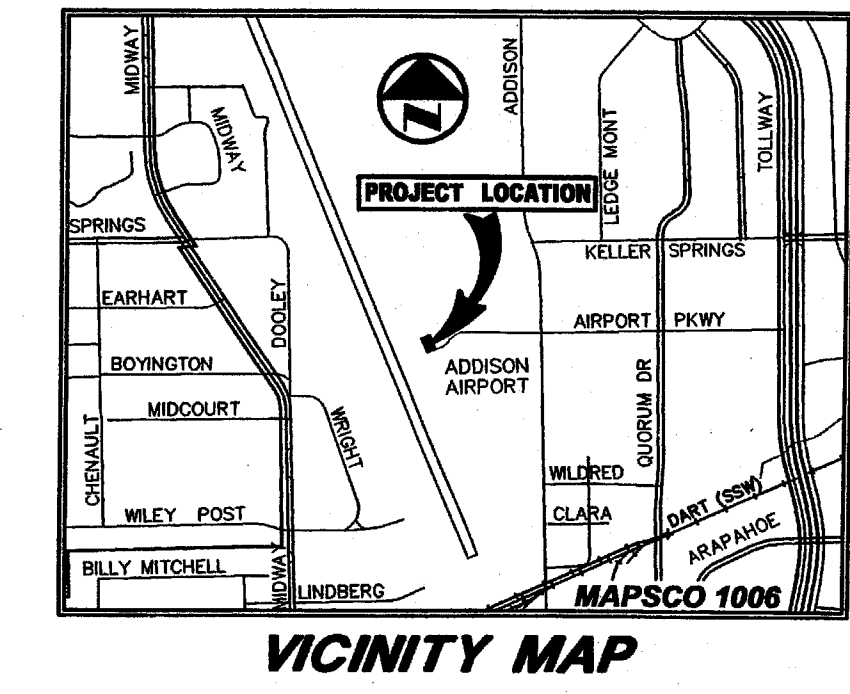
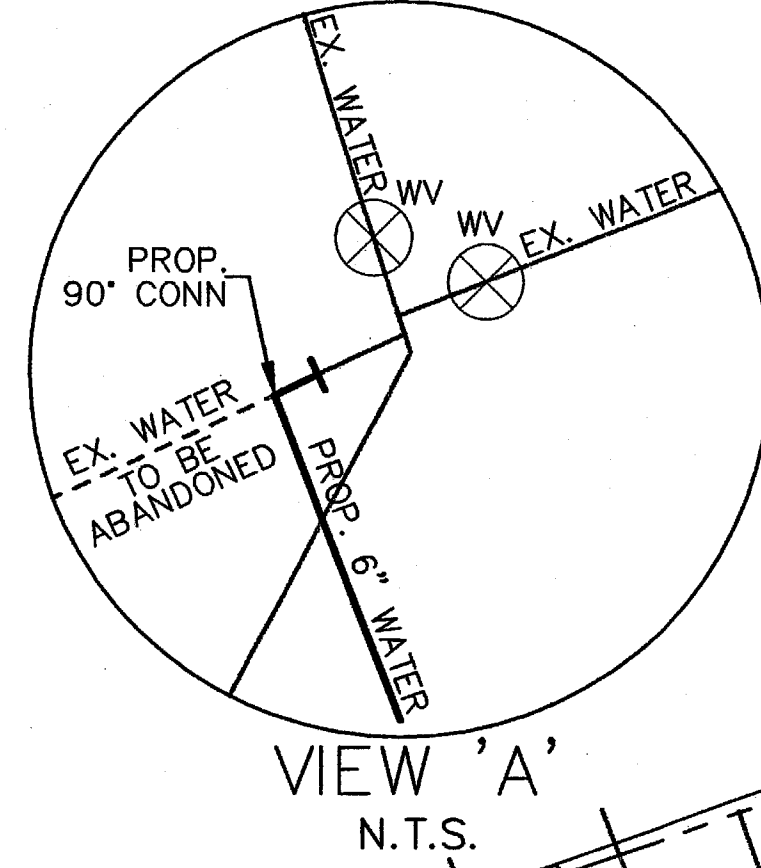


CONTROL POINTS

CONTROL POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	7,038,689.078	2,480,245.682	638.30	AA-1
2	7,041,501.126	2,480,144.730	641.92	AA-2
3	7,037,202.352	2,480,832.193	638.03	AA-3
4	7,035,957.986	2,479,444.822	632.41	AA-4
5	7,039,506.863	2,478,102.163	637.40	AA-5
6	7,043,948.891	2,477,491.499	652.28	AA-6
7	7,039,305.132	2,476,531.857	640.77	AB2786
8	7,040,772.156	2,476,253.153	633.02	AB7648
9	7,043,042.492	2,477,532.021	637.40	AB7652
10	7,038,354.486	2,476,876.925	642.02	CS1308



0 20 40 80 120
GRAPHIC SCALE IN FEET

LEGEND

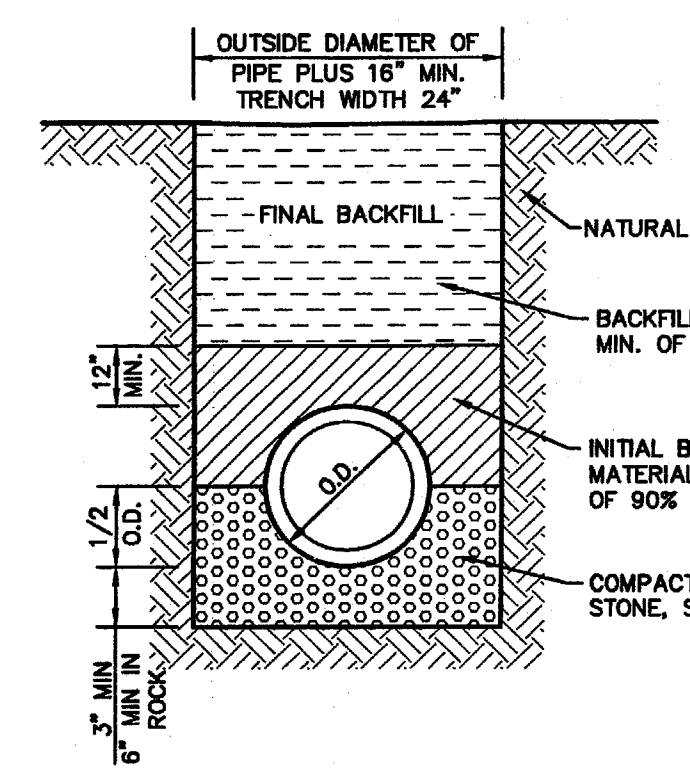
- B₁ BOLLARD
- EM₁ ELECTRIC METER
- PP₁ POWER POLE
- LS₁ LIGHT STANDARD
- WM₁ WATER METER
- WV₁ WATER VALVE
- ICV₁ IRRIGATION CONTROL VALVE
- PH₁ FIRE HYDRANT
- CL₁ CLEANOUT
- MH₁ MANHOLE
- TSC₁ TRAFFIC SIGNAL CONTROL
- TSP₁ TRAFFIC SIGNAL POLE
- TELE₁ TELEPHONE BOX
- FL₁ FLOOD LIGHT
- FP₁ FLAG POLE
- TR₁ TRAFFIC SIGN
- IRS₁ 1/2-INCH IRON ROD
- W/P₁ W/PACHECO KOCH™ CAP SET
- (C.M.) CONTROLLING MONUMENT
- PROPERTY LINE
- FENCE
- OVERHEAD UTILITY LINE
- UNDERGROUND WATER LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND CABLE LINE
- UNDERGROUND SANITARY SEWER LINE

WATER AND SANITARY SEWER GENERAL NOTES

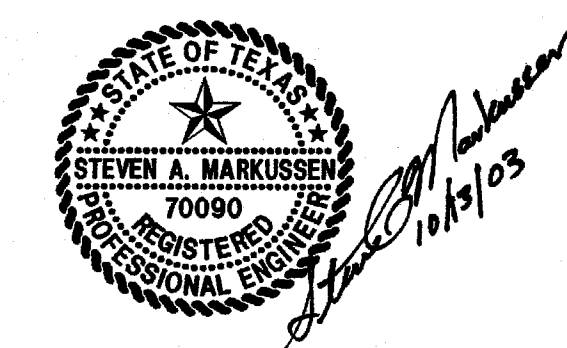
- UNLESS OTHERWISE NOTED, ALL CONCRETE SHALL BE CLASS "A", (3000 PSI).
- ALL WATER MAINS SHALL BE PVC C909, DR 18, CLASS 150.
- WATER AND SANITARY SEWER SERVICES SHALL MEET PLUMBING CODE REQUIREMENTS.
- ALL WATER MAINS UNLESS OTHERWISE NOTED SHALL HAVE A MINIMUM COVER OF 48" BELOW FINISHED GRADE.
- SANITARY SEWER PIPE SHALL BE PVC SDR-35.
- WHEN WATER MAINS AND SANITARY SEWERS ARE INSTALLED, THEY SHALL BE INSTALLED NO CLOSER TO EACH OTHER THAN NINE FEET IN ALL DIRECTIONS AND PARALLEL LINES MUST BE INSTALLED IN SEPARATE TRENCHES. WHERE THE NINE FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE FOLLOWING GUIDELINES SHALL APPLY:
 - 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 A MINIMUM OF TWO FEET BETWEEN OUTSIDE DIAMETERS AND THE HORIZONTAL SEPARATION SHALL BE A MINIMUM OF FOUR FEET BETWEEN OUTSIDE DIAMETERS. THE SEWER SHALL BE LOCATED BELOW THE WATERLINE.
 - WHERE A SANITARY SEWER CROSSES A WATERLINE AND THE SEWER IS CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI, AN ABSOLUTE MINIMUM DISTANCE OF SIX INCHES BETWEEN OUTSIDE DIAMETERS SHALL BE MAINTAINED. IN ADDITION, THE SEWER SHALL BE LOCATED BELOW THE WATERLINE WHERE POSSIBLE AND ONE LENGTH OF THE SEWER PIPE MUST BE CENTERED ON THE WATERLINE.
 - WHERE A SEWER CROSSES UNDER A WATERLINE AND THE SEWER IS CONSTRUCTED OF ABS TRUSS PIPE, SIMILAR SEMI-RIGID PLASTIC COMPOSITE PIPE, CLAY PIPE OR CONCRETE PIPE WITH GASKETED JOINTS, A MINIMUM TWO FOOT SEPARATION DISTANCE SHALL BE MAINTAINED. IN ADDITION, THE SEWER SHALL BE LOCATED BELOW THE WATERLINE WHERE POSSIBLE AND ONE LENGTH OF THE SEWER PIPE MUST BE CENTERED ON THE WATERLINE.
 - WHERE A SEWER CROSSES OVER A WATERLINE ALL PORTIONS OF THE SEWER WITHIN NINE FEET OF THE WATERLINE SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC PIPE WITH A PRESSURE RATING OF AT LEAST 150 PSI USING APPROPRIATE ADAPTERS. IN LIEU OF THIS PROCEDURE, THE NEW CONVEYANCE MAY BE ENCASED IN A JOINT OF 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE FEET INTERVALS WITH SPACERS OR BE FILLED TO THE SPRING LINE WITH WASHED SAND. THE ENCASEMENT PIPE SHOULD BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEAL.
 - THE SEWER NEED NOT BE DISTURBED WHERE A NEW WATERLINE IS TO BE INSTALLED PARALLEL TO AN EXISTING SEWER THAT SHOWS NO EVIDENCE OF LEAKAGE AND THE WATERLINE IS INSTALLED ABOVE THE SEWER A MINIMUM OF TWO FEET VERTICALLY AND FOUR FEET HORIZONTALLY. SHOULD EXCAVATION FOR THE WATERLINE PRODUCE EVIDENCE THAT THE SEWER IS LEAKING, THE SEWER MUST BE REPAIRED OR REPLACED AS DESCRIBED IN SUBPARAGRAPHS (A) OR (D) OF THIS PARAGRAPH.
 - THE SEWER NEED NOT BE DISTURBED WHERE A NEW WATERLINE IS TO CROSS OVER BY TWO FEET OR MORE) EXISTING SEWER SHOWING NO EVIDENCE OF LEAKAGE. SHOULD EXCAVATION FOR THE WATERLINE PRODUCE EVIDENCE THAT THE SEWER IS LEAKING, THEN THE SEWER MUST BE REPAIRED OR REPLACED AS DESCRIBED IN SUBPARAGRAPHS (C) OR (D).
- CONTRACTOR TO VERIFY ALL EXISTING SEWER FLOW LINES BEFORE BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL TIE A 1" WIDE PIECE OF RED PLASTIC FLAGGING TO THE END OF SEWER SERVICE AN SHALL LEAVE A MINIMUM OF 36" OF FLAGGING EXPOSED AFTER BACKFILL. AFTER CURB AND PAVING IS COMPLETED, CONTRACTOR SHALL MARK THE LOCATION ON THE CURB OR ON THE CURB OR ALLEY IN ACCORDANCE WITH THE STANDARD CITY SPECIFICATIONS.
- ALL SANITARY SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH THE STANDARD CITY SPECIFICATIONS.
- THE UTILITY CONTRACTOR SHALL INSTALL THE WATER SERVICES TO A POINT TWO (2) FEET BACK OF THE CURB LINE AT A DEPTH OF 6-8 INCHES. THE METER BOX SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AFTER THE PAVING CONTRACTOR HAS COMPLETED THE FINISH GRADING BEHIND THE BACK OF THE CURB. EACH SERVICE LOCATION WILL BE MARKED ON THE CURB, WITH A BLUE LETTER "W" BY THE UTILITY CONTRACTOR AND TIED TO PROPERTY CORNERS ON THE "RECORD DRAWINGS".
- ALL METER BOXES SHALL BE LOCATED IN NON-TRAFFIC AREAS.
- UTILITY TRENCHES SHALL BE BACKFILLED WITH MATERIAL MEETING MCGOWAN ITEM 6.2.10 AND MECHANICALLY COMPACTED IN 8" LIFTS TO THE TOP OF THE SUBGRADE TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY.
- VALVE BOXES SHALL BE FURNISHED AND SET ON EACH DATE VALVE. AFTER THE FINAL CLEAN-UP AND ALIGNMENT HAS BEEN COMPLETED, THE CONTRACTOR (UTILITY) SHALL POUR A CONCRETE BLOCK 24"x24"x8" AROUND ALL VALVE BOXES TOPS TO THE FINISHED GRADE IS LEVEL WITH THE FINISHED GRADE.
- IF REQUIRED DUE TO CONSTRUCTION, POWER POLES TO BE BRACED OR RELOCATED AT CONTRACTORS EXPENSE.
- ALL WATER SERVICES SHALL HAVE TOWN OF ADDISON APPROVED TESTABLE BACKFLOW PREVENTION DEVICES. THESE DEVICES SHALL BE INSTALLED, TESTED, AND CERTIFIED TO BE WORKING PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- ALL METERS SHALL HAVE ELECTRONIC ENCODER REGISTERS WITH TOUCH PADS.

CAUTION !

CONTACT:
ONCOR GAS: 1-800-344-8377
SBC: 1-800-395-0440
TEXAS UTIL. ELECT. CO.: 1-800-233-2133
TEXAS ONE CALL : 1-800-245-4545
48 HOURS PRIOR TO CONSTRUCTION



EMBEDMENT FOR WATER AND SANITARY SEWER PIPE
NOT TO SCALE



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY STEVEN A. MARKUSSEN, P.E. 70090 ON 10/13/2003. ALTERATION OF A SEALED DOCUMENT WITHOUT PRIOR NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

NO.	DATE	REVISION

Pacheco Koch Consulting Engineers
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.236.3031

WATER & SANITARY SEWER PLAN
FRITO LAY (FLNA) CORPORATE HANGER
AIRPORT PARKWAY @
ADDISON AIRPORT
TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BJM	DRI	SEPT 2003	1"=40'			C5.1

BRAD MOSS
10/13/2003
11/13/03 11:55:35-207CV.DWG (10-03-207CV.DWG)