ARE DESCRIBED IN THE ILLUMINATION PLANS.
        4
#       540,550-2
540,550 3MODIFICATIONS TO MEDIAN BARRIER GUARD FENCE AND HEADLIGHT BARRIER
-2      3FENCE MADE NECESSARY BY THE INSTALLATION OF MEDIAN MOUNTED ILLUMINATION
        3STANDARDS AND SIGN SUPPORTS ARE DESCRIBED IN THE ILLUMINATION PLANS.
        4
#       542-0
542-0   2  ITEM 542:
        4  --------
        4
#       542-1
542-1   3EXISTING GUARD FENCE (POSTS AND RAILING) TO BE REMOVED AND NOT REPLACED
        3SHALL BE STACKED ON THE RIGHT-OF-WAY AT A LOCATION TO BE DETERMINED BY
        3THE ENGINEER.
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        4
#       542-2
542-2   3EXISTING METAL BEAM GUARD FENCE TO BE REMOVED FROM BRIDGE ENDS SHALL BE
        3SALVAGED AND STOCKPILED WITHIN THE RIGHT-OF-WAY AS DIRECTED BY THE
        3ENGINEER. SALVAGED METAL BEAM GUARD FENCE SHALL BECOME THE PROPERTY OF
        3THE DEPARTMENT.
        4
#       542-3
542-3   3ALL METAL BEAM GUARD FENCE AND METAL BEAM GUARD FENCE (BAR) REMOVED
        3FROM THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR TO BE
        3DISPOSED OF BY HIM OUTSIDE THE LIMITS OF THE RIGHT-OF-WAY AT HIS OWN
        3EXPENSE.
        4
#       542-4
542-4   3METAL BEAM GUARD FENCE REMOVED FROM THIS PROJECT SHALL BE SALVAGED,
        3HAULED TO AND STOCKPILED AT THE TEXAS HIGHWAY DEPARTMENT NORTHSIDE
        3WAREHOUSE, 12000 GREENVILLE AVENUE, DALLAS, TEXAS 75218. THE WORK
        3INVOLVED IN HAULING THIS MATERIAL WILL NOT BE PAID FOR DIRECTLY, BUT
        3SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
        4
#       542-5
542-5   3EXISTING ANCHOR BOLTS IN BRIDGE SLABS SHALL BE REMOVED OR CUT OFF AND
        3HOLES FILLED WITH GROUT ALL AS DIRECTED BY THE ENGINEER.
        4
#       542-6
542-6   3METAL BEAM GUARD FENCE REMOVED FROM THIS PROJECT SHALL BE SALVAGED AND
        3STOCKPILED WITHIN THE RIGHT-OF-WAY AS DIRECTED BY THE ENGINEER.
        4
#       556-0
556-0   2  ITEM 556:
        4  --------
        4
#       556-1
556-1   3THE FILTER MATERIAL INTENDED FOR USE WITH THE RETAINING WALL SHALL
        3CONFORM TO THE REQUIREMENTS OF ITEM 421, TABLE 1, GRADES 3, 6 OR 7
        3AGGREGATE.
        4
#       556-2
556-2   3THE FILTER MATERIAL INTENDED FOR USE WITH PIPE UNDERDRAINS UNDER THE
        3PAVEMENT SHALL CONFORM TO THE REQUIREMENTS OF
        3ITEM 302 AGGREGATE WITH THE FOLLOWING GRADATION:
        4
        4      RETAINED ON 1/2" SIEVE                  0%
        4      RETAINED ON 3/8" SIEVE                0-2%
        4      RETAINED ON NO  4 SIEVE              40-85%
        4      RETAINED ON NO. 10 SIEVE             95-100%
        4
#       556-3
556-3   3THE UNIT PRICE BID PER LINEAR FOOT OF "PIPE UNDERDRAIN" SHALL INCLUDE
        3THE COST OF MAKING CONNECTIONS TO STORM SEWER LINES.
        4
#       556-4
556-4   3HUB AND SPIGOT TYPE PIPE SHALL BE PLACED WITH AN OPEN JOINT
        3OF APPROXIMATELY 3/8 INCH.
        4
```

```
#       556-5
556-5   3IN THE EVENT THAT TYPE 5 OR TYPE 10 UNDERDRAIN PIPE IS BID, THE
        3CONNECTION WILL BE MADE AS SHOWN IN THE PLANS.  THE COST OF MAKING THE
        3CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
        4
#       556-6
556-6   3THE REQUIREMENTS FOR DECANTATION OF FILTER MATERIAL ARE DELETED
        3FOR THIS PROJECT.
        4
#$      LIGHTING AND SIGNING
#       618-0
618-0   2  ITEM 618:
        4  --------
        4
#       618-1
618-1   3CONDUIT INSTALLED FOR FUTURE USE SHALL HAVE PULL WIRES INSTALLED AND
        3SHALL BE CAPPED USING STANDARD WEATHER TIGHT CONDUIT CAPS AS APPROVED
        3BY THE ENGINEER.  THIS WORK WILL NOT BE PAID FOR
        3DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM.
        4
#       618-2
618-2   3THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE PRESERVATION
        3OF ALL SOD, SHRUBBERY AND TREES AT THE SITE
        3DURING THE INSTALLATION AND, WHERE NECESSARY TO REMOVE ANY SOD,
        3SHRUBBERY OR TREE BRANCHES, HE SHALL OBTAIN PERMISSION FROM THE OWNER.
        4
#       618-3
618-3   3ALL SOD AND SHRUBBERY THAT ARE REMOVED SHALL BE CAREFULLY PRESERVED AND
        3REPLACED IN THEIR ORIGINAL POSITION. DAMAGED SOD OR SHRUBBERY SHALL BE
        3REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE.
        4
#       618,622-0
618,622 2  ITEMS 618 AND 622:
-0      4  ------------------
        4
#       618,622-1
618,622 3THE CONTRACTOR SHALL SECURE PERMISSION FROM THE PROPER AUTHORITY AND
-1      3THE APPROVAL OF THE ENGINEER BEFORE CUTTING INTO OR REMOVING ANY WALKS
        3OR CURBS WHICH MIGHT BE REQUIRED IN MAKING THE INSTALLATION.
        4
#       618,622-2
618,622 3AFTER THE WORK IS COMPLETED, THE CONTRACTOR SHALL RESTORE ANY CURBS OR
-2      3WALKS, WHICH HAVE BEEN REMOVED, TO THE EQUIVALENT OF THEIR ORIGINAL
        3CONDITION AND TO THE SATISFACTION OF THE ENGINEER.
        4
#       666-0
666     2  ITEMS 666:
-0      4  ---------
        4
#       666-1
666     3THE COST OF PAINT PURCHASED FROM THE DEPARTMENT SHALL BE
-1      3AS FOLLOWS:
        4
        4       STOCK NO.       DESCRIPTION                     PRICE PER UNIT
        4       --------        -----------                     --------------
```

```
        4       137959   WHITE TRAFFIC PAINT, 5 GAL. UNITS      $ 25.30
        4       137960   YELLOW TRAFFIC PAINT, 5 GAL. UNITS     $ 27.20
        4       117702   WHITE TRAFFIC PAINT, 55 GAL. UNITS     $267.40
        4       117703   YELLOW TRAFFIC PAINT, 55 GAL. UNITS    $285,70
        4
        4
#       666-2
666-2   3ALL MARKINGS SHALL BE APPLIED BY EXTRUSION.
        4
#$      SPECIAL SPECIFICATIONS
#       3116-0
3116-0  2  ITEM 3116:
        4  ----------
        4
#       3116-1
3116-1  3THE POLISH VALUE OF THE COARSE AGGREGATE FROM EACH SOURCE
        3USED IN THE SURFACE COURSE, EXCEPT THE SHOULDERS,
        3SHALL NOT BE LESS THAN 35 WHEN TESTED IN ACCORDANCE WITH
        3TEST METHOD TEX-438-A.
        4????   USE ABOVE NOTE ONLY ON ROADS WITH AN ADT   ????
        4????   OF 70,000 OR MORE.                         ????
        4
#       3116-2
3116-2  3THE POLISH VALUE OF THE COARSE AGGREGATE FROM EACH SOURCE
        3USED IN THE SURFACE COURSE, EXCEPT THE SHOULDERS,
        3SHALL NOT BE LESS THAN 32 WHEN TESTED IN ACCORDANCE WITH
        3TEST METHOD TEX-438-A.
        4????   USE ABOVE NOTE ONLY ON ROADS WITH AN ADT   ????
        4????   BETWEEN 5,000 AND 70,000.                  ????
        4
#       3116-3
3116-3  3THE POLISH VALUE OF THE COARSE AGGREGATE FROM EACH SOURCE
        3USED IN THE SURFACE COURSE, EXCEPT THE SHOULDERS,
        3SHALL NOT BE LESS THAN 30 WHEN TESTED IN ACCORDANCE WITH
        3TEST METHOD TEX-438-A.
        4????   USE ABOVE NOTE ONLY ON ROADS WITH AN ADT   ????
        4????   BETWEEN 2,000 AND 4,999.                  ????
        4
#       3116-4
3116-4  3THE POLISH VALUE OF THE COARSE AGGREGATE FROM EACH SOURCE
        3USED IN THE SURFACE COURSE, EXCEPT THE SHOULDERS,
        3SHALL NOT BE LESS THAN 28 WHEN TESTED IN ACCORDANCE WITH
        3TEST METHOD TEX-438-A.
        4????   USE ABOVE NOTE ONLY ON ROADS WITH AN ADT   ????
        4????   LESS THAN 2000                             ????
        4
#       3116-5
3116-5  3WHEN THE COARSE AGGREGATE FROM ANY ONE SOURCE CONTAINS MATERIALS WITH
        3SUBSTANTIALLY DIFFERENT MINERALOGY, EACH TYPE OF MATERIAL SHALL COMPLY
        3WITH THE REQUIRED POLISH VALUE.
        4
#       3116-6
3116-6  3THE UTILIZATION OF RAP FROM OFF PROJECT, STATE OWNED, NON-DESIGNATED
        3SOURCES CAN BE PROPOSED BY THE CONTRACTOR. THIS WILL BE CONSIDERED
        3A VALUE ENGINEERING PROPOSAL AND HANDLED AS SUCH BY THE ENGINEER.
```

TXDOT ?

```
        4
#       3116-7
3116-7  3ALL SURFACE MIXTURES WILL REQUIRE LATEX MODIFIED ASPHALT CEMENT OR
        3POLYMERS.
        4
#       3116-8
3116-8  3ASPHALT PAVEMENT TO BE REMOVED WITHIN THE LIMITS OF THE PROJECT
        3AND ASPHALT PAVEMENT MATERIALS USED IN CONSTRUCTION OF DETOURS
        3MAY BE USED AS RAP (RECLAIMED ASPHALTIC PAVEMENT) IN NON-SURFACE
        3COURSES IF THE MATERIAL MEETS ALL THE PHYSICAL REQUIREMENTS OF THE
        3APPROPRIATE ITEM. THERE WILL BE NO COST TO THE CONTRACTOR FOR THE
        3USE OF THIS MATERIAL. THE SAME WILL HOLD TRUE OF OTHER SOURCES
        3DESIGNATED IN THE PLANS.
        4
#       3116-9
3116-9  3BLENDING OF COARSE AGGREGATES TO MEET THE POLISH VALUE REQUIREMENTS
        3WILL NOT BE ALLOWED.
        4
#       3116-10
3116-10 3FOR THIS PROJECT, TYPE B RIDE QUALITY WILL BE REQUIRED
        3FOR THE MAINLANES AND SERVICE ROADS AND TYPE A FOR DETOURS.
        4
#       3116-11
3116-11 3FOR THIS PROJECT, TYPE A RIDE QUALITY WILL BE REQUIRED FOR
        3THE MAINLANES AND RIDE QUALITY WILL BE WAIVED FOR DETOURS.
        4
#       5001-0
5001-0  2  ITEM 5001:
        4  ---------
        4
#       5001-1
5001-1  3THE STEEL BARRELS REQUIRED FOR THIS ITEM SHALL BE PAINTED ORANGE.
        4
5004-0  2  ITEM 5004:
        4  ---------
        4
#       5004-1
5004-1  3THE SW3P (STORM WATER POLLUTION PREVENTION PLAN) FOR THIS
        3PROJECT SHALL CONSIST OF USING THE FOLLOWING ITEMS AS DIRECTED
        3BY THE ENGINEER:
        4    TEMPORARY SEDIMENT CONTROL FENCE
        4    BALED HAY FOR EROSION AND SEDIMENTATION CONTROL
        3THIS WORK SHALL BE PAID FOR UNDER THEIR RESPECTIVE BID ITEMS.
        4
#       6033-0
6033-0  2  ITEM 6033:
        4  ---------
        4
#       6033-1
6033-1  3A MINIMUM OF TWO TRANSPORTABLE CELLULAR TELEPHONES WILL BE REQUIRED.
        4
 $@     4
```

SEPARATE PAY ITEM FOR REMOVAL OF TEMPORARY SEDIMENT CONTROL FENCE AND BALED HAY HAVE BEEN INCLUDED.

TXDOT

ALSO SEE SIGNALIZATION RELATED DOCUMENTS

TRAFFIC SIGNALS ITEMS 3/24/99

EARTH TECH CMAQ #29

*F.R. DIV.6 * TEXAS * XXXXXXXXXXXXXX		* SHEET
* DALLAS	COUNTY * HWY FM XXXX	*CONT XXXX-XX-XXX

GENERAL NOTES AND SPECIFICATION DATA--

ITEM 504, FACILITIES FOR FIELD OFFICE AND LABORATORY:, CONT'D
AN ALL WEATHER PARKING AREA FOR STATE VEHICLES SHALL BE PROVIDED ADJACENT TO THE FIELD OFFICE. THE ENTIRE AREA SHALL BE ENCLOSED IN A 1.83M (6 FOOT) HIGH FENCE. A LOCKABLE VEHICLE GATE SHALL BE PROVIDED. THIS PARKING AREA SHALL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED SUBSIDIDARY TO THE VARIOUS BID ITEMS.

ALL BEAM TANKS SHALL BE ELEVATED A MINIMUM OF 305MM (ONE FOOT) ABOVE THE GROUND.

ITEM 506, TEMP. EROSION, SED. AND WATER POLL. PREV. AND CONTROL:

THE SW3P FOR THIS PROJECT SHALL CONSIST OF USING THE FOLLOWING ITEMS AS DIRECTED BY THE ENGINEER:

ITEM 5003 - BALED HAY FOR EROSION AND SEDIMENTATION CONTROL
ITEM 5012 - TEMPORARY SEDIMENT CONTROL FENCE

THIS WORK WILL BE PAID FOR UNDER THEIR RESPECTIVE BID ITEMS.

ITEM 531, SIDEWALKS:

SAW CUTTING AND REMOVAL OF EXISTING CONCRETE, EXCAVATION AND EMBANKMENT WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM. OLD CONCRETE SHALL BE REMOVED IN ACCORDANCE WITH ITEM 104, EXCEPT FOR MEASUREMENT AND PAYMENT.

ITEM 536, CONCRETE MEDIANS AND DIRECTIONAL ISLANDS:

SAW CUTTING OF EXISTING MEDIAN AND REMOVAL OF EXISTING CONCRETE SHALL BE DONE IN ACCORDANCE WITH ITEM 104. THIS WORK WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THIS ITEM.

ITEM 610, ROADWAY ILLUMINATION ASSEMBLIES:

LUMINAIRE BALLASTS SHALL BE RATED FOR OPERATION AT 120 (240) VOLTS.

GENERAL NOTES AND SPECIFICATION DATA--

ITEM 610, ROADWAY ILLUMINATION ASSEMBLIES:, CONT'D
EACH LUMINAIRE SHALL HAVE ITS OWN PHOTOCELL.

WHEN LUMINAIRES ARE TO BE INSTALLED ON STEEL MAST ARM POLES, A SEPARATE TERMINAL STRIP IN THE SIGNAL POLE ACCESS COMPARTMENT SHALL BE PROVIDED. THE TERMINAL STRIP SHALL BE 4 CIRCUIT BUCHANAN TYPE 104SN OR KULKA TYPE 985-GP-4 OR EQUIVALENT.

THE CONDUCTORS FROM THE SERVICE POLE TO THE TERMINAL STRIP SHALL BE NO. 8 XHHW WIRE. THE CONDUCTORS FROM THE TERMINAL STRIP TO THE LUMINAIRE SHALL BE NO. 12 XHHW WIRE.

ITEM 618, CONDUIT:

THE CONTRACTOR SHALL SECURE PERMISSION FROM THE PROPER AUTHORITY AND THE APPROVAL OF THE ENGINEER BEFORE CUTTING INTO OR REMOVING ANY SIDEWALKS OR CURBS, WHICH MIGHT BE REQUIRED IN MAKING THE INSTALLATION.

THE LOCATION OF CONDUITS AND GROUND BOXES ARE DIAGRAMMATIC ONLY AND MAY BE SHIFTED BY THE ENGINEER TO ACCOMMODATE FIELD CONDITIONS.

CONDUIT SHALL BE PLACED UNDER EXISTING PAVEMENT BY AN APPROVED BORING METHOD UNLESS OTHERWISE DIRECTED BY THE ENGINEER. PITS FOR BORING SHALL NOT BE CLOSER THAN 0.61M (2 FEET) FROM THE EDGE OF THE PAVEMENT UNLESS OTHERWISE DIRECTED BY THE ENGINEER. WATER JETTING WILL NOT BE PERMITTED.

WHEN BORING IS USED FOR UNDER PAVEMENT CONDUIT INSTALLATIONS, THE MAXIMUM ALLOWABLE OVERCUT SHALL BE 25MM (1") IN DIAMETER.

WHEN CONDUITS ARE BORED, THE VERTICAL AND HORIZONTAL TOLERANCES SHALL NOT EXCEED 457MM (18 IN) AS MEASURED FROM THE INTENDED TARGET POINT.

THE USE OF A PNEUMATICALLY DRIVEN DEVICE FOR PUNCHING HOLES BENEATH THE PAVEMENT (COMMONLY KNOWN AS A "MISSILE") WILL NOT BE PERMITTED ON THIS PROJECT.

THE SAW CUT TRENCH DETAIL SHOWN ON THE PLANS FOR INSTALLATION OF CONDUIT UNDER EXISTING PAVEMENT SHALL ONLY BE USED AT LOCATIONS WHERE CONDUIT CANNOT BE BORED. THE USE OF THE SAW CUT TRENCH SHALL ONLY BE MADE AT LOCATIONS APPROVED BY THE ENGINEER.

EXHIBIT "A"

County Dallas
Parcel 1
Highway Intersection of Dallas North Tollway at Keller Springs Road

CSJ : 0918-45- January 20, 2000

Legal Land Description for Parcel 1

Being 318.69 square meters [3430 square feet] of land, more or less, situated in the Robert Wilburn Survey, Abstract No. 1580, Dallas County, Texas, and being part of and out of a called 0.7884 hectare [1.949 acre] tract conveyed by deed from F.M. Properties Operating Co. to Harper's-Keller Springs, L.L.C. dated May 29, 1996 and recorded in Volume 96113, Page 4425 of the Deed Records of Dallas County, Texas, also being a part of Lot 1 Block B City Block 8707 of the Harper's Restaurant as recorded under Volume 96112 Page 4205 of the Plat Records of Dallas County, Texas , said 318.69 square meters [3430 square feet] of land being more particularly described by metes and bounds as follows:

COMMENCING at an iron rod found at the southwest corner of said Lot 1, Block B/8707 of the Harper's Restaurant, being in the existing east right-of-way line of Dallas Tollway (width varies);

THENCE with the west line of said Harper's Restaurant and the east right-of-way line of said Dallas Tollway, the following two (2) courses:

N 03° 08' 54" E 65.282 m (**214.18** feet) to a point;

N 47° 34' 17" E 8.417 m (**27.61** feet) to a ½-inch iron rod found at the northeast corner of a cutback at the southeast corner of the intersection of said Dallas Parkway and Keller Springs Road (width varies), said iron rod being the southwest corner of a street easement as recorded under Volume 92033 Page 1961 of the Deed Records of Dallas County, Texas, same being the most easterly northwest corner of Lot 1 Block B of the Harper's Restaurant and the **POINT OF BEGINNING**;

1. **THENCE** with the south line of said road easement, **S 88° 07' 50" E, 2.112** m (**6.93** feet) to a 5/8" inch iron rod with cap set at the southeast corner of the said road easement;

2. **THENCE** with the east line of said road easement, **N 01° 59" 40" E, 1.524** m (**5.00** feet) to a 5/8" inch iron rod with cap set in the existing south right-of-way line of said Keller Springs Road;

3. **THENCE** with said south right-of-way line **S 88° 07' 50" E, 87.551** m (**287.24** feet) to a 5/8" inch iron rod with cap set at the westerly corner of a cutback at the southwest corner of the intersection of Keller Springs Road and Knoll Trail (64 feet wide), said iron rod being the northwesterly corner of a 0.38 square foot tract that was dedicated for a corner clip by the plat of said Harper's Restaurant;

4. **THENCE** with said cutback and the northeasterly line of said corner clip, **S 44° 08' 08" E, 4.408** m (**14.46** feet) to a 5/8" inch iron rod with cap set in the arc of a curve to the left and the existing west right-of-way line of said Knoll Trail;

5. **THENCE** with the arc of said curve to the left and the existing west right-of-way line of said Knoll Trail, passing through a central angle of **28° 03' 48"** to a 5/8" inch iron rod with cap set in the south line of the said Lot 1 Block B, same being the north line of Lot 2 Block B ,City Block 8707 of the Bradford Homesuites Addition as recorded under Volume 96130 Page 6338 of the Plat Records of Dallas County, Texas, being out of the remainder of a called 6.1674 hectare [15.247 acre] tract conveyed by deed to F.M. Properties Operating Co. recorded in Volume 92115, Page 4038 of the Deed Records of Dallas County, Texas, said curve having a radius of **152.096** m (**499.00** feet), an arc length of **74.496** m (**244.41** feet), and a chord bearing of **S 15° 03' 22" E, 73.754** m (**241.97** feet);

6. **THENCE** departing the existing west right-of-way line of said Knoll Trail and with the south line of the said Lot 1 Block B and the north line of Lot 2 Block B, **N 88° 07' 50" W, 0.547** m (**1.79** feet) to a 5/8" inch iron rod with cap set in the new right-of-way line of said Knoll Trail and in the arc of a curve to the right;

7. **THENCE** departing the common line of Lot 1 Block B and Lot 2 Block B, and crossing Lot 1 Block B and along said new right-of-way line, with the arc of said curve to the right, passing through a central angle of **16° 35' 27"** to a 5/8" inch iron rod with cap set at the **POINT OF COMPOUND CURVATURE** of a curve to the right, said curve having a radius of **149.672** m (**491.05** feet), an arc length of **43.340** m (**142.19** feet), and a chord bearing of **N 22° 54' 09" W, 43.188** m (**141.69** feet);

8. **THENCE** with the arc of said curve to the right and continuing along the new right-of-way line of said Knoll Trail, passing through a central angle of **09° 43' 07"** to a 5/8" inch iron rod with cap set at the intersection with the new southerly right-of-way line of said Keller Springs Road and a cutback, said curve having a radius of **154.096** m (**505.56** feet), an arc length of **26.138** m (**85.75** feet), and a chord bearing of **N 07°56'27" W, 26.107** m (**85.65** feet);

9. **THENCE** with said cutback line and new right-of-way line **N 43° 58' 54" W 9.593**m (**31.47** feet) to a 5/8" inch iron rod with cap set;

10. **THENCE** departing said cutback and along the new southerly right-of-way line of said Keller Springs Road, **N 88° 07' 50" W 84.823** m (**278.29** feet) to a 5/8" inch iron rod with cap set in the cutback line at the southeast corner of the intersection of said Dallas Parkway and Keller Springs Road;

11. **THENCE** with said cutback line **N 47° 34' 17" E 0.682** m (**2.24** feet) to the **POINT OF BEGINNING,** and containing 318.69 square meters (3430 square feet) of land more or less.

BASIS OF BEARINGS IS THE SOUTH LINE OF THE CALIFORNIA STATE TEACHERS RETIREMENT SYSTEM TRACT AS DESCRIBED IN VOLUME 95099, PAGE 1320 OF THE DEED RECORDS OF DALLAS COUNTY, TEXAS.

A SURVEY PLAT OF EVEN DATE HEREWITH ACCOMPANIES THIS LEGAL DESCRIPTION.

EXHIBIT "A"

County Dallas
Parcel 1
Highway Intersection of Dallas North Tollway at Keller Springs Road

THE STATE OF TEXAS §

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF TRAVIS §

That I, David P. Carr, a Registered Professional Land Surveyor, do hereby certify that the above description is true and correct to the best of my knowledge and belief and that the property described herein was determined by a survey made on the ground during October 1999 under my direction and supervision.

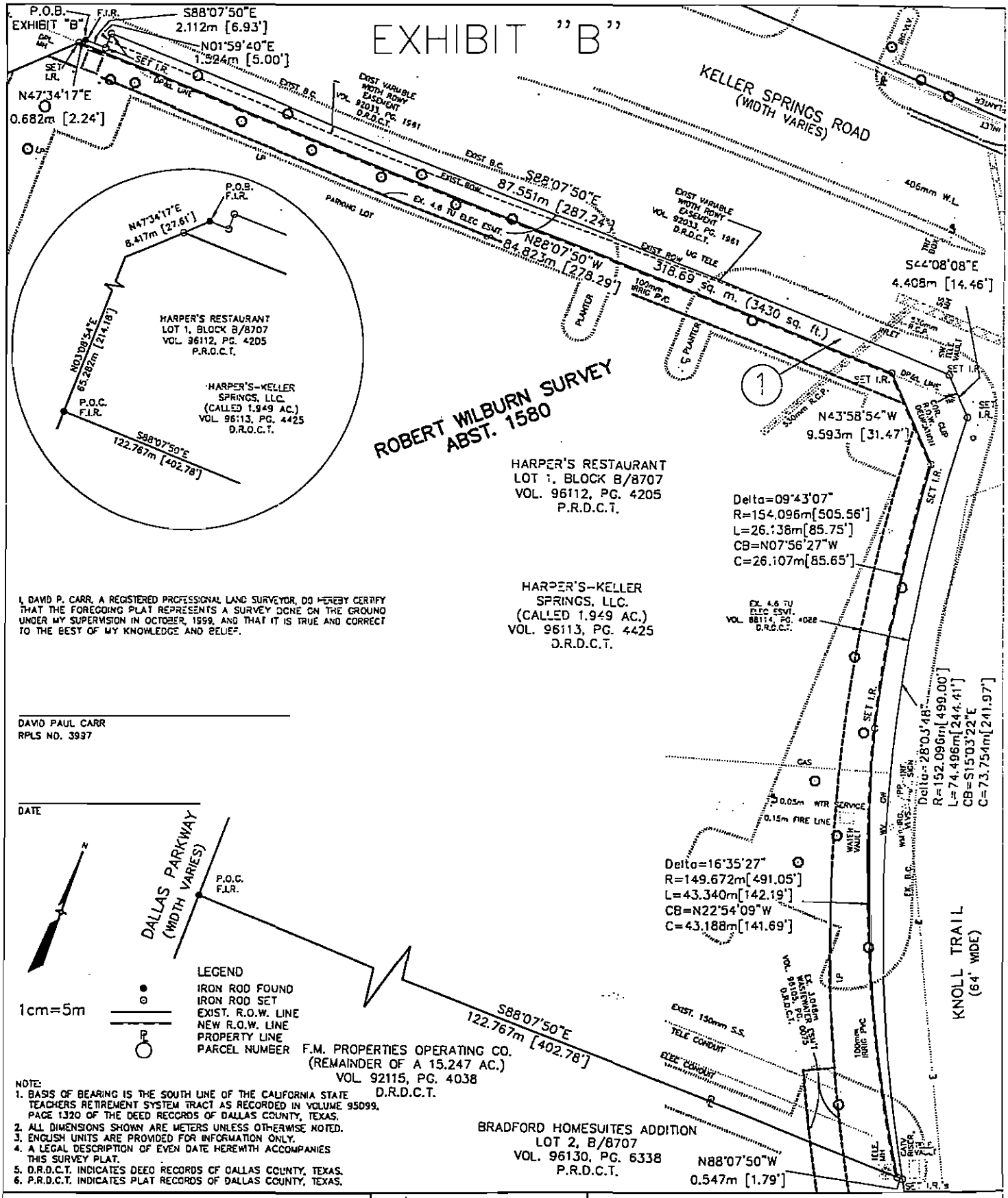
WITNESS MY HAND AND SEAL at Austin, Travis County, Texas this the 20th day of January, 2000, A.D.

Earth Tech
811 Barton Springs Road
Suite 400
Austin, Texas 78704

David P. Carr
Registered Professional Land Surveyor
No. 3997 - State of Texas

Job No 31742
FN 87 DPC

EXHIBIT "B"



I, DAVID P. CARR, A REGISTERED PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY THAT THE FOREGOING PLAT REPRESENTS A SURVEY DONE ON THE GROUND UNDER MY SUPERVISION IN OCTOBER, 1999, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DAVID PAUL CARR
RPLS NO. 3937

DATE

NOTE:
1. BASIS OF BEARING IS THE SOUTH LINE OF THE CALIFORNIA STATE TEACHERS RETIREMENT SYSTEM TRACT AS RECORDED IN VOLUME 95099, PAGE 1320 OF THE DEED RECORDS OF DALLAS COUNTY, TEXAS.
2. ALL DIMENSIONS SHOWN ARE METERS UNLESS OTHERWISE NOTED.
3. ENGLISH UNITS ARE PROVIDED FOR INFORMATION ONLY.
4. A LEGAL DESCRIPTION OF EVEN DATE HEREWITH ACCOMPANIES THIS SURVEY PLAT.
5. D.R.D.C.T. INDICATES DEED RECORDS OF DALLAS COUNTY, TEXAS.
6. P.R.D.C.T. INDICATES PLAT RECORDS OF DALLAS COUNTY, TEXAS.

EARTH TECH
811 BARTON SPRINGS RD., STE. 400
AUSTIN, TEXAS 78704-1164
(512) 474-5500

DRN	A.Y./J.C.	1-20-00
APP	D.C.	1-20-00
FILENAME:	Fn87(PARCEL 1)	
FIELD NOTE	FIELD BOOK	
FN87	XX	
DRAWING NO.: XX		

A PLAT OF A SURVEY OF A 318.69 sq. m. (3,430 sq. ft.) TRACT OF LAND IN THE ROBERT WILBURN SURVEY ABSTRACT NUMBER 1580 DALLAS COUNTY, TX.

Keller Springs Road
Parcel 1

FROM			ANGLE				DIST	NORTH	EAST	TO
	PT/PT INVERSE									
*****	START							9957.28145	10079.09577	101
101	INV	S	88	07	50	E	2.112	9957.21255	10081.20664	102
102	INV	N	1	59	40	E	1.524	9958.73563	10081.25968	103
103	INV	S	88	07	50	E	87.551	9955.87969	10168.76409	104
104	INV	S	44	08	08	E	4.408	9952.71630	10171.83344	105
	RADIAL	S	88	58	32	W				
	DELTA		28	03	48	LT				
	RADIUS				152.096					
	TAN				38.011					
	L-ARC				74.496					
	RADIAL	S	60	54	43	W				
	RP							9955.43586	10323.90512	106
105	CHORD	S	15	03	22	E	73.754	9881.49418	10190.99229	107
	TAN@PT	S	29	05	17	E				
107	INV	N	88	07	50	W	0.547	9881.51201	10190.44597	108
	RADIAL	S	58	48	08	W				
	DELTA		16	35	27	RT				
	RADIUS				149.672					
	TAN				21.823					
	L-ARC				43.340					
	RADIAL	S	75	23	34	W				
	RP							9959.04152	10318.47299	109
108	CHORD	N	22	54	09	W	43.188	9921.29582	10173.63858	110
	TAN@PT	N	14	36	26	W				
	RADIAL	S	77	12	00	W				
	DELTA		9	43	07	RT				
	RADIUS				154.096					
	TAN				13.100					
	L-ARC				26.138					
	RADIAL	S	86	55	06	W				
	RP							9955.43586	10323.90512	111
110	CHORD	N	7	56	27	W	26.107	9947.15208	10170.03194	112
	TAN@PT	N	3	04	54	W				
112	INV	N	43	58	54	W	9.593	9954.05466	10163.37047	113
113	INV	N	88	07	50	W	84.823	9956.82161	10078.59269	114
114	INV	N	47	34	17	E	0.682	9957.28145	10079.09577	101
								9957.28145	10079.09577	101

NO CLOSURE ERROR Area = 318.687 sq m 0.03187 ha

EXHIBIT "A"

County Dallas
Parcel 2
Highway Intersection of Keller Springs Road at Knoll Trail

CSJ: 0918-45- January 20, 2000

Legal Land Description for Parcel 2

Being 2.70 square meters [29 square feet] of land, more or less, out of the remainder of that certain 6.1674 hectares [15.247 acres] of land, more or less, situated in the Robert Wilburn Survey, Abstract No. 1580, Dallas County, Texas, and being a part of the land conveyed to FM Properties Operating Co. by deed recorded in Volume 92115, Page 4038 of the Deed Records of Dallas County, Texas, said 2.70 square meters [29 square feet] of land being more particularly described by metes and bounds as follows:

COMMENCING from a iron rod found at the southwest comer of a called 0.7884 hectare [1.949 acre] tract conveyed to Harper's-Keller Springs, L.L.C. recorded in Volume 96113, Page 4425 of the Deed Records of Dallas County, Texas, also known as Lot 1, Block B/8707 of the Harper's Restaurant as recorded in Volume 96112, Page 4205 of the Plat Records of Dallas County, Texas, said iron rod also being in the existing easterly right-of-way line of Dallas North Parkway (width varies), also known as Bradford HomeSuites Addition as recorded in Volume 96130, Page 6338 of the Plat Records of Dallas County, Texas;

THENCE with the south line of said Harper's Restaurant and the north line of said Bradford HomeSuites Addition **S 88° 07' 50" E 122.767** m (**402.78** feet) to a ½-inch iron rod set on the arc of a curve to the left, being in the existing west right-of-way line of Knoll Trail (64 feet wide), being the northeast comer of the said Bradford HomeSuites Addition and the southeast corner of said Harper's Restaurant, same being the **POINT OF BEGINNING**;

1. **THENCE** with said existing west right-of-way line of Knoll Trail and said curve to the left, passing through a central angle of **04°18'34"** to a 5/8" inch iron rod with cap set on the arc of a curve to the right, said curve having a radius of **152.096**m [**499.00** feet], an arc length of **11.440** m [**37.53** feet], and a chord of **S 31°12'41" E, 11.437** m [**37.52** feet];

2. **THENCE** leaving the said existing west right-of-way line of Knoll Trail, and crossing the said Bradford HomeSuites Addition with the said curve to the right, passing through a central angle of **04°29'50"** to a 5/8" inch iron rod with cap set on the north line of the said Bradford HomeSuites Addition and the south line of said Harper's Restaurant, said curve having a radius of **149.672**m [**491.05** feet], a arc length of **11.748** m [**38.54** feet], and a chord of **N 33°26'47" W, 11.745** m [**38.53** feet];

EXHIBIT "A"

County Dallas
Parcel 2
Highway Intersection of Keller Springs Road at Knoll Trail

3. **THENCE** with the north line of said Bradford HomeSuites Addition and the south line of said Harper's Restaurant, **S 88°07'50" E,** a distance of **0.547** m [**1.79** feet] to the **POINT OF BEGINNING**, and containing 2.70 square meters [29 square feet] of land, more or less.

BASIS OF BEARINGS IS THE SOUTH LINE OF THE CALIFORNIA STATE TEACHERS RETIREMENT SYSTEM TRACT AS RECORDED IN VOLUME 95099, PAGE 1320 OF THE DEED RECORDS OF DALLAS COUNTY, TEXAS

A SURVEY PLAT OF EVEN DATE HEREWITH ACCOMPANIES THIS LEGAL DESCRIPTION.

THE STATE OF TEXAS §

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF TRAVIS §

That I, David P. Carr, a Registered Professional Land Surveyor, do hereby certify that the above description is true and correct to the best of my knowledge and belief and that the property described herein was determined by a survey made on the ground during July & August, 1998 under my direction and supervision.

WITNESS MY HAND AND SEAL at Austin, Travis County, Texas this the 20th day of January, 2000, A.D.

Earth Tech
811 Barton Springs Road
Suite 400
Austin, Texas 78704

David P. Carr
Registered Professional Land Surveyor
No. 3997 - State of Texas

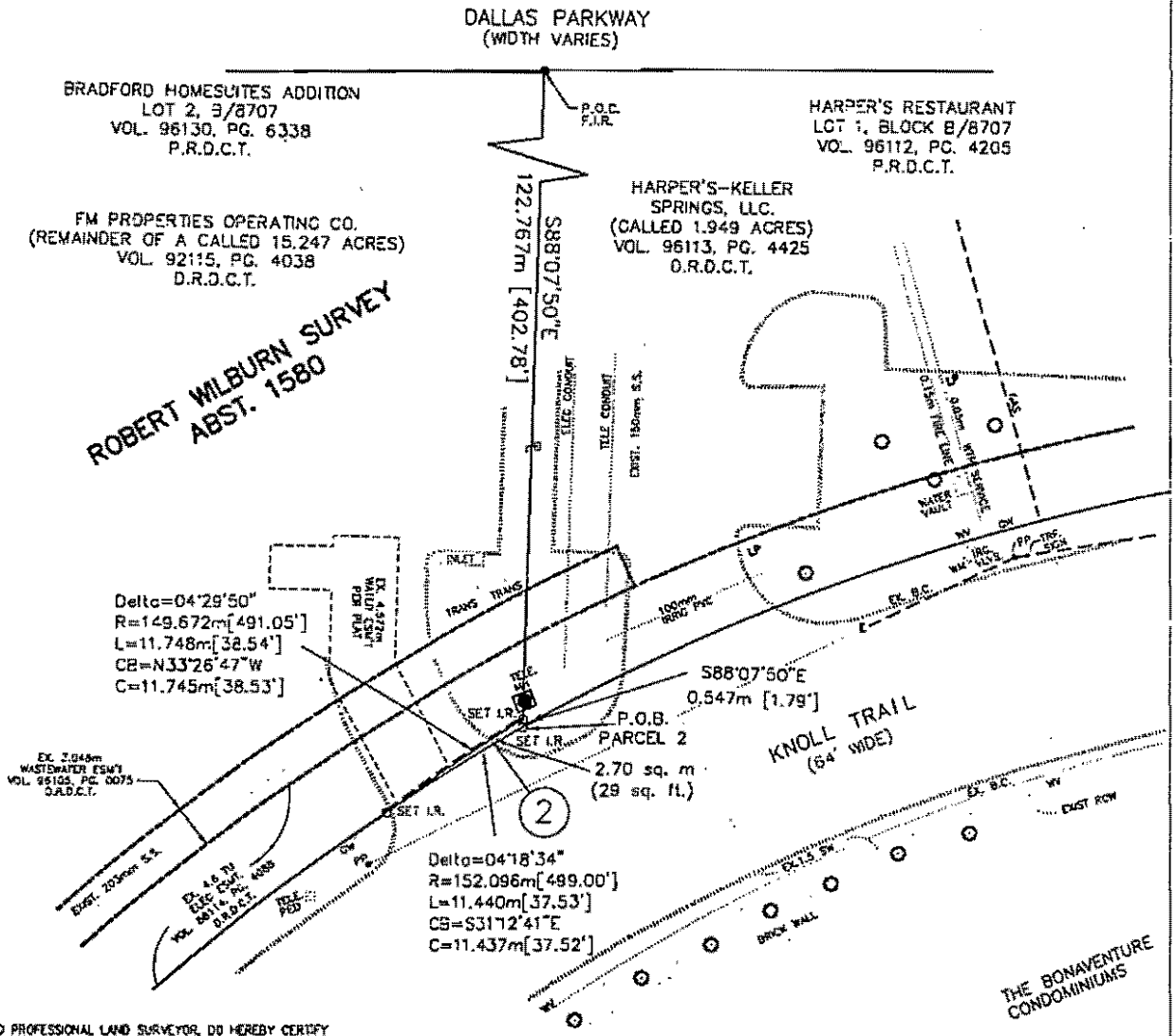
Job No 31742
FN 88 JAY

EXHIBIT "B"

1cm=5m

LEGEND
- IRON ROD FOUND
- IRON ROD SET
- EXIST. R.O.W. LINE
- NEW R.O.W. LINE
- PROPERTY LINE
- PARCEL NUMBER

NOTES:
1. ALL DIMENSIONS SHOWN ARE METERS UNLESS OTHERWISE NOTED.
2. ENGLISH UNITS ARE PROVIDED FOR INFORMATION ONLY AND ARE SHOWN IN BRACKETS
3. A LEGAL DESCRIPTION OF EVEN DATE HEREWITH ACCOMPANIES THIS SURVEY PLAT.
4. BASIS OF BEARING IS THE SOUTH LINE OF THE CALIFORNIA STATE TEACHERS RETIREMENT SYSTEM TRACT AS RECORDED IN VOLUME 95099, PAGE 1320 OF THE DEED RECORDS OF DALLAS COUNTY, TEXAS.
5. D.R.D.C.T. INDICATES DEED RECORDS OF DALLAS COUNTY, TEXAS
6. P.R.D.C.T. INDICATES PLAT RECORDS OF DALLAS COUNTY, TEXAS



I, DAVID P. CARR, A REGISTERED PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY THAT THE FOREGOING PLAT REPRESENTS A SURVEY DONE ON THE GROUND UNDER MY SUPERVISION IN OCTOBER, 1999, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DAVID PAUL CARR
RPLS NO. 3997

DATE

EARTH TECH
811 BARTON SPRINGS RD., STE. 400
AUSTIN, TEXAS 78704-1164
(512) 474-5500

DRN	A.Y./J.C.	1-20-00
APP	D.C.	1-20-00
FILENAME: FN88 (PARCEL 2)		
FIELD NOTE	FIELD BOOK	
88	XX	
DRAWING NO: XX		

A PLAT OF A SURVEY OF A 2.70 sq. m (29 sq. ft.) TRACT OF LAND IN THE ROBERT WILBURN SURVEY ABSTRACT NUMBER 1580 DALLAS COUNTY, TX.

Keller Springs
Parcel 2

FROM		ANGLE				DIST	NORTH	EAST	TO
	PT/PT INVERSE								
*****	START						9881.49418	10190.99229	201
	RADIAL	S	60	56	36 W				
	DELTA		4	18	34 LT				
	RADIUS				152.096				
	TAN				5.723				
	L-ARC				11.440				
	RADIAL	S	56	38	02 W				
	RP						9955.36338	10323.94542	202
201	CHORD	S	31	12	41 E	11.437	9871.71229	10196.91909	203
	TAN@PT	S	33	21	58 E				
	RADIAL	S	54	18	18 W				
	DELTA		4	29	50 RT				
	RADIUS				149.672				
	TAN				5.877				
	L-ARC				11.748				
	RADIAL	S	58	48	08 W				
	RP						9959.04152	10318.47299	204
203	CHORD	N	33	26	47 W	11.745	9881.51201	10190.44597	205
	TAN@PT	N	31	11	52 W				
205	INV	S	88	07	50 E	0.547	9881.49418	10190.99229	201
							9881.49418	10190.99229	201

NO CLOSURE ERROR Area = 2.702 sq m 0.00027 ha

EXHIBIT "A"

County Dallas
Parcel 3
Highway Intersection of Keller Springs Road at Knoll Trail

CSJ: 0918-45- January 20, 2000

Legal Land Description for Parcel 3

Being 151.94 square meters [1635 square feet] of land, more or less, out of that certain 0.363 hectare [0.898 acre] of land, more or less, situated in the A.J. Clark Survey, Abstract No. 360, Dallas County, Texas, and being a part of the land conveyed to Maayeh/El Tahhan Joint Venture by deed recorded in Volume 95212, Page 3222, Deed Record of Dallas County Texas, said 151.94 square meters (1635 square feet) of land being more particularly described by metes and bounds as follows:

COMMENCING at a iron rod found at the southwest corner of a called 2.167 hectares (5.354 acres) of land conveyed by deed to the California State Teachers Retirement System as recorded in Volume 95099, Page 1320 of the Deed Records of Dallas County, Texas;

THENCE with the south line of said 2.167 hectare (5.354 acre) tract and the north line of said 0.363 hectare (0.898 acre) tract, **S 87°40'29" E,** a distance of **102.869** m (**337.50** feet) to a **X** mark on concrete found, on the existing west right-of-way line of Knoll Trail (64 feet wide), being the southeast corner of the said 2.167 hectares [5.354 acres] of land, and being the northeast corner of the said 0.363 hectare (0.898 acre) of land, same being the **POINT OF BEGINNING**;

1. **THENCE** with the said existing west right-of-way line of Knoll Trail, **S 02°10'01" W,** a distance of **1.294** m **[4.25** feet], to a "X" mark on concrete found, on the point of curvature of a curve to the right,

2. **THENCE** continuing with the said existing west right-of-way line of Knoll Trail, and the arc of the said curve to the right, passing through a central angle of, **11°24'16"** to a 5/8" inch iron rod with cap set at the point of reverse curvature of a curve to the left, said curve having a radius of **170.688m [560.00** feet], a arc length of **33.975** m **[111.46** feet], and a chord of **S 07°52'09" W, 33.919** m **[111.28** feet],

3. **THENCE** continuing with the said existing west right-of-way line of Knoll Trail, and the arc of the said curve to the left, passing through a central angle of, **10°22'40"** to a 5/8"inch iron rod with cap set on the existing north right-of-way line of Keller Springs Road (width varies), said curve having a radius of **188.976m** [**620.00** feet], a arc length of **34.228** m [**112.29** feet], and a chord of **S 08°22'58" W, 34.181** m [**112.14** feet],

4. **THENCE** with the said existing north right-of-way line of Keller Springs Road, **N 88°10'29" W,** a distance of **1.998** m [**6.56** feet], to a 5/8 inch iron rod with cap set,

5. **THENCE** continuing with the existing north right-of-way line of Keller Springs Road, **N 87°07'36" W,** a distance of **4.799** m [**15.74** feet], to a 5/8" inch iron rod with cap set at the most westerly cut back corner at the intersection with the new westerly right-of-way line of said Knoll Trail,

6. **THENCE** leaving the said existing north right-of-way line of Keller Springs Road, and with said new westerly right-of-way line of Knoll Trail, crossing said 0.363 hectare [0.898 acre] of land, **N 45°00'00" E,** a distance of **7.308** m [**23.98** feet], to a 5/8" inch iron rod with cap set at the point of curvature of a curve to the right,

7. **THENCE** continuing with said new westerly right-of-way line and the arc of the said curve to the right, passing through a central angle of, **08°45'55"** to an "X" set in concrete, at the point of reverse curvature of a curve to the left, said curve having a radius of **190.976m** [**626.56** feet], a arc length of **29.216** m [**95.85** feet], and a chord of **N 09°11'20" E, 29.188** m [**95.76** feet],

8. **THENCE** continuing with said new westerly right-of-way line and the arc of said curve to the left, passing through a central angle of, **11°24'17"** to an "X" set in concrete, said curve having a radius of **168.688m** [**553.44** feet], a arc length of **33.577** m [**110.16** feet], and a chord of **N 07°52'09" E, 33.522** m [**109.98** feet],

9. **THENCE N 02°10'01" E,** a distance of **1.300** m [**4.27** feet], continuing with said new westerly right-of-way line to a ½ inch iron rod set on the north line of the said 0.363 hectare [0.898 acre] of land,

EXHIBIT "A"

10. **THENCE** with the said north line of the 0.363 hectares [0.898 acres] of land, **S 87°40'29" E,** a distance of **2.000** m [**6.56** feet] to the **POINT OF BEGINNING**, and containing 151.94 square meters [1635 square feet] of land, more or less.

BASIS OF BEARINGS IS THE SOUTH LINE OF THE CALIFORNIA STATE TEACHERS RETIREMENT SYSTEM TRACT AS RECORDED IN VOLUME 95099, PAGE 1320 OF THE DEED RECORDS OF DALLAS COUNTY, TEXAS.

A SURVEY PLAT OF EVEN DATE HEREWITH ACCOMPANIES THIS LEGAL DESCRIPTION.

THE STATE OF TEXAS §

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF TRAVIS §

That I, David P. Carr, a Registered Professional Land Surveyor, do hereby certify that the above description is true and correct to the best of my knowledge and belief and that the property described herein was determined by a survey made on the ground during October, 1999 under my direction and supervision.

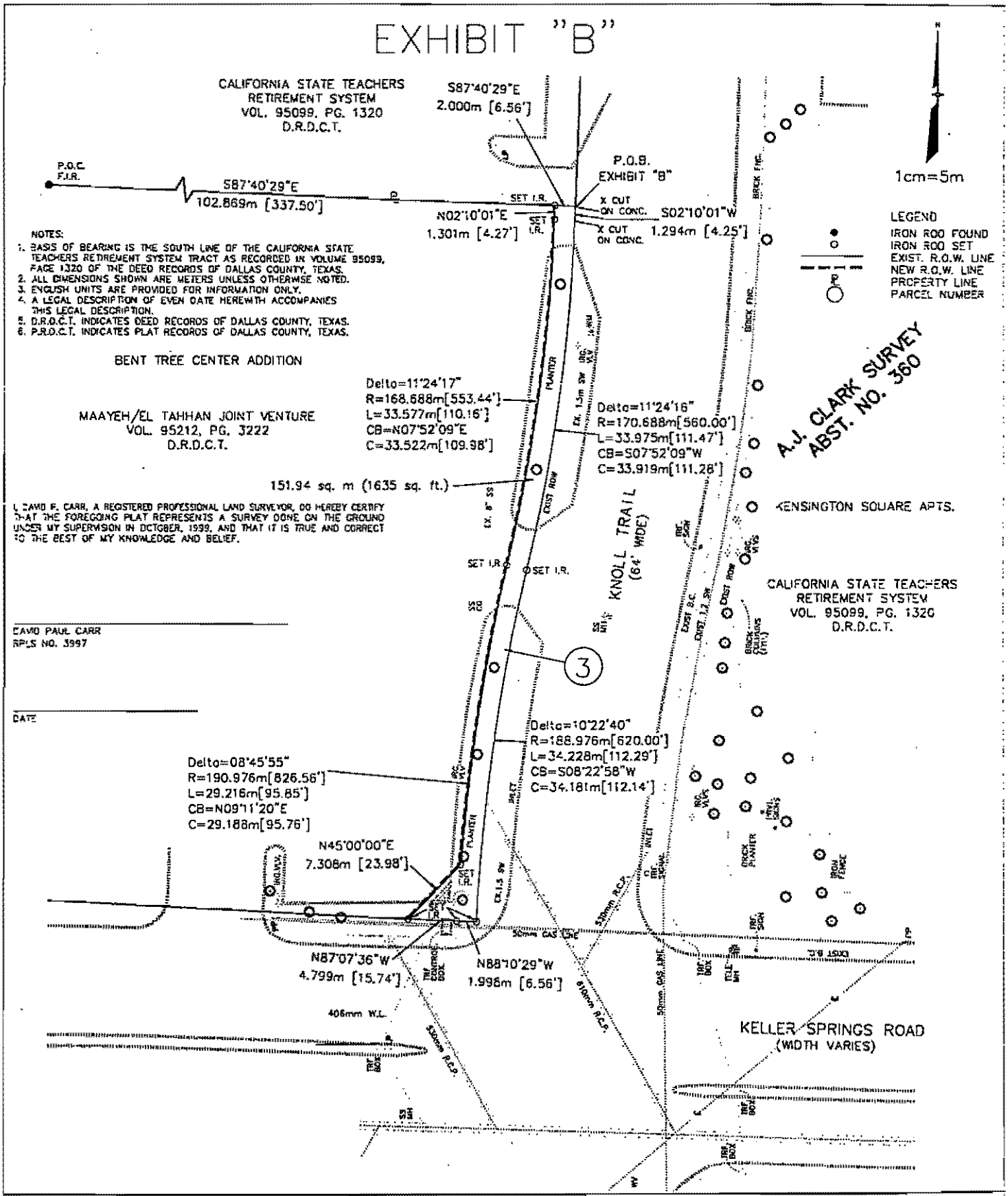
WITNESS MY HAND AND SEAL at Austin, Travis County, Texas this the 20th day of January, 2000, A.D.

Earth Tech
811 Barton Springs Road
Suite 400
Austin, Texas 78704

David P. Carr
Registered Professional Land Surveyor
No. 3997 - State of Texas

Job No 31742
FN 89 JAY

EXHIBIT "B"



EARTH TECH

811 BARTON SPRINGS RD., STE. 400
AUSTIN, TEXAS 78704-1164
(512) 474-5500

DRN	A.Y./J.C. 1-20-00
APP	D.C. 1-20-00
FILENAME:	FN89 (PARCEL 3)
FIELD NOTE	FIELD BOOK
89	XX
DRAWING NO.: XX	

A PLAT OF A SURVEY OF A
151.94 sq. m (1635 sq. ft.)
TRACT OF LAND IN THE
A.J. CLARK SURVEY
ABSTRACT NUMBER 360
DALLAS COUNTY, TX.

Keller Springs Road
Parcel 3

FROM			ANGLE				DIST	NORTH	EAST	TO
	PT/PT INVERSE									
*****	START							10049.23007	10182.47296	301
301	INV	S	2	10	01	W	1.294	10047.93658	10182.42402	302
	RADIAL	S	87	49	59	E				
	DELTA		11	24	16	RT				
	RADIUS				170.688					
	TAN				17.044					
	L-ARC				33.975					
	RADIAL	S	76	25	43	E				
	RP							10054.39012	10011.85807	303
302	CHORD	S	7	52	09	W	33.919	10014.33739	10177.78025	304
	TAN@PT	S	13	34	17	W				
	RADIAL	N	76	25	42	W				
	DELTA		10	22	40	LT				
	RADIUS				188.976					
	TAN				17.161					
	L-ARC				34.228					
	RADIAL	N	86	48	22	W				
	RP							9969.99208	10361.47952	305
304	CHORD	S	8	22	58	W	34.181	9980.52125	10172.79708	306
	TAN@PT	S	3	11	38	W				
306	INV	N	88	10	29	W	1.998	9980.58489	10170.80012	307
307	INV	N	87	07	36	W	4.799	9980.82543	10166.00753	308
308	INV	N	45	00	00	E	7.308	9985.99292	10171.17502	309
	RADIAL	N	85	11	38	W				
	DELTA		8	45	55	RT				
	RADIUS				190.976					
	TAN				14.637					
	L-ARC				29.216					
	RADIAL	N	76	25	43	W				
	RP							9969.99208	10361.47952	310
309	CHORD	N	9	11	20	E	29.188	10014.80613	10175.83596	311
	TAN@PT	N	13	34	17	E				
	RADIAL	S	76	25	43	E				
	DELTA		11	24	17	LT				
	RADIUS				168.688					
	TAN				16.844					
	L-ARC				33.577					
	RADIAL	S	87	49	59	E				
	RP							10054.39012	10011.85807	312
311	CHORD	N	7	52	09	E	33.522	10048.01220	10180.42545	313
	TAN@PT	N	2	10	01	E				
313	INV	N	2	10	01	E	1.300	10049.31122	10180.47460	314
314	INV	S	87	40	29	E	2.000	10049.23007	10182.47296	301
								10049.23007	10182.47296	301

NO CLOSURE ERROR Area = 151.940 sq m 0.01519 ha

EXHIBIT "A"

County Dallas
Parcel 4
Highway Intersection of Keller Springs Road at Knoll Trail

CSJ: 0918-45- January 20, 2000

Legal Land Description for Parcel 4

Being 20.14 square meters [217 square feet] of land, more or less, out of that certain 2.167 hectares [5.354 acres] of land, more or less, situated in the A.J. Clark Survey, Abstract No. 360, Dallas County, Texas, and being a part of the land conveyed from JDM Knoll Trail, Ltd. to California State Teachers Retirement System by deed dated May 16, 1995 and recorded in Volume 95099, Page 1320 of the Deed Records of Dallas County Texas, said 20.14 square meters [217 square feet] of land being more particularly described by metes and bounds as follows:

COMMENCING at a iron rod found at the southwest corner of the California State Teachers Retirement System tract of land as recorded in Volume 95099, Page 1320 of the Deed Records of Dallas County, Texas, being in the north line of a tract of land conveyed to Maayeh/El Tahhan Joint Venture by deed recorded in Volume 95212, Page 3222 of the Deed Records of Dallas County, Texas;

THENCE with the south line of said 2.167 hectare [5.354 acre] tract and the north line of said Maayeh/El Tahhan Joint Venture tract, **S 89°40'29" E,** a distance of **102.869** m (**337.50** feet) to a **X** mark on concrete found on the existing west right-of-way line of Knoll Trail, being the southeast corner of the said 2.167 hectare [5.354 acre] tract and the northeast corner of said Maayeh/El Tahhan Joint Venture tract, same being the **POINT OF BEGINNING**;

1. **THENCE** with the south line of the said 2.167 hectare [5.354 acre] tract and the north line of said Maayeh/El Tahhan Joint Venture tract, **N 89°40'29" W,** a distance of **2.000** m **[6.56** feet] to a 5/8" inch iron rod with cap set on the new west right-of-way line of said Knoll Trail;

2. **THENCE** leaving the south line of said 2.167 hectare [5.354 acre] tract and with said new west right-of-way line, **N 07°50'21" E,** a distance of **20.235** m **[66.39** feet] to a 5/8" inch iron rod with cap set on the existing west right-of-way line of said Knoll Trail;

3. **THENCE** with the existing west right-of-way line of said Knoll Trail, **S 02°10'01" W,** a distance of **20.142** m **[66.08** feet] to the **POINT OF BEGINNING**, and containing 20.14 square meters [217 square feet] of land, more or less.

EXHIBIT "A"

County Dallas
Parcel 4
Highway Intersection of Keller Springs Road at Knoll Trail

BASIS OF BEARINGS IS THE SOUTH LINE OF THE CALIFORNIA STATE TEACHERS RETIREMENT SYSTEM TRACT AS DESCRIBED IN VOLUME 95099, PAGE 1320 OF THE DEED RECORDS OF DALLAS COUNTY, TEXAS.

A SURVEY PLAT OF EVEN DATE HEREWITH ACCOMPANIES THIS LEGAL DESCRIPTION.

THE STATE OF TEXAS §

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF TRAVIS §

That I, David P. Carr, a Registered Professional Land Surveyor, do hereby certify that the above description is true and correct to the best of my knowledge and belief and that the property described herein was determined by a survey made on the ground during October,1999 under my direction and supervision.

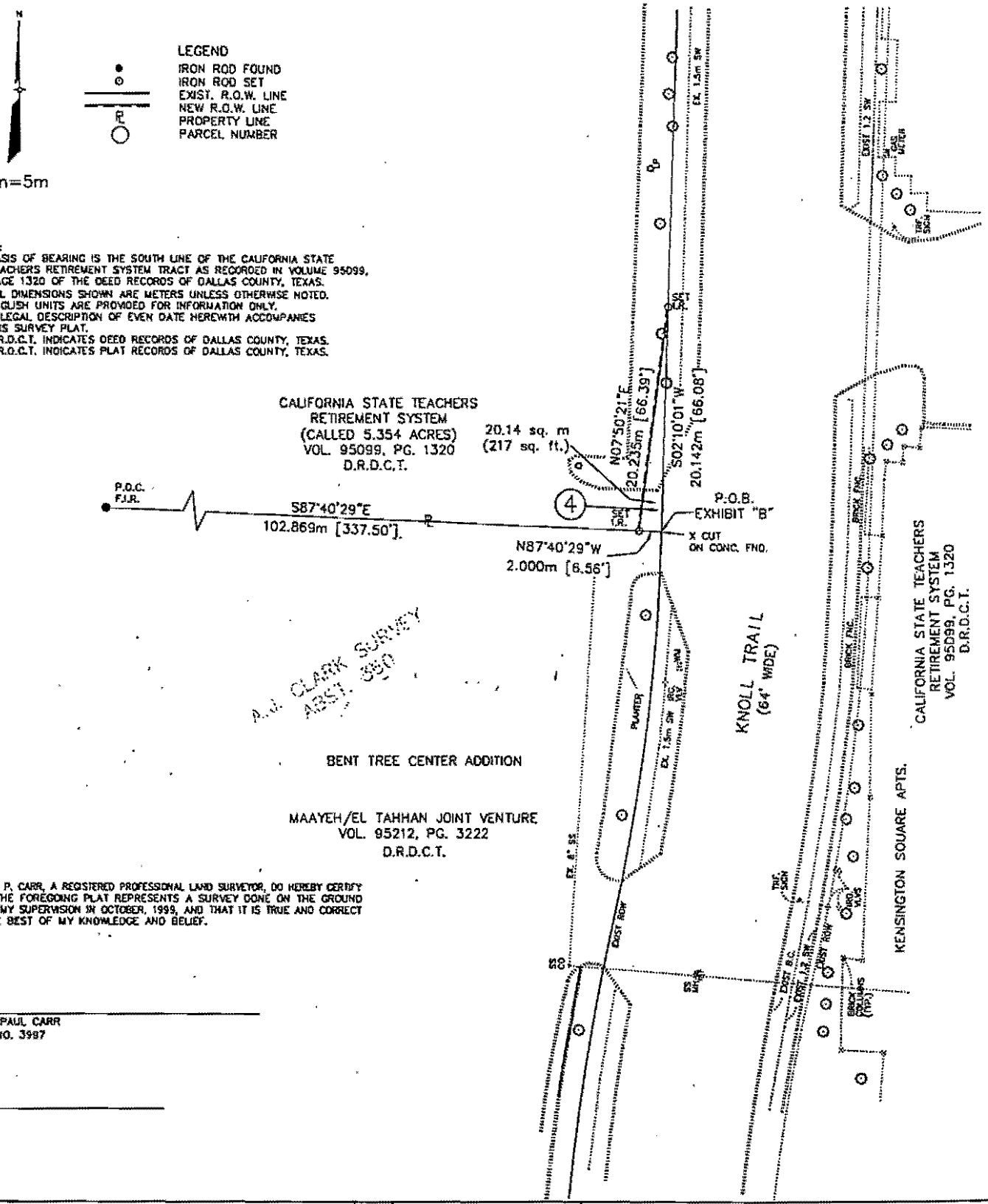
WITNESS MY HAND AND SEAL at Austin, Travis County, Texas this the 20th day of January, 2000, A.D.

Earth Tech
811 Barton Springs Road
Suite 400
Austin, Texas 78704

David P. Carr
Registered Professional Land Surveyor
No. 3997 - State of Texas

Job No 31742
FN 90 JAY

EXHIBIT "B"



NOTE:
1. BASIS OF BEARING IS THE SOUTH LINE OF THE CALIFORNIA STATE TEACHERS RETIREMENT SYSTEM TRACT AS RECORDED IN VOLUME 95099, PAGE 1320 OF THE DEED RECORDS OF DALLAS COUNTY, TEXAS.
2. ALL DIMENSIONS SHOWN ARE METERS UNLESS OTHERWISE NOTED.
3. ENGLISH UNITS ARE PROVIDED FOR INFORMATION ONLY.
4. A LEGAL DESCRIPTION OF EVEN DATE HEREWITH ACCOMPANIES THIS SURVEY PLAT.
5. D.R.D.C.T. INDICATES DEED RECORDS OF DALLAS COUNTY, TEXAS.
6. P.R.D.C.T. INDICATES PLAT RECORDS OF DALLAS COUNTY, TEXAS.

I, DAVID P. CARR, A REGISTERED PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY THAT THE FOREGOING PLAT REPRESENTS A SURVEY DONE ON THE GROUND UNDER MY SUPERVISION IN OCTOBER, 1999, AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DAVID PAUL CARR
RPLS NO. 3987

DATE

EARTH TECH
811 BARTON SPRINGS RD., STE. 400
AUSTIN, TEXAS 78704-1164
(512) 474-5500

DRN	A.Y./J.C.	1-20-00
APP	D.C.	1-20-00
FILENAME: Fn90 (PARCEL 4)		
FIELD NOTE	FIELD BOOK	
90	XX	
DRAWING NO.: XX		

A PLAT OF A SURVEY OF A 20.14 sq. m. (217 sq. ft.) TRACT OF LAND IN THE A.J. CLARK SURVEY ABSTRACT NUMBER 360 DALLAS COUNTY, TX.

Keller Springs Road
Parcel 4

FROM		ANGLE			DIST	NORTH	EAST	TO
PT/PT INVERSE								
***** START						10049.23007	10182.47296	401
401	INV	N	87 40 29	W	2.000	10049.31122	10180.47460	402
402	INV	N	7 50 21	E	20.235	10069.35755	10183.23455	403
403	INV	S	2 10 01	W	20.142	10049.23007	10182.47296	401
						10049.23007	10182.47296	401

NO CLOSURE ERROR Area = 20.142 sq m 0.00201 ha

7/6

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		SHEET NO.
GRAPHICS	6	CNAQ		1
CHECKED	STATE	STATE DIST.	COUNTY	
CHECKED	TEXAS	DAL	DALLAS	
	CONT.	SECT.	JOB	HIGHWAY NO.
	0918	45		

STATE OF TEXAS
DEPARTMENT OF TRANSPORTATION

PLANS OF PROPOSED
RIGHT OF WAY PROJECT

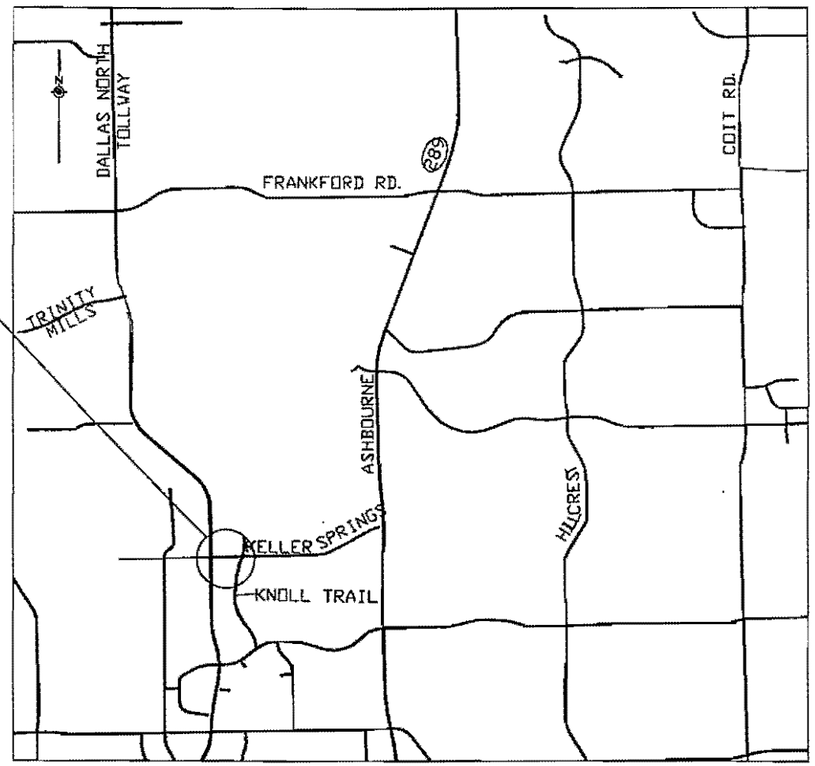
NET LENGTH OF PROJECT= 130.041 METERS [426.64 FT]= 0.130 KILOMETERS [0.080 MILES]

PROJECT NO. ACCOUNT NO. CSJ NO. 0918-45-

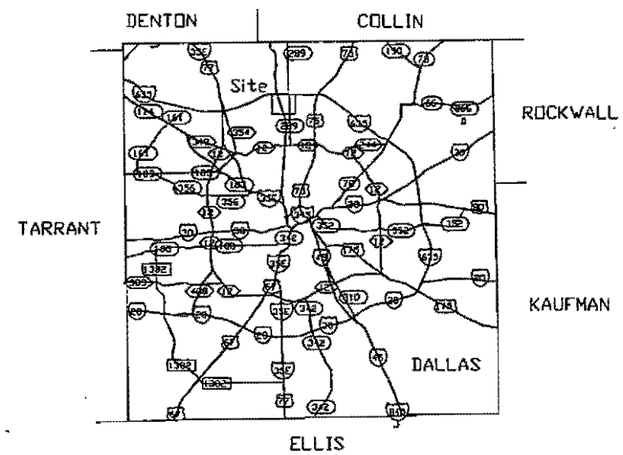
KELLER SPRINGS RD. AT DALLAS PARKWAY/
KELLER SPRINGS RD. AT KNOLL TRIAL

LEGEND
- IRON ROD FOUND
- IRON ROD SET
- EXIST. R.O.W. LINE
- NEW R.O.W. LINE
- PROPERTY LINE
- PARCEL NUMBER

NOTE: NO EQUATIONS



KELLER SPRINGS ROAD/
KNOLL TRAIL AT
DALLAS NORTH TOLLWAY
BEG. STA 10+005.94
END STA 10+140.00
CSJ: 0918-45-



NO EXCEPTIONS
NO EQUATIONS

NO SCALE

PLANS SUBMITTED BY:

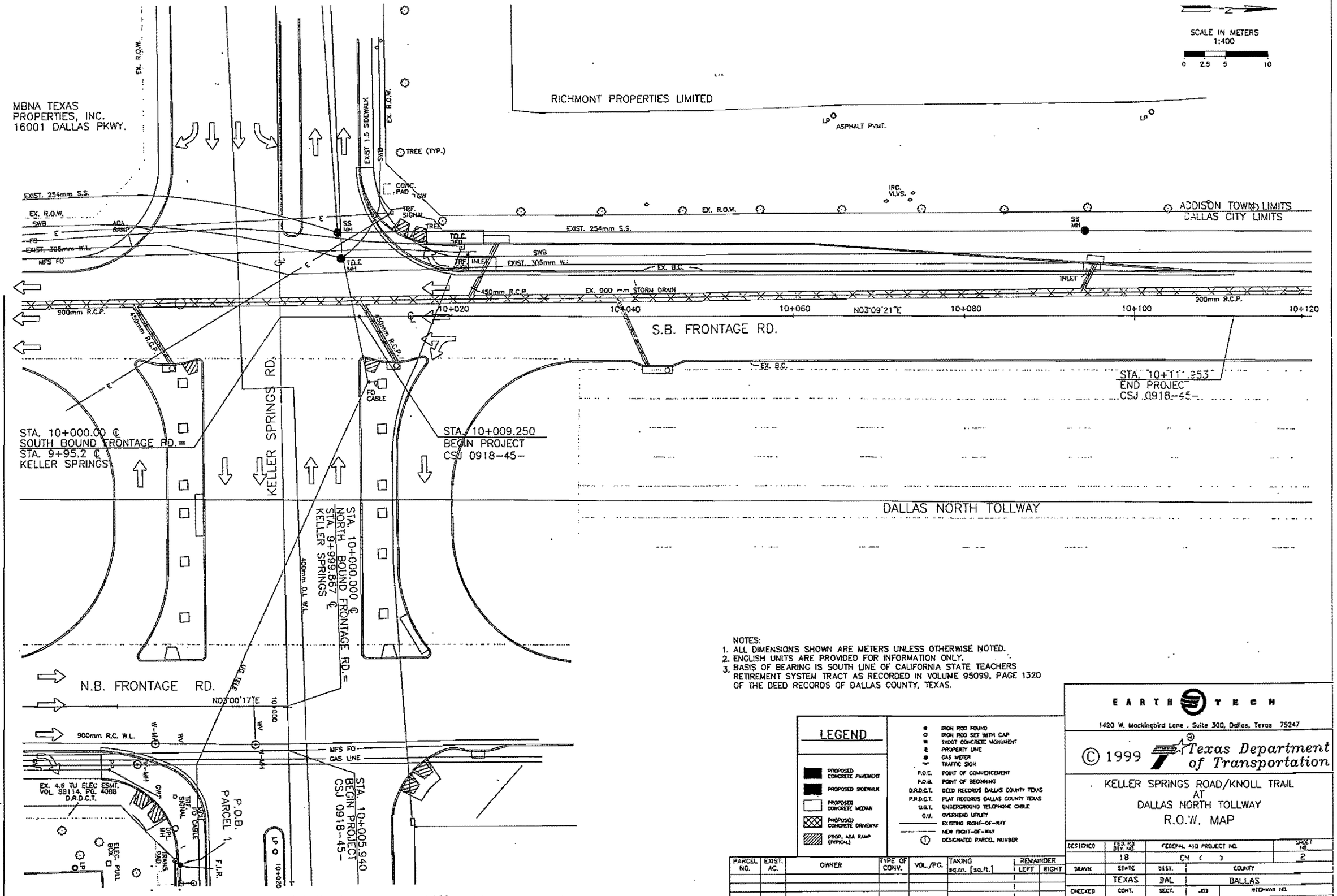
EARTH TECH
1420 MOCKINGBIRD LANE SUITE 300
DALLAS, TEXAS 75247
214-630-8857

RECOMMENDED FOR ACQUISITION OF RIGHT OF WAY _____ 19 __

APPROVED FOR ACQUISITION OF RIGHT OF WAY _____ 19 __

FINAL APPROVAL FOR ACQUISITION OF RIGHT OF WAY _____ 19 __

DISTRICT ENGINEER



NOTES:
1. ALL DIMENSIONS SHOWN ARE METERS UNLESS OTHERWISE NOTED.
2. ENGLISH UNITS ARE PROVIDED FOR INFORMATION ONLY.
3. BASIS OF BEARING IS SOUTH LINE OF CALIFORNIA STATE TEACHERS RETIREMENT SYSTEM TRACT AS RECORDED IN VOLUME 95099, PAGE 1320 OF THE DEED RECORDS OF DALLAS COUNTY, TEXAS.

LEGEND

- PROPOSED CONCRETE PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED CONCRETE MEDIAN
- PROPOSED CONCRETE DRIVEWAY
- PROP. ADA RAMP (TYPICAL)

- IRON ROD FOUND
- IRON ROD SET WITH CAP
- TXDOT CONCRETE MONUMENT
- PROPERTY LINE
- GAS METER
- TRAFFIC SIGN
- P.O.C. POINT OF COMMENCEMENT
- P.O.B. POINT OF BEGINNING
- D.R.D.C.T. DEED RECORDS DALLAS COUNTY TEXAS
- P.R.D.C.T. PLAT RECORDS DALLAS COUNTY TEXAS
- U.G.T. UNDERGROUND TELEPHONE CABLE
- O.U. OVERHEAD UTILITY
- EXISTING RIGHT-OF-WAY
- NEW RIGHT-OF-WAY
- ① DESIGNATED PARCEL NUMBER

PARCEL NO.	EXIST. AC.	OWNER	TYPE OF CONV.	VOL./PG.	TAKING sq.m. [sq.ft.]	REMAINDER LEFT	REMAINDER RIGHT

PROJECT NO. ACCOUNT NO. CSJ NO. 0918-45-

EARTH TECH
1420 W. Mockingbird Lane, Suite 300, Dallas, Texas 75247

KELLER SPRINGS ROAD/KNOLL TRAIL
AT
DALLAS NORTH TOLLWAY
R.O.W. MAP

DESIGNED	FED. RD DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
	18	CM ( )	2
DRAWN	STATE	DIST.	COUNTY
	TEXAS	DAL	DALLAS
CHECKED	CONT.	SECT.	JOB HIGHWAY NO.
	0918	45	KELLER SPRINGS/D. N. T.

NOTES:
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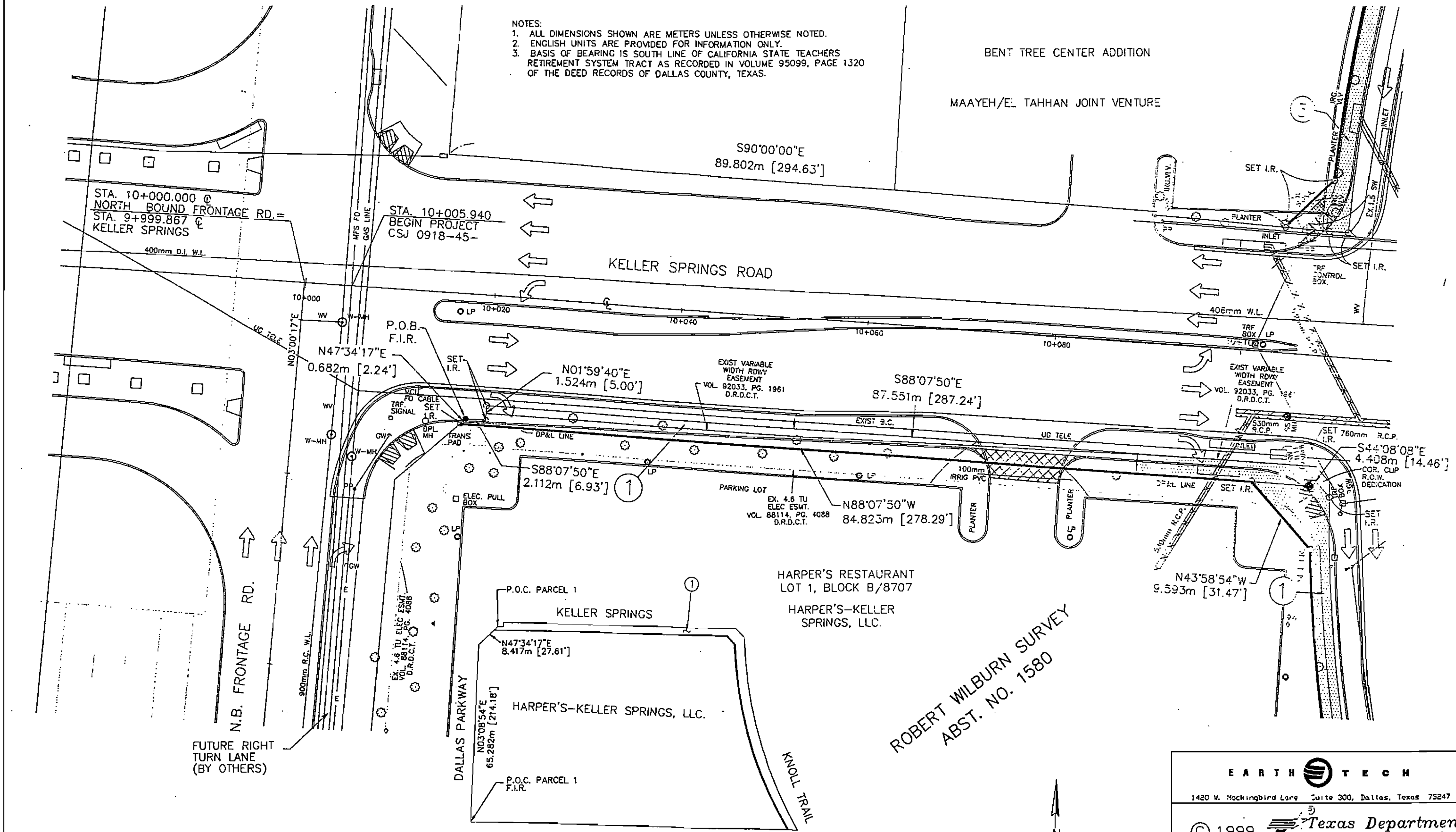
2. ENGLISH UNITS ARE PROVIDED FOR INFORMATION ONLY.
3. BASIS OF BEARING IS SOUTH LINE OF CALIFORNIA STATE TEACHERS RETIREMENT SYSTEM TRACT AS RECORDED IN VOLUME 95099, PAGE 1320 OF THE DEED RECORDS OF DALLAS COUNTY, TEXAS.



LEGEND

Symbol	Description
■	PROPOSED CONCRETE PAVEMENT
■	PROPOSED SIDEWALK
⬚	PROPOSED CONCRETE MEDIAN
⊠	PROPOSED CONCRETE DRIVEWAY
▨	PROP. ADA RAMP (TYPICAL)
●	IRON ROD FOUND
○	IRON ROD SET WITH CAP
■	TXDOT CONCRETE MONUMENT
℄	PROPERTY LINE
●	GAS METER
⊤	TRAFFIC SIGN
P.O.C.	POINT OF COMMENCEMENT
P.O.B.	POINT OF BEGINNING
D.R.D.C.T.	DEED RECORDS DALLAS COUNTY TEXAS
P.R.D.C.T.	PLAT RECORDS DALLAS COUNTY TEXAS
U.G.T.	UNDERGROUND TELEPHONE CABLE
O.U.	OVERHEAD UTILITY
———	EXISTING RIGHT-OF-WAY
- - -	NEW RIGHT-OF-WAY
①	DESIGNATED PARCEL NUMBER

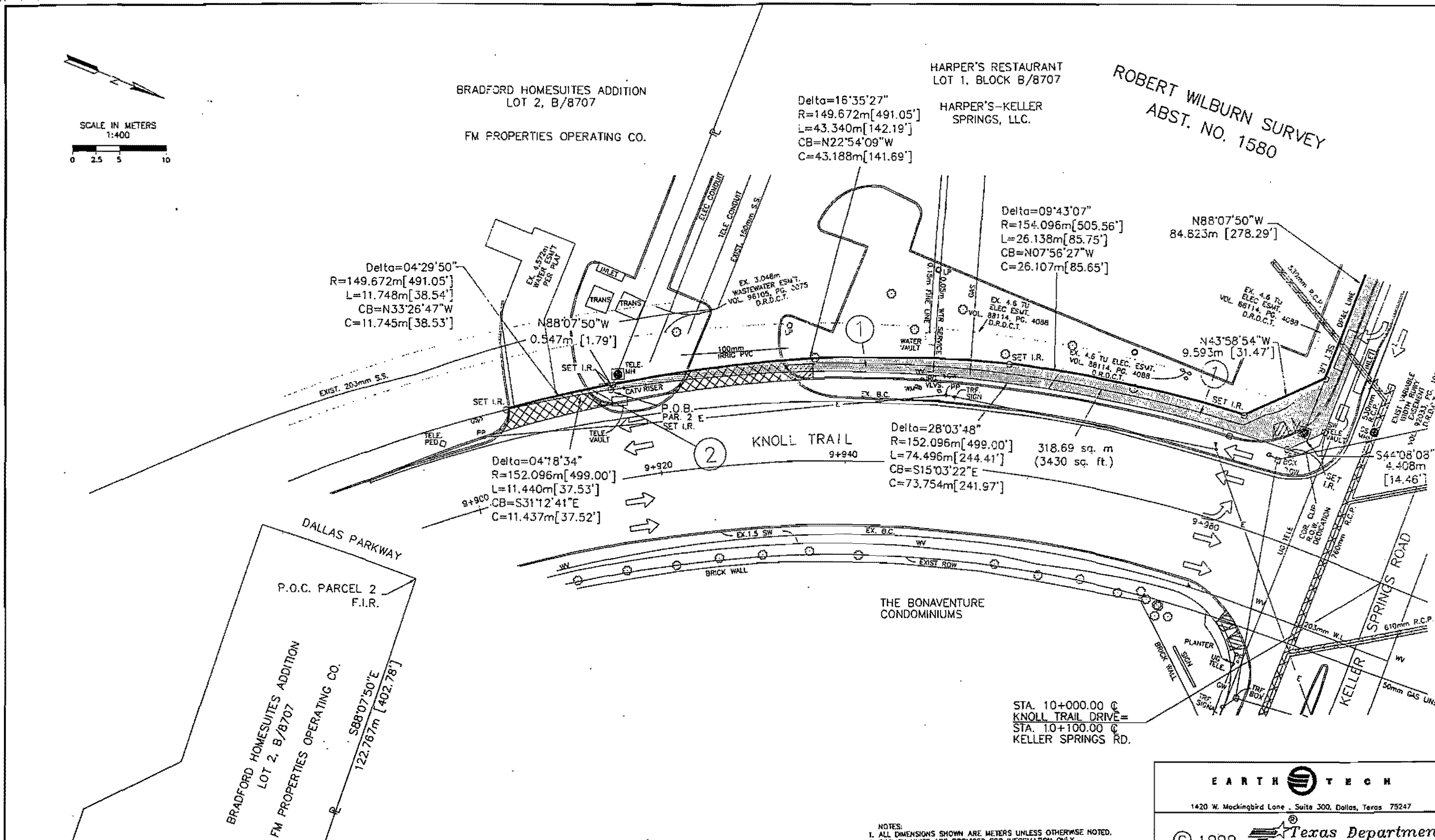
PARCEL NO.	EXIST. AC.	OWNER	TYPE OF CONV.	VOL./PG.	TAKING sq.m. [sq.ft.]	REMAINDER LEFT	REMAINDER RIGHT
1	1.949	HARPER'S-KELLER SPRINGS, LLC.			318.69 [3,430]		1.870

PROJECT NO. ACCOUNT NO. CSJ NO. 0918-45-

EARTH TECH
1420 W. Mockingbird Lane Suite 300, Dallas, Texas 75247

KELLER SPRINGS ROAD/KNOLL TRAIL
AT
DALLAS NORTH TOLLWAY
R.O.W. MAP

DESIGNED	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		SHEET NO.
	18	( )		3
DRAWN	STATE	DIST	COUNTY	
	TEXAS	DAL	DALLAS	
CHECKED	CONT.	SECT. JOB	HIGHWAY NO.	
	0918	45	KELLER SPRINGS/D. N. T	


SCALE IN METERS
1:400
0 2.5 5 10
BRADFORD HOMESUITES ADDITION
LOT 2, B/8707
FM PROPERTIES OPERATING CO.
HARPER'S RESTAURANT
LOT 1, BLOCK B/8707
HARPER'S-KELLER
SPRINGS, LLC.
ROBERT WILBURN SURVEY
ABST. NO. 1580
Delta=16°35'27"
R=149.672m[491.05']
L=43.340m[142.19']
CB=N22°54'09"W
C=43.188m[141.69']
Delta=09°43'07"
R=154.096m[505.56']
L=26.138m[85.75']
CB=N07°56'27"W
C=26.107m[85.65']
N88°07'50"W
84.823m [278.29']
Delta=04°29'50"
R=149.672m[491.05']
L=11.748m[38.54']
CB=N33°26'47"W
C=11.745m[38.53']
N88°07'50"W
0.547m [1.79']
N43°58'54"W
9.593m [31.47']
EXIST. 203mm S.S.
SET I.R.
P.O.B.
PAR. 2
SET I.R.
KNOLL TRAIL
9+920
9+940
9+900
Delta=04°18'34"
R=152.096m[499.00']
L=11.440m[37.53']
CB=S31°12'41"E
C=11.437m[37.52']
Delta=28°03'48"
R=152.096m[499.00']
L=74.496m[244.41']
CB=S15°03'22"E
C=73.754m[241.97']
318.69 sq. m
(3430 sq. ft.)
S44°08'08"E
4.408m
[14.46']
DALLAS PARKWAY
THE BONAVENTURE
CONDOMINIUMS
BRICK WALL
KELLER SPRINGS ROAD
STA. 10+000.00 ℄
KNOLL TRAIL DRIVE=
STA. 10+100.00 ℄
KELLER SPRINGS RD.
P.O.C. PARCEL 2
F.I.R.
BRADFORD HOMESUITES ADDITION
LOT 2, B/8707
FM PROPERTIES OPERATING CO.
S88°07'50"E
122.767m [402.78']
P.O.C. PARCEL 2
SET I.R.
KNOLL TRAIL

LEGEND

- PROPOSED CONCRETE PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED CONCRETE MEDIAN
- PROPOSED CONCRETE DRIVEWAY
- PROP. ADA RAMP (TYPICAL)

- IRON ROD FOUND
- IRON ROD SET WITH CAP
- TXDOT CONCRETE MONUMENT
- ℄ PROPERTY LINE
- GAS METER
- TRAFFIC SIGN
- P.O.C. POINT OF COMMENCEMENT
- P.O.B. POINT OF BEGINNING
- D.R.D.C.T. DEED RECORDS DALLAS COUNTY TEXAS
- P.R.D.C.T. PLAT RECORDS DALLAS COUNTY TEXAS
- U.C.T. UNDERGROUND TELEPHONE CABLE
- O.U. OVERHEAD UTILITY
- EXISTING RIGHT-OF-WAY
- NEW RIGHT-OF-WAY
- ① DESIGNATED PARCEL NUMBER

NOTES:
1. ALL DIMENSIONS SHOWN ARE METERS UNLESS OTHERWISE NOTED.
2. ENGLISH UNITS ARE PROVIDED FOR INFORMATION ONLY.
3. BASIS OF BEARING IS SOUTH LINE OF CALIFORNIA STATE TEACHERS RETIREMENT SYSTEM TRACT AS RECORDED IN VOLUME 95099, PAGE 1320 OF THE DEED RECORDS OF DALLAS COUNTY, TEXAS.

PARCEL NO.	EXIST. AC.	OWNER	TYPE OF CONV.	VOL./PG.	TAKING sq.m. [sq.ft.]	REMAINDER LEFT	REMAINDER RIGHT
2	13.298	F.M. PROPERTIES OPERATING CO.			2.70 [29]		13.297

EARTH TECH
1420 W. Mockingbird Lane, Suite 300, Dallas, Texas 75247

 Texas Department of Transportation

KELLER SPRINGS ROAD/KNOLL TRAIL
AT
DALLAS NORTH TOLLWAY
R.O.W. PLAN

DESIGNED	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.			SHEET NO.
	18	CM ( )			4
DRAWN	STATE	DIST.	COUNTY		
	TEXAS	DAL	DALLAS		
CHECKED	CONT.	SECT.	JOB	HIGHWAY NO.	
	0918	45		KELLER SPRNGS/D. N. T	

PROJECT NO. ACCOUNT NO. CSJ NO. 0918-45-

HARPER'S RESTAURANT
LOT 1, BLOCK B/8707

HARPER'S-KELLER SPRINGS, LLC.

ROBERT WILBURN SURVEY
ABST. NO. 1580

A.J. CLARK SURVEY
ABST. NO. 360

BENT TREE CENTER ADDITION

MAAYEH/EL TAHHAN JOINT VENTURE

N88°07'50"W
84.823m [278.29']

S88°07'50"E
87.551m [287.24']

N87°07'56"W
4.799m [15.74']

Delta=09°43'07"
R=154.096m[505.56']
L=26.138m[85.75']
CB=N07°56'27"W
C=26.107m[85.65']

N43°58'54"W
9.593m [31.47']

N45°00'00"E
7.308m [23.98']

151.94 sq. m
(1635 sq. ft.)

318.39 sq. m
(3430 sq. ft.)

Delta=28°03'48"
R=152.096m[499.00']
L=74.496m[244.41']
CB=S15°03'22"E
C=73.754m[241.97']

S44°08'08"E
4.408m [14.46']

S88°10'29"W
1.998m [6.56']

N02°10'01"E
1.301m [4.27']

Delta=08°45'55"
R=190.976m[626.56']
L=29.216m[95.85']
CB=N09°11'20"E
C=29.188m[95.76']

Delta=11°24'17"
R=168.688m[553.44']
L=33.577m[110.16']
CB=S07°52'09"E
C=33.522m[109.98']

Delta=10°22'40"
R=188.976m[620.00']
L=34.228m[112.29']
CB=S08°22'58"W
C=34.181m[112.14']

Delta=11°34'16"
R=170.688m[560.00']
L=33.975m[111.47']
CB=S07°52'09"W
C=33.919m[111.28']

KNOLL TRAIL

KELLER SPRINGS ROAD

THE BONAVENTURE CONDOMINIUMS

STA. 10+000.00 ℄
KNOLL TRAIL DRIVE=
STA. 10+100.00 ℄
KELLER SPRINGS RD.

KENSINGTON SQUARE APTS.

CALIFORNIA STATE TEACHERS
RETIREMENT SYSTEM

NOTES:
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LEGEND

- PROPOSED CONCRETE PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED CONCRETE MEDIAN
- PROPOSED CONCRETE DRIVEWAY
- PROP. ADA RAMP (TYPICAL)

- IRON ROD FOUND
- IRON ROD SET WITH CAP
- TXDOT CONCRETE MONUMENT
- PROPERTY LINE
- GAS METER
- TRAFFIC SIGN
- P.O.C. POINT OF COMMENCEMENT
- P.O.B. POINT OF BEGINNING
- D.R.D.C.T. DEED RECORDS DALLAS COUNTY TEXAS
- P.R.D.C.T. PLAT RECORDS DALLAS COUNTY TEXAS
- U.G.T. UNDERGROUND TELEPHONE CABLE
- O.U. OVERHEAD UTILITY
- EXISTING RIGHT-OF-WAY
- NEW RIGHT-OF-WAY
- ① DESIGNATED PARCEL NUMBER

SCALE IN METERS
1:400
0 2.5 5 10

PARCEL NO.	EXIST. AC.	OWNER	TYPE OF CONV.	VOL./PG.	TAKING sq.m. [sq.ft.]	REMAINDER LEFT	REMAINDER RIGHT
3	0.898	MAAYEH/EL TAHHAN JOINT VENTURE			151.94 [1635]		1.861

PROJECT NO. ACCOUNT NO. CSJ NO. 0918-45-

EARTH TECH
1420 W. Mockingbird Lane, Suite 300, Dallas, Texas 75247

KELLER SPRINGS ROAD/KNOLL TRAIL
AT
DALLAS NORTH TOLLWAY
R.O.W. PLAN

DESIGNED	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
	18	( )	5
DRAWN	STATE	DIST. COUNTY	
	TEXAS	DAL DALLAS	
CHECKED	CONT.	SECT. JOB	HIGHWAY NO.
	0198	45	KELLER SPRINGS/KNOLL TR

PROJECT NO. ACCOUNT NO. CSJ NO. 0918-45-

scale = 1:400

0 2.5 5 10

BENT TREE CENTER ADDITION
MAAYEH/EL TAHHAN JOINT VENTURE

A.J. CLARK ABST. NO. 360 SURVEY

REMAINDER OF
21602.23 sq. m
(232524.30 sq. ft.)

CALIFORNIA STATE TEACHERS
RETIREMENT SYSTEM

KNOLL TRAIL

KELLER SPRINGS ROAD

Delta=08°45'55"
R=190.976m[626.56']
L=29.216m[95.85']
CB=N09°11'20"E
C=29.188m[95.76']

Delta=11°24'17"
R=168.688m[553.44']
L=33.577m[110.16']
CB=N07°52'09"E
C=33.522m[109.98']

Delta=10°22'40"
R=188.976m[620.00']
L=34.228m[112.29']
CB=S08°22'58"W
C=34.181m[112.14']

Delta=11°24'16"
R=170.688m[560.00']
L=33.974m[111.46']
CB=S07°52'09"W
C=33.919m[111.28']

N87°07'36"W 4.799m [15.74']

N45°00'00"E 7.308m [23.98']

NS88°10'29"W 1.998m [6.56']

N02°10'01"E 1.301m [4.27']

S87°40'29"E 2.000m [6.56']

N07°50'21"E 20.235m [66.39']

S02°10'01"W 1.294m [4.25']

S02°10'01"W 20.142m [66.08']

151.94 sq. m (1635 sq. ft.)

151.94 sq. m. (1635 sq. ft.)

20.14 sq. m (217 sq. ft.)

STA. 10+119.007
END PROJECT
CSJ 0918-45-

P.O.C. PARCEL 3 & 4
F.I.R.

P.O.B. PARCELS 3 & 4
F.I.R.

MAAYEH/EL TAHHAN JOINT VENTURE

CALIFORNIA STATE TEACHERS RETIREMENT SYSTEM

S87°40'29"E 102.869m [337.50']

KENSINGTON SQUARE APTS.

CALIFORNIA STATE TEACHERS RETIREMENT SYSTEM

NOTES:
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LEGEND

- PROPOSED CONCRETE PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED CONCRETE MEDIAN
- PROPOSED CONCRETE DRIVEWAY
- PROP. ADA RAMP (TYPICAL)

- IRON ROD FOUND
- IRON ROD SET WITH CAP
- TXDOT CONCRETE MONUMENT
- PROPERTY LINE
- GAS METER
- TRAFFIC SIGN
- P.O.C. POINT OF COMMENCEMENT
- P.O.B. POINT OF BEGINNING
- D.R.D.C.T. DEED RECORDS DALLAS COUNTY TEXAS
- P.R.D.C.T. PLAT RECORDS DALLAS COUNTY TEXAS
- U.G.T. UNDERGROUND TELEPHONE CABLE
- O.U. OVERHEAD UTILITY
- EXISTING RIGHT-OF-WAY
- NEW RIGHT-OF-WAY
- (1) DESIGNATED PARCEL NUMBER

PARCEL NO.	EXIST. AC.	OWNER	TYPE OF CONV.	VOL./PG.	TAKING sq.m. [sq.ft.]	REMAINDER LEFT	REMAINDER RIGHT
4	4.440	CALIFORNIA STATE TEACHERS RETIREMENT SYSTEM			20.14 [217]		4.4396

EARTH TECH
1420 W. Mockingbird Lane, Suite 300, Dallas, Texas 75247

 Texas Department of Transportation

KELLER SPRINGS ROAD/KNOLL TRAIL
AT
DALLAS NORTH TOLLWAY
R.O.W. PLAN

DESIGNED	FED.RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
	18	CM ( )	6
DRAWN	STATE	DIST.	COUNTY
	TEXAS	DAL	DALLAS
CHECKED	CONT.	SECT.	JOB / HIGHWAY NO.
	0198	45	KELLER SPRNGS/KNOLL TR