1996 North Dallas County Water Supply /
Sewer Tunnel Agreement Addison & Farmers
Branch

copy: Randy M
Ron W

CTE ENGINEERS
CONSOER TOWNSEND ENVIRODYNE ENGINEERS, INC.

10700 Richmond Avenue
Suite 275
Houston, Texas 77042
Phone: (713) 780 7168
Fax: (713) 780 7193

February 4, 1997

North Dallas County Water Supply Corporation
Post Office Box 819010
City of Farmers Branch, Texas 75381-9010

Attention: Mr. Jerry Murawski

Subject: North Dallas County Water Supply Corporation
Phase I - Sanitary Interceptor Sewer
Final Report

Gentlemen:

Submitted herewith is the Final Report for the subject project:

I. PROJECT REVIEW

A. Status

1. Construction

The construction of the project is complete including the one year warranty Post video of the inside of the sewer for its entire length. Substantial completion was September 21, 1996. The Post videos were submitted for final review on December 10, 1996.

2. Post Video Review

A review of the Post video tapes is as follows:

a. The grade and alignment of the sewer is excellent with no offsets or dips.

b. The tee-lock liner is also in excellent condition with every joint in the sewer and manholes sealed. There are absolutely no leaks.

c. The flow varies in depth from ± 1 inch below the 270 degree tee-lock liner to ± 3 inches above the edge of the liner. The flow is smooth and uniform. The video was taken during a dry period with no rain before or during the video taping.

One copy of the 4 video tapes will be sent under separate cover.

3. Restoration
All restoration has been completed.

4. Record Drawings
One copy of sealed Mylars and electronic CAD discs of the record drawings were submitted June 10, 1996.

5. Pictures
Construction pictures have been bound in two books. These books will also be sent under separate cover.

II. FINAL CONSTRUCTION

1.	Original Bid Price =	$ 11,046,890.00
2.	Change Orders Net total of 3 Change Orders is a deduction of =	$ 89,709.72
3.	Final Construction Cost =	$ 10,642,336.01

The contract is a Unit Price Contract. The final cost is the net amount of the Change Order reduction and the payment for actual pay items measured in place on a unit price basis.

4. The Final Construction Cost is **$404,553.99** under the original Bid Price.

III. ODOR CONTROL

A. General
Shortly after the Phase II sewers from Farmers Branch and Addison were connected into the tunnel, odors associated with hydrogen sulfide gas were detected around the tunnel vent pipe vents. Generally these odors are only detected during warm weather. There is minimal to no odor during the late fall and winter months.

B. Corrective Action
In order to determine the cause and potential magnitude of the odors several steps have been taken.

1. Air Quality Analysis:
Armstrong Environmental, Inc. has been contracted by CTE to provide air and gas sampling of the six vents associated with the 60 inch tunnel.

2. Chemical Analysis of Sewage:
ERMI Environmental Laboratories has been contracted by CTE to provide a chemical analysis of the sewage over a 24 hour period at 4 locations, including one each of sewage being discharged by the Addison and Farmers Branch Phase II sewers immediately up stream of the terminal tunnel shaft.

The results of these air and water samples will be available during February 1997. Several odor control systems, which will treat the hydrogen sulfide in the liquid state rather than treating the generation of hydrogen sulfide gas that is released from solution, will be analyzed. A separate report will be prepared after the laboratory tests have been completed, and a recommended system including operating and chemical costs will be submitted.

3. Interim Solution Installed
In order to remove the gaseous odors at the vents Unisorb Corporation has modified the existing vents so that carbon pellets can be placed in the vents, which filter the odor (gas) as it passes through the vent. The carbon pellets have been installed and the odors have been removed. The cost of the pellets are $525 for the four vents where odors were detected. The carbon will probably not be required to be removed during the winter. There is no history of longevity of the pellets in the summer but Unisorb estimates ± 3 month changes in the summer.

IV. SUMMARY AND CONCLUSION

A. Final Payment
Based on Final Payment Request No. 26, it is recommended that the Contractor be paid in full in the amount of $181,919.27.

B. Final Inspection of Interceptor Sewer Tunnel and Open Cut
Final acceptance of the sewer is recommended. There are no visible defects along the entire length of the sewer. There are also no leaks. The line and grade are straight with no offsets. Consoer Townsend Envirodyne appreciates the trust placed in our firm to provide Engineering Design and Construction Services to successfully complete this project. We wish to thank the engineering staffs of both the City of Farmers Branch and the City of Addison and the North Dallas County Water Supply Corporation Board for their excellent cooperation and assistance.

Yours truly,
CONSOER TOWNSEND ENVIRODYNE ENGINEERS, INC.

Wilbur Van Riper
Project Manager

FARMERS BRANCH

REC'D JAN 3 1 1997

January 29, 1997

TO: Charles Cox, Director of Finance

FROM: Jerome Murawski, Jr., City Engineer

SUBJECT: NDCWSC Contract Administration

The attached detail of tasks reflect City of Farmers Branch Engineering staff time for the NDCWSC Interceptor Sewer. The project manager agreement was executed April 15, 1993 and Engineering staff time is for the months of October, November, and December, 1996.

Phase I:	
Project Engineer	8 hours
Engineering Inspector	12 hours
Phase II:	
Project Engineer	7 hours
Engineering Inspector	78 hours

Please invoice the Cities per agreement including any time for financial administration and public relations and administrative services.

JVM:nm
attachments

cc: John Baumgartner, P.E.
Town of Addison

B:\SISTIME.OND\NDCWSC

GARY OSHEL
PROJECT ENGINEER

PHASE I

October 24, 1996 - 2 hours
Review proposal for odor control with Consoer Townsend & Associates

October 28, 1996 - 1 hour
Process purchasing order for odor control

November 7, 1996 - 2 hours
Review agreements for air testing and sampling

November 21, 1996 - 2 hours
Coordinate installation of odor control

December 26, 1996 - 1 hour
Process payment for odor control

8 hours total for Phase I

PHASE II

November 19, 1996 - 2 hours
Look at replacement trees for restoration

December 5, 1996 - 2 hours
Meeting with Providence Towers re: restoration

Nov. 1996 - Dec. 1996 - 3 hours
Various communications with property managers, contractor re: tree replacement

7 hours total for Phase II

Barry Maternowski
Engineering Inspector

Phase I

November 22, 1996 - 8 hours
Installing odor control @ vent stacks

December 23, 1996 - 4 hours
Air sampling conducted

Phase II

October 1, 1996 - 2 hours
Inspection

October 2, 1996 - 2 hours
Inspection

October 3, 1996 - 2 hours
Inspection

October 4, 1996 - 2 hours
Inspection

October 9, 1996 - 1 hour
Inspection

October 10, 1996 - 1 hour
Inspection

October 11, 1996 - 2 hours
Inspection

October 14, 1996 - 1 hour
Inspection

October 15, 1996 - 3 hours
Inspection

October 17, 1996 - 2 hours
Inspection

October 18, 1996 - 2 hours
Inspection

October 21, 1996 - 1 hour
Inspection

October 22, 1996 - 2 hours
Inspection

October 23, 1996 - 2 hours
Inspection

October 24, 1996 - 2 hours
Inspection

October 25, 1996 - 2 hours
Inspection

October 28, 1996 - 2 hours
Inspection

October 29, 1996 - 2 hours
Inspection

November 1, 1996 - 1 hour
Inspection

November 4, 1996 - 1 hour
Inspection

November 5, 1996 - 1 hour
Inspection

November 6, 1996 - 2 hours
Inspection

November 7, 1996 - 3 hours
Inspection

November 11, 1996 - 1 hour
Inspection

November 12, 1996 - 2 hours
Inspection

November 13, 1996 - 2 hours
Inspection

November 14, 1996 - 2 hours
Inspection

November 15, 1996 - 1 hour
Inspection

November 20, 1996 - 2 hours
Inspection

December 2, 1996 - 2 hours
Inspection

December 3, 1996 - 2 hours
Inspection

December 5, 1996 - 2 hours
Inspection

December 6, 1996 - 2 hours
Inspection

December 9, 1996 - 2 hours
Inspection

December 10, 1996 - 2 hours
Inspection

December 11, 1996 - 1 hour
Inspection

December 12, 1996 - 2 hours
Inspection

December 13, 1996 - 2 hours
Inspection

December 16, 1996 - 2 hours
Inspection

December 17, 1996 - 1 hour
Inspection

December 18, 1996 - 1 hour
Inspection

December 19, 1996 - 1 hour
Inspection

December 20, 1996 - 1 hour
Inspection

December 23, 1996 - 1 hour
Inspection

December 24, 1996 - 1 hour
Inspection

December 26, 1996 - 1 hour
Inspection

December 27, 1996 - 1 hour
Inspection

12 hours total for Phase I

78 hours total for Phase II

NORTH DALLAS COUNTY WATER SUPPLY CORPORATION
BALANCE SHEET
ALL FUNDS
DECEMBER 31, 1996

	OPERATING FUND	CAPITAL FUND	TOTAL
ASSETS			
Cash	$0	$83,797	$83,797
Accounts Receivable - Addison		83,782	83,782
Accounts Receivable - Farmers Branch		64,507	64,507
Total Assets	$0	$232,086	$232,086
TOTAL LIABILITIES AND FUND BALANCE			
Accounts Payable	$0	$0	$0
Liability to Quebecor *		2,280	2,280
Retainage Payable		147,973	147,973
	$0	$150,253	$150,253
Fund Balance - Addison	$0	$43,632	$43,632
Fund Balance - Farmers Branch	$0	38,201	38,201
Total Fund Balance	$0	$81,833	$81,833
Total Liabilities and Fund Balance	$0	$232,086	$232,086

* Developer Contribution Outstanding

DEC96FIN.WK1

NORTH DALLAS COUNTY WATER SUPPLY CORPORATION
STATEMENT OF REVENUES AND EXPENDITURES
BUDGET AND ACTUAL
FOR THE MONTH ENDING DECEMBER 31, 1996
OPERATING FUND

	95-96 AMENDED BUDGET	96-97 ADOPTED BUDGET	DECEMBER 1996 ACTUAL	YEAR TO DATE ACTUAL	LIFE TO DATE ACTUAL
REVENUES:					
Charges to participant cities	$16,500	$11,000	$0	$0	$1,128,725
Interest income and miscellaneous	0	0	0	0	664
Transfer from Capital Projects Fund	0	0	0	0	0
TOTAL REVENUES	$16,500	$11,000	$0	$0	$1,129,389
EXPENDITURES:					
Project Administration	$4,700	$1,600	$0	$0	$8,922
Supplies	0	0	0	0	244
Legal	3,000	3,000	0	0	44,961
Insurance	1,000	1,000	0	0	8,737
Audit Fees	3,200	3,500	0	0	3,200
Bank Fees	4,000	1,200	0	0	3,911
Miscellaneous	600	700	0	0	12,709
Total General Overhead	16,500	11,000	0	0	82,684
Transfer to Capital Projects Fund	0	0	0	0	1,046,705
TOTAL EXPENDITURES	$16,500	$11,000	$0	$0	$1,129,389
EXCESS OF REVENUES OVER EXPENDITURES	$0	$0	$0	$0	($0)
BEGINNING FUND BALANCE			$0	$754	$0
ENDING FUND BALANCE	$0	$0	$0	$754	($0)

DEC96FIN.WK1

NORTH DALLAS COUNTY WATER SUPPLY CORPORATION
STATEMENT OF REVENUES AND EXPENDITURES
BUDGET AND ACTUAL
FOR THE MONTH ENDING DECEMBER 31, 1996
CAPITAL PROJECTS FUND

	95-96 AMENDED BUDGET	96-97 ADOPTED BUDGET	DECEMBER 1996 ACTUAL	YEAR TO DATE ACTUAL	PROJECT BUDGET	LIFE TO DATE ACTUAL
REVENUES:						
Charges to participant cities	$4,317,000	$27,000	$5,658	$5,658	$17,096,295	$14,178,531
Interest Income	8,000	3,000	407	1,216	7,000	27,213
Transfer from Operating Fund	0	0	0	0	1,046,705	1,046,705
TOTAL REVENUES	$4,325,000	$30,000	$6,065	$6,874	$18,150,000	$15,252,449
EXPENDITURES:						
Engineering, Design & Inspection	$568,000	$25,000	$5,658	$5,658	$2,500,000	$1,999,471
Construction	3,712,800	0	0	0	15,579,700	13,072,060
Contract Administration	40,500	0	0	0	38,300	68,363
Land/R.O.W. Acquisition	3,700	5,000	0	0	32,000	30,722
Total Development	4,325,000	30,000	5,658	5,658	18,150,000	15,170,616
Transfer to Operating Fund	0	0	0	0	0	0
TOTAL EXPENDITURES	$4,325,000	$30,000	$5,658	$5,658	$18,150,000	$15,170,616
EXCESS OF REVENUES OVER EXPENDITURES	$0	$0	$407	$1,216	$0	$81,833
BEGINNING FUND BALANCE				$117,155		
ENDING FUND BALANCE	$0	$0	$407	$118,371	$0	$81,833

DEC96FIN.WK1

Capital Projects Fund

Description	11-30-96	DR	CR	12-31-96
Cash	110,705.63	22,707.50	49,615.23	83,797.90
Accounts Receivable	0.00			0.00
Due from Farmers Branch	64,507.21			64,507.21
Due from Addison	100,424.40		16,642.73	83,781.67
Due from Other Funds	0.00			0.00
Construction in Progress	0.00			0.00
Accounts Payable	0.00			0.00
Quebecor Liability	(2,280.36)			(2,280.36)
Retainage Payable	(191,929.85)	43,957.23		(147,972.62)
Due to Other Funds	0.00			0.00
Investment in GFA	0.00			0.00
Fund Balance - FB	(37,654.93)			(37,654.93)
Fund Balance - Addison	(42,962.95)			(42,962.95)
Charges to Farmers Branch	0.00		2,444.82	(2,444.82)
Charges to Addison	0.00		3,213.18	(3,213.18)
Interest Income-FB	(364.12)		183.05	(547.17)
Interest Income-Addison	(445.03)		223.72	(668.75)
Eng, Design, Inspect-FB	0.00	2,444.82		2,444.82
Eng, Design, Inspect-Addison	0.00	3,213.18		3,213.18
Construction-FB	0.00			0.00
Construction-Addison	0.00			0.00
Contract Administration - FB	0.00			0.00
Contract Administration - Addison	0.00			0.00
Land/ROW-FB	0.00			0.00
Land/ROW-Addison	0.00			0.00
Operating Transfers In-FB	0.00			0.00
Operating Transfers In-Addison	0.00			0.00
Operating Transfers Out-FB	0.00			0.00
Operating Transfers Out-Addison	0.00			0.00
Total	0.00	72,322.73	72,322.73	0.00

NDCWSC JOURNAL ENTRIES
DECEMBER 31, 1996

OPERATING FUND		
To Record December Cash Disbursements		
Project Admin - Farmers Branch		
Project Admin - Addison		
Legal - Farmers Branch		
Legal - Addison		
Audit - Farmers Branch		
Audit - Addison		
Bank - Farmers Branch		
Bank - Addison		
Misc - Farmers Branch		
Misc - Addison		
Accounts Payable	0.00	
Cash		0.00
To Record December Cash Receipts		
Cash	0.00	
Accounts Receivable - Farmers Branch		0.00
Accounts Receivable - Addison		0.00
TOTAL OPERATING	**0.00**	**0.00**

CAPITAL PROJECTS FUND		
To Record December Cash Disbursements		
Design - Farmers Branch	2,444.82	
Design - Addison	3,213.18	
Construction - Farmers Branch		
Construction - Addison		
Project Mgt - FB		
Project Mgt - Addison		
Land/ROW - Farmers Branch		
Land/ROW - Addison		
Quebecor Liability		
Retainage Payable	43,957.23	
Cash		49,615.23
To Record December Cash Receipts		
Cash	22,707.50	
Interest Income-Farmers Branch		183.05
Interest Income-Addison		223.72
Contributions - Farmers Branch		2,444.82
Contributions - Addison		3,213.18
Accts Receivable - Addison		16,642.73
TOTAL CIP	**72,322.73**	**72,322.73**
TOTAL ALL FUNDS	**72,322.73**	**72,322.73**

BANK RECONCILIATION
DECEMBER 31, 1996

Book Balance November 30, 1996	110,705.65
December	
Receipts	22,707.50
Disbursements	(49,615.23)
Book Balance December 31, 1996	83,797.92
Bank Statement Balance December 31, 1996	89,455.92
Outstanding Deposits	0.00
Outstanding Checks (1171)	(5,658.00)
Book Balance December 31, 1996	83,797.92

REC'D SEP 3 0 1996

cc Ron Whitehead
FYI 10-1-96
QRB

FARMERS BRANCH

September 27, 1996

Mr. Wilbur Van Riper, P.E.
Project Manager
Consoer, Townsend Environdyne Engineers, Inc.
10700 Richmond Avenue, Suite 275
Houston, Texas 77042

Subject: North Dallas County Water Supply Corporation
Sanitary Interceptor Sewer Phase I
Odor Control at Tunnel Air Vents

Dear Mr. Van Riper:

Please proceed with the odor control measures as proposed by Unisorb Corp. (See Attached)

This work is to be accomplished under your contract with the NDCWSC. The corporation will reimburse CTE Engineers upon invoicing after the work is completed.

Sincerely,

Gary M. Oshel, P.E.
Project Manager

GMO/nm
h:\ndcwsc\vanrodor.ltr

Attachment
cc: John Baumgartner, Town of Addison

Unisorb Corp.

RECEIVED
SEP 24 1996
ENGINEERING DEPT.

September 13,1996

Mr. Jerry Murawski, P.E.
North Dallas County Water Supply Corporation
Post Office Box 819010
City of Farmers Branch, Texas 75381-9010

Re: Odor Control At Tunnel Air Vents

Dear Mr. Murawski:

Unisorb propose to build sections to insert in top and bottom of existing exhaust pipe and load pipe with activated impregnated carbon for odor control. The bottom section is a 8" T with flanges as shown on attached drawing. The top cover would allow the air to escape and keep rain water out of carbon media. All parts would be painted dark green in accordance with paint color specifications furnished by city.

Unisorb would offer complete service with fabrication of parts, delivery, and installation. Parts include the following:

1. Tees with flanges, blank & perf	x	4
2. Tops per drawing	x	4
3. section 8' iron pipe with flanges	x	1
4. AGB 248 carbon 90 lbs. each	x	4
5. 16 guage stainless steel insert at base of existing 8" DIP U fitting	x	1

Total price for 4 units installed = $5372

We should be able to be on the job within one week after approval with order.

Unisorb will require City of Farmers Branch equipment and operator assistance in removing and replacing existing 8" vent pipes so that Tees and Cap can be installed. It is estiimated that the time required would be one afternoon and the following morning.

If one replacement change of carbon is requested, the additional cost would be $525 for all four vents. The total cost for the installation plus the replacement change would be $5372 + $525 =$5897. The cost of the carbon pellets are $1.50/pound. There are 35 pounds/box and approximately 10 boxes will be required for replacement for all four vents.

P.O. BOX 388 • SO. HOUSTON, TX 77587 • (713) 943-3753 • FAX: (713) 943-7313

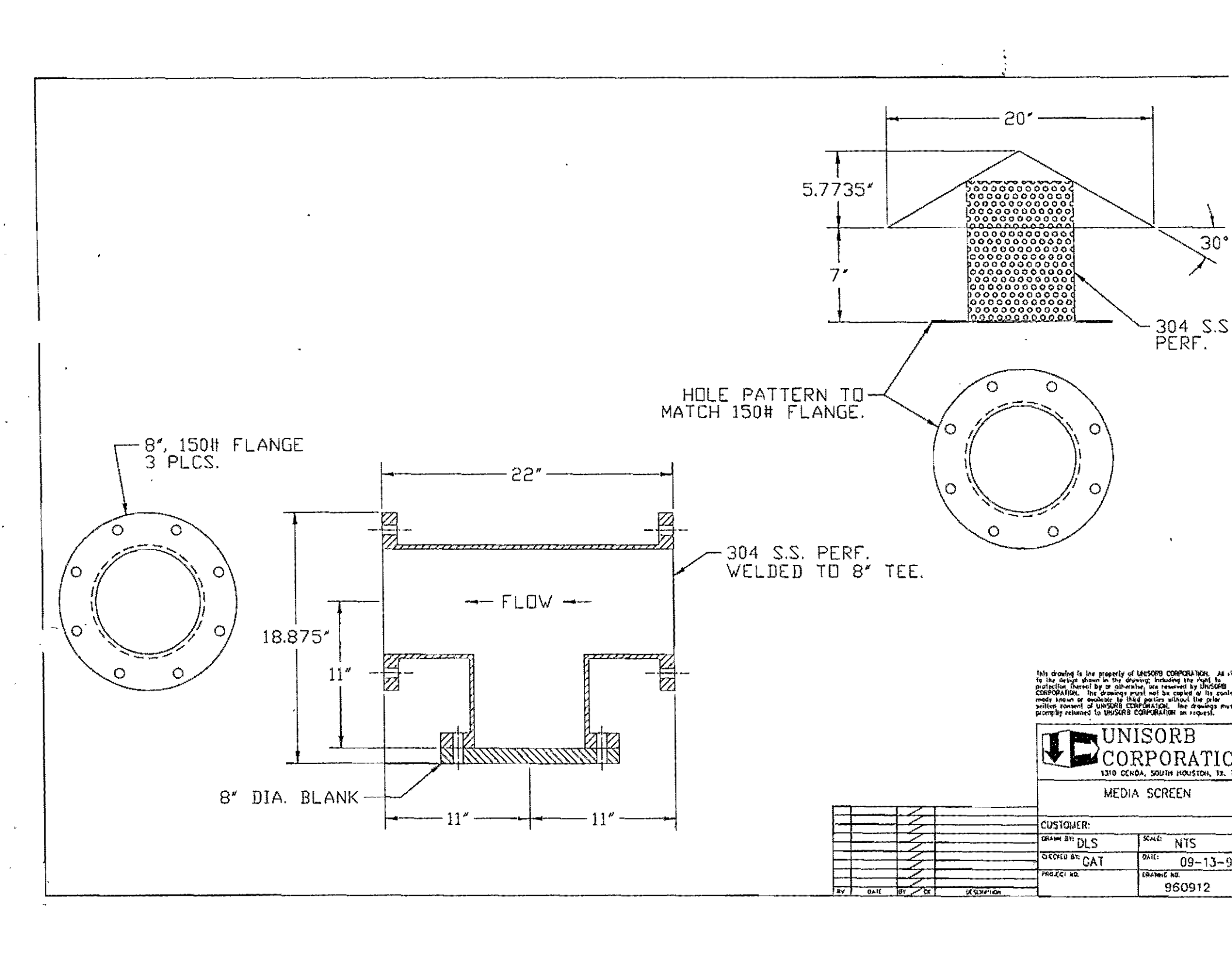
Unisorb Corp.®

Thanks, for considering Unisorb. We look forward to working witn you on this project and any other odor control projects that require our services.

Very truly yours,
Unisorb Corporation

Joel Taylor, Municipal Manager

P.O. BOX 388 • SO. HOUSTON, TX 77587 • (713) 943-3753 • FAX: (713) 943-7313



UNISORB
CORPORATIO
1310 OCNDA, SOUTH HOUSTON, TX.

MEDIA SCREEN

CUSTOMER:	
DRAWN BY: DLS	SCALE: NTS
CHECKED BY: GAT	DATE: 09-13-9
PROJECT NO.	DRAWING NO. 960912

REV	DATE	BY	CK	DESCRIPTION

FARMERS BRANCH

MEMORANDUM

October 21, 1996

TO: Charles Cox, Director of Finance

FROM: Jerome Murawski, Jr., City Engineer

SUBJECT: NDCWSC Contract Administration

The attached detail of tasks reflect City of Farmers Branch Engineering staff time for the NDCWSC Interceptor Sewer. The project manager agreement was executed April 15, 1993 and Engineering staff time is for the months of July, August, and September, 1996.

Phase I:	
Project Engineer	18 hours
Engineering Inspector	0 hours
Phase II:	
Project Engineer	18 hours
Engineering Inspector	160 hours

Please invoice the Cities per agreement including any time for financial administration and public relations and administrative services.

JVM:nm
attachments

cc: John Baumgartner, P.E.
Town of Addison

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GARY OSHEL
PROJECT ENGINEER

PHASE I

July 17, 1996 - 2 hours
Meeting with Consoer, Townsend & Associates to discuss post video

August 6, 1996 - 1 hour
NDCWSC Board meeting

August 7, 1996 - 3 hours
Meeting with Consoer, Townsend & Associate and Seven K regarding post video
Tunnel- on site during video

August 8, 1996 - 2 hours
Post video

August 9, 1996 - 2 hours
Post video

August 16, 1996 - 6 hours
Post video

September 13, 1996 - 2 hours
Meeting with vendor and TRA regarding sewer odor

17 hours total for Phase I

GARY OSHEL
PROJECT ENGINEER

PHASE II

July 1, 1996 - 1 hour
Check progress

July 10, 1996 - 2 hours
Monthly meeting, check progress

July 15, 1996 - 1 hour
Process pay request

July 17, 1996 - 1 hour
Check progress

July 29, 1996 - 1 hour
Review NDCWSC budget

August 8, 1996 - 2 hours
Process pay request

August 9, 1996 - 1 hour
Check progress

August 12, 1996 - 1 hour
Check progress

August 14, 1996 - 1 hour
Check progress

August 19, 1996 - 1 hour
Check progress

August 22, 1996 - 1 hour
Check progress

August 29, 1996 - 1 hour
Check progress

September 5, 1996 - 1 hour
Check progress

September 18, 1996 - 1 hour
Check progress

September 27, 1996 - 2 hours
Check progress

18 hours total for Phase II

Barry Maternowski
Engineering Inspector

Phase II

July 1, 1996 - 2 hours
Inspection

July 2, 1996 - 2 hours
Inspection

July 3, 1996 - 2 hours
Inspection

July 8, 1996 - 4 hours
Inspection

July 9, 1996 - 3 hours
Inspection

July 10, 1996 - 3 hours
Inspection

July 11, 1996 - 3 hours
Inspection

July 12, 1996 - 3 hours
Inspection

July 13, 1996 - 5 hours
Inspection

July 15, 1996 - 3 hours
Inspection

July 16, 1996 - 3 hours
Inspection

July 17, 1996 - 3 hours
Inspection

July 18, 1996 - 3 hours
Inspection

July 19, 1996 - 3 hours
Inspection

July 22, 1996 - 3 hours
Inspection

July 23, 1996 - 3 hours
Inspection

July 24, 1996 - 1 hour
Inspection

July 25, 1996 - 1 hour
Inspection

July 26, 1996 - 2 hours
Inspection

July 29, 1996 - 3 hours
Inspection

July 30, 1996 - 3 hours
Inspection

July 31, 1996 - 2 hours
Inspection

August 1, 1996 - 4 hours
Inspection

August 2, 1996 - 1 hour
Inspection

August 5, 1996 - 1.5 hours
Inspection

August 6, 1996 - 1 hour
Inspection

August 7, 1996 - 1.5 hours
Inspection

August 8, 1996 - 3 hours
Inspection

August 9, 1996 - 3 hours
Inspection

August 12, 1996 - 3 hours
Inspection

August 13, 1996 - 4 hours
Inspection

August 14, 1996 - 4 hours
Inspection

August 15, 1996 - 4 hours
Inspection

August 16, 1996 - 4 hours
Inspection

August 19, 1996 - 4 hours
Inspection

August 20, 1996 - 3 hours
Inspection

August 21, 1996 - 4 hours
Inspection

August 22, 1996 - 4 hours
Inspection

August 23, 1996 - 4 hours
Inspection

August 26, 1996 - 3 hours
Inspection

August 27, 1996 - 2 hours
Inspection

August 28, 1996 - 1 hour
Inspection

August 29, 1996 - 2 hours
Inspection

September 4, 1996 - 2 hours
Inspection

September 5, 1996 - 2 hours
Inspection

September 6, 1996 - 2 hours
Inspection

September 9, 1996 - 1 hour
Inspection

September 10, 1996 - 2 hours
Inspection

September 11, 1996 - 3 hours
Inspection

September 12, 1996 - 3 hours
Inspection

September 13, 1996 - 2 hours
Inspection

September 16, 1996 - 2 hours
Inspection

September 17, 1996 - 2 hours
Inspection

September 18, 1996 - 2 hours
Inspection

September 19, 1996 - 2 hours
Inspection

September 20, 1996 - 1 hour
Inspection

September 24, 1996 - 4 hours
Inspection

September 25, 1996 - 1 hour
Inspection

September 26, 1996 - 4 hours
Inspection

September 27, 1996 - 2 hours
Inspection

September 30, 1996 - 2 hours
Inspection

160 hours total for Phase II

REC'D JAN 1 1 1996

FARMERS BRANCH

MEMORANDUM

January 8, 1996

To: Charles Cox, Director of Finance

From: Jerome V. Murawski, Jr., P.E., City Engineer

Subject: NDCWSC Contract Adminitration

The attached detail of tasks reflect City of Farmers Branch Engineering staff time for the NDCWSC Interceptor Sewer. The project manager agreement was executed April 15, 1993 and Engineering staff time is for the months of October, November, and December, 1995.

Phase I:	
Project Engineer	38 hours
Engineering Inspection	0 hours
Engineering Technician	5 hours

Phase II:	
Project Engineer	38 hours
Engineering Inspection	256.3 hours
Engineering Technician	9 hours

Please invoice the Cities per agreement including any time for financial administration and public relations and administrative services.

JVM:nm
attachments

cc: John Baumgartner, P.E.
Town of Addison

B:\SIST195.ond\NDCWSC

GARY OSHEL
PROJECT ENGINEER

PHASE I

October 3, 1995 - 2 hours
Prepare Change Order No. 2 for the Board

October 4, 1995 - 2 hours
Process Consoer Townsend and Associates (CTA) pay request; check progress of project

October 5, 1995 - 5 hours
View video of tunnel

October 6, 1995 - 3 hours
View video of tunnel; meeting with CTA and Phase II contractor to determine if Manhole 2, 6 and 29 can be used on Phase II

October 9, 1995 - 1 hour
Check progress of project

October 10, 1995 - 2 hours
Review video of tunnel

October 11, 1995 - 2 hours
Inspect manholes

October 12, 1995 - 2 hours
Prepare board agenda items

October 16, 1995 - 1 hour
Check progress of project

October 17, 1995 - 2 hours
NDCWSC Board meeting

October 18, 1995 - 1 hour
Check progress of project

October 19, 1995 - 1 hour
Check progress of project

October 20, 1995 - 1 hour
Check progress of project

October 23, 1995 - 2 hours
Process contractor's pay request

October 24, 1995 - 1 hour
Check progress of project

October 30, 1995 - 1 hour
Check progress of project

November 1, 1995 - 1 hour
Review Change Order for vent stack relocation

November 7, 1995 - 1 hour
Check progress of project

November 8, 1995 - 1 hour
Check progress of project

November 14, 1995 - 3 hours
CTA/Seven K monthly meeting; progress CTA's pay request; and Change Order No. 3

November 15, 1995 - 1 hour
Check progress of project

November 16, 1995 - 1 hour
Check progress of project

December 12, 1995 - 1 hour
Process pay request

Total Hours: 38

GARY OSHEL
PROJECT ENGINEER

PHASE II

October 4, 1995 - 1 hour
Check progress of project

October 5, 1995 - 1 hour
Check progress of project

October 6, 1995 - 2 hours
Meeting with Brookhaven Community College re: Phase II Work

October 9, 1995 - 1 hour
Check progress of project

October 11, 1995 - 2 hours
Shimek, Jacob & Finklea (SJF) and John Burns Construction monthly meeting; check progress of project

October 16, 1995 - 1 hour
Check progress of project

October 18, 1995 - 1 hour
Check progress of project

October 19, 1995 - 1 hour
Check progress of project

October 20, 1995 - 1 hour
Check progress of project

October 23, 1995 - 2 hours
Investigate TU Electric's conflict; review credit for Manhole

October 24, 1995 - 1 hour
Check progress of project

October 31, 1995 - 1 hour
Check progress of project

November 1, 1995 - 2 hours
Monthly meeting with SJF and John Burns

November 3, 1995 - 2 hours
Meeting with TU Electric re: conflict with underground cable

November 6, 1995 - 1 hour
Check progress of project

November 7, 1995 - 1 hour
Check progress of project

November 8, 1995 - 3 hours
NDCWSC Board meeting; meeting on site with contractor and TU Electric

November 13, 1995 - 1 hour
Check progress of project

November 14, 1995 - 2 hours
TU Electric conflict with sewer

November 15, 1995 - 2 hours
TU Electric conflict

November 16, 1995 - 1 hour
Check progress on project

November 28, 1995 - 1 hour
Check progress on project

December 6, 1995 - 2 hours
Monthly meeting with SJF and John Burns

December 7, 1995 - 1 hour
Check progress on project

December 11, 1995 - 3 hours
Process pay requests

December 28, 1995 - 1 hour
Review pay request

Total Hours: 38

Chris Harrington
Engineering Technician

Phase I

November 3, 1995 - 2 hours
Conversations with resident Mrs. Bulino

November 6, 1995 - 1 hour
Conversations with resident Mrs. Bulino

November 8, 1995 - 2 hours
Conversations with resident Mrs. Bulino

Total Hours: 5

Phase II

November 2, 1995 - 2 hours
TU Electric lines

November 3, 1995 - 3 hours
TU Electric lines

November 6, 1995 - 2 hours
TU Electric lines

November 7, 1995 - 2 hours
TU Electric lines

Total Hours: 9

Barry Maternowski
Engineering Inspector

Phase II (9/95 through 12/95)

September 12, 1995 - 1 hour
Preconstruction meeting

September 25, 1995 - 3 hours
Inspection

September 26, 1995 - 3 hours
Inspection

September 27, 1995 - 3 hours
Inspection

September 28, 1995 - 3 hours
Inspection

September 29, 1995 - 2 hours
Inspection

October 2, 1995 - 5 hours
Inspection

October 3, 1995 - 1.5 hours
Inspection

October 4, 1995 - 1 hour
Inspection

October 5, 1995 - 5 hours
Inspection

October 6, 1995 - 4 hours
Inspection

October 9, 1995 - 4 hours
Inspection

October 10, 1995 - 4 hours
Inspection

October 11, 1995 - 4.3 hours
Monthly meeting; inspection

October 12, 1995 - 4 hours
Inspection

October 13, 1995 - 3 hours
Inspection

October 16, 1995 - 3 hours
Inspection

October 17, 1995 - 4 hours
Inspection

October 18, 1995 - 4 hours
Inspection

October 19, 1995 - 4 hours
Inspection

October 20, 1995 - 3 hours
Inspection

October 23, 1995 - 5 hours
Inspection

October 24, 1995 - 3 hours
Inspection

October 25, 1995 - 4 hours
Inspection

October 26, 1995 - 5 hours
Inspection

October 27, 1995 - 5 hours
Inspection

October 30, 1995 - 4 hours
Inspection

October 31, 1995 - 4 hours
Inspection

November 1, 1995 - 4 hours
Monthly progress meeting; inspection

November 2, 1995 - 5 hours
Inspection

November 3, 1995 - 4 hours
Inspection

November 6, 1995 - 3 hours
Inspection

November 7, 1995 - 5 hours
Inspection

November 8, 1995 - 5 hours
Inspection

November 9, 1995 - 5.5 hours
Inspection

November 10, 1995 - 5 hours
Inspection

November 13, 1995 - 5 hours
Inspection

November 14, 1995 - 6 hours
Inspection

November 15, 1995 - 5 hours
Inspection

November 16, 1995 - 4.5 hours
Inspection

November 17, 1995 - 5 hours
Inspection

November 20, 1995 - 5.5 hours
Inspection

November 21, 1995 - 4.5 hours
Inspection

November 22, 1995 - 5 hours
Inspection

November 27, 1995 - 2 hours
Inspection

November 28, 1995 - 5 hours
Inspection

November 29, 1995 - 5 hours
Inspection

November 30, 1995 - 5 hours
Inspection

December 1, 1995 - 5 hours
Inspection

December 4, 1995 - 5 hours
Inspection

December 5, 1995 - 3 hours
Inspection

December 6, 1995 - 6 hours
Monthly meeting; inspection

December 7, 1995 - 5 hours
Inspection

December 8, 1995 - 3 hours
Inspection

December 11, 1995 - 4 hours
Inspection

December 12, 1995 - 3 hours
Inspection

December 13, 1995 - 2.5 hours
Inspection

December 14, 1995 - 2 hours
Inspection

December 15, 1995 - 2 hours
Inspection

December 18, 1995 - 2 hours
Inspection

December 19, 1995 - 3 hours
Inspection

December 20, 1995 - 4 hours
Inspection

December 21, 1995 - 4 hours
Inspection

December 22, 1995 - 4 hours
Inspection

December 27, 1995 - 5 hours
Inspection

December 28, 1995 - 5 hours
Inspection

December 29, 1995 - 5 hours
Inspection

Total Hours: 265.3

August 14, 1996

TO: Charles Cox, Director of Finance

FROM: Jerome Murawski, Jr., City Engineer

SUBJECT: NDCWSC Contract Administration

The attached detail of tasks reflect City of Farmers Branch Engineering staff time for the NDCWSC Interceptor Sewer. The project manager agreement was executed April 15, 1993 and Engineering staff time is for the months of April, May, and June, 1996.

Phase I:	
Project Engineer	10 hours
Engineering Technician	0 hours
Engineering Inspector	0 hours
Phase II:	
Project Engineer	31 hours
Engineering Technician	0 hours
Engineering Inspector	211 hours

Please invoice the Cities per agreement including any time for financial administration and public relations and administrative services.

JVM:nm
attachments

cc: John Baumgartner, P.E.
Town of Addison

B:\SISTIME.AM\NDCWSC

GARY OSHEL
PROJECT ENGINEER

PHASE I

April 1, 1996 - 1 hour
Review retainage bond form

April 2, 1996 - 1 hours
Review retainage bond form with Attorney

April 15, 1996 - 2 hours
Process pay request for contractor (Seven K Construction)

April 22, 1996 - 3 hour
Review and process Consoer, Townsend & Associates's pay request

May 20, 1996 - 2 hour
Review submittal of photographs

May 28, 1996 - 1 hour
Check progress of project

10 hours total for Phase I

GARY OSHEL
PROJECT ENGINEER

PHASE II

April 2, 1996 - 1 hour
Process pay request for contractor (Burns Constructors)

April 3, 1996 - 2 hours
Monthly meeting; review pay request

April 15, 1996 - 1 hour
Check progress of project

April 16, 1996 - 1 hour
Process Shimek Jacobs and Finklea's pay request

April 29, 1996 - 1 hour
Check progress of project

May 1, 1996 - 1 hour
Monthly meeting

May 7, 1996 - 2 hours
Process pay request for Burns

May 9, 1996 - 1 hour
Check progress of project

May 14, 1996 - 2 hours
Check progress of project; process pay request for Burns

May 22, 1996 - 2 hours
Meeting with Shimek Jacobs & Finklea, Burns, regarding schedule and utility locates

May 23, 1996 - 1 hour
Check progress of project

May 28, 1996 - 1 hour
Check progress of project

May 31, 1996 - 1 hour
Check progress of project

June 3, 1996 - 1 hour
Check progress of project

June 5, 1996 - 3 hours
Monthly meeting; check progress of project

June 10, 1996 - 2 hours
Discuss conflicts at Inwood/Spring Valley; check progress of project

June 11, 1996 - 2 hours
Meeting with Shimek Jacobs & Finklea and Burns Constructors regarding utility conflicts at Inwood/Spring Valley

June 14, 1996 - 2 hours
Process pay request; check progress of project

June 18, 1996 - 1 hour
Check progress of project

June 20, 1996 - 1 hour
Check progress of project

June 26, 1996 - 2 hours
Inspect channel lining to determine limits of correction

31 hours total for Phase II

CHRIS HARRINGTON
Engineering Technician

Phase I	-0-
Phase II	-0-

0 hours on Phase I and Phase II for Chris Harrington

Barry Maternowski
Engineering Inspector

Phase II

April 1, 1996 - 3 hours
Inspection of project

April 2, 1996 - 3 hours
Inspection of project

April 3, 1996 - 3 hours
Inspection of project

April 4, 1996 - 3 hours
Inspection of project

April 8, 1996 - 3 hours
Inspection of project

April 9, 1996 - 3 hours
Inspection of project

April 10, 1996 - 3 hours
Inspection of project

April 11, 1996 - 3 hours
Inspection of project

April 12, 1996 - 3 hours
Inspection of project

April 13, 1996 - 4.5 hours
Inspection of project

April 15, 1996 - 3 hours
Inspection of project

April 16, 1996 - 3 hours
Inspection of project

April 17, 1996 - 3 hours
Inspection of project

April 18, 1996 - 3 hours
Inspection of project

cont. Phase II

April 19, 1996 - 2 hours
Inspection of project

April 22, 1996 - 2 hours
Inspection of project

April 23, 1996 - 3 hours
Inspection of project

April 24, 1996 - 3 hours
Inspection of project

April 25, 1996 - 3 hours
Inspection of project

April 26, 1996 - 4 hours
Inspection of project

April 29, 1996 - 3 hours
Inspection of project

April 30, 1996 - 4 hours
Inspection of project

May 1, 1996 - 3 hours
Inspection of project

May 2, 1996 - 3 hours
Inspection of project

May 3, 1996 - 3 hours
Inspection of project

May 6, 1996 - 3 hours
Inspection of project

May 7, 1996 - 3 hours
Inspection of project

May 8, 1996 - 3 hours
Inspection of project

May 9, 1996 - 3 hours
Inspection of project

cont. Phase II

May 10, 1996 - 3 hours
Inspection of project

May 13, 1996 - 3 hours
Inspection of project

May 14, 1996 - 3 hours
Inspection of project

May 15, 1996 - 3 hours
Inspection of project

May 16, 1996 - 3 hours
Inspection of project

May 17, 1996 - 3 hours
Inspection of project

May 18, 1996 - 2 hours
Inspection of project

May 20, 1996 - 3 hours
Inspection of project

May 21, 1996 - 3 hours
Inspection of project

May 22, 1996 - 3 hours
Inspection of project

May 23, 1996 - 3 hours
Inspection of project

May 24, 1996 - 2 hours
Inspection of project

May 25, 1996 - 2 hours
Inspection of project

May 29, 1996 - 3 hours
Inspection of project

May 30, 1996 - 3 hours
Inspection of project

cont. Phase II

May 31, 1996 - 3 hours
Inspection of project

June 3, 1996 - 3 hours
Inspection of project

June 4, 1996 - 3 hours
Inspection of project

June 5, 1996 - 3 hours
Inspection of project

June 6, 1996 - 3 hours
Inspection of project

June 7, 1996 - 3 hours
Inspection of project

June 8, 1996 - 15 hours
Inspection of project

June 10, 1996 - 2 hours
Inspection of project

June 11, 1996 - 3 hours
Inspection of project

June 12, 1996 - 3 hours
Inspection of project

June 13, 1996 - 6.5 hours
Inspection of project

June 14 1996 - 3 hours
Inspection of project

June 15, 1996 - 2 hours
Inspection of project

June 17, 1996 - 3 hours
Inspection of project

June 18, 1996 - 3 hours
Inspection of project

cont. Phase II

June 19, 1996 - 3 hours
Inspection of project

June 20, 1996 - 3 hours
Inspection of project

June 21, 1996 - 2 hours
Inspection of project

June 24, 1996 - 3 hours
Inspection of project

June 25, 1996 - 3 hours
Inspection of project

June 26, 1996 - 2 hours
Inspection of project

June 27, 1996 - 3 hours
Inspection of project

June 28, 1996 - 3 hours
Inspection of project

211 hours total for Phase II

June 27, 1996

ENGINEERING
PLANNING
MANAGEMENT

North Dallas County Water Supply Corporation
P.O. Box 819010
City of Farmers Branch, TX 75381-9010

Attn: Mr. Gary Oshel, P.E.

Re: Sanitary Interceptor Sewer Tunnel,
Contract Dated November 16, 1993

10700 RICHMOND AVENUE

As you requested, we are sending you one mylar original set, and one electronic file set (AutoCad Release 12) of the record drawings for the above referenced project.

SUITE 275

This is in lieu of the two mylar original sets requested in the contract.

If I can be of further assistance, please contact me.

Very truly yours,

HOUSTON, TX 77042

CONSOER, TOWNSEND & ASSOCIATES, INC.

for Wilbur Van Riper, P.E.
Program Manager

FAX 713/780-7193

Enclosures

cc: Jerry Murawski
John Baumgartner

713/780-7168

Troy P. Norris
Director of Technical Services
CONCRETE PRODUCTS DIVISION

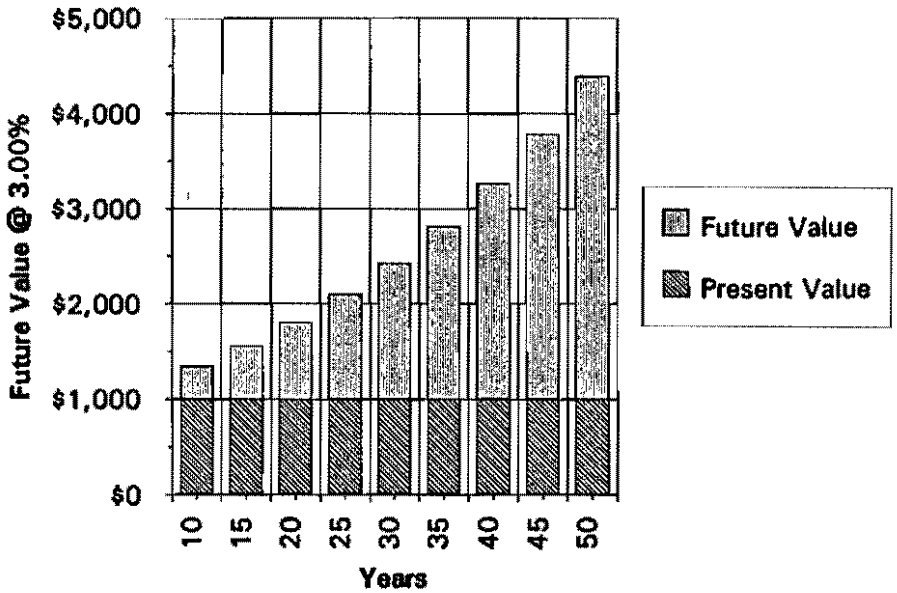
Gifford-Hill & Company

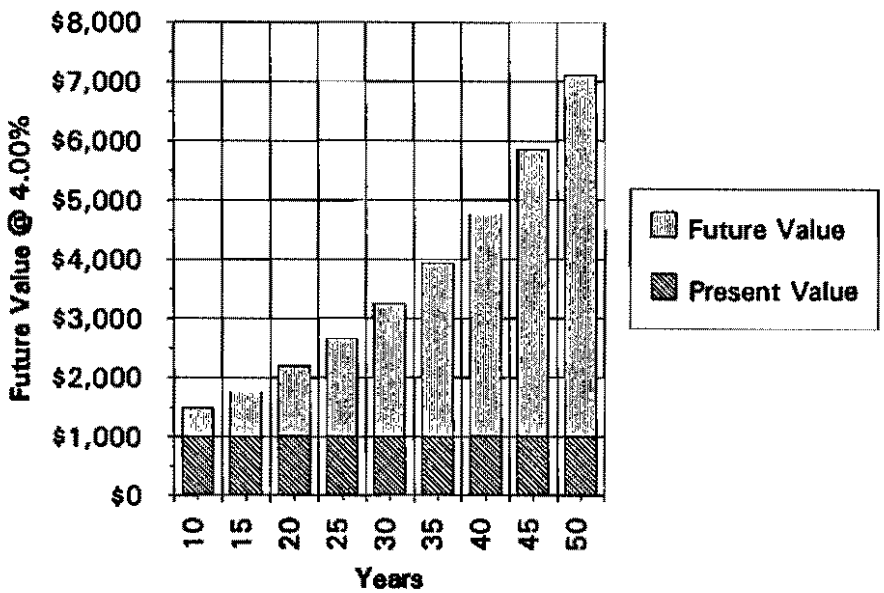
2515 McKinney Avenue • Dallas, Texas 75201
P.O. Box 190999 • Dallas, Texas 75219-0999

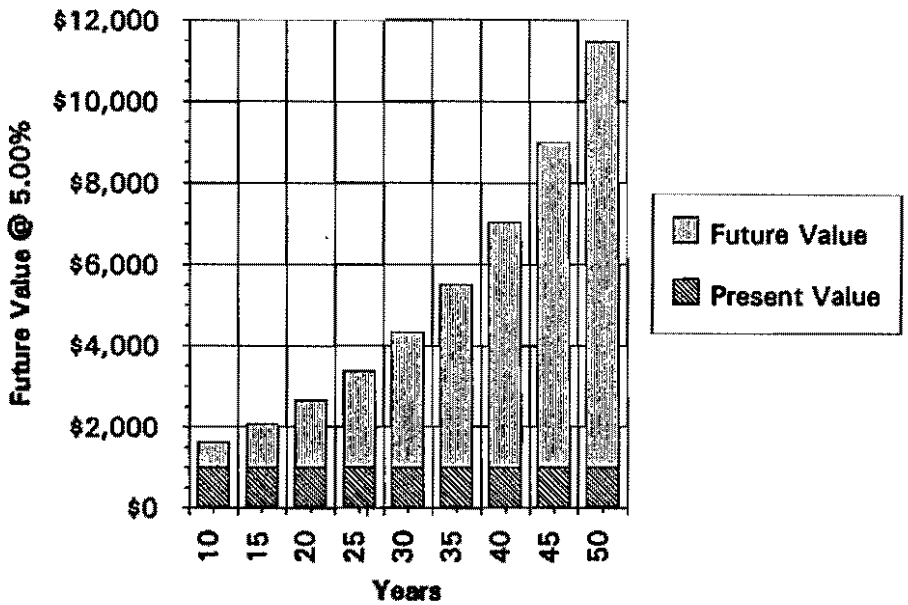
214/754-5861 Mobile: 214/707-8118
Fax: 214/754-5868 Res: 214/696-1505

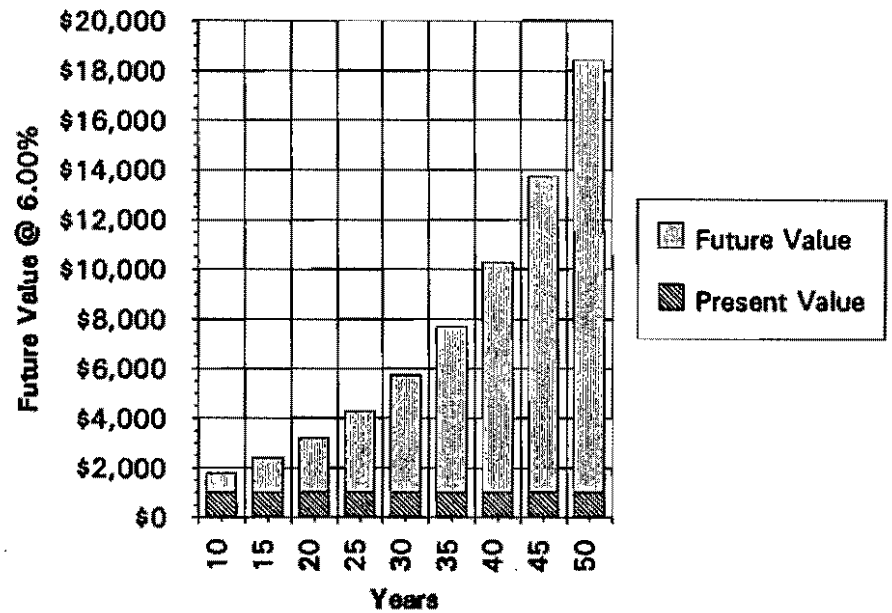
FILE
NDCWSC

Future Values

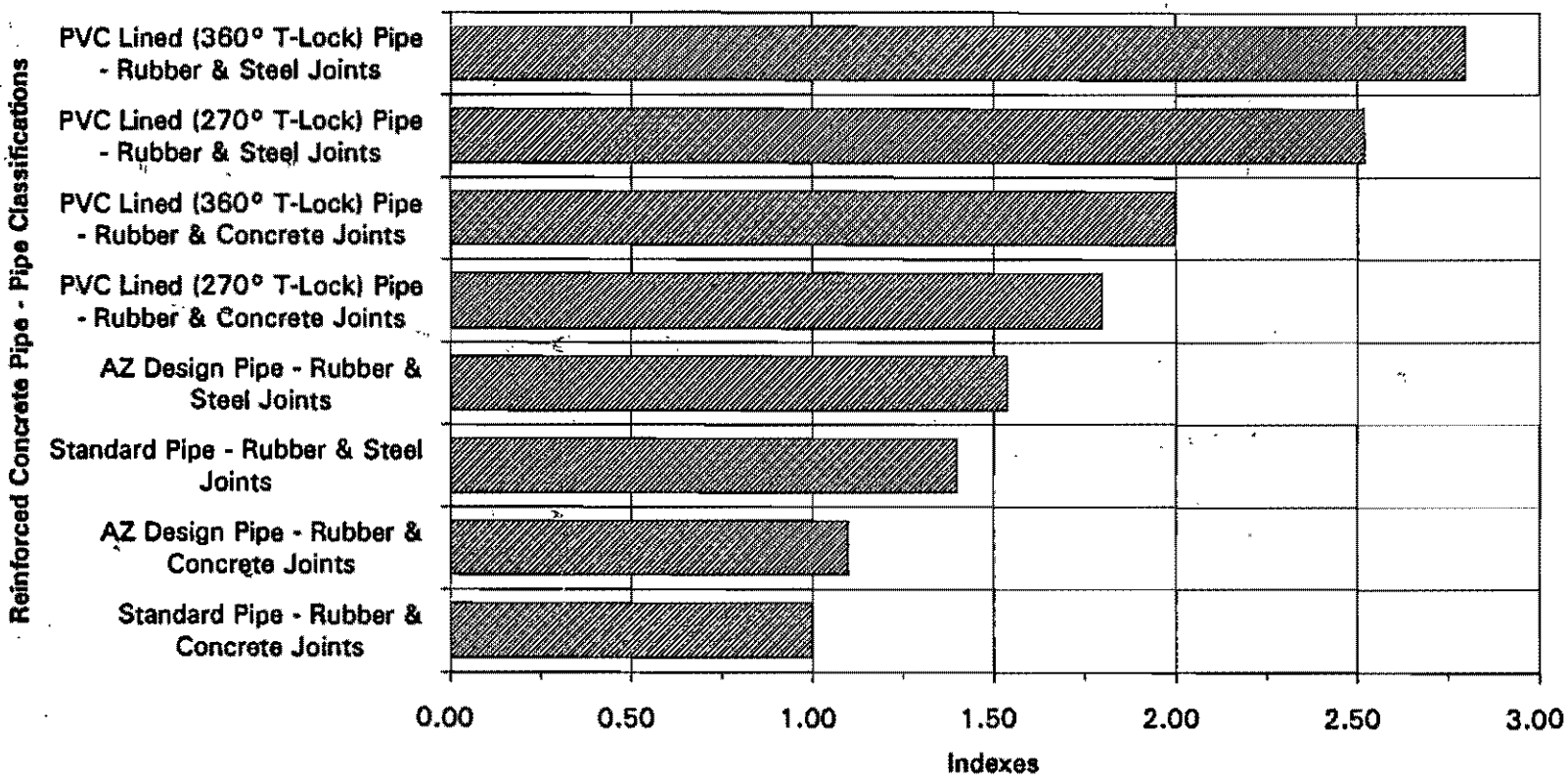








Present Values



Type Of Reinforced Concrete Pipe	Baseline Costs
Standard Pipe - Rubber & Concrete Joints	1.00
AZ Design Pipe - Rubber & Concrete Joints	1.10
Standard Pipe - Rubber & Steel Joints	1.40
AZ Design Pipe - Rubber & Steel Joints	1.54
PVC Lined (270° T-Lock) Pipe - Rubber & Concrete Joints	1.80
PVC Lined (360° T-Lock) Pipe - Rubber & Concrete Joints	2.00
PVC Lined (270° T-Lock) Pipe - Rubber & Steel Joints	2.52
PVC Lined (360° T-Lock) Pipe - Rubber & Steel Joints	2.80

YEAR	$1,000 @3% COMPOUND	$1,000 @4% COMPOUND	$1,000 @5% COMPOUND	$1,000 @6% COMPOUND
1	1,030	1,040	1,050	1,060
2	1,061	1,082	1,103	1,124
3	1,093	1,125	1,158	1,191
4	1,126	1,170	1,216	1,262
5	1,159	1,217	1,276	1,338
6	1,194	1,265	1,340	1,419
7	1,230	1,316	1,407	1,504
8	1,267	1,369	1,477	1,594
9	1,305	1,423	1,551	1,689
10	1,344	1,480	1,629	1,791
11	1,384	1,539	1,710	1,898
12	1,426	1,601	1,796	2,012
13	1,469	1,665	1,886	2,133
14	1,513	1,732	1,980	2,261
15	1,558	1,801	2,079	2,397
16	1,605	1,873	2,183	2,540
17	1,653	1,948	2,292	2,693
18	1,702	2,026	2,407	2,854
19	1,754	2,107	2,527	3,026
20	1,806	2,191	2,653	3,207
21	1,860	2,279	2,786	3,400
22	1,916	2,370	2,925	3,604
23	1,974	2,465	3,072	3,820
24	2,033	2,563	3,225	4,049
25	2,094	2,666	3,386	4,292
26	2,157	2,772	3,556	4,549
27	2,221	2,883	3,733	4,822
28	2,288	2,999	3,920	5,112
29	2,357	3,119	4,116	5,418
30	2,427	3,243	4,322	5,743
31	2,500	3,373	4,538	6,088
32	2,575	3,508	4,765	6,453
33	2,652	3,648	5,003	6,841
34	2,732	3,794	5,253	7,251
35	2,814	3,946	5,516	7,686
36	2,898	4,104	5,792	8,147
37	2,985	4,268	6,081	8,636
38	3,075	4,439	6,385	9,154
39	3,167	4,616	6,705	9,704
40	3,262	4,801	7,040	10,286
41	3,360	4,993	7,392	10,903
42	3,461	5,193	7,762	11,557
43	3,565	5,400	8,150	12,250
44	3,671	5,617	8,557	12,985
45	3,782	5,841	8,985	13,765
46	3,895	6,075	9,434	14,590
47	4,012	6,318	9,906	15,466
48	4,132	6,571	10,401	16,394
49	4,256	6,833	10,921	17,378
50	4,384	7,107	11,467	18,420

TOWN OF ADDISON

PUBLIC WORKS DEPARTMENT (214) 450-2871

Post Office Box 144 Addison, Texas 75001 16801 Westgrove

July 19, 1994

Mr. Gary Oshel, P.E.
Assistant City Engineer
City of Farmers Branch
P.O. Box 819010
Farmers Branch, Texas 75381-9010

Re: NDCWSC Seven K Construction Company - Progress Payment No. 7

Dear Gary:

The Town of Addison concurs with your assessment and recommends payment of Seven K Construction Company's seventh payment application in the amount of $273,881.20.

Sincerely,

John R. Baumgartner, P.E.
Director of Public Works

JRB/gmk

cc: Randy Moravec
Finance Director

Sent copy to Randy 7-25-94

TOWN OF ADDISON

PUBLIC WORKS DEPARTMENT (214) 450-2871

Post Office Box 144 Addison, Texas 75001 16801 Westgrove

July 19, 1994

Mr. Gary Oshel, P.E.
Assistant City Engineer
City of Farmers Branch
P.O. Box 819010
Farmers Branch, Texas 75381-9010

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Sincerely,

John R. Baumgartner, P.E.
Director of Public Works

JRB/gmk

cc: Randy Moravec
Finance Director

P.S.
Approximately 21% complete construction
Approximately 29% of elapsed time
contractor now working 10 hour days
6 days a week to ~~eliminate~~ mitigate effects of being behind

JRB

FARMERS BRANCH

July 14, 1994

Mr. John Baumgartner, P.E.
City Engineer
Town of Addison
P.O. Box 144
Addison, Texas 75001

RE: NDCWSC INVOICE FOR CONTRACTOR

Attached is a copy of Seven K Construction Company's progress payment application No. 7 through June 25, 1994. I have examined their application for payment and find that it is reasonable and should be paid.

Please review the enclosed documentation for approval of payment on behalf of the Town of Addison and respond in writing if you concur. You may fax your response to Engineering Department, 241-6305.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

Gary M. Oshel, P.E.
Assistant City Engineer

GMO/en

Attachment: Seven K Construction Company Payment Application No.7

INTERCEP\7K.ADD

APPLICATION 7
PERIOD 5-26-94 TO 6-25-94

CERTIFICATE OF THE CONTRACTOR OR HIS DULY AUTHORIZED REPRESENTATIVE

To the best of my knowlegdge and belief, I certify that all items, units, quantities, and prices of work and material shown on the face of Sheets 1 thru 4 of this Monthly Estimate are correct that all work has been performed and materials supplied in full accordance with the terms and conditions of the corresponding construction contract documents between the undersigned as Contractor and The North Dallas County Water Supply Corporation, as Owner, dated November 16, 1993, and all authorized changes thereto; that the following is a true and correct statement of the contract account up to and including the last day of the period covered by this estimate and that no part of the Total Amount Due has been received:

(a)	Total amount earned (From Worksheet)	$	2,294,095.10
(b)	Retainage – 5% –	$	114,704.76
(c)	Total earned less retainage	$	2,179,390.35
(d)	Total previously certified (Line c from previous estimate)	$	1,905,509.15
(e)	Amount due this estimate	$	273,881.20
(f)	Excess cost of field engineering and inspection 17 HOURS @ $75/HR	$	(1,275.00)
(g)	Total Amount Due	$	272,606.20

I further certify that all claims outstanding as of this date against the undersigned as contractor for labor, materials, and expendable equipment employed in the performance of said contract to this date have been paid in accordance with the requirements of said contract.

CONTRACTOR: SEVEN K CONSTRUCTION COMPANY DATE: July 5, 1994

BY: John M Kent TITLE: Project Manager

CERTIFICATE OF THE OWNER'S CONSULTING ENGINEERS

I certify that I have verified this Monthly Estimate, and that to the best of my knowledge and belief it is a true and correctt statement of work performed and materrials supplied under the contract, and that the Contractor's certified statement of his account and the amount due him is correct and just, and that all work and materials included in this Monthly Estimate have been performed in full accordance with the terms and conditions of the corresponding construction documents and authorized changes thereto.

ENGINEER: CONSOER TOWNSEND & ASSOCIATES DATE: JULY 8, 1994

BY: Fernando Bravo TITLE: R.E

OWNER'S RECOMMENDATION FOR PAYMENT

Approved and Payment Recommended: DATE: 7/13/94

NORTH DALLAS COUNTY WATER SUPPLY CORPORATION: OWNER

BY: [signature] TITLE: PROJECT MGR

PAYMENT APPLICATION 7

SEVEN K CONSTRUCTION COMPANY
144 GREEN BAY ROAD
WINNETKA, ILL 60093

APPLICATION NO. 7
PERIOD FROM 5/26/94 to 6/25/94

NORTH DALLAS COUNTY WATER SUPPLY CORPORATION
CITY OF FARMERS BRANCH, TOWN OF ADDISON
SANITARY INTERCEPTOR SEWER, PHASE I

BID ITEM	BID DESCRIPTION	WORK BID				WORK COMPLETED					
		UNIT	UNIT COST	UNIT AMOUNT	TOTAL COST	PREVIOUS APPLICATION		CURRENT APPLICATION		TO DATE	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
1B	60" SAN SWR IN OPEN CUT	LF	$325.00	3480	$1,131,000.00	2382.60	$774,345.00	296.40	$96,330.00	2679.00	$870,675.00
2B	60" UNDER I.H. 635 FRNTG RD	LF	$425.00	71	$30,175.00						
3B	60" SAN SWR IN TUNNEL	LF	$365.00	18810	$6,865,650.00	715.40	$261,121.00	480.90	$175,528.50	1196.30	$436,649.50
4B	42" SAN SWR IN OPEN CUT	LF	$410.00	15	$6,150.00						
5B	36" SAN SWR IN OPEN CUT	LF	$280.00	85	$23,800.00						
6B	36" JK/BOR UNDER FRM BR CRK	LF	$655.00	167	$109,385.00						
7B	30" SAN SWR IN OPEN CUT	LF	$150.00	78	$11,700.00						
8	12" DIP DRP ASY MH #29	EA	$1,800.00	1	$1,800.00						
9	36" DIP DRP ASY MH #25	EA	$15,180.00	1	$15,180.00						
10	MH #1 INTCPT STRCT	EA	$50,000.00	1	$50,000.00						
11	MH #4 STRCT	EA	$26,000.00	1	$26,000.00						
12	96" DIA. MH BASE	EA	$5,750.00	9	$51,750.00	6.00	$34,500.00	1.00	$5,750.00	7.00	$40,250.00
13	72" DIA. MH BASE	EA	$6,200.00	5	$31,000.00						
14	72" DIA. MH SIDEWALL	VF	$280.00	110	$30,800.00						

SEVEN K CONSTRUCTION COMPANY
144 GREEN BAY ROAD
WINNETKA, ILL 60093

APPLICATION NO. 7
PERIOD FROM 5/26/94 to 6/25/94

NORTH DALLAS COUNTY WATER SUPPLY CORPORATION
CITY OF FARMERS BRANCH, TOWN OF ADDISON
SANITARY INTERCEPTOR SEWER, PHASE I

BID ITEM	BID DESCRIPTION	WORK BID				WORK COMPLETED					
		UNIT	UNIT COST	UNIT AMOUNT	TOTAL COST	PREVIOUS APPLICATION		CURRENT APPLICATION		TO DATE	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
15	48" DIA. MH SIDEWALL	VF	$90.00	100	$9,000.00	63.50	$5,715.00	16.00	$1,440.00	79.50	$7,155.00
16	48" DIA. MH FRM & CVR	EA	$2,500.00	9	$22,500.00						
17	24" DIA. MH FRM & CVR	EA	$580.00	5	$2,900.00						
18	TNL SHF #1 w/MH 12 STR	EA	$175,000.00	1	$175,000.00	0.60	$105,000.00			0.60	$105,000.00
19	TNL SHF #2 w/MH 13 STR	EA	$200,000.00	1	$200,000.00	0.60	$120,000.00			0.60	$120,000.00
20	TNL SHF #3 w/MH 14 STR	EA	$200,000.00	1	$200,000.00	0.60	$120,000.00			0.60	$120,000.00
21	TNL SHF #4 w/MH 15 STR	EA	$115,000.00	1	$115,000.00	0.50	$57,500.00			0.50	$57,500.00
22	TNL SHF #5 w/MH 16 STR	EA	$120,000.00	1	$120,000.00	0.60	$72,000.00			0.60	$72,000.00
23	TNL SHF #6 w/MH 17 STR	EA	$150,000.00	1	$150,000.00						
24	TNL SHF #7 w/MH 18 STR	EA	0.00	1							
25	TNL SHF #8 w/MH 19 STR	EA	$140,000.00	1	$140,000.00						
26	TNL SHF #9 w/MH 20 STR	EA	$125,000.00	1	$125,000.00						
27	TNL SHF #10 w/MH 21 STR	EA	$125,000.00	1	$125,000.00						
28	TNL SHF #11 w/MH 22 STR	EA	0.00	1							
29	TNL SHF #12 w/MH 23 STR	EA	$200,000.00	1	$200,000.00						
30	TNL SHF #13 w/MH 24 STR	EA	0.00	1							

SEVEN K CONSTRUCTION COMPANY
144 GREEN BAY ROAD
WINNETKA, ILL 60093

APPLICATION NO. 7
PERIOD FROM 5/26/94 to 6/25/94

NORTH DALLAS COUNTY WATER SUPPLY CORPORATION
CITY OF FARMERS BRANCH, TOWN OF ADDISON
SANITARY INTERCEPTOR SEWER, PHASE I

BID ITEM	BID DESCRIPTION	WORK BID				WORK COMPLETED					
		UNIT	UNIT COST	UNIT AMOUNT	TOTAL COST	PREVIOUS APPLICATION		CURRENT APPLICATION		TO DATE	
						QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
31	TNL SHF #14 w/MH 25 STR	EA	$120,000.00	1	$120,000.00						
32	MH & 36" RCP STSWR SH7 RMV & RPL	LS	$25,000.00	1	$25,000.00						
33	TMP 8" SN SWR R+R EX SH9	LS	$6,500.00	1	$6,500.00						
34	12" D. WM –RMV EXST 12" WM	LF	$65.00	500	$32,500.00	67.00	$4,355.00	49.50	$3,217.50	116.50	$7,572.50
35	36" D. CL–3 RCP STM SWR	LF	$95.00	180	$17,100.00						
36	SFT END TRT 36" RCP ST SWR	LS	$16,500.00	1	$16,500.00						
37	TR SFT SYS TUNNEL ACC SFT	LF	$10.00	4300	$43,000.00	2424.85	$24,248.50	312.00	$3,120.00	2736.85	$27,368.50
38	POST–CONST PIPE SYS TEST'G	LF	$2.50	22532	$56,330.00						
39	PPCM HLTH & SAFETY PLAN FRM.	LS	$30,000.00	1	$30,000.00						
40	PPCM HANDLING	LS	$200,000.00	1	$200,000.00						
41	TEMP RELOC ELEC LN–SH #3	LS	$30,000.00	1	$30,000.00	0.86	$25,709.00			0.86	$25,709.00
42	MOBILIZATION	LS	$400,000.00	1	$400,000.00	1.00	$400,000.00			1.00	$400,000.00
43	12" WTR VLV, COMPL IN PLC	EA	$1,100.00	4	$4,400.00	1.00	$1,100.00	2.00	$2,200.00	3.00	$3,300.00
44	8" WTR VLV, COMPL IN PLC	EA	$710.00	1	$710.00			1.00	$710.00	1.00	$710.00
45	CONC PVT RMVL & REPLACE	SY	$30.00	500	$15,000.00						

PAYMENT APPLICATION 7

SEVEN K CONSTRUCTION COMPANY
144 GREEN BAY ROAD
WINNETKA, ILL 60093

APPLICATION NO. 7
PERIOD FROM 5/26/94 to 6/25/94

NORTH DALLAS COUNTY WATER SUPPLY CORPORATION
CITY OF FARMERS BRANCH, TOWN OF ADDISON
SANITARY INTERCEPTOR SEWER, PHASE I

BID ITEM	BID DESCRIPTION	WORK BID				WORK COMPLETED					
		UNIT	UNIT COST	UNIT AMOUNT	TOTAL COST	PREVIOUS APPLICATION QUANTITY	PREVIOUS APPLICATION AMOUNT	CURRENT APPLICATION QUANTITY	CURRENT APPLICATION AMOUNT	TO DATE QUANTITY	TO DATE AMOUNT
46	ASPHALT PVT RMVL & REPLC	SY	$20.00	1000	$20,000.00						
47	CONC CRB & GTR RMV & RPL	LF	$16.00	500	$8,000.00						
48	CONC SIDEWALK RMV & RPLC	SF	$2.50	2000	$5,000.00						
49	CEMENT STAB. TRNCH BKFL	CY	$25.00	1000	$25,000.00						
50	CRSHD STONE TRNCH BKFL	CY	$8.00	1000	$8,000.00	25.70	$205.60			25.70	$205.60
51	4,000 PSI CONC W OR W/O FORMS	CY	$75.00	50	$3,750.00						
52	REBAR	LB	$0.70	500	$350.00						
53	18" SAN SWR RMV & RPL--NICHLSN RD	LF	$28.00	170	$4,760.00						
54	48" DIA. MH BASE--NICHOLSON RD	EA	$400.00	4	$1,600.00						
55	48" DIA MH SDWL--NICHOLSON RD	VF	$50.00	80	$4,000.00						
56	24" DIA MH FRM+CVR NICHOLSON RD	EA	$150.00	4	$600.00						
	TOTAL ALTERNATE C	ITEMS 1B THRU 56			$11,046,890.00		$2,005,799.10		$288,296.00		$2,294,095.10

FARMERS BRANCH

December 20, 1991

John Bumgartner
Acting City Manager
Town of Addison
P.O. Box 144
Addison, TX 75001

SUBJECT: SANITARY INTERCEPTER TUNNEL

Dear Mr. Bumgartner:

Enclosed is your copy of the agreement between Consoer, Townsend & Associates and the North Dallas County Water Supply Corporation. This agreement is for Engineering Design and Services during construction of the Sanitary Intercepter Tunnel for the City of Farmers Branch and the Town of Addison.

Sincerely,

Jerome V. Murawski, Jr., P.E.
City Engineer

JVM/en

Enclosure

C:Addison.SST

AGREEMENT

THIS AGREEMENT is made by and between **Consoer, Townsend & Associates, Inc.** hereinafter called **"UNDERSIGNED"**, and the **NORTH DALLAS COUNTY WATER SUPPLY CORPORATION**, hereinafter called **"OWNER"**.

WHEREAS, **OWNER** desires **UNDERSIGNED** to perform Engineering Design and Services During Construction for the Sanitary Intercepter Tunnel serving portions of the City of Farmers Branch and the Town of Addison, as set forth herein and in Scope of Services, marked Exhibit "A" and "B", and attached hereto and incorporated herein; and

WHEREAS, the **UNDERSIGNED** has agreed to perform such work and services,

NOW, THEREFORE, all parties agree as follows:

SECTION 1 - GENERAL

UNDERSIGNED shall furnish and pay for all labor, tools, materials, equipment, supplies, transportation and management necessary to perform Engineering Design and Services During Construction for the Farmers Branch/Addison Sanitary Interceptor Tunnel as set forth in "Section 2." hereof for the **OWNER** in accordance with the terms, conditions and provisions of the Scope of Services, marked Exhibits "A" and "B" attached hereto and incorporated herein for all purposes. **OWNER** may, at any time, stop any services by the **UNDERSIGNED** upon giving **UNDERSIGNED** written notice. **UNDERSIGNED** shall be bound to **OWNER** by the terms, conditions and responsibilities toward the **OWNER** for **UNDERSIGNED's** services set forth in this Agreement.

SECTION 2 - SERVICES

a. The Engineering Design Services, when authorized in writing by a Notice to Proceed, shall be performed by the **UNDERSIGNED** in accordance with the **OWNER'S** requirements; as set forth in Exhibit A and summarized as follows:

Prepare construction plans, and specifications including surveying and geotechnical services for a Sanitary Intercepter Tunnel ranging in size from 60 to 72 inches in diameter for a distance of approximately 22,200 lineal feet from the Trinity River Authority intercepter, easterly crossing I-35 generally following an alignment along Valley View Lane and Marsh Lane in the city of Farmers Branch, Texas.

b. The following Services During Construction, when authorized in writing by a Notice to Proceed shall be performed by the undersigned in accordance with the **OWNER'S** requirements; as set forth in Exhibit B and summarized below:

Provide Construction Management Services for the construction of the Sanitary Interceptor Tunnel referred to in paragraph a. above including Detailed full time observation of construction, including inspection, reporting and recommendations to owner for conformance with plans and specifications, shop drawing review, recommendations for pay estimate approvals, utility and traffic control coordination, daily approval of all Contract pay items, and coordination of all restoration, daily clean up and citizens complaints, and monitor contractors schedules.

c. **UNDERSIGNED** shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, plans and other services furnished by **UNDERSIGNED** under this Agreement. **UNDERSIGNED** shall, without additional compensation, correct or revise any errors or deficiencies in the design, drawings, specifications, plans and other services.

d. Neither **OWNER'S** review, approval or acceptance of, nor payment for any of the services required under this Agreement, shall be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement, and **UNDERSIGNED** shall be and remain liable to **OWNER** in accordance with applicable law for all damages to **OWNER** caused by **UNDERSIGNED's** negligent performance of any of the services furnished under this Agreement.

e. The rights and remedies of **OWNER** under this Agreement are as provided by law and equity and shall include but shall not be limited to the right to seek specific performance of the terms hereof and to strictly enforce all terms and provisions..

SECTION 3 PAYMENT

a. **OWNER** shall pay **UNDERSIGNED** for all Engineering Design services authorized in writing and properly performed by **UNDERSIGNED** on the basis herein described, subject to additions or deletions for changes or extras agreed upon in writing.

b. Partial payment for Engineering Design Services will be as stipulated in Exhibits "C" and "D" attached hereto and incorporated herein. Invoices shall be submitted monthly.

c. Upon completion of Design Services and prior to notice to proceed with Services During Construction, the **OWNER** will negotiate with the **UNDERSIGNED** the billing rates and fee schedules for Services During Construction. **OWNER** shall pay undersigned for all Services During Construction authorized in writing and properly performed by **UNDERSIGNED** on the basis herein described, subject to additions or deletions for changes or extras agreed upon in writing.

d. Partial payment for Services During Construction, will be stipulated in Exhibits E and F which will be negotiated and upon execution thereof attached to this agreement and incorporated herein. Invoices shall be submitted monthly.

e. Upon complete performance of this Agreement by **UNDERSIGNED** and final approval and acceptance of **UNDERSIGNED's** service by **OWNER, OWNER** will make final payment to **UNDERSIGNED** of the balance due under this Agreement within thirty (30) days of the following month after final payment for Design and Services During Construction services has been billed by **UNDERSIGNED.**

f. **OWNER** may deduct from any amounts due or to become due to **UNDERSIGNED** any sum or sums owing by undersigned to **OWNER.** In the event of any breach by **UNDERSIGNED** of any provision or obligation of this Agreement, or in the event of the assertion by other parties of any claim or lien against **OWNER**, or the **OWNER'S** premises, arising out of **UNDERSIGNED's** performance of this Agreement, **OWNER** shall have the right to retain out of any payments due or to become due to **UNDERSIGNED** an amount sufficient to completely protect the **OWNER** from any and all loss, damage or expense therefrom, until the breach, claim or lien has been satisfactorily remedied or adjusted by the **UNDERSIGNED.**

SECTION 4 - TIME FOR PERFORMANCE

a. **UNDERSIGNED** shall perform all services as provided for under this Agreement in a proper, efficient and professional manner in accordance with the **OWNER's** requirements. As time is of the essence in this Agreement, Services for Design Services excluding bidding and recommendation of award shall be completed within 340 calendar days, from the date of written notice to proceed from Owner to **UNDERSIGNED**, exclusive of **OWNER** and other governmental review time. Review submittals to **OWNER** during progress of the Design shall be at 50 percent, 90 percent and 100 percent completion stages at 225, 300 and 340 calendar days respectively from notice to proceed exclusive of **OWNER** and other governmental review time.

b. In the event **UNDERSIGNED's** performance of this Agreement is delayed or interfered with by acts of the **OWNER** or others, **UNDERSIGNED** may request an extension of time for the performance of same as hereinafter provided, but shall not be entitled to any increase in fee or price, or to damages or additional compensation as a consequence of such delays, not to exceed one year.

c. No allowance of any extension of time, for any cause whatever, shall be claimed or made to the **UNDERSIGNED**, unless **UNDERSIGNED** shall have made written request upon **OWNER** for such extension within forty-eight (48) hours after the cause for such extension occurred, and unless **OWNER** and **UNDERSIGNED** have agreed in writing upon the allowance of additional time to be made.

SECTION 5 - DOCUMENTS

a. All instruments of service (including plans, specifications, drawings, reports, designs, computations, computer programs, estimates, surveys other data or work items, etc.) prepared under this Agreement shall be submitted for approval of the **OWNER**. All instruments of service shall be professionally sealed as may be required by law or by **OWNER**.

b. Such instruments of service, together with necessary supporting documents, shall be delivered to **OWNER**, and **OWNER** shall have unlimited rights, for the benefit of **OWNER**, in all instruments of service, including the right to use same on any other work of **OWNER** without additional cost to **OWNER**. If, in the event **OWNER** uses such instruments of service on any work of **OWNER** other than that specified in the Scope of Services, attached as Exhibits "A" and "B", provided **UNDERSIGNED** completes this Agreement, under those circumstances **OWNER** hereby agrees to protect, defend, indemnify and hold harmless the **UNDERSIGNED**, their officers, agents, servants and employees (hereinafter individually and collectively referred to as "Indemnities"), from and against suits, actions, claims, losses, liability or damage of any character, and from and against costs and expenses, including, in part, attorney fees incidental to the defense of such suits, actions, claims, losses, damages or liability on account of injury, disease, sickness, including death, to any person or damage to property including, in part, the loss of use resulting therefrom, arising from any inaccuracy, such use of such instruments of service with respect to such other work except where **UNDERSIGNED** participates in such other work.

c. **UNDERSIGNED** agrees to and does hereby grant to **OWNER** a royalty-free license to all such instruments of service which **UNDERSIGNED** may cover by copyright and to all designs as to which **UNDERSIGNED** may assert any rights or establish any claim under the design patent or copyright laws. **UNDERSIGNED**, after completion of the project, agrees to furnish the originals of all such instruments of service to the **OWNER**.

SECTION 6 - TERMINATION

a. **OWNER** may suspend or terminate this Agreement for cause or without cause at any time by giving written notice to the **UNDERSIGNED**. In the event suspension or termination is without cause, payment to **UNDERSIGNED**, in accordance with the terms of this Agreement, will be made on the basis of services reasonably determined by **OWNER** to be satisfactorily performed to date of suspension or termination. Such payment will be due upon delivery of all instruments of service to **OWNER.**

b. Should the **OWNER** require a modification of this contract with **UNDERSIGNED**, and in the event **OWNER** and **UNDERSIGNED** fail to agree upon a modification to this Agreement, **OWNER** or **UNDERSIGNED** shall have the option of terminating this Agreement and the **UNDERSIGNED's** services hereunder at no additional cost other than the payment to **UNDERSIGNED**, in accordance with the terms of this Agreement, for the services reasonably determined by **OWNER** to be properly performed by the **UNDERSIGNED** prior to such termination date.

SECTION 7 - INSURANCE

a. **UNDERSIGNED** shall carry and maintain during the term of this contract and any renewal term(s) such liability and other insurance coverages in the minimum amounts as set forth below with insurance companies authorized to do such business in the State of Texas:

(1) Worker's Compensation, including occupational diseases, providing for the payment of statutory benefits required by law.

(2) Employer's liability insurance with a minimum limit of $100,000 per - occurrence each accident/$100,000 by disease per - occurrence/$100,000 by disease aggregate.

(3) Comprehensive general liability coverage with the limits as follows: Bodily injury and property damage liability with a minimum combined single limit of $500,000 per - occurrence and $1,000,000 general aggregate. Such coverage shall include contractual liability and product liability (including completed operations) in the amount of $500,000 products/completed operations aggregate.

(4) Comprehensive automobile liability insurance with a minimum combined single limit of $500,000 per - occurrence for bodily injury and property damage including owned, non-owned and hired car coverage.

(5) Professional liability insurance at minimum limits of $2,000,000 per claim.

b. **UNDERSIGNED** agrees to have **OWNER** designated as an additional insured party under insurance policies described in Subsections 3 and 4.

c. **UNDERSIGNED** shall provide **OWNER** with certificates of insurance evidencing the above coverages. Provision shall be made in each certificate that any change in coverage (including cancellation) shall not be made without thirty (30) days prior written notice to **OWNER**.

SECTION 8 - INDEMNIFICATION FOR INJURY AND PERFORMANCE

UNDERSIGNED further specifically obligates itself to **OWNER** in the following respects, to-wit:

The **UNDERSIGNED** hereby agrees to protect, defend, indemnify and hold harmless the **OWNER**, their officers, agents, servants and employees (hereinafter individually and collectively referred to as "Indemnities"), from and against suits, actions, claims, losses, liability or damage of any character, and from and against costs and expenses, including, in part, attorney fees incidental to the defense of such suits, actions, claims, losses, damages or liability on account of injury, disease, sickness, including death, to any person or damage to property arising from any act, error, omission or neglect of the **UNDERSIGNED**, its officers, employees, servants, agents or subcontractors, or anyone else under the **UNDERSIGNED's** direction and control, and arising out of, occurring in connection with, resulting from or caused by the performance or failure of performance of any work or services called for by this Agreement, or from conditions created by the performance or non-performance of said work or services. In the event one or more of the Indemnities is determined by a court of law to be jointly or derivatively negligent or liable for such damage or injury, the **UNDERSIGNED** shall be obligated to indemnify **OWNER** as provided herein on a proportionate basis in accordance with the final judgement, after all appeals are exhausted, determining such joint or derivative negligence or liability.

The **UNDERSIGNED** is not responsible for the actions of the **OWNER's** contractor to perform the construction of the improvements covered under this Agreement. Acceptance and approval of the final plans by the **OWNER** shall not constitute nor be deemed a release of this responsibility and liability of **UNDERSIGNED**, its employees, associates, agents and Engineers for the accuracy or competency of their designs, working drawings and specifications, or other documents and work; nor shall such approval be deemed to be an assumption of such responsibility by the **OWNER** for any defect in the designs, working drawings and specifications, or other documents prepared by **UNDERSIGNED**, its employees, contractor, agents and Engineers.

SECTION 9 - INDEMNIFICATION FOR UNEMPLOYMENT COMPENSATION

UNDERSIGNED agrees that it is an independent contractor and not an agent of the **OWNER**, and that **UNDERSIGNED** is subject, as an employer, to all applicable Unemployment Compensation Statutes, so as to relieve **OWNER** of any responsibility or liability from treating **UNDERSIGNED's** employees as employees of **OWNER** for the purpose of keeping records, making reports or payments of Unemployment Compensation taxes or contributions. **UNDERSIGNED** further agrees to indemnify and hold **OWNER** harmless and reimburse it for any expenses or liability incurred under said Statutes in connection with employees of **UNDERSIGNED.**

SECTION 10 - INDEMNIFICATION FOR PERFORMANCE

UNDERSIGNED shall defend and indemnify **OWNER** against and hold **OWNER** and the premises harmless from any and all claims, suits or liens based upon or alleged to be based upon the non-payment of labor, tools, materials, equipment, supplies, transportation and management costs incurred by **UNDERSIGNED** in performing this Agreement.

SECTION 11 - ASSIGNMENT

UNDERSIGNED shall not assign or sublet this Agreement, or any part thereof, without the written consent of **OWNER.**

SECTION 12 - APPLICABLE LAWS

UNDERSIGNED shall comply with all Federal, State, County and Municipal laws, ordinances, regulations, safety orders, resolutions and building codes relating or applicable to services to be performed under this Agreement.

This Agreement is entered into subject to the Charter and Ordinances of the **CITY OF FARMERS BRANCH** and the laws of the State of Texas.

SECTION 13 - DEFAULT OF UNDERSIGNED

IN THE EVENT **UNDERSIGNED** fails to comply or becomes disabled and unable to comply with the provisions of this Agreement as to the quality or character of the service or time of performance, and the failure is not corrected within ten (10) days after written notice by **OWNER** to **UNDERSIGNED, OWNER** may, at its sole discretion without prejudice to any other right or remedy:

a. Terminate this Agreement and be relieved of the payment of any further consideration to **UNDERSIGNED** except for all work determined by **OWNER** to be satisfactorily completed prior to termination. Payment for work satisfactorily completed shall be for actual costs, including reasonable salaries and travel expenses of **UNDERSIGNED** to and from meetings called by **OWNER**, at which the **UNDERSIGNED** is required to attend, but shall not include any loss of profit of **UNDERSIGNED**. In the event, of such termination, **OWNER** may proceed to complete the services in any manner deemed proper by **OWNER**, either by the use of its own forces or by resubletting to others. In either event, the **UNDERSIGNED** shall be liable for all costs in excess of the total contract price under this Agreement incurred to complete the services herein provided for and the costs so incurred may be deducted and paid by the **OWNER** out of such monies as may be due or that may thereafter become due to **UNDERSIGNED** under and by virtue of this Agreement.

b. **OWNER** may, without terminating this Agreement or taking over the services, furnish the necessary materials, equipment, supplies and/or help necessary to remedy the situation, at the expense of the **UNDERSIGNED**.

SECTION 14 - ADJUSTMENTS IN SERVICES

No claims for extra services, additional services or changes in the services will be made by **UNDERSIGNED** without a written agreement with **OWNER** prior to the performance of such services.

SECTION 15 - EXECUTION BECOMES EFFECTIVE

This Agreement will be effective upon execution of the contract by and between **UNDERSIGNED** and **OWNER**.

SECTION 16 - AGREEMENT AMENDMENTS

This Agreement together with Exhibit A, Exhibit B, Exhibit C and Exhibit D attached hereto contains the entire understanding of the parties with respect to the subject matter thereof and there are no oral understandings, statements or stipulations bearing upon the meaning or effect of this Agreement which have not been incorporated herein.

Exhibit E and Exhibit F, summary of cost and Billing rates for Services During Construction, will be included as Amendments to the Contract upon negotiation of the cost of these services upon completion of Design Services and when executed and attached hereto. This Agreement may only be modified, amended, supplemented or waived by a written instrument execute by the parties except as may be otherwise provided therein.

SECTION 17 - WRITTEN NOTICES

All notices, demands and communications hereunder shall be in writing and may be serviced or delivered personally upon the party for whom intended, or mailed to the party for whom intended at the address set forth on the signature page of this Agreement. The address of a party may be changed by notice given pursuant to this Section.

SECTION 18 - GENDER AND NUMBER

The use of any gender in this Agreement shall be applicable to all genders, and the use of singular number shall include the plural and conversely.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on this the 6th day of January, 19 92.

OWNER:

North Dallas County Water Supply Corporation

By: _____
Richard L. Escalante
President

By: _____
John F. Burke
Secretary

UNDERSIGNED:

Consoer, Townsend & Associates

By: _____
C.J. Smith, P.E.
Vice President

Witness: _____

Witness: _____

Approved as to Form: _____

EXHIBIT "A"

SCOPE OF SERVICES FOR ENGINEERING DESIGN

This is an Exhibit to and incorporated into the Agreement (the "Agreement") entered into by and between the **NORTH DALLAS COUNTY WATER SUPPLY CORPORATION**, a Texas Water Supply Corporation, created by the City of Farmers Branch and the town of Addison hereinafter referred to as "**OWNER**", and **CONSOER TOWNSEND & ASSOCIATES, INC.**, hereinafter referred to as "Engineer", on Jan 6, 1992 and sets forth certain terms, conditions and provisions of the Agreement. Final design includes Special Services which are included in Exhibit "A" as Section B-1 thru B-4.

A. FINAL DESIGN

1. Upon notice to proceed meeting with owner to review Preliminary Report and establish a schedule for review and monthly progress meetings.

2. Establish the route and parameters of the detailed topographic survey and complete surveys using Datum and Bench Marks established in Preliminary Report. The detailed scope of the topographic surveys is set forth in Special Services.

3. Conduct field land surveys necessary to prepare plats and legal descriptions of all permanent and temporary easements along the route of the proposed interceptor. The detailed scope of the land surveys is set forth in Special Services.

4. Prepare final design geotechnical report supplementing the soil report completed during the preliminary design phase. Also pumping tests and an Environmental water quality assessment will be completed in connection with the Geotechnical Report. The detailed scope of final geotechnical report is set forth in Special Services.

5. Plans will be prepared on 24-inch by 36-inch plan and profile, sheets of a scale of 1" = 20' in plan view and 1" = 5' in the profile vertical scale. Plans will be prepared using CADD method.

6. Plans will include a cover sheet, a location sheet, traffic control sheets, plan and profile sheets, detail sheets, construction notes and legend sheets and standard detail sheets. All sheets will be designed and sealed by a engineer registered in the state of Texas.

7. Prepare contract documents including notice to bidders, proposal, special instructions to bidders, contract conditions, special provisions, and project specifications using the CSI standard specifications, and **"OWNER"** of Farmers Branch Standard Documents.

8. Prepare the documents required to obtain approval of all governmental authorities having jurisdiction over the design and/or operation of the Project and all public and private utilities including license agreements to cross railroad property and pipeline transmission companies affected by the Project. Submit plans or agreements for signatures of representatives of such governmental authorities and public utilities; and **"OWNER"** officials.

9. Design the Project in compliance with the requirements of all applicable local, state and federal laws, codes and regulations, make all revisions to the plans, specifications and other contract documents necessary to provide clarifications or to correct discrepancies. The plans and specifications shall conform to all applicable federal and state regulations.

10. Deliver to the **"OWNER"** five copies of preliminary plans at the 50% completion stage for their review and at the 90% and 100% completion stages of Final Design a detailed cost estimate and five (5) copies of all the reports, recommendations, analyses, specifications, plans and drawings (including working drawings) or as may be modified by Exhibit "A", Scope of Services.

11. Furnish the owner 30 sets of plans and specifications for bidding purposes. Assist the "**OWNER**" in securing bids for the construction of the Project based upon the construction documents; attend prebid conferences; assist the "**OWNER**" in evaluating the bid proposals; prepare tabulations of bids received; and furnish the "**OWNER**" 20 copies of the bid tabulation and a written recommendation for the award of a construction contract for the project.

12. Issue all required addenda to revise the plans, specifications and other contract documents in order to (i) provide clarifications; (ii) correct discrepancies; (iii) correct errors and/or omissions; or (iv) reflect changes in design requirements and/or field conditions.

B. SPECIAL SERVICES

1. Surveying

Perform field surveys and provide office support relative to surveying required to obtain horizontal and vertical data along the proposed interceptor sewer line, prepare temporary and permanent easements, and to prepare a working plan layout on CADD. Specific tasks are as follows:

a. Horizontal Control - Establish a baseline as approved by "**OWNER**" on a location near the centerline of the proposed interceptor sewer. A representative from CT&A will assist Lichliter, Jameson & Associates in identification of the shaft locations (PI's) on the baseline. The baseline will be staked at 100' station intervals. PI's will be referenced with points outside the construction area for re-establishment during construction using Aerial and Field Surveys.

b. Topography - Obtain complete planimetric topography with ties to streets, buildings, trees, utilities, etc. Where sewer is in public R.O.W. the topography will be obtained from right of way to right of way plus an additional 35 feet or the distance necessary to locate the nearest dwelling units which ever is

smaller. Where sewer is in public or private property the topography will be obtained 75 feet on each side of the centerline of proposed sewer. This topo will be obtained from ROW to ROW or for a width of 150' (75' each side of the baseline) when on new location. Invert elevations of underground utilities will be obtained where accessible. Elevations will be obtained along utilities at locations probed or uncovered by utility companies. All survey data will be digitized on discs for CADD Drafting.

c. Profiles and Cross Sections - Obtain elevations along the baseline at 100' station intervals. At creek, street, railroad, and highway crossings, obtain additional cross sections as appropriate to represent the surface. At shaft locations, establish a 20' grid for a width of approximately 60' x 80' and obtain elevations on the grid points.

d. ROW/Easements - Research property information (plats, right of way plans, metes & bounds descriptions). Tie property corners, fences, etc. to define the existing street right of way. Prepare a working sketch of existing street right of way and properties which are crossed by the interceptor sewer line. Perform boundary analysis and computations to define the permanent easements as required for the line and temporary easements at shaft locations. Prepare individual plats and metes and bounds descriptions for each easement. Stake the limits of the easements in a semi-permanent manner as required by the **"OWNER"**.

2. Geotechnical Investigations

Perform final geotechnical services to provide soil borings, tests and reports in accordance with the following specific tasks:

a. Test borings will be drilled at approximately 500-feet intervals along the recommended alignment to depths below the proposed sewer invert.

b. A total of 37 borings to total depths of 25 to 100 feet are proposed as summarized in Table 1. Boring logs and related information from the preliminary geotechnical report will be used to fill in the information base along the alignment.

c. Cohesive soils will be sampled with thin-walled tube samplers. Standard penetrations tests will be performed on very sandy or cohesionless soils. The sampling intervals will be at each change in material or a maximum of five feet. The unweathered Eagle Ford Shale will be continuously cored with double-tube core barrels and appropriate bits. All samples will be extruded in the field and packaged to protect them from disturbance and preserve their in-situ moisture content.

d. Field permeability tests by the pressure packer method will be performed at selected locations in the shale bedrock to evaluate in-situ permeability. Small-diameter (2-inch PVC) groundwater observations wells will be installed at selected locations, primarily in the overburden soils, for long-term groundwater level measurements. Field permeability tests by the bailing and recovery method will be performed in these observation wells to evaluate in-situ permeability.

e. All borings will be grouted following completion of drilling.

f. An experienced field geologist will be assigned to each drilling rig to log the borings, perform field tests, assist in access and utility clearances at boring sites, and perform related duties.

g. Ground surface elevations and locations will be provided for each of the test borings (final and preliminary).

h. Laboratory tests will be performed on representative samples to establish the pertinent engineering properties of the various soil and rock strata.

For soil samples, the following tests are anticipated:

Natural moisture content
Dry unit weight
Atterberg limits and linear shrinkage
Grain-size analysis
Unconfined compression
Triaxial shear
Direct shear
Absorption swell

For rock core samples, the following tests are anticipated:

Natural moisture content
Dry unit weight
Unconfined compression
Triaxial compression
Absorption swell
Atterberg limits

These tests will be performed in general accordance with ASTM and IRSM methods. It is also proposed to perform a limited program of special tests to further evaluate the rock durability, hardness, and mineralogy. Addisontional types of tests for both soil and rock samples may be performed depending on conditions encountered.

i. The results of all field and laboratory studies will be compiled into an engineering report with Southwestern Laboratories (SwL) comments and recommendations on various appropriate design parameters.

These will include, as a minimum, the following:

- o Test boring logs and discussion of soil and rock stratigraphy
- o Interpretive subsurface profile along the alignment

- o Discussion of geologic and hydrogeologic conditions including groundwater levels
- o Laboratory test results and discussion of engineering properties of soil and rock materials.
- o Geotechnical engineering comments and recommendations, including
  - dewatering (open cut, shafts, and tunnel)
  - soil bearing and settlement in cut and cover segment
  - pipe bedding and backfill
  - design parameters for excavation support
  - cut and cover excavation slopes
  - estimated ground movements
  - monitoring and instrumentation

j. Field pumping tests will be performed to provide more in-depth measurements of the in-situ permeability characteristics of the overburden soils, at three locations. At each location, this will require installation of a 4-inch diameter PVC pumping well and two nearby 2-inch diameter PVC observation wells or piezometers. The larger well will be pumped for a period of 12-hours with observations of drawdown levels in the pumping well, and the drawdown wells before, during, and following the pumping period. The pumping flow rate will also be monitored. The test results would then be analyzed to obtain coefficients of permeability, transmissivity, and related geohydrologic information at each of the test sites.

k. Preliminary Environmental and Water Quality Assessment will be prepared to assess the potential for environmental liabilities associated with past or current practices along the alignment, and include the following tasks:

(1) Determine Existing Conditions Along Alignment

A site visit will be conducted to observe surficial evidence of environmental impairment. The SwL staff will inspect the alignment and adjacent properties for the presence of the underground storage tanks,

chemical stains, stressed vegetation, land scars, or obvious evidence of improper use or disposal of toxic or hazardous materials. Right of entry will be provided by the **"OWNER"**.

(2) Review History

The history of the alignment will be reviewed by utilizing data such as aerial photographs, inquiries of persons familiar with adjacent sites, and possibly, property chain-of-title. The surface conditions and surrounding land-use will be examined for previous activities that may have affected the environmental conditions.

(3) Regulatory Agency Inquiry

Inquiries will be made to local, state, and federal regulatory agencies to determine whether or not noncompliance citations or violations have been issued in the past. Examples of regulatory agencies include, the Texas Water Commission (TWC), city or county health departments, air quality and water quality departments, and the Environmental Protection Agency (EPA).

(4) Groundwater Sampling and Tests

Based on these findings, sites will be selected for installation of 4-inch diameter groundwater monitor wells at three locations judged to have the highest potential for the presence of hazardous substances. These wells will be installed using appropriate decontamination procedures for the drilling equipment and well materials. Groundwater samples will then be obtained using appropriate sampling methods for water quality analysis. Parameters anticipated for such analyses include general groundwater characterization (pH, total dissolved solids, specific conductance, etc.), total organic carbon, total petroleum hydrocarbons, total volatile hydrocarbons, purgeable aromatics, general pesticides and herbicides, and other substances as may be indicated by the findings of the previous tests.

(5) Data Evaluation and Final Report

All pertinent data and observations will be organized and presented in the final report. The report will include an opinion by SwL with regard to the potential for environmental concerns and liabilities, including the presence of hazardous and toxic substances. Should the results of this study reveal evidence for the potential for environmental concerns, a recommendation will be made for additional investigation activities, which commonly include additional soil borings, monitor wells, soil/waste sampling and laboratory testing, not included within the scope of this preliminary study.

3. Analytical Laboratory Testing

A minimum of three analytical laboratory tests will be performed on the sanitary sewage which will be conveyed in the new sanitary interceptor tunnel. The test will include the following analysis:

PH, sulfates, sulfides, cyanide, volatile organics, semi-volatile organics, chlorides and methane.

These tests will be conducted for use in analyzing corrosion protection necessary for the tunnel and appurtenances.

4. Flow Monitoring

A maximum of two portable velocity flow monitors will be installed for a maximum six week period to determine dry and wet weather flows tributary to the terminus of the new sanitary interceptor tunnel.

EXHIBIT "B"

SCOPE OF SERVICES FOR SERVICES DURING CONSTRUCTION

This is an Exhibit to and incorporated into the Agreement (the "Agreement") entered into by and between the **NORTH DALLAS COUNTY WATER SUPPLY CORPORATION**, a Texas Water Supply Corporation, created by the Cities of Farmers Branch and Addison hereinafter referred to as "**OWNER**", and **CONSOER TOWNSEND & ASSOCIATES, INC.**, hereinafter referred to as "Engineer", on January 10, 1992 and sets forth certain terms, conditions and provisions of the Agreement.

The Engineer shall provide professional services during construction to assist in obtaining a complete Project in accordance with the purpose and intent of the contract documents. Services During Construction shall include, but not be limited to, the following:

1. Participate in pre-construction conferences and assist with the execution of a contract between the "**OWNER**" and the successful bidder;

2. Provide a full time on site resident engineer and assistant field engineers as required to administer construction contracts and prepare monthly progress reports, minutes of meetings, daily diaries, review and monitor contractor's CPM schedule adherence and project progress, and check and recommend approval of contractors pay estimates, and provide daily on site construction inspection for conformance with plans and specifications, including reporting and recommendations to Owner. However, neither Consoer, Townsend & Associates or Jay Dee Contractors are responsible for the means or methods employed by the Contractor in the process of his work, or have the authority to stop the Contractor's work.

3. Jay Dee Contractors Inc. will assist Consoer Townsend & Associates during construction Phase Services and will provide at least one full time representative as part of the onsite personnel referred to in Paragraph 2 above.

Both Consoer Townsend and Jay Dee Contractors will assign a project manager to interface between the contractor, the "**OWNER**" and resident engineers and attend monthly progress meetings and any other meetings as required.

4. Review, prepare, make recommendations, execute, and administer contract changes including field change orders and engineering design changes.

5. Review and recommend approval of contractor's submittals and schedules including shop drawings and coordinate during construction to minimize the impact of traffic disruption or dust conditions to the local populace.

6. Arrange for, and coordinate as required, all independent testing or laboratory services necessary for the project and review and administer, as needed, in accordance with the test results.

7. Coordinate with contractor, utility companies and Owners Public Works Department to minimize disruption of utilities caused by or required by construction operations.

8. Conduct a final inspection and prepare final punch list to be approved by Owner prior to approval of final pay estimate. Conduct a final inspection with Owner after completion of punch list.

9. Provide two sets of reproducible record prints of drawings, which shall become the property of the "**OWNER**" corrected to show significant changes made in the work during the construction of the Project. Such corrections shall be based upon " as-built" prints, drawings, field sketches and other data furnished to the Engineer by the "**OWNER**" and the contractor, upon change orders issued during construction, and upon on-site observations of the Engineer.

10. No less than 30 days and no more than 45 days before the expiration of the guarantee period established by the construction contract documents, the Engineer, in company with the "**OWNER**", shall inspect the construction site. Within fourteen days after such inspection the Engineer shall furnish the "**OWNER**" with a written report enumerating items which require repair or replacement as provided under the guarantee and warranty provisions of the contract documents;

EXHIBIT "C"

PAYMENT AND BILLING RATES

This is an Exhibit to and incorporated into the Agreement (the "Agreement") entered into by and between the **NORTH DALLAS COUNTY WATER SUPPLY CORPORATION**, a Texas Water Supply Corporation, created by the Cities of Farmers Branch and Addison hereinafter referred to as "**OWNER**", and **CONSOER, TOWNSEND & ASSOCIATES, INC.**, hereinafter referred to as "Engineer", on Jan 6, 1992

I. PAYMENT

Payment will be based on base salary of staff members involved in productive work on the project times a multiplier of 3.10 with maximum fees set forth in Exhibit "D".

II. BILLING RATES

Average billing rates for Consoer, Townsend & Associates, Inc. and the subcontractor's Lichliter Jameson for surveying services; Southwestern Laboratories for geotechnical work and Jay Dee Contractors for design services are as follows:

A. CONSOER TOWNSEND

Classification	Average Billing Rate Per Hour
Senior Advisor	$ 110.00
Project Manager	110.00
Project Engineer	84.00
Sr. Civil Engineer	78.00
Civil Engineer	65.00
Structural Engineer	81.00
CAD Technician	56.00
Technician	50.00

(Exhibit "C" Continued)

B. JAY DEE CONTRACTORS

Classification	Average Billing Rate Per Hour
Sr. Design Engineer	$ 107.00
Sr. Estimator	60.00
Staff Estimator	45.00

C. SOUTHWESTERN LABORATORIES
(See Following Pages)

D. LICHLITER/JAMESON & ASSOCIATES, INC.
(See Following Pages)

EXHIBIT "C"

Lichliter Jameson & Associates, Inc.

AVERAGE RATE SCHEDULE

Classification	Base Salary Per Hour	Average Billing Rate Per Hour
Project Manager	$ 26.50	$79.50
Engineer	18.30	54.90
Registered Public Surveyor	19.00	57.00
Survey Technician	15.00	45.00
Survey Crew (3 man)	-----	70.00
CADD Operator	15.00	45.00
Clerical	11.50	34.50
CADD Equipment	-----	25.00

EXHIBIT "C"

SOUTHWESTERN LABORATORIES

SCHEDULE OF SERVICES AND MINIMUM FEES

NORTH TEXAS GEOTECHNICAL ENGINEERING DIVISION
JANUARY 1991

HOURLY FEES FOR PERSONNEL

ENGINEERS		
Staff Engineer	(Grade I and II)	$ 60.00
Project Engineer	(Grade III and IV)	$ 75.00
Senior Engineer	(Grade V and VI)	$ 95.00
Principal Engineer	(Grade VII and VIII)	$105.00
Expert Witness	(4 hour minimum)	$160.00
GEOLOGIST		
Staff Geologist		$ 45.00
Project Geologist		$ 55.00
Senior Geologist		$ 85.00
DRAFTSMAN		$ 35.00
TECHNICIANS		
Technician in Training		$ 25.00
Engineering Technician		$ 35.00
WORD PROCESSING		$ 30.00

Direct Costs at cost plus 15 percent

SCHEDULE OF SERVICES AND MINIMUM FEES

NORTH TEXAS GEOTECHNICAL ENGINEERING DIVISION
FIELD STUDIES
JANUARY 1991

MOBILIZATION AND DEMOBILIZATION

1. Truck mounted drill rig, water truck and crew---------- $ 2.65/mi.
   ($175.00 Minimum)

2. Pickup and 3-man crew (travel to/from site and office when equipment left at location on out-of-town projects) $ 1.25/mi.

3. Subsistence per crew member---------- $ 60.00/day

4. Minimum drilling fee---------- $500.00

FIELD INVESTIGATION

5. Soil samples (Shelby Tube samples in cohesive soils, 2-inch split spoon samples in cohesive soils)

   a. Intermittent 2 or 3-inch diameter

      0-50 (sampled at 5'intervals---------- $ 9.15/ft

      50-100 (sampled at 5'intervals)---------- $ 11.60/ft.

      100-200 (sampled at 10'intervals)---------- $ 16.80/ft.

      200-300 (sampled at 20'intervals)---------- $ 21.00/ft.

   b. Continuous 2 or 3-inch diameter

      0-50 feet---------- $ 16.80/ft.

      50-100 feet---------- $ 21.00/ft.

   c. Larger diameters----------Quoted on request

6. Wash or auger borings without samples---------- $ 5.00/ft.

7. Undisturbed or split-spoon samples in wash or auger borings---------- $ 31.50/ea.

8. Casing of boring through overburden for soil sampling or rock coring---------- $ 5.00/ft.

FIELD STUDIES

9. Rock coring (NX-size), continuous coring, plus bit costs

    a. Carbide ——— $14.95

    b. Diamond ——— $21.00

10. Equipment rental plus bit costs

    a. Two men, Mobil B-53 ——— $136.50/hr.

    b. Three men, Failing 1250 (air), GD1000 (air) Mobil B-57 ——— $150.00/hr.

    c. Three men, CME 75 air combination ——— $160.00/hr.

11. Stand-by of crew and equipment, including move time in excess of 30 minute per boring

    a. Three men, drilling equipment ——— $130.00/hr.

12. Rental equipment necessary to gain access ——— Cost +15%

13. Instrumentation (slope indicators, piezometers, etc.)

    a. Installation ——— Rig rental rate

    b. Materials (screen, pipe, instruments) ——— Cost +15%

    c. Geologist or Engineer at rate listed in Schedule of Hourly fees for personnel

    d. Standard 2-inch standpipe observation wells ——— $ 6.00/ft.

14. Drilling tools, casing and bits lost in hole ——— Cost +15%

15. Pressure testing ——— Rig rental rate

16. Resistivity Surveys ——— Quoted on request

17. Borehole Grouting

    a. Equipment ——— Rig rental rate

    b. Materials ——— Cost +15%

18. Rock Core Wooden Boxes ——— Cost +15%

SCHEDULE OF SERVICES AND MINIMUM FEES

NORTH TEXAS GEOTECHNICAL ENGINEERING DIVISION
LABORATORY TESTING
JANUARY 1991

IDENTIFICATION AND CLASSIFICATION TESTS	UNIT PRICES
1. Liquid and Plastic Limits	$ 39.50
2. Hydrometer Analyses, including Sieve	$ 75.00
3. Sieve Analyses through No. 200 Sieve	$ 26.00
4. Percent Passing No. 200 Sieve	$ 15.50
PHYSICAL TESTS	
5. Moisture Content	$ 3.00
6. Density and Moisture Content	$ 15.50
7. Maximum and Minimum Density	$ 185.00
8. Specific Gravity	$ 46.75
9. Permeability Fixed Wall	$ 75.00
Permeability Flex Wall	$ 175.00
10 Organic Content	$ 10.00
STRENGTH AND COMPRESSIBILITY TESTS	
11. Unconfined compression-maximum stress	
Soil (with Moisture-density)	$ 27.50
Rock	$ 27.50
12. Triaxial Shear 2 inch and 3 inch diameter specimens	
Unconsolidated - undrained	
Per specimen	$ 40.00
Multiple Stage	$ 100.00
Consolidated-Undrained with Pore Pressure	
Per specimen	$ 140.00
Multiple Stage (3-points)	$ 340.00
Stress-Strain curves for above tests	
Per specimen	$ 30.00
13. Direct Shear - Per specimen	
Unconsolidated - Undrained	$ 45.00
Consolidated - Undrained	$ 85.00
Consolidated - Drained	$ 135.00
Residual strength determination in conjunction with above tests - Add	$ 115.00

LABORATORY TESTING

STRENGTH AND COMPRESSIBILITY - Continued	UNIT PRICE
14. Consolidation	$ 180.00
15. Absorption Swell Test	$ 60.00
Controlled Pressure Swell	$ 80.00
16. Preparation of remolded or compacted specimen for items above	$ 20.00
17. Optimum Moisture - Density Relation	
Standard	$ 135.00
Modified	$ 150.00
18. California Bearing Ratio (3 specimens)	$ 415.00
19. Lime Stabilization	
Lime/Atterberg Series	$ 160.00
Lime/pH Series	$ 80.00
Optimum Moisture - Density/Lime Stabilized Soil	
4-inch Mold	$ 150.00
6-inch Mold	$ 150.00
Optimum Moisture Density with strength tests - three lime contents	$ 450.00
20. Dispersion	
Pinhole	$ 115.00
Crumb	$ 21.00
Double Hydrometer	$ 115.00
21. Laboratory Resistivity	$ 35.00

ANALYTICAL TESTING
SANITARY INTERCEPTOR SEWER
FARMERS BRANCH/ADDISON, TEXAS

pH	5.00 ea.
Sulfates	20.00 ea.
Sulfides	25.00 ea.
Cyanide	25.00 ea.
Volatile Organics	225.00 ea.
Semi-Volatile Organics	575.00 ea.
Chlorides	20.00 ea.
Methane	50.00 ea.
Total	$945.00/sample

Above series on five or more samples $875.00/sample.

Sampling Charge $45.00/hr. For three sampling times estimate maximum of 8 hours.

April 17, 1991

EXHIBIT "D"

SUMMARY OF COSTS

This is an exhibit to and incorporated into the Agreement (the "Agreement") entered into by and between the **NORTH DALLAS COUNTY WATER SUPPLY CORPORATION**, a Texas Water Supply Corporation, created by the Cities of Farmers Branch and Addison hereinafter referred to as **"OWNER"** and **CONSOER, TOWNSEND & ASSOCIATES, INC.**, hereinafter referred to as "Engineer", on Jan 6, 1992.

MAXIMUM FINAL DESIGN BASIC SERVICES COST

A.	BASIC FINAL DESIGN SERVICES	$607,984
B.	OTHER DIRECT COSTS:	
1.	Printing plans specifications @ commercial invoice costs	
a.	5 sets for 50, 90 & 100 percent review	
b.	30 sets for bidding purposes	
c.	20 sets for regulatory & utility agencies	
d.	Total costs	$5,500
2.	Travel cost @ commercial invoice cost @ 26 round trips	$4,000
3.	CAD use costs @ $10.00 per hour @ 1,384 hours =	$13,840
	Total other direct costs	$23,340
	TOTAL MAXIMUM FINAL DESIGN BASIC SERVICES	$631,324

MAXIMUM SPECIAL SERVICES COST SUMMARY

A.	Surveying	$92,896

B.	Easement legal descriptions and plat preparation	$49,408
C.	Geotechnical investigations	$183,500
D.	Sanitary sewage analytical testing	$3,195
E.	Flow metering	$4,500
	TOTAL MAXIMUM SPECIAL SERVICES	$333,499
	TOTAL MAXIMUM COST FINAL DESIGN AND SPECIAL SERVICES COST	$964,823

EXHIBIT "E"
PAYMENT AND BILLING RATES FOR
SERVICES DURING CONSTRUCTION

This is an exhibit to and incorporated into the Agreement (the "Agreement") entered into by and between the **NORTH DALLAS COUNTY WATER SUPPLY CORPORATION**, a Texas Water Supply Corporation, created by the Cities of Farmers Branch and Addison hereinafter referred to as "**OWNER**" and **CONSOER, TOWNSEND & ASSOCIATES, INC.**, hereinafter referred to as "Engineer", on June 6, 1991.

I. PAYMENT

Payment will be based on actual salary of staff members involved in productive work on the project based on a salary multiplier to be negotiated with the owner upon the completion of Final Design.

II. BILLING RATES

Billing rates will be based on the personnel assigned to the project upon the completion of Final Design and will also be based upon the salary multiplier negotiated in Paragraph I - Payment - above.

Exhibit "E" is not included in this Agreement and if for information only.

EXHIBIT "F"
SUMMARY OF MAXIMUM COST FOR
SERVICES DURING CONSTRUCTION

This is an exhibit to and incorporated into the Agreement (the "Agreement") entered into by and between the **NORTH DALLAS COUNTY WATER SUPPLY CORPORATION**, a Texas Water Supply Corporation, created by the Cities of Farmers Branch and Addisonson hereinafter referred to as **"OWNER"** and **CONSOER, TOWNSEND & ASSOCIATES, INC.**, hereinafter referred to as "Engineer", on Jan 6, 1991.

The Maximum Costs for Services During Construction will be negotiated with the owner upon completion of Final Design.

Exhibit "F" is not included in this Agreement and if for information only.

ATTACHMENT 'B'

NORTH DALLAS COUNTY WATER SUPPLY CORPORATION

EXTRA WORK COST SUMMARY

A. SouthWestern Bell Design Adjustment

1. Consoer Townsend & Associates

Position	Base Salary	Hours	Base Salary Multiplier	Cost
Project Manager	$39.01	20	3.1	$2,418.62
CADD Technician	$19.58	40	3.1	$2,427.92
Total				$4,846.54

B. R.O.W. Easements

1. Consoer Townsend & Associates

Position	Base Salary	Hours	Base Salary Multiplier	Cost
CADD Technician	$18.74	43	3.1	$2,498.04
Technician	$13.71	11	3.1	$467.51
CADD Technician	$19.58	23	3.1	$1,396.05
Technician	$14.33	6	3.1	$266.54
Total				$4,628.14

C. City of Dallas Requested Easement Adjustments

1. Consoer Townsend & Associates

Position	Base Salary	Hours	Base Salary Multiplier	Cost
CADD Technician	$19.58	4	3.1	$242.79

2. Lichliter/Jameson & Associates

Invoice No. 110185	$661.75
Total	$904.54

D. A-Z Report

1. Consoer Townsend & Associates

Position	Base Salary	Hours	Base Salary Multiplier	Cost
Project Director	$39.01	6	3.1	$725.59
Project Manager	$39.01	28	3.1	$3,386.07
Project Engineer	$29.63	23	3.1	$2,112.62
Technician	$13.99	8	3.1	$346.95
Technician	$14.33	1	3.1	$44.42
SubTotal				$6,615.65

2. Jay Dee Contractors, Inc.

Invoice No. _____	$0.00
Total	$6,615.65

E. Project Advertisement

	Invoice Nos.	Cost
McGraw-Hill	K1794047	$1,066.00
	K1804051	$1,066.00
	K1944062	$1,066.00
Total		$3,198.00

F. Total Extra Work $20,192.88

Project Budget Summary: Farmers Brai Addison Sanitary Inteceptor Sewer Tunnel

Invoice No.:			54790	54888	54977	55115	55223							
	Contract Amount	Subtotal 01/92-12/92	01/93	02/93	03/93	04/93	05/93	06/93	07/93	08/93	Total Billed	Contract Balance	Add'l Expns Requested	New Balance
BASIC SVCS	$607,984.00	$405,223.96	$71,602.96	$27,685.76	$29,740.35	$19,952.46	$30,050.24	$25,962.93	$17,897.42	$15,198.89	$643,314.97	($35,330.97)	$16,333.12	($18,997.85)
CT&A Design:	$555,996.00	$388,372.21	$51,526.83	$27,685.76	$29,740.35	$19,952.46	$20,030.83	$25,962.93	$17,897.42	$7,593.39	$588,762.18	($32,766.18)	$16,333.12	($16,433.06)
L/J Design:	$15,312.00	$14,925.75	$346.00							$2,605.50	$17,877.25	($2,565.25)		($2,565.25)
Jay Dee Cnstr:	$36,676.00	$1,926.00	$19,730.13				$10,019.41			$5,000.00	$36,675.54	$0.46		$0.46
DIRECT COSTS	$23,340.00	$20,644.86	$704.24	$0.00	$376.90	$255.33	$678.88	$3,032.33	$1,187.76	$421.52	$27,301.82	($3,961.82)	$3,198.00	($763.82)
printing:	$5,500.00	$1,679.44	$265.03		$376.90	$255.33	$153.53	$251.38			$2,981.61	$2,518.39		$2,518.39
travel:	$4,000.00	$5,125.42	$439.21				$525.35	$648.95	$121.76	$421.52	$7,282.21	($3,282.21)		($3,282.21)
CADD:	$13,840.00	$13,840.00									$13,840.00	$0.00		$0.00
Advertisement:	$0.00	$0.00						$2,132.00	$1,066.00		$3,198.00	($3,198.00)	$3,198.00	$0.00
TOTAL BASIC:	$631,324.00	$425,868.82	$72,307.20	$27,685.76	$30,117.25	$20,207.79	$30,729.12	$28,995.26	$19,085.18	$15,620.41	$670,616.79	($39,292.79)	$19,531.12	($19,761.67)
SPECIAL SVCS														
Surveying:	$92,896.00	$92,677.50								$10,177.00	$102,854.50	($9,958.50)		($9,958.50)
Esmts, Legal:	$49,408.00	$49,408.00						$661.75		$1,890.75	$51,960.50	($2,552.50)	$661.75	($1,890.75)
TOTAL SRVY:	$142,304.00	$142,085.50	$0.00	$0.00	$0.00	$0.00	$0.00	$661.75	$0.00	$12,067.75	$154,815.00	($12,511.00)	$661.75	($11,849.25)
Geotechnical:	$183,500.00	$142,403.16				$1,325.00		$770.00			$144,498.16	$39,001.84		$39,001.84
Anlytcl Tests:	$3,195.00	$0.00									$0.00	$3,195.00		$3,195.00
Flow Metering:	$4,500.00	$4,500.00									$4,500.00	$0.00		$0.00
TOTAL SPECIAL:	$333,499.00	$288,988.66	$0.00	$0.00	$0.00	$1,325.00	$0.00	$1,431.75	$0.00	$12,067.75	$303,813.16	$29,685.84	$661.75	$30,347.59
PROJECT TOTAL	$964,823.00	$714,857.48	$72,307.20	$27,685.76	$30,117.25	$21,532.79	$30,729.12	$30,427.01	$19,085.18	$27,688.16	$974,429.95	($9,606.95)	$20,192.87	$10,585.92

North Dallas County Water Supply Corporation
City of Farmers Branch/Town of Addison Joint Venture
Sanitary Interceptor Sewer - Phase I

I. Consoer Townsend & Associates

A. Estimated Staffing Costs

Position	Manhours	Rate	Cost
Principal	200	123.75	$24,750.00
Project Manager	940	123.00	$116,325.00
Resident Engineer	4002	75.00	$300,150.00
Project Engineer	500	94.00	$47,000.00
Structural Engineer	100	115.00	$11,500.00
CADD Technician	120	62.00	$7,440.00
Technician-Office	400	45.00	$18,000.00
		Subtotal	**$525,165.00**

B. Direct Costs

Travel - Plane and car rental (158 + 55) x 30 =		$6,390.00
Printing @ $125 x 24 =		$3,000.00
	Subtotal	$9,390.00
	Subtotal CT&A	**$534,555.00**

II. Jay Dee Contractors

A. Estimated Staffing Costs

Position	Manhours	Rate	Cost
Manager	768	115.00	$88,320.00
Assistant Resident Engineer	4002	75.00	$300,150.00
Field Inspector	3480	35.00	$121,800.00
Senior Safety Engineer	192	72.00	$13,824.00
		Subtotal	**$524,094.00**

B. Direct Costs

Travel Expenses (160 + 400) x 24 =		$13,440.00
	Subtotal Jay Dee	**$537,534.00**

III. Project Special Costs

A.	Safety Equipment	
	Combination Gas Tester, 2 @ $120/month x 20 =	$4,800.00
	Escape SCBA Units, 4 @ $50/month x 18 =	$3,600.00
	Anemometer, 1 @ $50/month x 18 =	$900.00
	Subtotal Safety Equipment	**$9,300.00**
B.	Photographs	
	5 photos x 21 days x 20 months @ .60/photo =	$1,260.00
C.	Tunnel Survey Consultant	
	3 surveys @ 3,000/Survey =	$9,000.00
D.	Surveying for Line and Grade and Settlement Control	
	1. Line and grade and setting elevation markers and establishing starting elevations	$25,650.00
	2. Provide elevations on all markers once a month for 12 months	$25,700.00
	3. Provide elevations at end of warranty period one year after construction	$5,250.00
	Subtotal Surveying	**$56,600.00**
E.	Project Vehicles	
	2 Vehicles @ $35/day @21 days x 23 months =	$33,810.00
	1 Vehicle @ $35/day @21 days x 20 months =	$14,700.00
	Subtotal Vehicles	**$48,510.00**
F.	One Year Warranty	
	Inspection and Report **Subtotal Warranty**	**$11,990.00**
	Subtotal Special Costs	**$136,660.00**
	Total Project Cost	**$1,208,749.00**

NORTH DALLAS COUNTY
WATER SUPPLY CORPORATION

ANNUAL FINANCIAL REPORT

YEAR ENDED SEPTEMBER 30, 1996

NORTH DALLAS COUNTY WATER SUPPLY CORPORATION

ANNUAL FINANCIAL REPORT
YEAR ENDED SEPTEMBER 30, 1996

CONTENTS

WEAVER AND TIDWELL L.L.P.

CERTIFIED PUBLIC ACCOUNTANTS AND CONSULTANTS

12221 Merit Drive
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Dallas, Texas 75251
972.490.1970
F 972.702.8321

INDEPENDENT AUDITOR'S REPORT

Board of Directors
North Dallas County Water
Supply Corporation
Farmers Branch, Texas

We have audited the accompanying financial statements of the North Dallas County Water Supply Corporation, as of and for the year ended September 30, 1996, as listed in the table of contents. These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the North Dallas County Water Supply Corporation at September 30, 1996, and the results of its operations for the year then ended in conformity with generally accepted accounting principles.

Weaver and Tidwell L.L.P.

WEAVER AND TIDWELL, L.L.P.

Dallas, Texas
November 7, 1996

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FORT WORTH OFFICE

307 West Seventh Street
Suite 1500
Fort Worth, Texas 76102

NORTH DALLAS COUNTY WATER SUPPLY CORPORATION
BALANCE SHEET - ALL FUND TYPES AND ACCOUNT GROUPS
SEPTEMBER 30, 1996

	Governmental Fund Types		Account Group	Totals Memorandum Only	
	General	Capital Projects	General Fixed Assets	1996	1995
ASSETS					
Cash	$	$ 83,156	$	$ 83,156	$ 125,971
Accounts receivable:					
Town of Addison	411	147,783		148,194	636,579
City of Farmers Branch	337	150,407		150,744	484,613
Construction in progress			15,164,957	15,164,957	12,624,059
Total Assets	$ 748	$ 381,346	$ 15,164,957	$ 15,547,051	$ 13,871,222
LIABILITIES					
Accounts payable	$ 748	$ 108,798	$	$ 109,546	$ 652,886
Retainage payable		191,930		191,930	521,002
Total liabilities	748	300,728		301,476	1,173,888
EQUITY AND OTHER CREDITS					
Investment in general fixed assets			15,164,957	15,164,957	12,624,059
Fund balances		80,618		80,618	73,275
Total equity and other credits		80,618	15,164,957	15,245,575	12,697,334
Total Liabilities, Equity and Other Credits	$ 748	$ 381,346	$ 15,164,957	$ 15,547,051	$ 13,871,222

The Notes to Financial Statements are an integral part of this statement.

NORTH DALLAS COUNTY WATER SUPPLY CORPORATION
STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN
FUND BALANCES - ALL GOVERNMENTAL FUND TYPES
YEAR ENDED SEPTEMBER 30, 1996

	Governmental Fund Types		Totals Memorandum Only	
	General	Capital Projects	1996	1995
Revenues:				
Charges to participant cities:				
Town of Addison	$ 6,209	$ 1,023,596	$ 1,029,805	$ 4,246,101
City of Farmers Branch	5,080	1,517,303	1,522,383	3,252,716
Interest income and other		7,343	7,343	13,954
Total revenues	11,289	2,548,242	2,559,531	7,512,771
Expenditures:				
Current:				
Project administration	3,077		3,077	2,353
Legal fees	1,078		1,078	25,610
Miscellaneous	7,134		7,134	3,835
Capital outlay		2,540,899	2,540,899	7,407,698
Total expenditures	11,289	2,540,899	2,552,188	7,439,496
Excess (deficiency) of revenues over expenditures		7,343	7,343	73,275
Other financing sources (uses):				
Operating transfers in		8,062	8,062	
Operating transfers out	(8,062)		(8,062)	
Total other financing sources (uses)	(8,062)	8,062		
Excess (deficiency) of revenues and other financing sources over expenditures and other financing uses	(8,062)	15,405	7,343	73,275
Fund balances, beginning of year	8,062	65,213	73,275	
Fund balances, end of year	$	$ 80,618	$ 80,618	$ 73,275

The Notes to Financial Statements are an integral part of this statement.

NORTH DALLAS COUNTY WATER SUPPLY CORPORATION
STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN
FUND BALANCES - BUDGET (GAAP BASIS) AND ACTUAL
ALL GOVERNMENTAL FUND TYPES
YEAR ENDED SEPTEMBER 30, 1996

	General Fund			Capital Projects Fund		
	Budget	Actual	Variance favorable (unfavorable)	Budget	Actual	Variance favorable (unfavorable)
Revenues:						
Charges to participant cities:						
Town of Addison	$ 9,075	$ 6,209	$ (2,866)	$ 2,288,000	$ 1,023,596	$ (1,264,404)
City of Farmers Branch	7,425	5,080	(2,345)	2,029,000	1,517,303	(511,697)
Interest and miscellaneous				8,000	7,343	(657)
Total revenues	16,500	11,289	(5,211)	4,325,000	2,548,242	(1,776,758)
Expenditures:						
Current:						
Project administration	4,700	3,077	1,623			
Insurance	1,000		1,000			
Legal fees	3,000	1,078	1,922			
Miscellaneous	7,800	7,134	666			
Capital outlay				4,325,000	2,540,899	1,784,101
Total expenditures	16,500	11,289	5,211	4,325,000	2,540,899	1,784,101
Excess (deficiency) of revenues over expenditures					7,343	7,343
Other Financing Sources (Uses):						
Operating transfers in					8,062	8,062
Operating transfers out		(8,062)	(8,062)			
Total other financing sources (uses)		(8,062)	(8,062)		8,062	8,062
Excess (deficiency) of revenues and other financing sources over expenditures and other financing uses		(8,062)	(8,062)		15,405	15,405
Fund balances, beginning of year	8,062	8,062		65,213	65,213	
Fund balances, end of year	$ 8,062	$	$ (8,062)	$ 65,213	$ 80,618	$ 15,405

The Notes to Financial Statements are an integral part of this statement.

Note 1. Summary of Significant Accounting Policies

The financial statements of the North Dallas County Water Supply Corporation are presented in accordance with generally accepted accounting principles applicable to state and local governmental units as set forth by the Governmental Accounting Standards Board. The following is a summary of the more significant accounting and reporting policies and practices.

Organization and Reporting Entity

The North Dallas County Water Supply Corporation ("Corporation") was incorporated on April 29, 1991 as a public instrumentality and non-profit water supply corporation under Article 1434a, Texas Revised Civil Statutes Annotated, as amended. The Corporation was formed with the approval of the Town Council of the Town of Addison, Texas ("Town"), and the City Council of the City of Farmers Branch,Texas ("City"), to provide sanitary sewer interceptor services to the Town and City on a joint basis. The affairs of the Corporation are managed by a six person board of directors that is appointed by the governing bodies of the Town and the City.

The Corporation's financial statements include the accounts of all Corporate activities.

Operations

The Corporation was formed to design, finance, construct, operate and maintain a joint sanitary sewer interceptor. Costs of development, financing, overhead, operations and maintenance are allocated to the Town and City in accordance with an interlocal sanitary sewer interceptor agreement.

Basis of Presentation

The accounts of the Corporation are organized on the basis of funds and account groups, each of which is considered a separate accounting entity. The operations of each fund are accounted for with a separate set of self-balancing accounts that comprise its assets, liabilities, fund equity, revenues, and expenditures, as appropriate. Government resources are allocated to and accounted for in individual funds based upon the purposes for which they are to be spent and the means by which spending activities are controlled. The various funds are grouped, in the financial statements in this report, into the fund types and account groups listed below:

Governmental Funds

General fund - is the general operating fund of the Corporation. It is used to account for all financial resources except those required to be accounted for in another fund.

Capital projects fund - is used to account for financial resources to be used for the construction of the joint sanitary sewer interceptor project.

Account Group

General fixed assets account group - is utilized to account for fixed assets utilized in governmental fund type operations.

Note 1. Summary of Significant Accounting Policies - continued

Measurement Focus

Measurement focus is the accounting convention which determines which assets and liabilities are included on the balance sheet of a fund type and whether a fund type's operating statement presents "financial flow" or capital maintenance information.

All governmental fund types are accounted for on a spending or "financial flow" measurement focus. This means that only current assets and current liabilities are generally included on their balance sheets. Their reported fund balance is considered a measure of "available spendable resources". Governmental fund operating statements present increases (revenues and other financing sources) and decreases (expenditures and other financing uses) in net current assets. Accordingly, they are said to present a summary of sources and uses of "available spendable resources" during a period. Fixed assets used in governmental fund type operations are accounted for in the General Fixed Assets account group, which is not a "fund". It is concerned only with the measurement of financial position. It is not involved with the measurement of results of operations.

Basis of Accounting

Basis of accounting refers to when revenues and expenditures or expenses are recognized in accounts and reported in the financial statements. Basis of accounting relates to the timing of the measurements made, regardless of the measurement focus applied.

All governmental fund types are accounted for using the modified accrual basis of accounting. Under the modified accrual basis of accounting, revenues are recognized when they become measurable and available as net current assets. Primary revenues of the governmental fund types which have been accrued are charges to participant cities for liabilities of the Corporation which were incurred but not reimbursed by participant cities prior to year end. This amount is considered available due to the close relationship between the Corporation and participant cities. Expenditures are generally recognized under the modified accrual basis of accounting when the related fund liability is incurred.

Budget

At least sixty days prior to the commencement of each fiscal year, the Board of Directors of the Corporation adopts a proposed budget of expected revenues and proposed expenditures for the next ensuing fiscal year. The budget is not effective until approved by the Town and City.

General Fixed Assets

General fixed assets have been acquired or constructed for general governmental purposes from governmental fund types. Assets purchased or constructed in these funds are recorded as expenditures and capitalized at cost in the general fixed asset account group. No depreciation is provided on general fixed assets.

Note 1. Summary of Significant Accounting Policies - continued

Memorandum Only - Total Columns

The total columns presented in the financial statements are captioned "Memorandum Only" to indicate that they are presented only to facilitate financial analysis. Data in these columns do not present financial position or results of operations in conformity with generally accepted accounting principles. Neither are such data comparable to a consolidation. Interfund eliminations have not been made in the aggregation of these data.

Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Note 2. Cash and Investments

Deposits

At September 30, 1996, the carrying amount of the Corporation's cash deposits held at the Corporation's depository bank was $83,156 and the bank balance was $84,458. In addition to the $100,000 of federal deposit insurance, the Corporation's depository bank had pledged in the Corporation's name $1,049,055 in additional collateral held by the Corporation's agent in the Corporation's name.

Cash deposits held at financial institutions can be categorized according to three levels of risk. These three levels of risk are:

Category 1	Deposits which are insured or collateralized with securities held by the entity or by its agent in the entity's name.
Category 2	Deposits which are collaterialized with securities held by the pledging financial institution's trust department or agent in the entity's name.
Category 3	Deposits which are not collateralized.

Based on these three levels of risk, the Corporation's cash deposits at September 30, 1996 are classified as Category 1.

Investments

The investment policy approved by the Board of Directors of the Corporation authorizes the investment of the Corporation's funds in obligations of the United States or its agencies and instrumentalities, fully collateralized direct repurchase agreements with a defined termination date secured by obligations of the United States or its agencies and instrumentalities, or joint pools of political subdivisions in the State of Texas which invest in instruments allowed by current law. The Corporation had no investments at September 30, 1996.

Note 3. General Fixed Assets

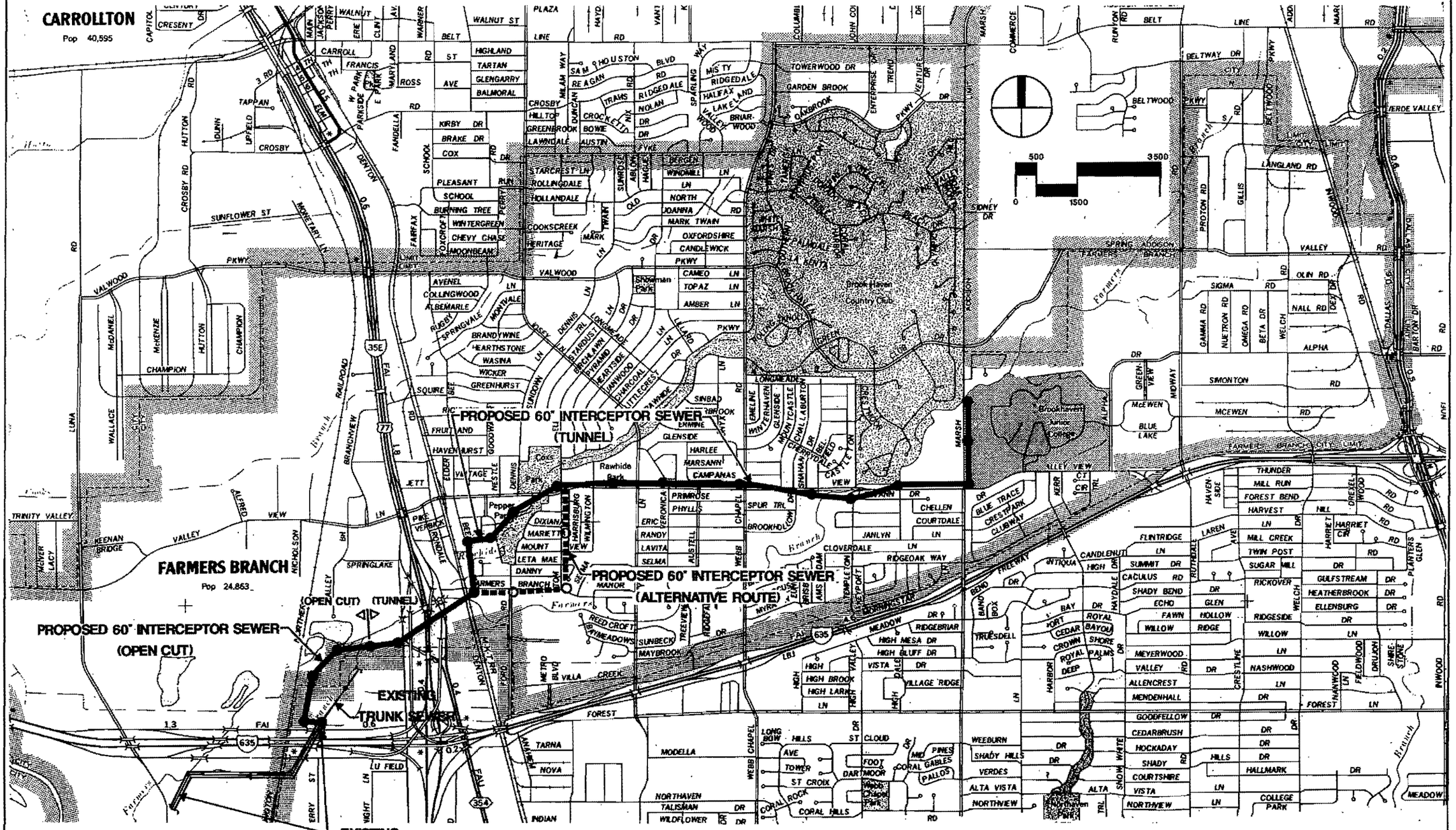
A summary of changes in general fixed assets follows:

	Balance at beginning of year	Additions	Balance at end of year
Construction in progress	$12,624,059	$2,540,898	$15,164,957

Note 4. Commitments

At September 30, 1996, the Corporation is committed under the following outstanding construction contracts in the Capital Projects Fund.

Phase I construction	$ 61,787
Phase II construction	69,117



CT&A Consoer, Townsend & Assoc. Consulting Engineers	City of Farmers Branch Town of Addison TUNNEL INTERCEPTOR SEWER	DETAILED LOCATION MAP	EXHIBIT NO. 2