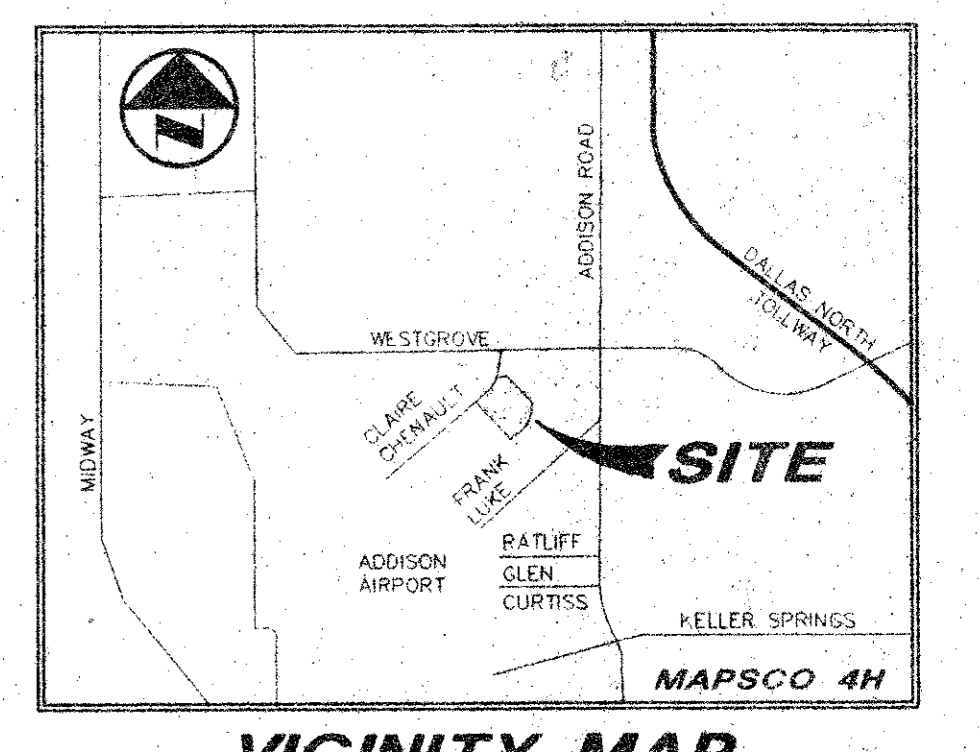


**LEGEND**

- 1"=20' FIRE WIDENING
- 1"=20' POWER POLE
- 1"=20' LIGHT STANDARD
- 1"=20' WATER METEER
- 1"=20' WATER VALVE
- 1"=20' CLEANOUT
- 1"=20' GAS METER
- 1"=20' PROPERTY LINE
- 1"=20' EXIST CONTOUR
- 1"=20' EXIST SPOT ELEVATION
- 1"=20' EXIST TOP OF CURB ELEVATION
- 1"=20' EXIST GUTTER ELEVATION
- 1"=20' DITCH LINE
- 1"=20' EXISTING DRAINAGE DIVIDE
- 1"=20' PROPOSED DRAINAGE LINE
- 1"=20' DRAINAGE AREA SF (0.01)
- 1"=20' EROSION CONTROL FENCING
- 1"=20' INLET PROTECTION



**PAVING AND DRAINAGE GENERAL NOTES**

1. ALL WORK, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, ISSUED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, AND TOWN OF ADDISON STANDARD CONSTRUCTION SPECIFICATIONS.
2. UNLESS OTHERWISE NOTED, ALL CONCRETE SHALL BE CLASS "A", (3000 PSI).
3. THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SUBSURFACE UTILITIES HAVE BEEN DETERMINED FROM DATA RECORDED BY OTHERS. CONTRACTOR SHALL VERIFY THAT NECESSARY CROSSING CLEARANCES BETWEEN EXISTING AND PROPOSED UTILITIES EXIST PRIOR TO CONSTRUCTION OF ANY SUCH CROSSING. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT.
4. CONTRACTOR SHALL MAINTAIN ONE SET OF "RECORD DRAWINGS" ON SITE WHICH WILL BE SUBMITTED TO OWNER OR ENGINEER UPON COMPLETION OF THE PROJECT. RECORD DRAWINGS SHALL INDICATE THE LOCATION OF ALL SUBTERRANEAN UTILITY IMPROVEMENTS, AND INDICATE TIES TO ALL MANHOLES, CULVERTS, INLETS, JUNCTION BOXES, ETC.
5. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS REGARDING TRENCH SAFETY.
6. STORM DRAIN LINES MAY BE OF THE FOLLOWING MATERIALS:
  - a. RCP C-76, CLASS III
7. BARRICADING AND PROJECT SIGNS SHALL CONFORM TO "STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION BARRICADING AND CONSTRUCTION STANDARDS."
8. PRIOR TO COMMENCEMENT OF CONSTRUCTION, BONDS AND THREE-WAY CONTRACTS SHALL BE SUBMITTED TO THE CITY AS REQUIRED.

**POLLUTION CONTROL GENERAL NOTES**

1. THIS PLAN HAS BEEN PREPARED TO PROVIDE MEANS TO PREVENT OR MINIMIZE POLLUTION OF STORM WATER.
2. THE CONSTRUCTION ACTIVITY INCLUDED IN THIS PLAN WILL INCLUDE:
  - A. CLEARING AND GRUBBING
  - B. ROUGH GRADING
  - C. FINAL GRADING
  - D. UTILITY INSTALLATION
  - E. PAVEMENT INSTALLATION
  - F. BUILDING CONSTRUCTION
3. THE TOTAL ESTIMATED LAND AREA TO BE DISTURBED IS 1.579 ACRES.
4. THE ESTIMATED RUNOFF COEFFICIENT UPON COMPLETION OF THE PROJECT IS 0.90X.
5. THE STORM WATER EXITING THE SITE IS COLLECTED IN AN EXISTING DRAINAGE SYSTEM MAINTAINED BY THE CITY OF DALLAS, TEXAS.
6. THE SOILS ON THE SITE ARE GENERALLY EXPANSIVE CLAYS.
7. THE CONTRACTOR SHALL PROVIDE EROSION PROTECTION AROUND THE WORK AREA PERIMETER AND AT ALL INLET MOUTHS DURING CONSTRUCTION.
8. THE CONTRACTOR WILL REMOVE ALL EXCESS SOIL FROM CONSTRUCTION VEHICLES PRIOR TO EXITING THE SITE.
9. ALL DISTURBED AREAS WHICH WILL NOT BE RE-DISTURBED FOR A MINIMUM OF 21 DAYS MUST BE STABILIZED BY THE CONTRACTOR TO CONTROL EROSION.
10. THE CONTRACTOR SHALL UNDERTAKE PROPER METHODS TO REDUCE DUST GENERATION FROM THE SITE.
11. THE CONTRACTOR MUST COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS REGARDING SEDIMENT AND EROSION CONTROL.
12. A COPY OF THIS PLAN MUST BE KEPT AT THE CONSTRUCTION FACILITY DURING THE ENTIRE CONSTRUCTION PERIOD.

**24" HGL INFORMATION**

Q = 0.45 cfs	D = 1.31'
N = 0.013	V = 4.34 f/s
C <sub>1</sub> = 12.39 cfs	S = 0.0017 f/s
V = 3.01 f/s	
W = 0.14'	

INSTALL 130 LF OF 24" RCP SLOTTED DRAIN PIPE @ 0.50%.

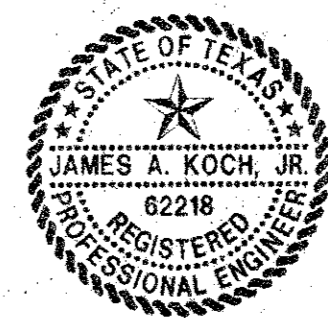
**CAUTION!**  
TOP OF PIPE IN PAVEMENT SUBGRADE

**DRAINAGE AREA CALCULATIONS**

DA	A	C	I <sub>100</sub>	Q
1	0.62	0.8	8.74	4.36
2	0.18	0.8	8.74	1.26
3	0.79	0.8	8.74	5.52
4	0.37	0.8	8.74	2.60

**BENCHMARK LISTING**

BM #1	"C" CUT ON THE NORTHWEST CORNER OF THE SUBJECT TRACT.	ELEV. 641.66
BM #2	"C" CUT ON THE FIRST STEP ON THE EAST CORNER OF 4559 WESTGROVE ROAD.	ELEV. 644.46



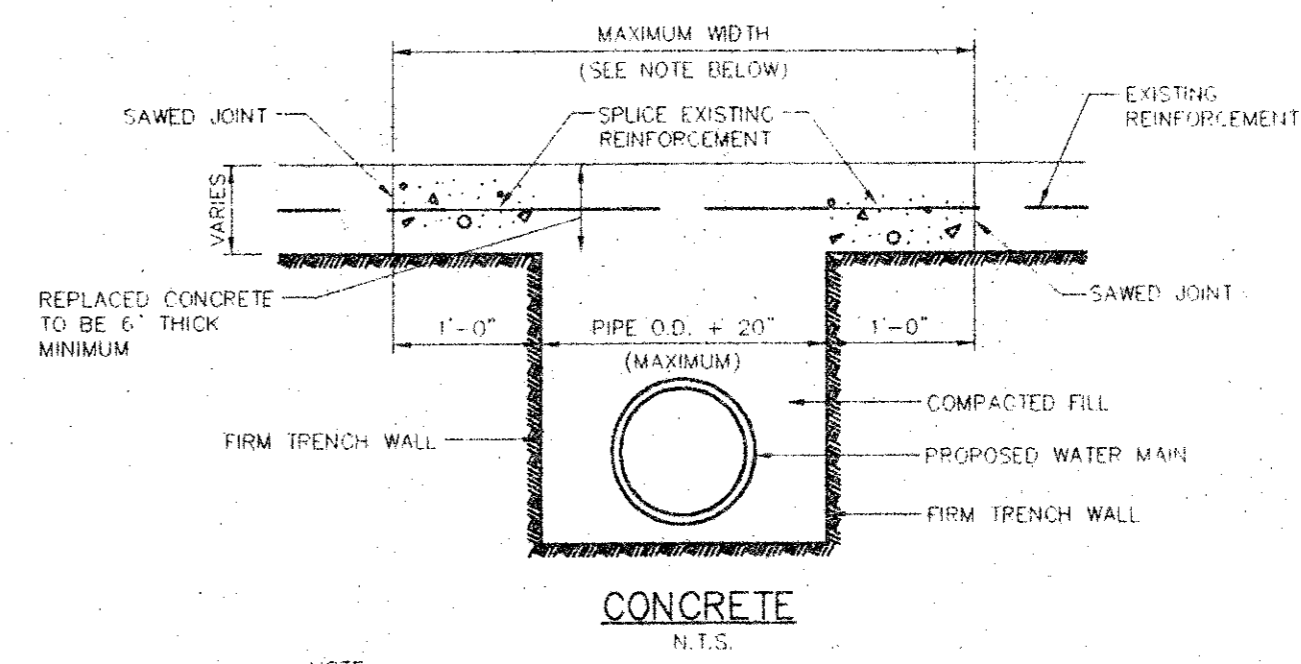
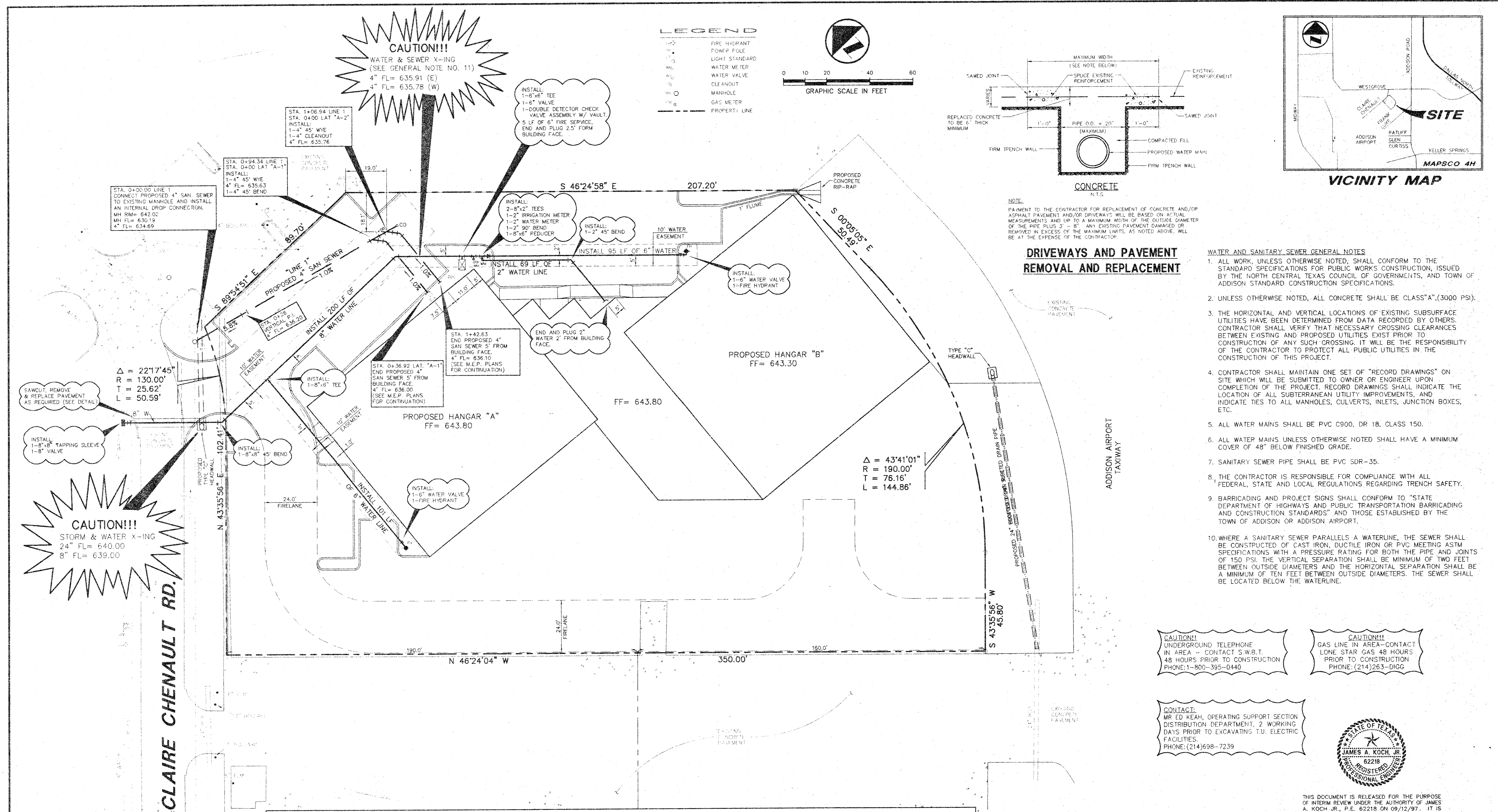
**PACHECO KOCH Consulting Engineers, Inc.**  
9401 LBJ Freeway, Suite 300  
Dallas, Texas 75243  
(972) 236-3031  
Civil Engineering • Land Surveying

**GRADING & DRAINAGE PLAN**

**MISSION PROPERTIES HANGAR**  
4550 CLAIRE CHENAULT ROAD  
ADDISON AIRPORT  
TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JAK	CHI/MWA	JULY 1987	1"=20"			C-1

PK NO. 1830-97.1  
DWG NO. 1830



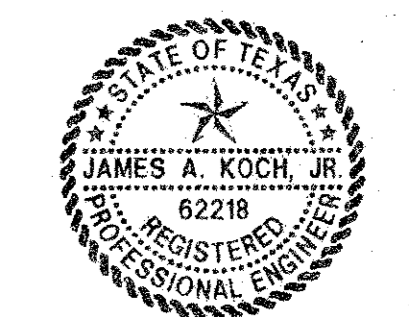
**DRIVEWAYS AND PAVEMENT REMOVAL AND REPLACEMENT**

- WATER AND SANITARY SEWER GENERAL NOTES**
1. ALL WORK, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, ISSUED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, AND TOWN OF ADDISON STANDARD CONSTRUCTION SPECIFICATIONS.
  2. UNLESS OTHERWISE NOTED, ALL CONCRETE SHALL BE CLASS "A", (3000 PSI).
  3. THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SUBSURFACE UTILITIES HAVE BEEN DETERMINED FROM DATA RECORDED BY OTHERS. CONTRACTOR SHALL VERIFY THAT NECESSARY CROSSING CLEARANCES BETWEEN EXISTING AND PROPOSED UTILITIES EXIST PRIOR TO CONSTRUCTION OF ANY SUCH CROSSING. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT.
  4. CONTRACTOR SHALL MAINTAIN ONE SET OF "RECORD DRAWINGS" ON SITE WHICH WILL BE SUBMITTED TO OWNER OR ENGINEER UPON COMPLETION OF THE PROJECT. RECORD DRAWINGS SHALL INDICATE THE LOCATION OF ALL SUBTERRANEAN UTILITY IMPROVEMENTS, AND INDICATE TIES TO ALL MANHOLES, CULVERTS, INLETS, JUNCTION BOXES, ETC.
  5. ALL WATER MAINS SHALL BE PVC C900, DR 18, CLASS 150.
  6. ALL WATER MAINS UNLESS OTHERWISE NOTED SHALL HAVE A MINIMUM COVER OF 48" BELOW FINISHED GRADE.
  7. SANITARY SEWER PIPE SHALL BE PVC SDR-35.
  8. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS REGARDING TRENCH SAFETY.
  9. BARRICADING AND PROJECT SIGNS SHALL CONFORM TO "STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION BARRICADING AND CONSTRUCTION STANDARDS" AND THOSE ESTABLISHED BY THE TOWN OF ADDISON OR ADDISON AIRPORT.
  10. WHERE A SANITARY SEWER PARALLELS A WATERLINE, THE SEWER SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC MEETING ASTM SPECIFICATIONS WITH A PRESSURE RATING FOR BOTH THE PIPE AND JOINTS OF 150 PSI. THE VERTICAL SEPARATION SHALL BE MINIMUM OF TWO FEET BETWEEN OUTSIDE DIAMETERS AND THE HORIZONTAL SEPARATION SHALL BE A MINIMUM OF TEN FEET BETWEEN OUTSIDE DIAMETERS. THE SEWER SHALL BE LOCATED BELOW THE WATERLINE.

**CAUTION!!!**  
UNDERGROUND TELEPHONE  
IN AREA - CONTACT S.W.B.T.  
48 HOURS PRIOR TO CONSTRUCTION  
PHONE: 1-800-356-0440

**CAUTION!!!**  
GAS LINE IN AREA-CONTACT  
LONE STAR GAS 48 HOURS  
PRIOR TO CONSTRUCTION  
PHONE: (214)283-0100

**CONTACT:**  
MR. ED KEAH, OPERATING SUPPORT SECTION  
DISTRIBUTION DEPARTMENT, 2 WORKING  
DAYS PRIOR TO EXCAVATING T.U. ELECTRIC  
FACILITIES.  
PHONE: (214)698-7239



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**BENCHMARK LISTING**

BM #1	"□" CUT ON THE NORTHWEST CORNER OF THE WYE INLET NEAR THE NORTHWEST CORNER OF THE SUBJECT TRACT.	ELEV. 641.66
BM #2	"□" CUT ON THE FIRST STEP ON THE EAST CORNER OF 4559 WESTGROVE ROAD.	ELEV. 644.46

**PACHECO KOCH Consulting Engineers, Inc.**  
Civil Engineering • Land Surveying  
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Dallas, Texas 75243  
(972) 286-3031

**WATER & SANITARY SEWER PLAN**  
**MISSION PROPERTIES HANGAR**  
**4580 CLAIRE CHENAULT ROAD**  
**ADDISON AIRPORT**  
**TOWN OF ADDISON, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JAK	CH/MWA	JULY 1997	1"=20'			<b>C-2</b>

(SEE GENERAL NOTE NO. 11)

4" FL= 635.91 (E)

4" FL= 635.78 (W)

- ☼ LIGHT STANDARD
- WM WATER METER
- WV WATER VALVE
- CO CLEANOUT
- MH MANHOLE
- GM GAS METER
- PROPERTY LINE

.94 LINE 1  
LAT "A-2"  
VVE  
NOUT  
5.76

VG  
RETE  
MENT

INSTALL:  
 1-8"x6" TEE  
 1-6" VALVE  
 2-8"x2" TEES  
 1-2" IRRIGATION METER  
 1-2" WATER METER  
 1-2" 90° BEND  
 1-8"x6" REDUCER  
 1-6" MECHANICAL JOINT  
 BY FLANGED ADAPTER  
 1-DOUBLE DETECTOR CHECK  
 VALVE ASSEMBLY W/ VAULT.  
 5 LF OF 6" FIRE SERVICE,  
 END AND PLUG 2.5' FROM  
 BUILDING FACE.

2-2" DCVA  
**RECEIVED**  
 MAY 15 1998

19.0'  
 GRATE INLET  
 S 46°24'58" E

207.20'

INSTALL:  
 1-2" 45° BEND

INSTALL 85 LF OF 6" WATER  
 INSTALL 60 LF OF 2" WATER LINE

INSTALL:  
 1-6" WATER VALVE  
 1-FIRE HYDRANT

STA. 1+42.63  
 END PROPOSED 4"  
 SAN SEWER 5' FROM  
 BUILDING FACE.  
 4" FL= 636.10  
 (SEE M.E.P. PLANS  
 FOR CONTINUATION)

END AND PLUG 2"  
 WATER 2' FROM BUILDING  
 FACE.

STA. 0+36.92 LAT. "A-1"  
 END PROPOSED 4"  
 SAN SEWER 5' FROM  
 BUILDING FACE.  
 4" FL= 636.00  
 (SEE M.E.P. PLANS  
 FOR CONTINUATION)

PROPOSED HANGAR  
 FF= 643.31

FF= 643.80

PROPOSED HANGAR "A"  
 FF= 643.80

05/15/98 FRI 11:01 FAX 972 235 9544

Pacheco Koch Consult Eng

002

Pacheco Koch Consulting Engineers

TELECOMMUNICATIONS COVER LETTER

Date: 5/15/98

PK Job No: 1830-97.176

To: MR. DAVE WILDY  
Name

TOWN OF ADDISON  
Company

ADDISON TX  
City State

(972) 450-2837  
Telefax Number

CC: JOHN MOEN  
(972) 385-1937

From: Matthew W. Alexander

Telefax Number: (972) 235-9544

Comments: PLEASE REVIEW AND APPROVE OR  
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