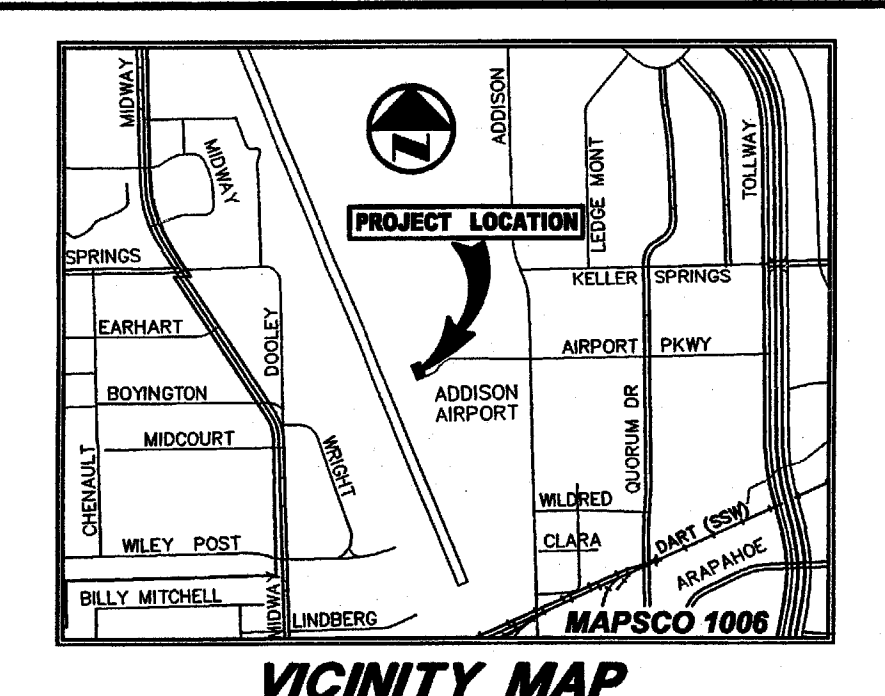


CONTROL POINTS

CONTROL POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	7,039,889.078	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	2,480,632.183	636.03	AA-3
4	7,035,957.988	2,479,444.822	632.41	AA-4
5	7,039,506.863	2,478,102.163	637.40	AA-5
6	7,043,846.691	2,477,497.499	652.26	AA-6
7	7,039,305.132	2,478,531.657	640.77	AB2786
8	7,040,772.156	2,478,253.153	633.02	AB7648
9	7,043,045.492	2,477,532.021	637.40	AH7852
10	7,038,354.486	2,478,875.925	642.02	CS1308

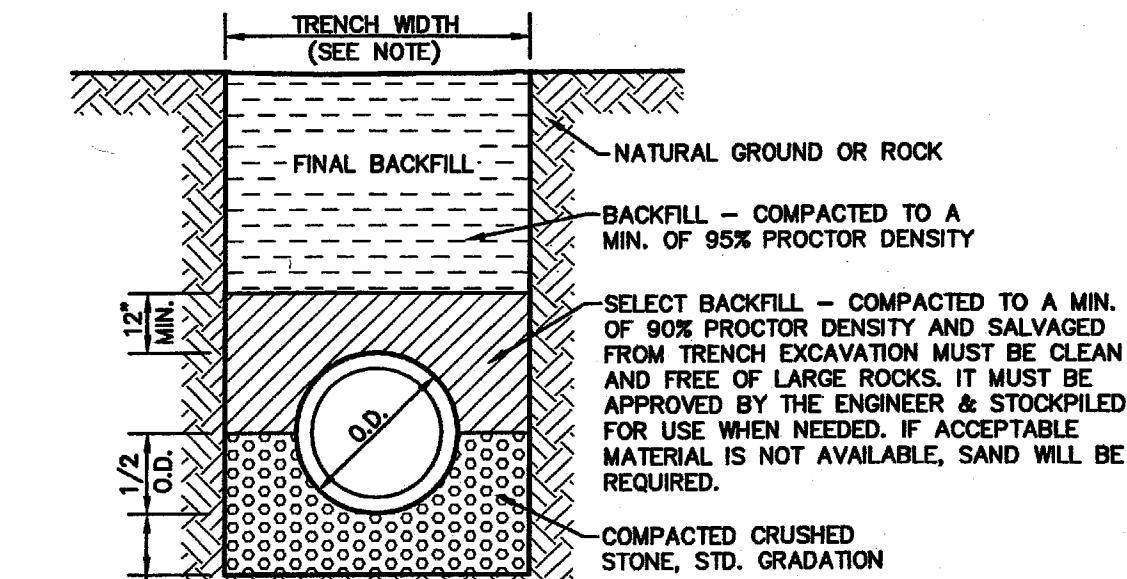
100 YR STORM SEWER CALCULATIONS

STATION	SIZE	Q (cfs)	C	V (ft/s)	V ² /2g	S	D (ft)	V ₂ (ft/s)
LINE "ST-1"								
SLOPE @ 0.30%								
STA 0+00 TO STA 0+16.83	12"	8.87	1.95	11.29	1.98	0.0620	---	---
STA 0+16.83 TO STA 0+54.16	12"	4.17	1.95	5.31	0.44	0.0137	---	---
STA 0+54.16 TO STA 1+36.20	12"	2.09	1.95	2.66	0.11	0.0034	0.91	2.78
LINE "ST-2"								
SLOPE @ 1.24%								
STA 0+00 TO STA 0+08.89	12"	4.70	3.97	5.98	0.56	0.0174	---	---
LINE "ST-3"								
SLOPE @ 0.70%								
STA 0+00 TO STA 0+29.32	18"	8.59	8.79	4.86	0.37	0.0087	1.20	5.67
STA 0+29.32 TO STA 0+52.22	18"	7.54	8.79	4.27	0.28	0.0052	1.07	5.59
LINE "ST-4"								
SLOPE @ 0.30%								
STA 0+00 TO STA 0+22.09	18"	4.78	5.75	2.70	0.11	0.0021	1.04	3.64
STA 0+22.09 TO STA 1+36.74	18"	2.85	5.75	1.61	0.04	0.0007	0.75	3.25



LEGEND

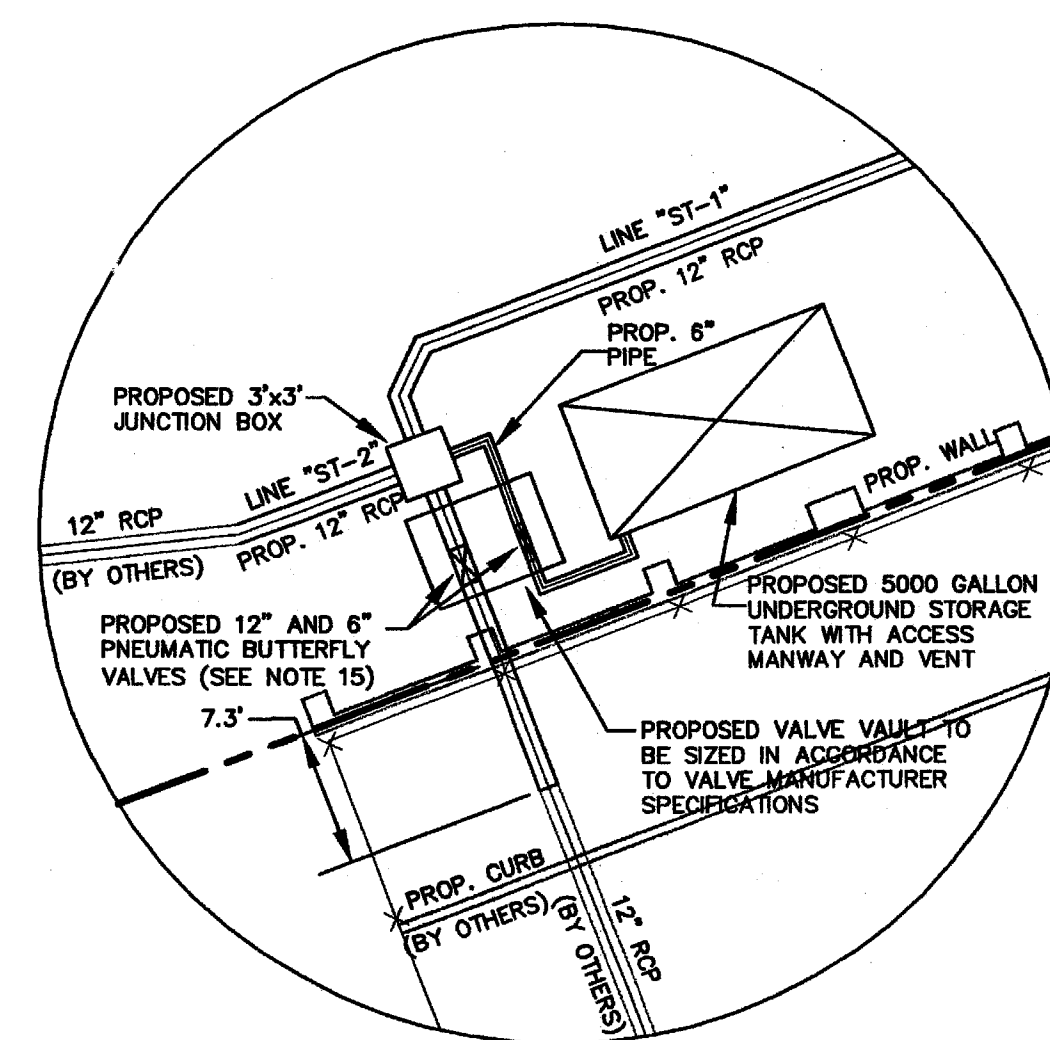
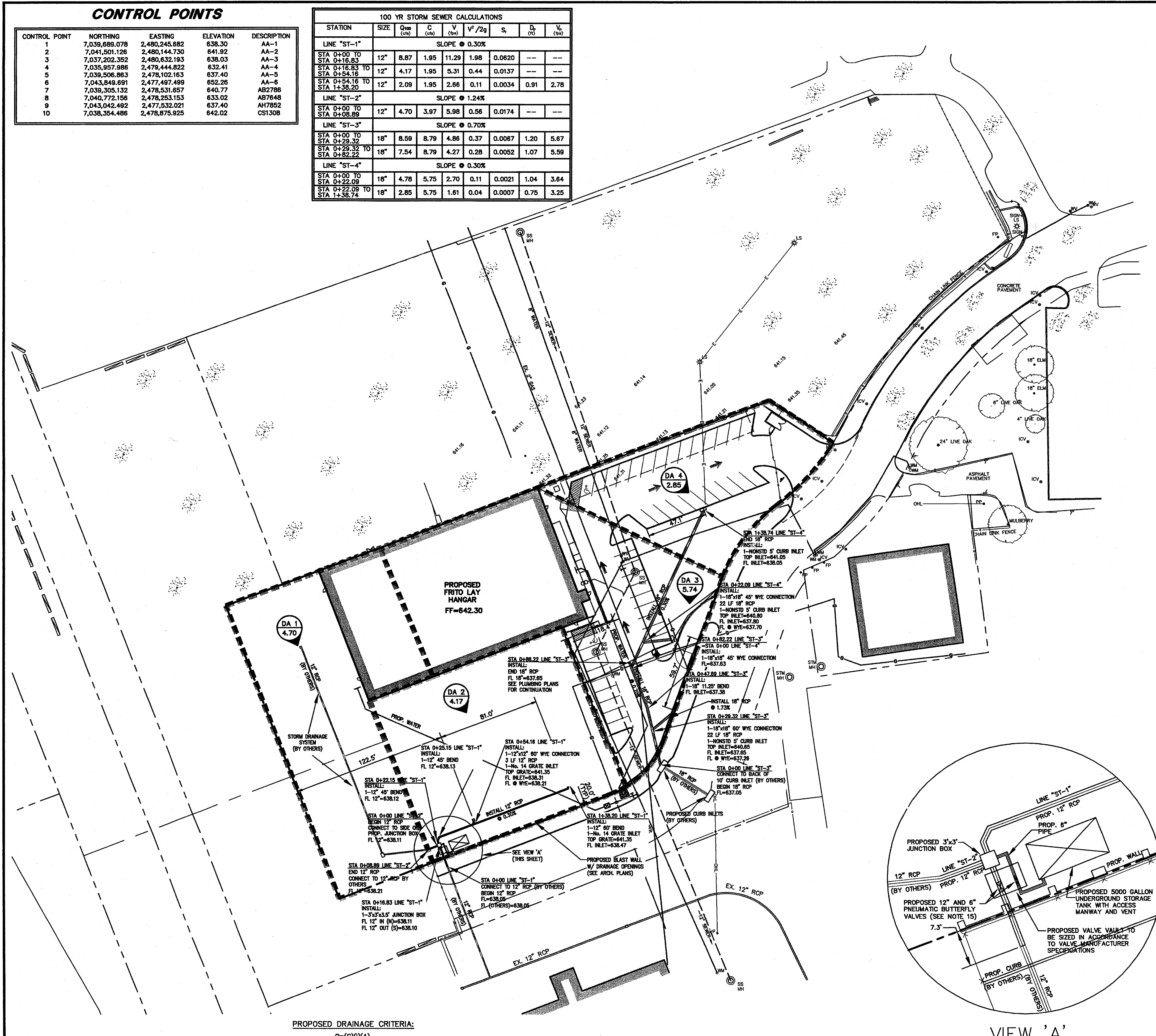
B	BOLLARD
EM	ELECTRIC METER
EP	POWER POLE
LS	LIGHT STANDARD
WM	WATER METER
WV	WATER VALVE
ICV	IRRIGATION CONTROL VALVE
FH	FIRE HYDRANT
CL	CLEANOUT
MH	MANHOLE
TC	TRAFFIC SIGNAL CONTROL
TS	TRAFFIC SIGNAL POLE
TEB	TELEPHONE BOX
FL	FLOOD LIGHT
FP	FLAG POLE
ST	TRAFFIC SIGN
IRS	1/2-INCH IRON ROD W/ "PACHECO 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
---	PROPOSED DRAINAGE DIVIDE



NOTE:
 (A) FOR 24" PIPE OR SMALLER, TRENCH WIDTH SHALL BE 24" OR O.D. OF PIPE PLUS 16", WHICHEVER IS GREATER.
 (B) FOR GREATER THAN 24" TO 72" PIPE, THE TRENCH WIDTH SHALL BE O.D. OF PIPE PLUS 24".
 (C) FOR PIPE GREATER THAN 72", THE TRENCH WIDTH SHALL BE 1.25 * O.D. PLUS 1 FT.

CLASS III REINFORCED CONCRETE PIPE EMBEDMENT
 NOT TO SCALE

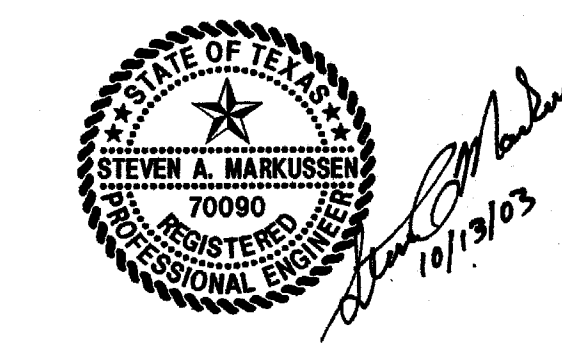
- GRADING AND DRAINAGE GENERAL NOTES**
- REFER TO GEOTECHNICAL REPORT FOR REQUIREMENTS REGARDING FILL COMPACTION AND MOISTURE CONTENT.
 - UNLESS NOTED, ALL FILL IS TO BE COMPACTED TO A MINIMUM OF 90% STANDARD PROCTOR DENSITY 0 TO 4.5% OF OPTIMUM MOISTURE CONTENT. FILL TO BE PLACED IN A MAXIMUM OF 6" LIFTS.
 - SIDEWALKS AND ACCESSIBLE ROUTES SHALL HAVE A SLOPE NO GREATER THAN 5% AND A CROSS FALL NO GREATER THAN 2% UNLESS NOTED OTHERWISE.
 - GRADING OF ALL HANDICAPPED SPACES AND ROUTES TO CONFORM TO STATE, LOCAL AND FEDERAL GUIDELINES.
 - UNLESS NOTED, STORM DRAIN LINES MAY BE OF THE FOLLOWING MATERIALS:
 A. RCP C-75, CLASS III
 B. ADS N-12
 C. HANCOCK 18-0
 AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
 - UNLESS NOTED, GRATE INLET TO BE "AMERICAN INDUSTRIAL PRE-CAST PRODUCTS, INC." PRECAST CATCH BASIN, SIZED AS SHOWN, OR APPROVED EQUAL.
 - FINAL PAVING, CURB AND SIDEWALK ELEVATIONS WILL BE PLACED AT PLUS OR MINUS 0.03 FOOT.
 - ANY CONCRETE, ROCK OR MATERIAL DEEMED UNSUITABLE FOR SUBGRADE, BY ENGINEER, SHALL BE DISPOSED OF OFFSITE AT CONTRACTOR'S EXPENSE.
 - TRENCH BACKFILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG ITEM 6.2.10, AND SHALL BE MECHANICALLY COMPACTED IN ACCORDANCE WITH NCTCOG ITEM 6.2.9 TO A MINIMUM OF 90% STANDARD PROCTOR DENSITY UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN STANDARD CITY SPECIFICATIONS.
 - EMBEDMENT SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG ITEM 6.2.9 UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN STANDARD CITY SPECIFICATIONS.
 - A ROUND MANHOLE COVER MEETING CITY SPECIFICATIONS SHALL BE PLACED IN ALL INLET TOPS. THE MANHOLE COVER SHALL BE PLACED NEAR THE OUTLET PIPE.
 - ALL CONCRETE FOR INLETS AND DRAINAGE STRUCTURES SHALL CONFORM TO NCTCOG ITEM 7.4.5, CLASS "A" UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN STANDARD CITY SPECIFICATIONS.
 - IF REQUIRED DUE TO CONSTRUCTION, POWER POLES TO BE BRACED OR RELOCATED AT CONTRACTOR'S EXPENSE.
 - ALL EXTERIOR GRADES WITHIN 5 FEET OF THE BUILDING FACE ARE TO BE SLOPED AT A MINIMUM OF 1% AWAY FROM THE BUILDING (SEE DETAIL ON THIS SHEET).
 - CONTRACTOR IS TO COORDINATE WITH OWNER FOR THE SEQUENCE OF OPERATION OF THE PNEUMATIC VALVE SYSTEM.



PROPOSED DRAINAGE CRITERIA:
 Q=(C)(I)(A)
 C=0.90

DRAINAGE AREA TABLE

DRAINAGE AREA No.	AREA (acres)	C	Tc (minutes)	STORM FREQUENCY (year)	Q100 (cfs)	Q10 (cfs)	COMMENTS
DA #1	0.90	0.90	10	100 YEAR	6.74	4.70	DRAINS TO GRATE INLET (BY OTHERS)
DA #2	0.53	0.90	10	100 YEAR	6.74	4.17	DRAINS TO PROP. GRATE INLETS
DA #3	0.73	0.90	10	100 YEAR	6.74	5.74	DRAINS TO PROP. CURB INLET
DA #4	0.36	0.90	10	100 YEAR	6.74	2.85	DRAINS TO PROP. CURB INLET



NO. DATE REVISION

Pacheco Koch Consulting Engineers
 8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031

DRAINAGE PLAN
FRITO LAY (FLNA) CORPORATE HANGAR
AIRPORT PARKWAY @
ADDISON AIRPORT
TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BJM	DRI	SEPT 2003	1"=40'			C4.1

PK FILE: 1830-03.207 DWG FILE: 1830-03.207CV.DWG

BRAD MOSS, P.E. 10/19/03, 1830-03.207, DWG 1830-03.207CV.DWG

FRITO LAY (FLNA) CORPORATE HANGAR