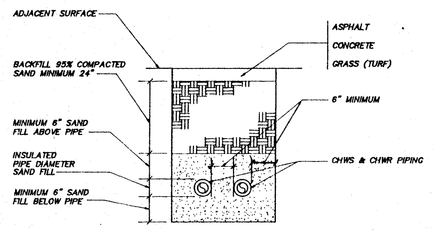
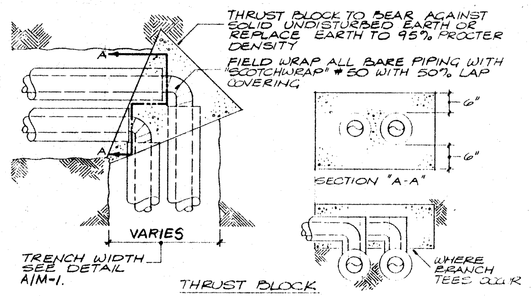


PIPE TRENCH

DETAIL (A/M-1)

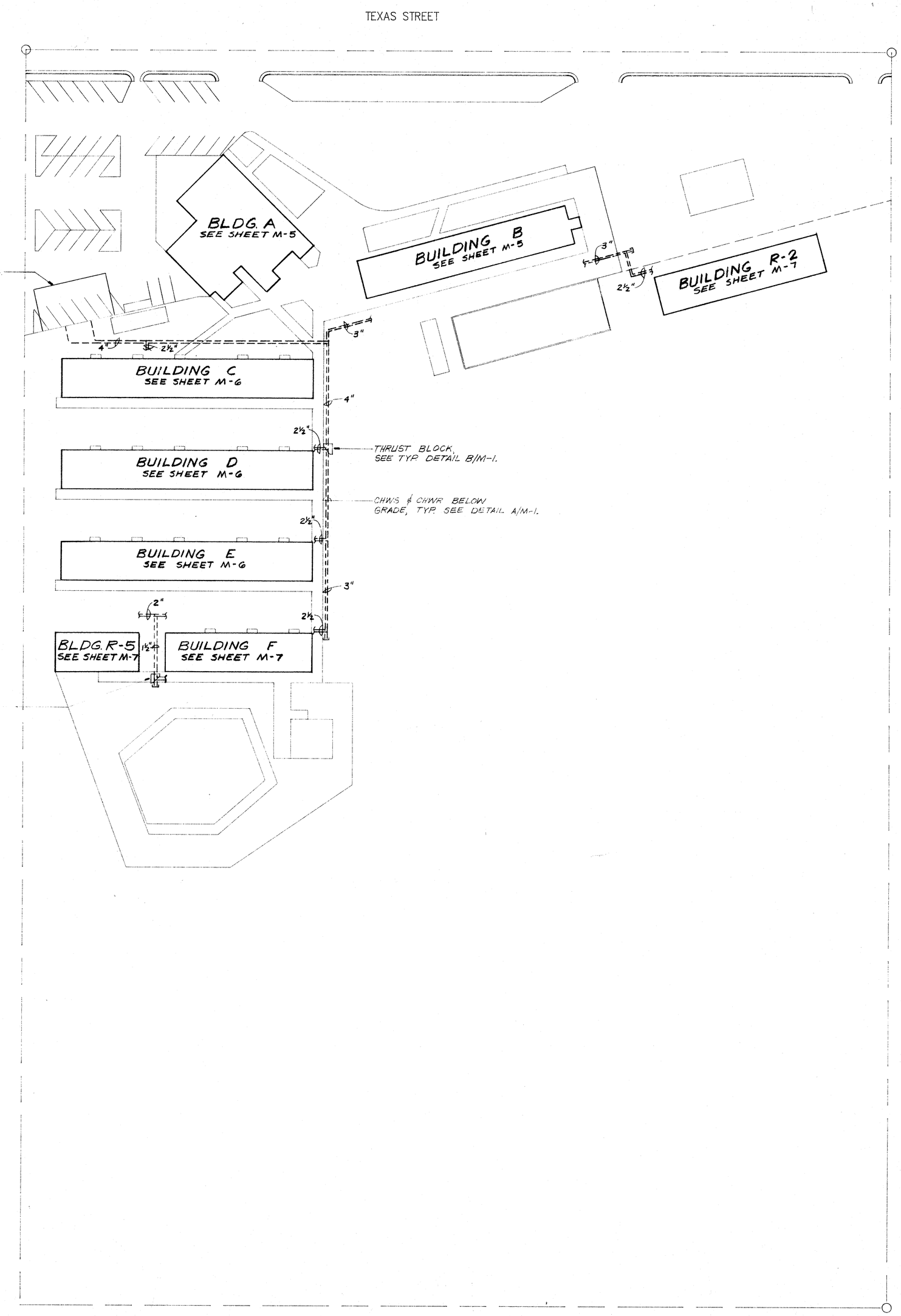
SCALE NONE



DETAIL (B/M-1)

NO SCALE

THRUST BLOCK TO COMPLETELY ENCLOSE UNINSULATED PIPING. THRUST BLOCKS ARE REQUIRED AT EVERY CHANGE IN DIRECTION AND AT ALL BRANCH TAKE-OFFS.



SITE PLAN

40'

FOR COMPLETE SITE PLAN DETAILS REFER TO ARCHITECTURAL SITE PLAN.

AIR CONDITIONING LEGEND

SYMBOL	ITEM	ABBR.	SYMBOL	ITEM	ABBR.
	DUCT	—		CHILLED WATER SUPPLY	CWS
	DUCT WITH ACOUSTICAL LINING	—		CHILLED WATER RETURN	CWR
	SUPPLY AIR DUCT DROP	—		CHILLED AND HOT WATER SUPPLY	CHWS
	RETURN AIR DUCT DROP	—		CHILLED AND HOT WATER RETURN	CHWR
	SUPPLY AIR DUCT RISE	—			
	RETURN AIR DUCT RISE	—		GATE VALVE	G.V.
	TURNING VANES	—		GLOBE VALVE	GL.V.
	EXTRACTOR	—		CHECK VALVE	C.V.
	VOLUME CONTROL DAMPER	V.C.D.		STRAINER	—
				STRAINER WITH COCK	—
	FIRE DAMPER WITH ACCESS PANEL	F.D.		UNION	—
(T)	THERMOSTAT at + 60"	—		PLUG VALVE	P.V.
	PRESSURE RELIEF VALVE	P.R.V.		BUTTERFLY VALVE	B.V.
				REDUCER OR INCREASER	—
	DIRECTION OF FLOW	—		POINT OF CONNECTION	P.O.C.
	SUPPLY AIR	S.A.	—HWS—	HOT WATER SUPPLY	HWS
	RETURN AIR	R.A.	—HWR—	HOT WATER RETURN	HWR
	EXHAUST AIR	E.A.	—CHWS—	CHILLED AND HOT WATER SUPPLY BELOW GRADE	CHWS
	OUTSIDE AIR	O.A.			
	PIPING TURN DOWN	—	—CHWR—	CHILLED AND HOT WATER RETURN BELOW GRADE	CHWR
	PIPING TURN UP	—			
	SHEET METAL	S/M			
	GAUGE	GA.			
	WITH	W/		GALVANIZED	GALV.
				DIAMETER	DIA.
	TYPICAL	TYP.		EXISTING	(E)
	ENERGY MANAGEMENT SYSTEM	EMS		CENTRAL PROCESSING UNIT	CPU

GENERAL NOTES:

1. SPECIFICALLY OMITTED FROM THE SERVICES OF JOHN FRANK MITCHELL, INC., ARE ALL DESIGN AND CONSTRUCTION REVIEW SERVICES RELATING TO THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES REQUIRED FOR THE CONTRACTOR TO PERFORM HIS WORK, BUT NOT RELATING TO THE FINAL OR COMPLETED STRUCTURE: OMITTED SERVICES INCLUDE BUT ARE NOT LIMITED TO SHORING, SCAFFOLDING, UNDERPINNING, TEMPORARY RETAINMENT OF EXCAVATIONS, ANY ERECTION METHODS AND BRACING.

2. CONTRACT DRAWINGS FOR THE EXISTING FACILITY ARE ON FILE AT THE OFFICE OF THE ARCHITECT, RENFRO RUSSELL & ASSOCIATES, FOR THE PURPOSE OF MANDATORY REFERENCE BEFORE SUBMITTING BID. CONTRACTOR SHALL VISIT THE JOBSITE AND INSPECT THE EXISTING CONDITIONS AND, BASED ON THE REVIEWED SITE CONDITIONS AND REFERENCED DRAWINGS, MAKE THE MODIFICATIONS AND EXTENSIONS TO THE EXISTING SYSTEMS AS GENERALLY DELINEATED. NO CLAIM FOR EXTRA SUMS WILL BE ALLOWED DUE TO THE CONTRACTOR'S FAILURE TO PROPERLY EXAMINE THE SITE AND REFERENCED DRAWINGS.

3. ALL MECHANICAL EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION USING THE FOLLOWING CRITERIA:

FIXED EQUIPMENT ON GRADE	22% OF OPERATING WEIGHT
FIXED EQUIPMENT ON STRUCTURE	33% OF OPERATING WEIGHT
EMERGENCY POWER EQUIPMENT ON GRADE	33% OF OPERATING WEIGHT
EMERGENCY POWER EQUIPMENT ON STRUCTURE	50% OF OPERATING WEIGHT

FOR FLEXIBLE MOUNTED EQUIPMENT USE 2 X THE ABOVE VALUES.
SIMULTANEOUS VERTICAL FORCE - USE 1/3 X HORIZONTAL FORCE.

WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT* AND THE FIELD REPRESENTATIVE OF THE OFFICE OF THE STATE ARCHITECT.

4. CONFIRM EXACT LOCATION OF ALL ROOF MOUNTED EQUIPMENT WITH STRUCTURAL DRAWINGS. ALL MECHANICAL EQUIPMENT SUPPORT FRAMES WHETHER OR NOT ON ROOF AND ERECTED BY SPECIFICATION SECTION 15800 AND SHALL BE DONE SO IN ACCORDANCE WITH SPECIFICATION SECTION 05120, STRUCTURAL STEEL. SUBMIT SHOP DRAWINGS FOR REVIEW AND ACCEPTANCE BEFORE FABRICATION.

5. ANY CUTTING, DRILLING, CORING OR SAW CUTTING OF EXISTING CONSTRUCTION ELEMENTS TO BE DONE ONLY WHEN SO DETAILED IN DRAWINGS OR APPROVED BY THE ARCHITECT OR STRUCTURAL ENGINEER AND BY THE OSA REPRESENTATIVE.

* AND MECHANICAL ENGINEER

SHEET INDEX

SHEET	DESCRIPTION
M - 1	SITE PLAN
M - 2	SCHEDULES AND DETAILS
M - 3	DETAILS
M - 4	MECHANICAL EQUIPMENT AREA, SYSTEM PIPING DIAGRAM & CONTROLS
M - 5	AIR CONDITIONING PLAN, BUILDINGS A & B
M - 6	AIR CONDITIONING PLAN, BUILDINGS C, D, & E
M - 7	AIR CONDITIONING PLAN, BUILDINGS F, R-2, & R-5

IDENTIFICATION STAMP
Department of General Services
Office of the State Architect
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Structural Safety Section
OSA 15-0

RENFRO RUSSELL & ASSOCIATES
Architecture • Engineering • Interior Design/Space Planning

Donald W. Renfro AIA C 5283
Mark E. Russell AIA C 13726

4800 Stockdale Highway, Suite 304, Bakersfield, California 93309 (805) 327-7075

CONSULTANTS

FRANK MITCHELL M12910 Expires 9/1/90
JOHN FRANK MITCHELL, INC.
CONSULTING MECHANICAL ENGINEERS
PHONE 873-3399 4644 WEST JENNIFER, SUITE 107 FRESNO, CALIFORNIA 93722
8807.2

PROJECT

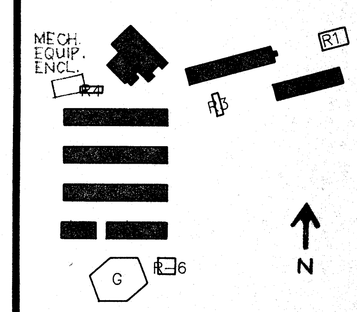
BAKERSFIELD CITY SCHOOL DISTRICT

FREMONT ELEMENTARY SCHOOL MODERNIZATION

THE ABOVE DRAWINGS AND SPECIFICATIONS AND IDEAS, DESIGNS AND ARRANGEMENTS REPRESENTED THEREBY ARE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT AND NO PART THEREOF SHALL BE COPIED, DISCLOSED TO OTHERS OR USED IN CONNECTION WITH ANY WORK OR PROJECT OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY HAVE BEEN PREPARED AND DEVELOPED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. VISUAL CONTACT WITH THESE DRAWINGS OR SPECIFICATIONS SHALL CONSTITUTE CONCLUSIVE EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS.

WRITTEN DIMENSIONS ON THESE DRAWINGS SHALL HAVE PRECEDENCE OVER SCALED DIMENSION. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB AND THIS OFFICE MUST BE NOTIFIED OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS BEFORE ANY WORK IS EXECUTED. SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.

KEY PLAN



BAKERSFIELD CITY SCHOOL DISTRICT
BOARD OF EDUCATION

DATE	APPROVED

DATE	ISSUED FOR
9.3.91	BIDDING

DATE	REVISIONS

SHEET TITLE

SITE PLAN

APPROVED/ARCHITECT
CHECKED JFM
DRAWN BY MJB
DATE 8-1-89
PROJECT NO. 86-216FMA

SHEET NUMBER 86216CAI2480

M - 1

OF 7 SHEETS