DPW TEMPORARY OFFICES (BUILDIN 023 - 0

DEPARTMENT OF THE ARMY
PUERTO RICO ARMY NATIONAL GUARD

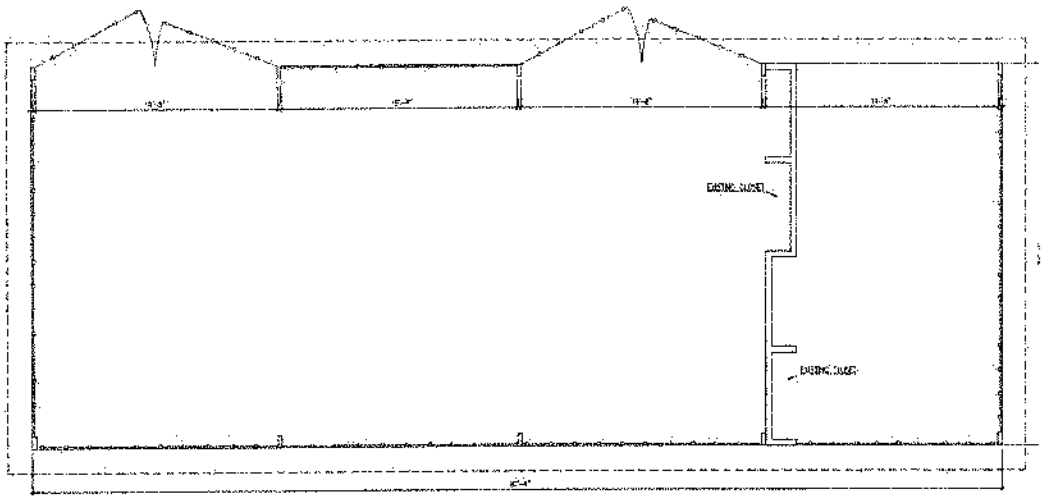
MAJ GEN MIGUEL A. MENDEZ
ADJUTANT GENERAL

LTC JOSE L. RIVERA
GARRISON COMMANDER

NUM.	DESCRIPTION
1	TITLE
2	EXISTING PLAN BUILDINGS 023 & 023A
3	DEMOLITION PLAN BUILDINGS 023 & 023A
4	PROPOSED FLOOR PLAN BUILDING 023 & 023A
5	DETAILS
6	CEILING PLAN BUILDING 023
7	ELEVATION PLAN BUILDING 023
8	LIGHTNING RECEPTACLE & DATA PLAN BUILDING 023
9	ELECTRICAL NOTES
10	ELECTRICAL DETAILS
11	AIR CONDITIONING PLAN BUILDING 023

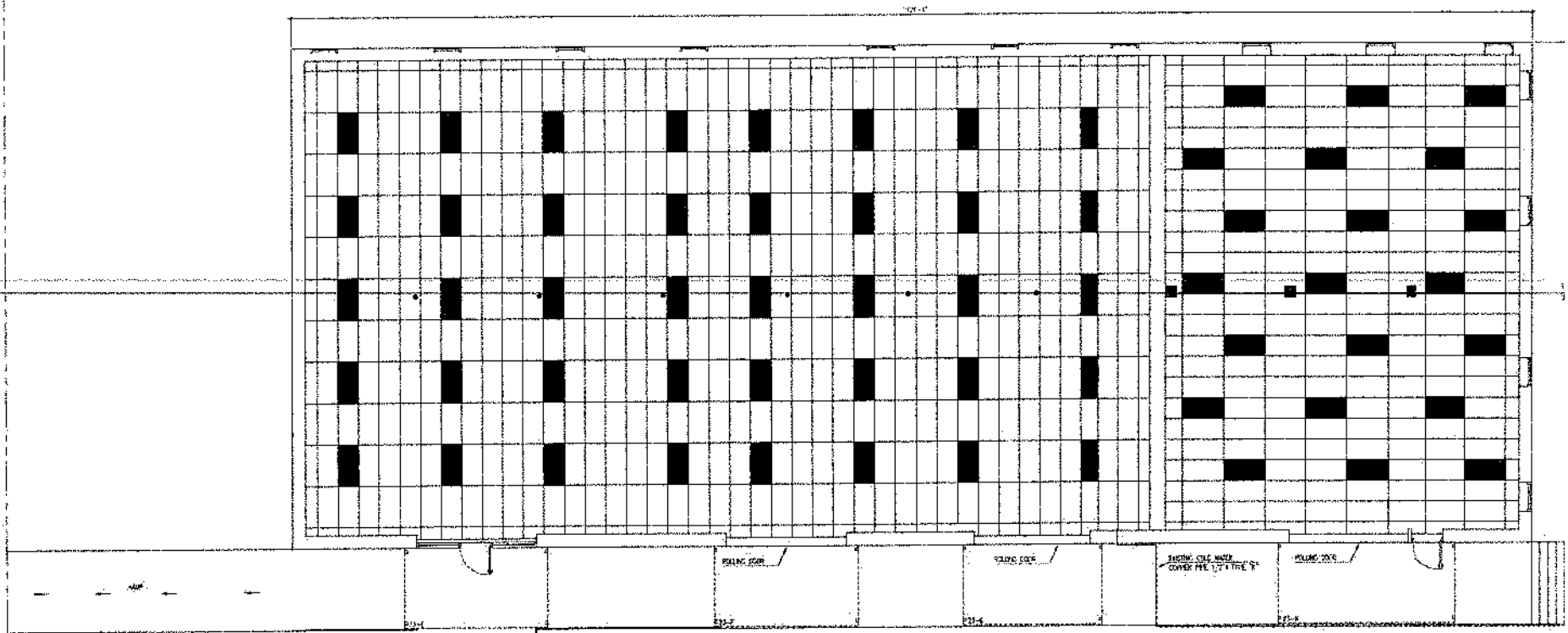
DIRECTORATE OF PUBLIC
CAMP SANTIAGO JOINT TRAINING

CPT ARMAI
STATE ROAD PR 1
TEL. (787) 289-1



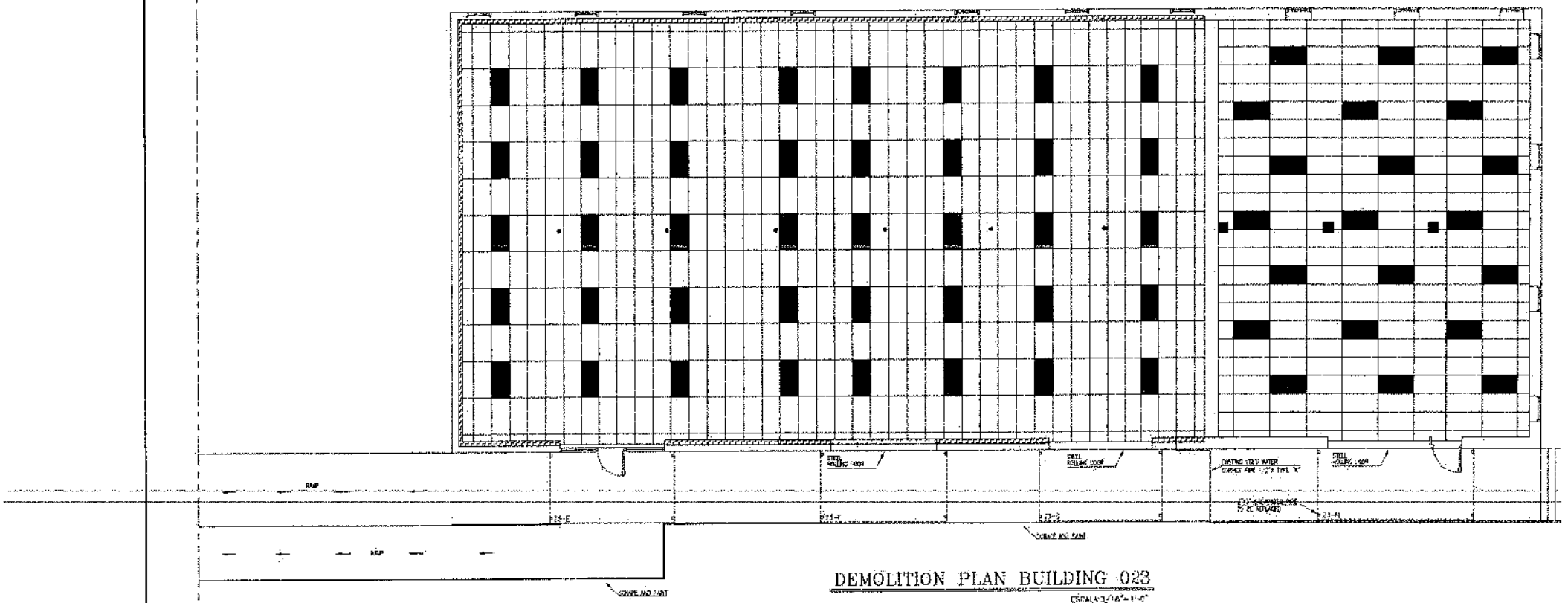
EXISTING FLOOR PLAN BUILDING 023A

ESCALA: 3/16"=1'-0"



EXISTING FLOOR PLAN BUILDING 023

ESCALA: 1/8"=1'-0"



DEMOLITION PLAN BUILDING 023

SCALE: 3/16" = 1'-0"

LEYEND: BUILDING 023	
□ 23-H	REPLACE GALVANIZED 3X3 PIPE AT INLET 23-H
	REMOVE PLASTER WALLS TO INSTALL NEW
	REMOVE PLASTER WALLS

LEYENG BUILDING 023

NEW CHAIN LINK FENCE TO BE INSTALLED

INSTALL SECURITY BARS

INSTALL SAFETY GRAB

NEW SIDEWALK

STORAGE

RECEPTION

OFFICE

OFFICE

LOBBY

CONFERENCE ROOM

STORAGE

STORAGE

NEW SIDEWALK

ELECTRICIAN WORKSHOP

PLUMBERS WORKSHOP

CARPENTER WORKSHOP

CARPENTER WORKSHOP

NEW SIDEWALK

NEW SIDEWALK

PROPOSED FLOOR PLAN BUILDING 023

LEYENG BUILDING 023A

NEW CHAIN LINK FENCE TO BE INSTALLED

NEW EQUIPMENT WAREHOUSE

FEDERAL TRIMMER WAREHOUSE

TRIMMER WAREHOUSE

AUTO WORKSHOP

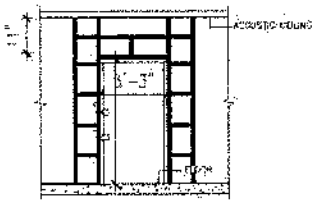
GAS

AUTO

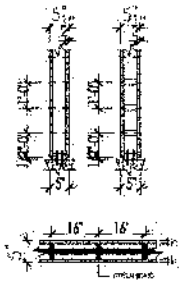
WELDING WORKSHOP

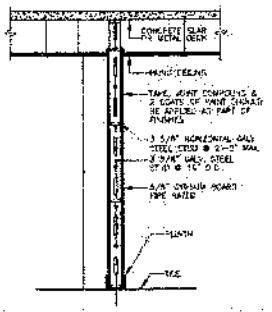
PROPOSED FLOOR PLAN BUILDING 023A

GYPSUM BOARD WALL DETAIL

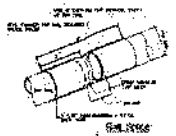


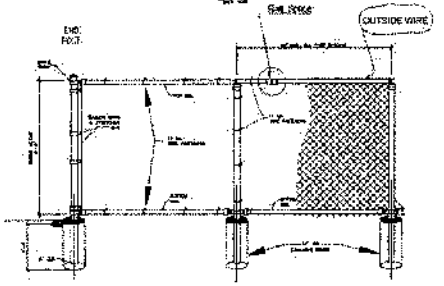
REINFORCEMENT DETAIL
DOOR OPENINGS ON
GYPSUM BOARD WALLS



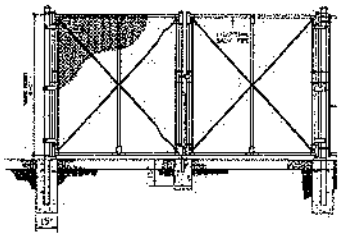


TYPICAL GYPSUM BOARD WALL SECTION

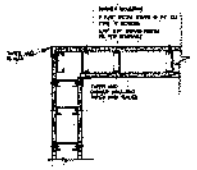




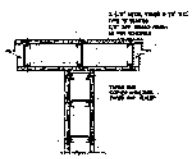
FENCE DETAIL



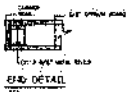
GATE ELEVATION



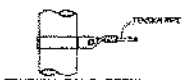
CORNER DETAIL



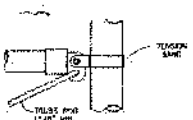
INTERSECTION DETAIL #2



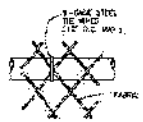
END DETAIL



TENSION BAND DETAIL

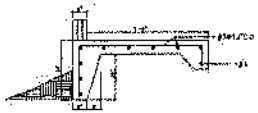


BRACE RAIL CLAMP DETAIL

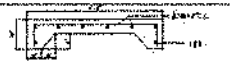


BRACE RAIL ATTACHMENT

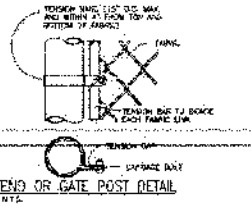
SIDEWALK DETAIL



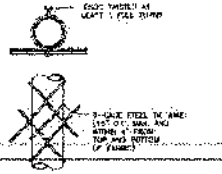
SIDEWALK SECTION (A)
NOTE: FINISH WITH BRUSH.
CONST. JOINT EVERY 10'-0"



SIDEWALK SECTION (B)
NOTE: FINISH WITH BRUSH.
CONST. JOINT EVERY 10'-0"



END OR GATE POST DETAIL

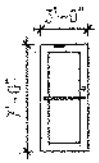


LINE POST ATTACHMENTS

NOTES:

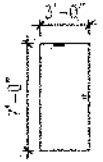
1. CHAIN LINK FENCE-INDUSTRIAL (A
2. LINE POSTS 2 1/2" O.D. (MIN. –
WEIGHT PIPE – 3.65 LBS PER LI
3. TOP RAIL 1 5/8" O.D. GALV. – 2
WEIGHT PIPE – 2.27 LBS PER LI
4. CORNER POST 2 1/2" O.D. GALV.
WEIGHT PIPE – 3.65 LBS PER LIN
5. TENSION WIRE GA. No. 7 GALVANI
6. GATE POSTS 4" O.D. GALV. – SIZ
WEIGHT PIPE – 9.1 LBS PER LIN
7. GALVANIZED CHAIN LINK GA. 9 –
1.2 OUNCES GALVANIZED
8. STD. WEIGHT PIPE – SCHEDULE 4
9. ALL FITTINGS – HEAVY DUTY
10. MILL CERTIFICATE SHALL BE SUBM

DOOR DETAIL



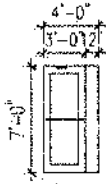
Type 1

1 3/4" Bottom Rail Standard
1 3/4" Flush Mount Frame
.042" Extruded Aluminum
Brushed Aluminum Finish
Class 1/4" Sidelight Bronze
Plastic Installed
ASTM Approved
Dead bolt 4870 Series Sargent
1339 Series Door Closer Sargent



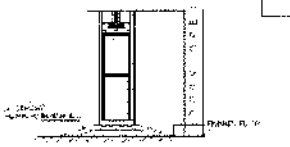
Type 2

1 3/4" Thick Stiffened
Flushed Metal door Design 16
Hanny Comb Plate
Guage 14 Steel Frame
ASTM Approved
700 Line Series Sargent
1331 Series Door Closer Sargent

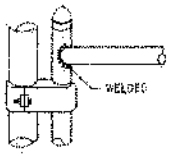


Type 3

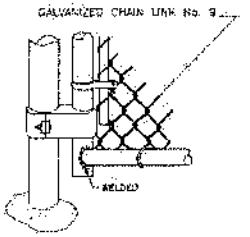
1 3/4" Bottom Rail Standard
1 1/2" Flush Mount Frame
1/8" Extruded Aluminum
Brushed Aluminum Finish
Class 1/4" Sidelight Bronze
Plastic Installed
ASTM Approved
Dead bolt 4870 Series Sargent
Two 1331 Series Door Closers Sargent
Top & Bottom Locks for both doors



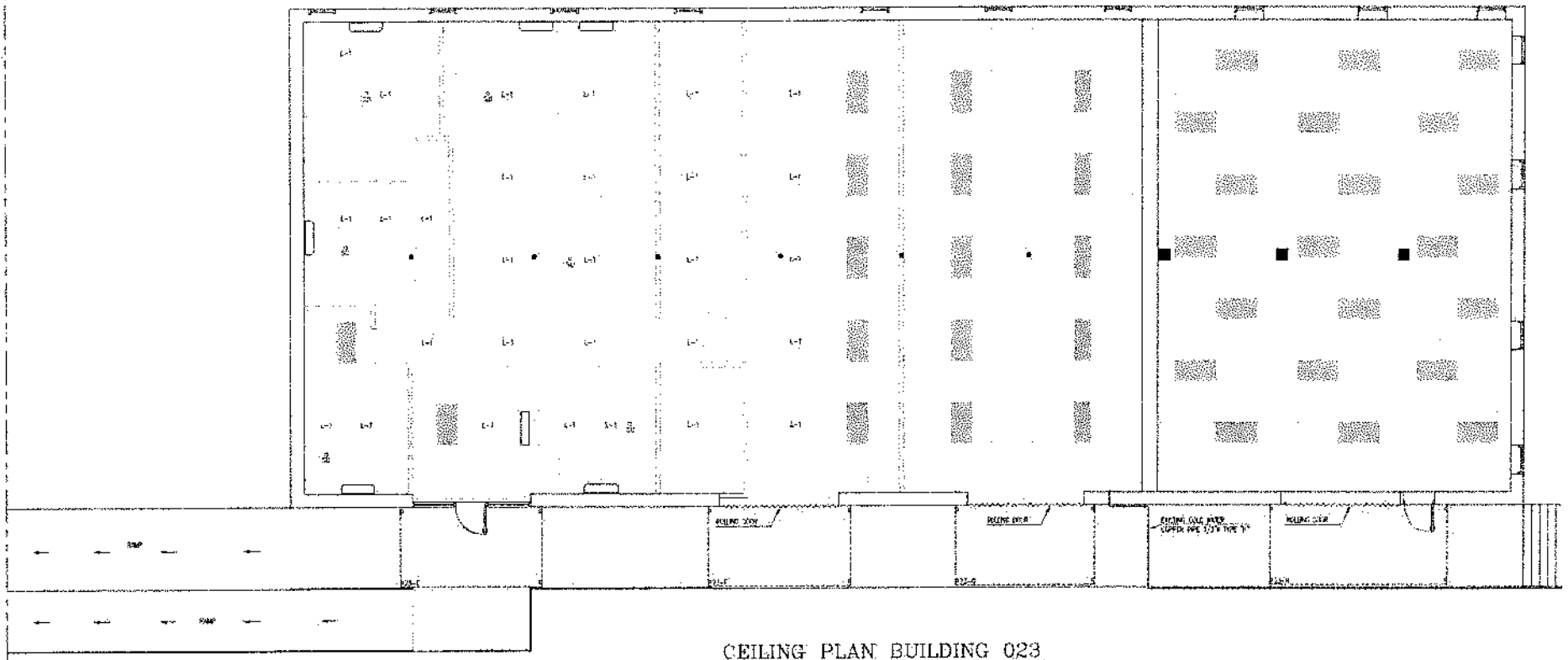
THRESHOLD DETAIL FOR DOOR



Upper Gate Hinge



Lower Gate Hinge



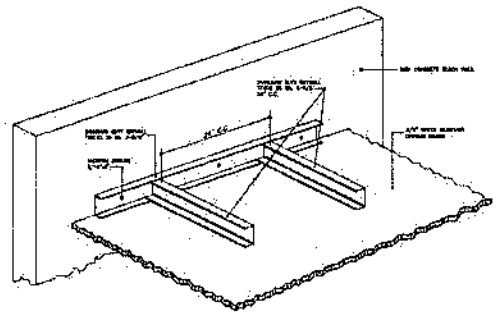
CEILING PLAN BUILDING 023

ESCALA: 3/32"=1'-0"

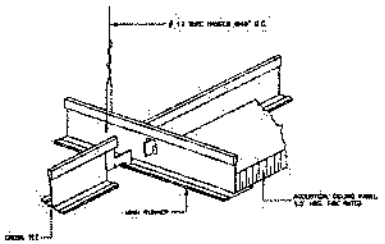
LEYEND

LIGHTS TO STAY IN PLACE

RELOCATE EXISTING LIGHTS TO U



GYPSUM BOARD HUNG CEILING DETAIL



TYPICAL HUNG CEILING DETAIL

CEILING NOTES:

1. ALL ACOUSTICAL CEILING SHALL BE EQUAL OR SIMILAR TO ARMSTRONG PRODUCT.

2. TYPE XL RH60 (PERFORATED) MINERAL FIBER BOARD, 24"x48"x5/8", NRC=0.55,CAC=35, CLASS A FIRE RESISTANCE- HIGH GUARD MAX, LIGHT REFLECTANCE OF 0.83, 1.05#/SF, VINYL FACED MEMBRANE,WET-FORMED MINERAL FIBER, TEXTURE FINE AT ALL TOILET ROOMS.

3. CEILING SUSPENSION SYSTEM: PRELUDE XL FIRE GUARD 15/16" EXPOSED TEE GRID, FOR ALL AREAS BLACK COLOR FINISH.

4. ALL SUSPENDED ACOUSTICAL CEILINGS SHALL BE MOUNTED AT 8'-0" ABOVE FINISH FLOOR ELEVATION.

LEFT LATERAL ELEVATION BUILDING 023

REAR ELEVATION BUILDING 023

FRONT ELEVATION BUILDING 023

RIGHT LATERAL ELEVATION BUILDING 023

NEW PANEL BOARD SCHEDULE (BLDG 23A) AREA

CIRCUITS	AMPS RATED	NO. OF POLES	CONDUCTOR SIZE #		CONDUIT		SERVICE	REMARKS
			SIZE	INSULATION	SIZE IN "	TYPE		
1-7	20	1	1-12 AWG	THHW	3/4	PVC SCH 40	LIGHTING	
8-14	20	1	1-12 AWG	THHW	3/4	PVC SCH 40	RECEPTACLES	
15-21	20	1	1-12 AWG	THHW	3/4	PVC SCH 40	RECEPTACLES	

EXISTING PANEL BOARD SCHEDULE (BLDG 023) WORKSHOP AREA (E-1)

CIRCUITS	AMPS RATED	NO. OF POLES	CONDUCTOR SIZE #		CONDUIT		SERVICE	REMARKS
			SIZE	INSULATION	SIZE IN "	TYPE		
1-15	20	1	2-12 AWG	THHW	3/4	PVC SCH 40	RECEPTACLES	
16-35	20	1	2-12 AWG	THHW	3/4	PVC SCH 40	LIGHTING	

EXISTING PANEL BOARD SCHEDULE (BLDG 023) OFFICE AREA (E-2)

CIRCUITS	AMPS RATED	NO. OF POLES	CONDUCTOR SIZE #		CONDUIT		SERVICE	REMARKS
			SIZE	INSULATION	SIZE IN "	TYPE		
1-15	20	1	2-12 AWG	THHW	3/4	PVC SCH 40	RECEPTACLES	
16-35	20	1	2-12 AWG	THHW	3/4	PVC SCH 40	LIGHTING	

NEW PANEL BOARD SCHEDULE (BLDG 023) OFFICE AREA (E-3)

CIRCUITS	AMPS RATED	NO. OF POLES	CONDUCTOR SIZE #		CONDUIT		SERVICE	REMARKS
			SIZE	INSULATION	SIZE IN "	TYPE		
1-15	20	1	2-12 AWG	THHW	3/4	PVC SCH 40	RECEPTACLES	
16-30	20	1	2-12 AWG	THHW	3/4	PVC SCH 40	LIGHTING	
31-36	20	1	2-12 AWG	THHW	3/4	PVC SCH 40	A/C	

NOTES:
1. FMC EXPOSED CONDUITS ALLOWED UNLESS APPROVED.
2. ALL CABLES TO BE COPPER.
3. EXPOSED CONDUITS WILL BE PAINT GALVANIZED STEEL.
4. AN ALLOWANCE OF $1,000.00 FOR ADDITIONAL ELECTRIC WORKS MUST BE CONSIDERED.

LEGEND
- ELECTRICAL CIRCUIT
- SWITCH CONDUIT
- RECEPTACLE CONDUIT
- SURFACE MOUNT ON 24"Ø X 4" ARCHITECT WALL LED LIGHTER
- SINGLE SWITCH 120 V 15 A @ 42" ± 6" FROM GROUND
- WHITE WITH STAINLESS STEEL COVER SIMILAR TO LEVITON DECORA
- NEW ELECTRICAL PANEL 120V, 2 240 V 100 SPACES
- SMOKE DETECTOR 120 V W/BOX
- EXIT LIGHT 120V/BATTERY BACK UP
- EMERGENCY LIGHT 120V/BATTERY BACKUP
- DOUBLE ELECTRICAL OUTLET WITH GFI/GFCI PROTECTION, MTD. @ 12" ± 6" FROM GROUND LEVITON DECORA STAINLESS STEEL COVER
- WEATHER 27"H x 6" JUNCTION BOX WITH STAINLESS STEEL ETHERNET COVER 27" CONDUIT HOUSING THROUGH THE WALL

TO NEW ELECTRICAL PANEL BUILDING 023A

LIGHTNING & RECEPTACLE PLAN BUILDING 023A

SCALE: 3/16"=1'-0"

NEW WALL & MDP & SAFETY SWITCH

RELOCATED GENERATOR

NEW SLAB

NEW PANEL BOARD

EXISTING PANEL BOARD

ROLLING DOOR

ROLLING DOOR

ROLLING DOOR

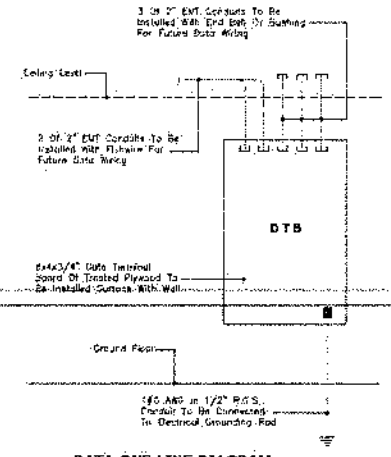
EXISTING PANEL BOARD

LIGHTNING & RECEPTACLE PLAN BUILDING 023

SCALE: 3/16"=1'-0"

NOTE:

1. ELECTRICAL RISER WILL BE INSTALLED (TYPICAL TYPE) WITH SAFETY SWITCH 120/240 VOLTS, SOLID NEUTRAL DISTRIBUTION PANEL 120/240 VOLTS, 225 AMPS, 2 POLES, 22 SPACES (RAINTIGHT).
2. ELECTRICAL SERVICE WILL BE SUPPLIED FROM NEAREST POLE AND WILL BE CONNECTED TO THREE CONDUCTORS #3 THW COOPER IN RIGID GALVANIZED CONDUIT 2" DIAM., ENDING WITH TYPE "T" CONDULET.
3. ELECTRICAL RISER WILL BE FIXED ALSO WITH A COOPER CONDUCTOR #6 IN RIGID GALVANIZED CONDUIT 2" DIAM., ATTACHED WITH A 5/8" x 8'-0" COOPER WELD BAR.
4. CIRCUITS WILL BE DISTRIBUTED AS THE BETTER KNOW OF THE ELECTRICAL TECHNICIAN ON DISTRIBUTION PANEL.



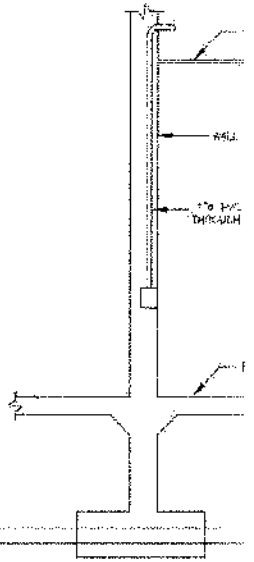
DATA ONE LINE DIAGRAM

ELECTRICAL NOTES:

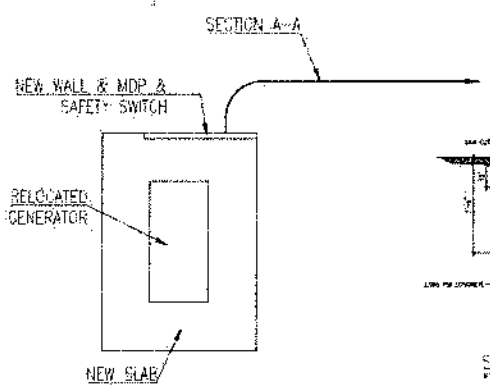
1. ALL WORK SHALL BE STRICTLY COORDINATED WITH OWNER'S REPRESENTATIVE, A WRITTEN NOTICE TO PROCEEDE FROM THE OWNER IS REQUIRED PRIOR START THE CONSTRUCTION WORKS. ALL MATERIALS AND INSTALLATION SHALL CONFORM TO THE OWNER'S STANDARDS AND SPECIFICATION.
2. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED INSURANCES ACCORDING TO OWNER'S REPRESENTATIVE FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE.
3. ALL ELECTRICAL CONSTRUCTION WORKS SHALL BE DONE IN A THOROUGH AND WORKMANLIKE MANNER BY A LICENSED CONTRACTOR FOR A FULLY OPERATIVE SYSTEM IN ACCORDANCE WITH THE PLANS, SPECS AND CONSTRUCTION DRAWINGS. THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL, FIRE AND LOCAL CODES HAVING JURISDICTION SHALL BE FOLLOWED.
4. ELECTRICAL CONTRACTOR SHALL VISIT THE PROJECT PRIOR BID AND SHALL ADJUST HIS WORK TO ALL CONDITIONS FOUNDED ON SITE ACCORDING TO ARCHITECTURAL, CIVIL, STRUCTURAL, PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS. ALL ADJUSTMENTS AND CHANGES REQUIRED DUE TO EXISTING CONDITIONS SHALL BE INCLUDED IN HIS BID.
5. SPECIAL CONDITIONS APPLY TO ELECTRICAL DRAWINGS, THEY ARE SCHEMATICS. ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID ALL COSTS NECESSARIES TO PROVIDE A COMPLETE INSTALLATION READY FOR USE ACCORDING TO DRAWINGS AND SPECIFICATIONS.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH MANUFACTURER'S SUPPLIER EXACT REQUIREMENTS FOR THE INSTALLATION AND PROTECTION OF ALL ELECTRICAL EQUIPMENTS AND MATERIALS PRIOR BID. ALL EQUIPMENTS AND MATERIALS SHALL BE NEW EXCEPT UNLESS OTHERWISE INDICATED AND SHALL BEAR UNDERWRITERS AND UNION LABELS.
7. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO FURNISH AND INSTALL ALL ELECTRICAL EQUIPMENTS, INCLUDING CONTROL PANELS, OUTLETS, DEVICES, WIRING, ETC. ACCORDING TO DRAWINGS UNLESS OTHERWISE INDICATED.
8. ALL DISTRIBUTION PANELBOARDS SHALL BE CONSTRUCTED WITH A GROUND BUS SEPARATE FROM NEUTRAL ONE TO CONNECT ALL GROUNDING GREEN WIRES. CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE, PLUG-IN TYPE NOT ALLOWED. PROVIDE IDENTIFICATION OF ALL BRANCH CIRCUITS ON A TYPEWRITTEN DIRECTORY CARD IN THE PANEL DOOR.
9. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR BALANCING ALL LOADS ON EACH DISTRIBUTION PANELBOARD. MAXIMUM LOAD FOR EACH BRANCH CIRCUITS IS EIGHTY PERCENT (80%).
10. ALL ELECTRICAL EQUIPMENTS SHALL BE CLEARLY IDENTIFIED WITH YELLOW ENAMEL PAINT OR ANY OTHER APPROVED METHOD ACCORDING TO DRAWINGS. NO FREE HAND IDENTIFICATION ALLOWED.
11. ALL METERBANKS, METER SOCKETS, DISTRIBUTION PANELBOARDS, SAFETY SWITCHES AND ANY OTHER ELECTRICAL MATERIAL SHALL BE CONSTRUCTED WITH COOPER BUSES, NOT ALLUMINUM ALLOWED.
12. ELECTRICAL, TELEPHONE, C.A.T.V., INTERCOM, DATA AND ANY OTHER SYSTEM SHALL BE GROUNDED AS PER LATEST EDITION NATIONAL ELECTRICAL CODE. ALL GROUND SYSTEM SHALL HAVE MAXIMUM RESISTANCE OF 5 OHMS. PROVIDED BOND WIRES IN ALL CONDUITS AND GROUND TYPE BUSHINGS AS REQUIRED.
13. ALL ELECTRICAL CONDUCTORS SHALL BE COPPER WITH 600 V INSULATION AND #12 AWG MINIMUM UNLESS OTHERWISE INDICATED. ALLUMINUM WIRE IS NOT PERMITTED UNLESS SPECIFIED.
14. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ENGINEER EXACT FINAL LOCATION OF ELECTRICAL ELEMENTS, C.A.T.V., DATA, INTERCOM AND ANY OTHER OUTLET OR EQUIPMENT PRIOR TO INSTALLATION.
15. ELECTRICAL CONTRACTOR SHALL INSTALL UNISTRUT CHANNELS AND HANGERS TO PROVIDE MECHANICAL SUPPORT TO ALL CONDUITS EXPOSED IN CEILING PLENUM.
16. PROVIDE ELECTRICAL IDENTIFYING PVC WARNING RIBBON FOR UNDERGROUND LINES INSTALLED OVER ALL DIRECT BURIAL UNDERGROUND CONDUCT AND SETS AT 12" BELOW FINAL FLOOR. IT IT SHALL BE 6" WIDE YELLOW COLOR AND PERMANENTLY PRINTED WITH CONTINUOUS 3-1/4" X 3/8" BLACK LETTERS WITH WORDS " PELIGRO - PELIGRO" AT THE TOP AND "LINEAS ELECTRICAS DEBAJO" AT BOTTOM.
17. NO CONDUIT SHALL BE SMALLER THAN 3/4" IN DIAMETER.
18. PROVIDE NO. 12 TW GREEN BONDING JUMPER BETWEEN THE OUTLET BOX GROUNDING SCREW AND ALL RECEPTACLES GROUND TERMINALS.
19. ALL WIRING DEVICE SHALL BE SPECIFICATION GRADE.
20. ALL CONDUCTORS #8 AWG AND ABOVE SHALL BE STRANDED.
21. ALL EXPOSED CONDUITS SHALL BE SUPPORTED AT INTERVALS NOT EXCEEDING THE RECOMENDATIONS OF NEC 1996, SECTION 347-8.
22. HOMERUNS TO PANEL BOARD EXCEEDING ONE HUNDRED FEETS SHALL BE WIRED WITH #8 AWG PHASE CONDUCTORS AND #10 AWG GROUNDING CONDUCTOR USING 1" CONDUIT.
23. GROUNDING CONDUCTOR FOR ISOLATED GROUND BUS SHALL BE INSTALLED DIRECTLY WITH #8 AWG PHASE CONDUCTORS NEARES GROUND ROD NOT ITEM GROUNDING BUS BAR OF SUPPLY PANEL BOARD. SEE ELECTRICAL RISER DIAGRAM AND TYPICAL ISOLATED DISTRIBUTION PANEL BOARD CONNECTION DETAIL.
24. EACH CIRCUIT SHALL INCLUDE A SEPARATOR NEWMAN AND GROUNDING CONDUCTORS INSTALLED DIRECTLY TO PANEL BOARD.

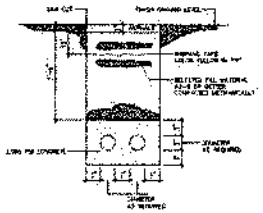
NOTES:

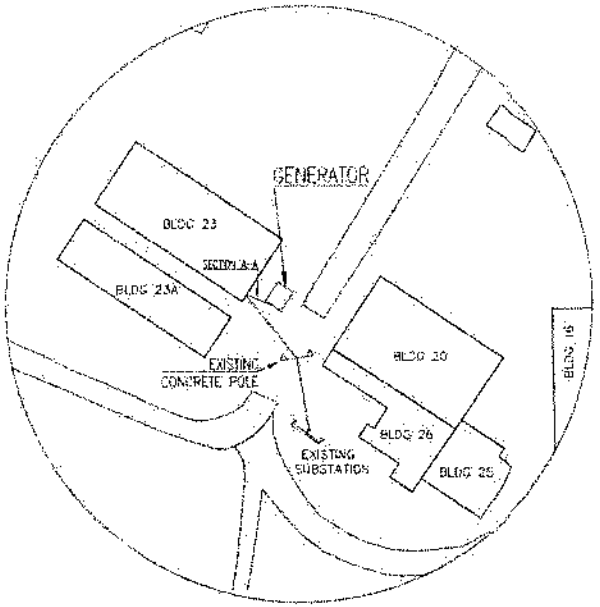
1) ALL MATERIAL WILL BE NEW AND BUY AMERICA COMPLIANT FREE OF DEFECTS
2) ALL EXPOSED CONDUITS WILL BE RIGID GALVANIZED.
3) ALL RECEPTACLES INSTALLED IN CIRCUITS OF 15 Y 20 AMPERES MUST BE BORNE TYPE, FOR GROUND CONECTION ("GROUND TYPE").
4) INSTALL CONDUCTOR #12TW GREEN BEETWEEN THE "BORNE" GROUND FROM THE OUTLET TO "BORNE" GROUND OF THE ELECTRICAL BOX.
5) THE CONTRACTOR WILL BE RESPONSIBLE TO ABIDE BY THE PREPA CODES AND THE ARTICLES OF THE APPLICABLE NATIONAL ELECTRICAL CODES DURING CONSERUCTION.



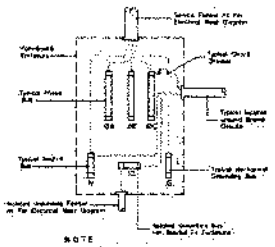
TYPICAL INSTALLATION FOR COMU



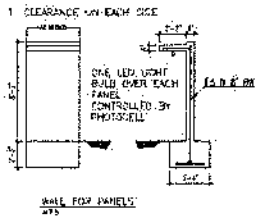




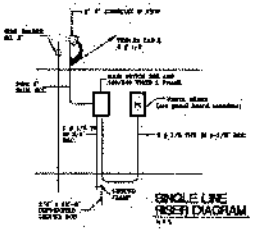
NEW FEEDER DIAGRAM
N.T.S.



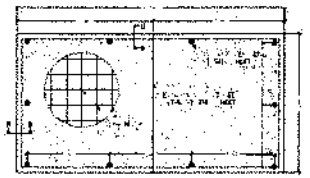
TYPICAL (ISOLATED) DISTRIBUTION PANELBOARD CONNECTION DETAIL



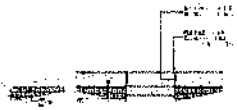
WALL FOR PANELS

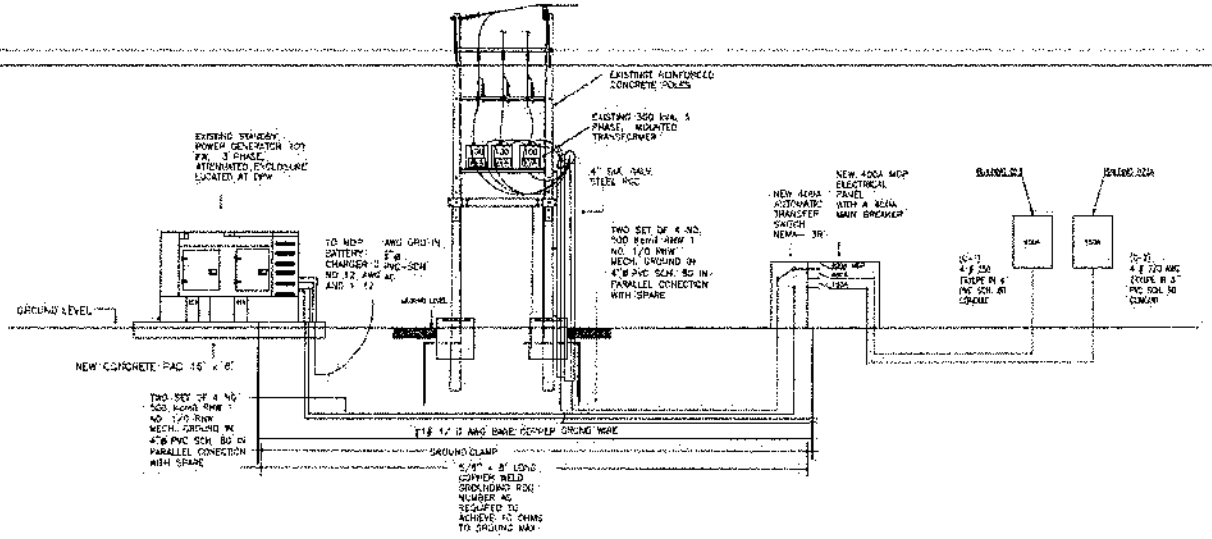


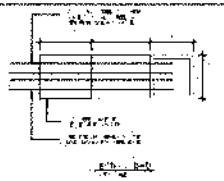
SINGLE LINE (RISER) DIAGRAM

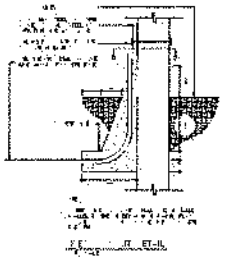


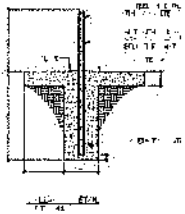


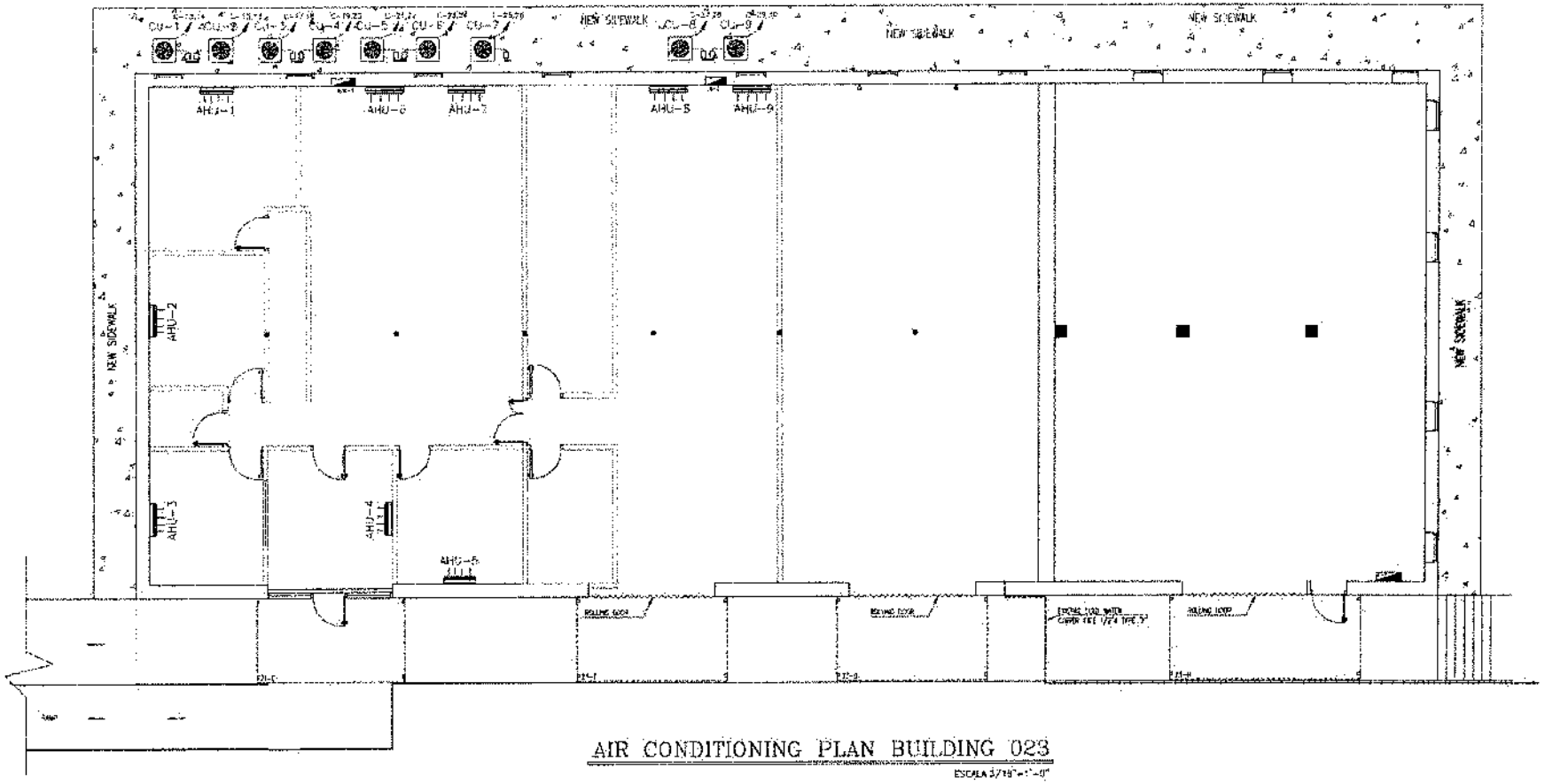






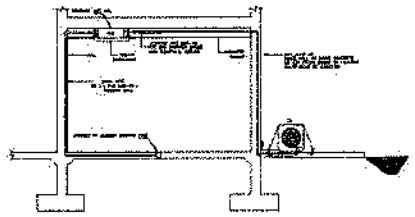






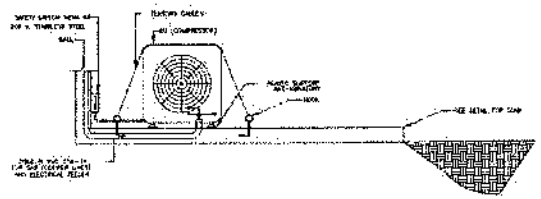
AIR CONDITIONING PLAN BUILDING 023

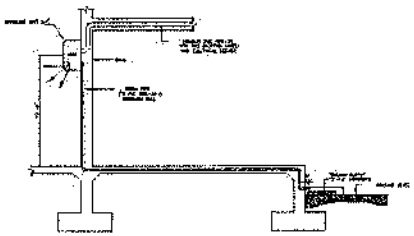
ESCALA 3/16"=1'-0"



TYPICAL INSTALLATION FOR A/C UNITS "CASSETTE"

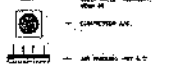
N.T.S





TYPICAL INSTALLATION FOR A/C UNITS "MINI-SPLIT"

N.T.S



LIST OF THE MECHANICAL EQUIPMENT

MARK	FOLLOWING ARE DESCRIPTION OF EQUIPMENT
AHU-1 / CU-1	"MINI-SPLIT" THREE 9,000+12,000+18,000 BTU/H HEATING & COOLING 1 PHASE
AHU-2 / CU-2	"MINI-SPLIT" THREE 9,000+12,000+18,000 BTU/H HEATING & COOLING 1 PHASE
AHU-3 / CU-3	"MINI-SPLIT" THREE 9,000+12,000+18,000 BTU/H HEATING & COOLING 1 PHASE
AHU-4 / CU-4	"MINI-SPLIT" THREE 9,000+12,000+18,000 BTU/H HEATING & COOLING 1 PHASE
AHU-5 / CU-5	"MINI-SPLIT" THREE 9,000+12,000+18,000 BTU/H HEATING & COOLING 1 PHASE
AHU-6 / CU-6	"MINI-SPLIT" THREE 9,000+12,000+18,000 BTU/H HEATING & COOLING 1 PHASE
AHU-7 / CU-7	"MINI-SPLIT" THREE 9,000+12,000+18,000 BTU/H HEATING & COOLING 1 PHASE
AHU-8 / CU-8	"MINI-SPLIT" THREE 9,000+12,000+18,000 BTU/H HEATING & COOLING 1 PHASE
AHU-9 / CU-9	"MINI-SPLIT" THREE 9,000+12,000+18,000 BTU/H HEATING & COOLING 1 PHASE

A/C NOTES: