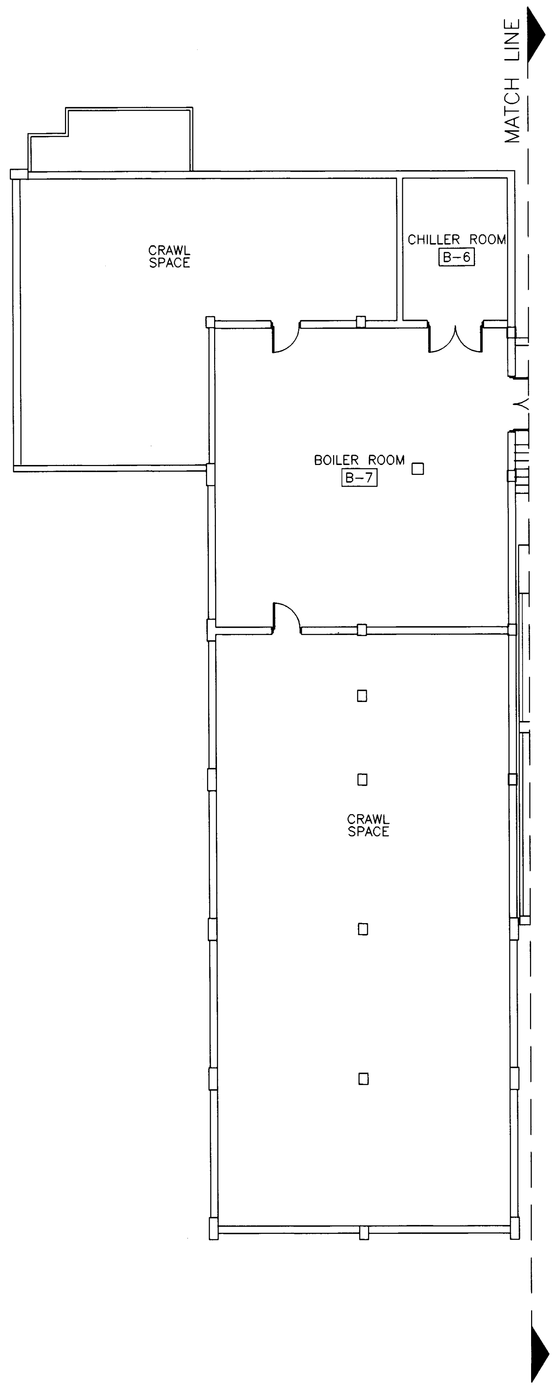
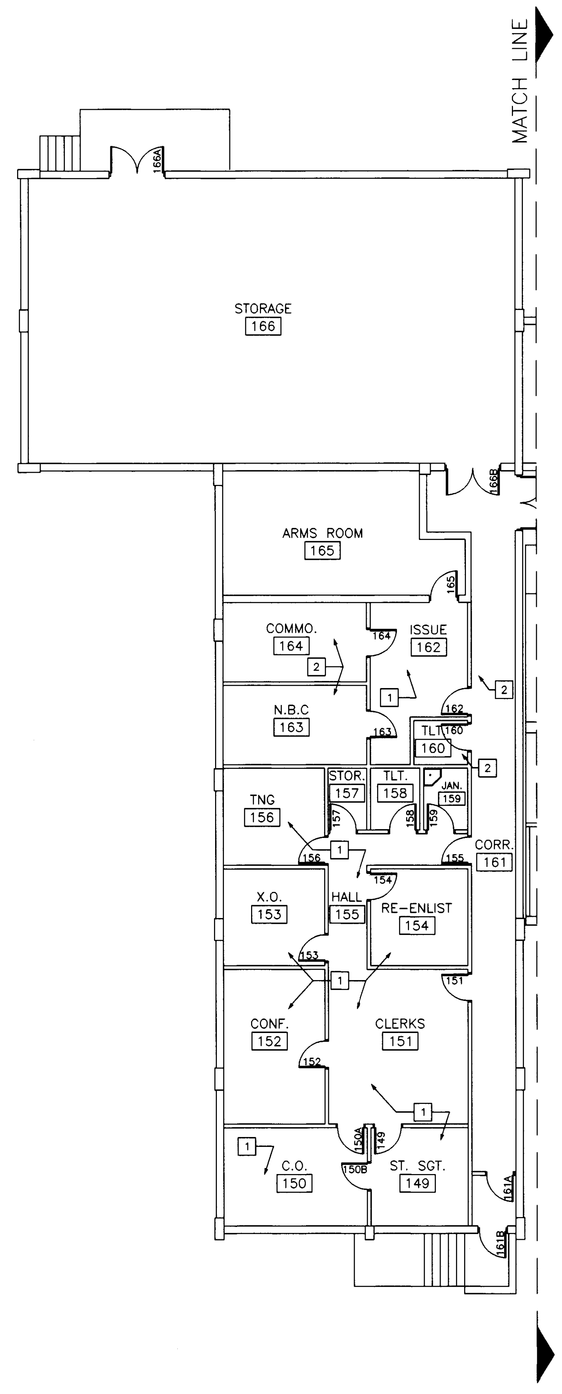


DEMOLITION BASEMENT FLOOR PLAN
1/8" = 1'-0"
BLDG. 2448

PLAN NORTH



DEMOLITION FIRST FLOOR PLAN
1/8" = 1'-0"
BLDG. 2448

PLAN NORTH

GENERAL NOTES:

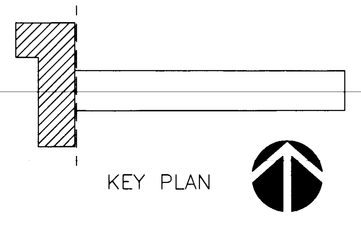
A. SEE ELECTRICAL DRAWINGS FOR WORK RELATED TO NEW ELECTRICAL WORK.

B. SEE PLUMBING DRAWINGS FOR WORK RELATED TO NEW MECHANICAL/PLUMBING WORK.

DEMOLITION KEYED NOTES:

1. REMOVE AND REPLACE CEILING TILES AS REQUIRED FOR HVAC WORK. DISCARD STAINED PIECES AND REPLACE WITH SALVAGED PIECES. RE-INSTALL CEILING TILE AFTER HVAC WORK HAS BEEN COMPLETED.

2. DEMOLISH PORTIONS OF GYP. BD. CEILING TILE AS REQUIRED FOR HVAC DEMOLITION AND NEW WORK.



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.	Mark	Description	Date	Appr.

Date: 09/23/04 Rev.
Design file no. B2448A0101
Drawing code: A
File name: B2448A0101
Plot date: 9/23/04
Plot scale: 1/8" = 1'-0"

Designed by: JC
Dwn by: JC
Ckd by: JB
Reviewed by: CA
Submitted by: Paul Wolters

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORPS OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

FY04 OMA
BRIGADE BARRACKS
FORT BLISS, TEXAS

DEMOLITION BASEMENT & 1ST. FLOOR
HAMMER HEAD
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

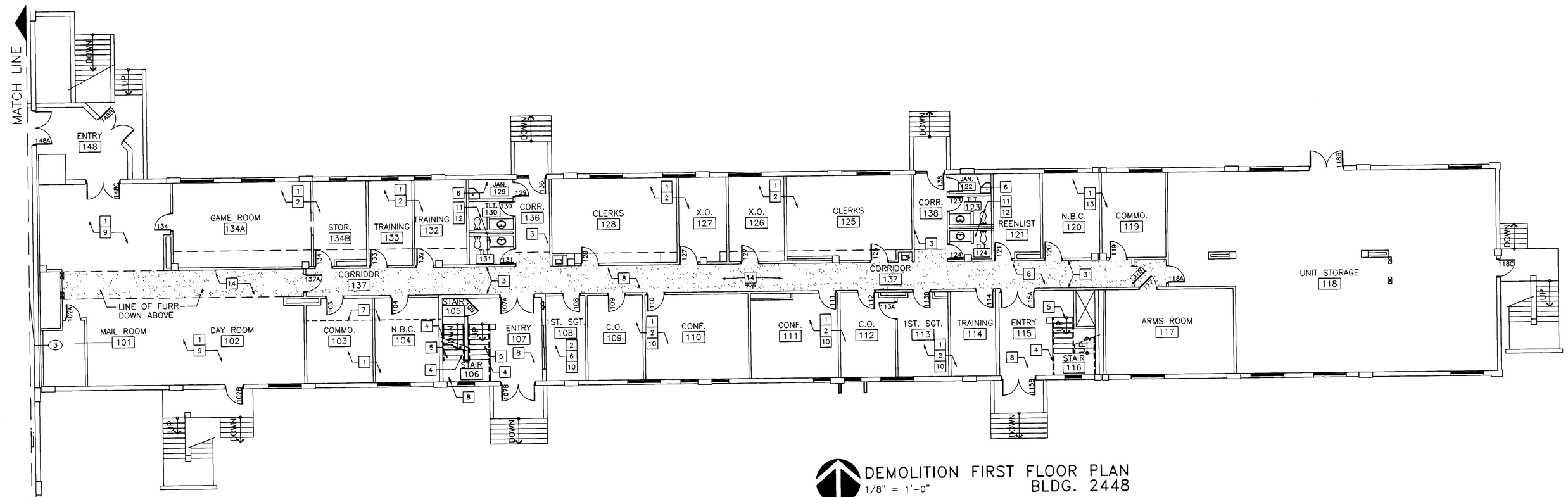
Sheet reference number:
A-101
Sheet 4 of 160

CONTRACT NO. W9126G-04-C-0034

DRAWING OF WORK AS BUILT

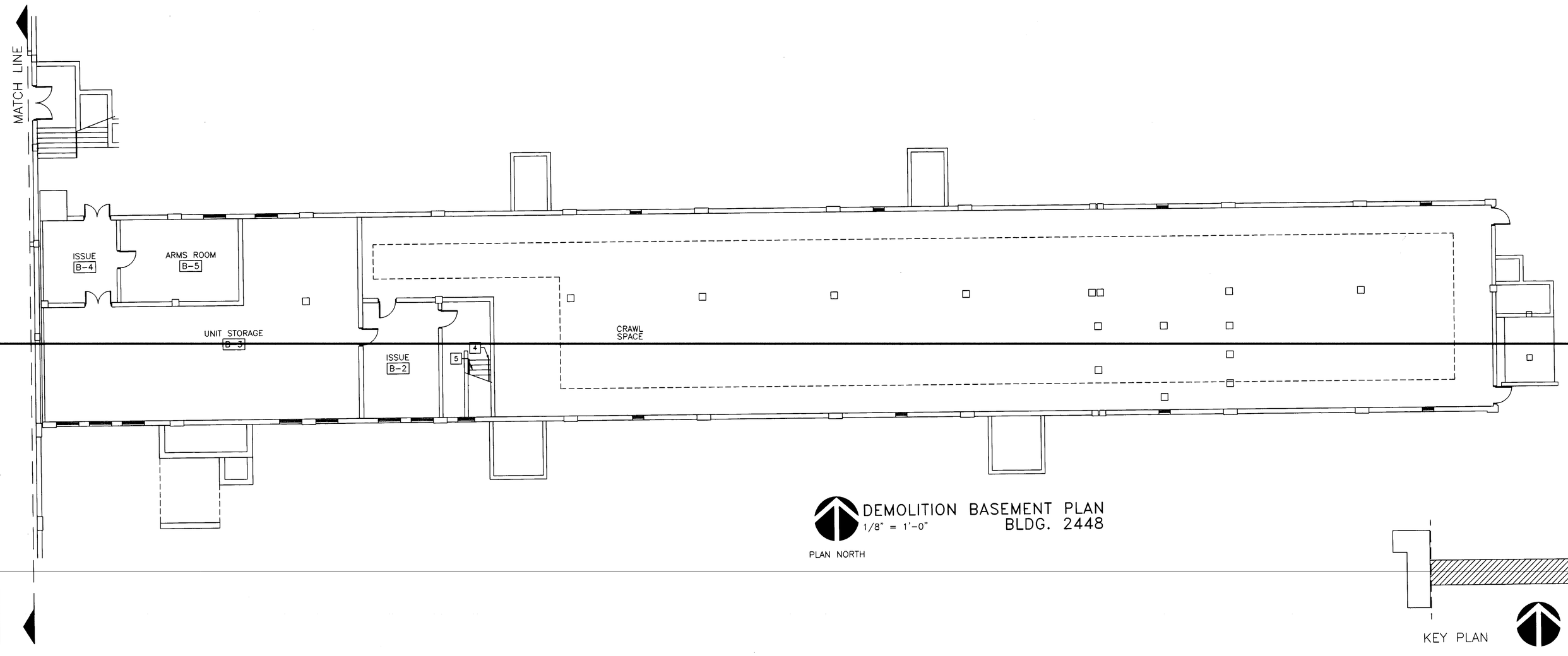
SHEETNUMBER

FB-SA



DEMOLITION FIRST FLOOR PLAN
1/8" = 1'-0"
BLDG. 2448

PLAN NORTH



DEMOLITION BASEMENT PLAN
1/8" = 1'-0"
BLDG. 2448

PLAN NORTH

KEY PLAN

GENERAL NOTES:

A. REMOVE TACK BOARDS, DISPLAY CABINETS, ETC. FROM WALL. CLEAN/REPAIR AND STORE FOR REINSTALLATION.
B. REMOVE PLATE ROOM NUMBER ETC. FROM DOOR/FRAMES CLEAN/REPAIR AND STORE FOR REINSTALLATION. IN ORDER TO PREVENT DAMAGE TO WOOD DOORS DO NOT REMOVE PLATES IF THEY ARE ADHERED TO DOOR.
C. REFER TO DOOR SCHEDULE FOR DOORS TO BE REFINISHED. ALL DOORS SHALL BE STRIPPED AND FINISHED IN PLACE. IT IS THE CONTRACTORS OPTION TO REMOVE HARDWARE FROM THE DOOR AND FRAME FOR NEW WORK.
D. CUT AND REMOVE PORTION OF GYP. BD. CEILING/ WALL AS REQUIRED FOR MECH. AND PLUMBING WORK, SEE MECHANICAL/PLUMBING DRAWINGS.
E. REMOVE DRAPERY HANGER/BRACKETS AT ALL WINDOWS AND DISCARD. PATCH HOLES AND PREP FOR NEW FINISH.
F. SEE ELECTRICAL DRAWINGS FOR WORK RELATED TO REMOVAL AND RELOCATION OF EMERGENCY LIGHT FIXTURES, ALARM DEVICES, ETC.
G. SEE PLUMBING DRAWINGS FOR WORK RELATED TO REMOVAL AND RELOCATION OF PLUMBING FIXTURES.
H. AT AREAS OF PAINT PEALING OFF, SCRAPE SURFACE AND PREPARE FOR NEW FINISHES.
I. STRIP AND REMOVE RUST FROM ALL DOOR FRAMES (INTERIOR AND EXTERIOR), PATCH HOLES WHERE REQUIRED, PREPARE FOR NEW FINISHES.
J. AT BUILDING 2448 REMOVE ALL BLINDS WITH THE EXCEPTION OF THE BLINDS AT THE STAIRCASE AND THE HAMMER HEAD AREA. CLEAN WINDOW FOR INSTALLATION OF NEW BLINDS. ACCOUNT FOR A TOTAL OF 85 BLINDS FOR 1ST, 2ND AND 3RD FLOORS.
K. SERVICE AND ASSURE FIRE EXTINGUISHERS AND CABINETS ARE IN PROPER WORKING CONDITION TYPICAL OF 3 PER FLOOR.
L. IN AREAS WHERE THERE HAS BEEN WATER DAMAGE TO THE SHEETROCK OR DISCOLORATION, THE SHEETROCK NEEDS TO BE REMOVED. IN THE PROCESS OF REMOVING THE CONTRACTOR SHOULD KEEP THE MATERIAL WET WITH EITHER A BIOCIDE OR A 10% BLEACH SOLUTION (1 PART BLEACH TO 10 PARTS WATER). CONTRACTOR SHOULD CUT APPROXIMATELY 2" TO 3" BEYOND EITHER THE WATER DAMAGE OR DISCOLORATION TO ASSURE ALL THE DAMAGED AREAS ARE REMOVED. CONTRACTOR WILL DISPOSE OF ALL MATERIAL REMOVED PER BASE STANDARDS.

OPTION #2

AT THE CORRIDORS IN BUILDING 2448 REMOVE EXISTING FRP WAINSCOT PANELING AND WALL FABRIC IN IT'S ENTIRETY (FIRST FLOOR ONLY, EXCLUDE HAMMERHEAD).

DEMOLITION KEYED NOTES:

1. EXISTING CARPET, PAD, AND VINYL BASE TO BE REMOVED AND DISPOSED, PREPARE FLOOR SLAB FOR NEW FINISHES.
2. REMOVE AND STORE EXISTING ACOUSTICAL CEILING TILE FOR REINSTALLATION. DISPOSE DAMAGED CEILING TILES AND DAMAGED GRID RUNNERS.
3. EXISTING FABRIC & FRP WALL COVERING TO REMAIN. PATCH AND REPAIR WHERE REQUIRED ASSUME 50 S.F.
4. WITH EXISTING HANDRAILS IN-PLACE, STRIP AND PREPARE FOR NEW PAINT.
5. REMOVE ALL STAIR SAFETY COVER TREADS.
6. REMOVE EXISTING VCT FLOORING, PREPARE SLAB FOR NEW FINISHES.
7. REMOVE PORTION OF EXISTING GYP. BD. CEILING FOR HVAC WORK, PREPARE FOR NEW GYP. BD. CEILING
8. REMOVE EXISTING RUBBER FLOOR AND WALL BASE, PREPARE SLAB FOR NEW FINISHES.
9. AT THIS AREA ONLY, REMOVE CEILING TILE AND GRID SUPPORT. STORE ITEMS IN USABLE CONDITION FOR REINSTALLATION ELSEWHERE (WHERE REQUIRED).
10. REMOVE EXISTING CEILING GRID AND ACOUSTICAL TILE IN ITS ENTIRETY FOR MECHANICAL WORK, STORE FOR REINSTALLATION. DISCARD PERIMETER CEILING SUPPORT WALL ANGLES AND REPLACE WITH NEW.
11. REMOVE EXISTING DAMAGED CERAMIC TILE FINISHES, PREPARE SURFACE FOR REPLACEMENT.
12. REMOVE EXISTING TOILET ACCESSORIES AND STORE, REINSTALL AFTER APPLYING NEW BATHROOM FINISHES. IT IS THE CONTRACTORS OPTION TO REMOVE ACCESSORIES IN ORDER TO FINISH WALLS.
13. EXISTING GYP. BD. CEILING TO REMAIN. REMOVE PORTION OF CEILING AS REQUIRED FOR HVAC WORK, SEE MECHANICAL DWGS. PREPARE FOR NEW FINISHES, SEE FINISH SCHEDULE.
14. REMOVE EXISTING GYP. BD CEILING IN ITS ENTIRETY FOR NEW HVAC WORK.

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.

Date: 08/23/04 Rev.
Design file no. 01
Drawing code: X
File name: B2448A01D
File date: 08/23/04
Plot scale: 1/8"=1'-0"

Designed by: D.P.
Dwn by: L.C.
Ckd by: J.R.
Reviewed by: E.A.
Submitted by: Paul Weems

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
2155 LOUISIANA BLVD, NE
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FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

DEMOLITION BASEMENT & 1ST. FLOOR
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

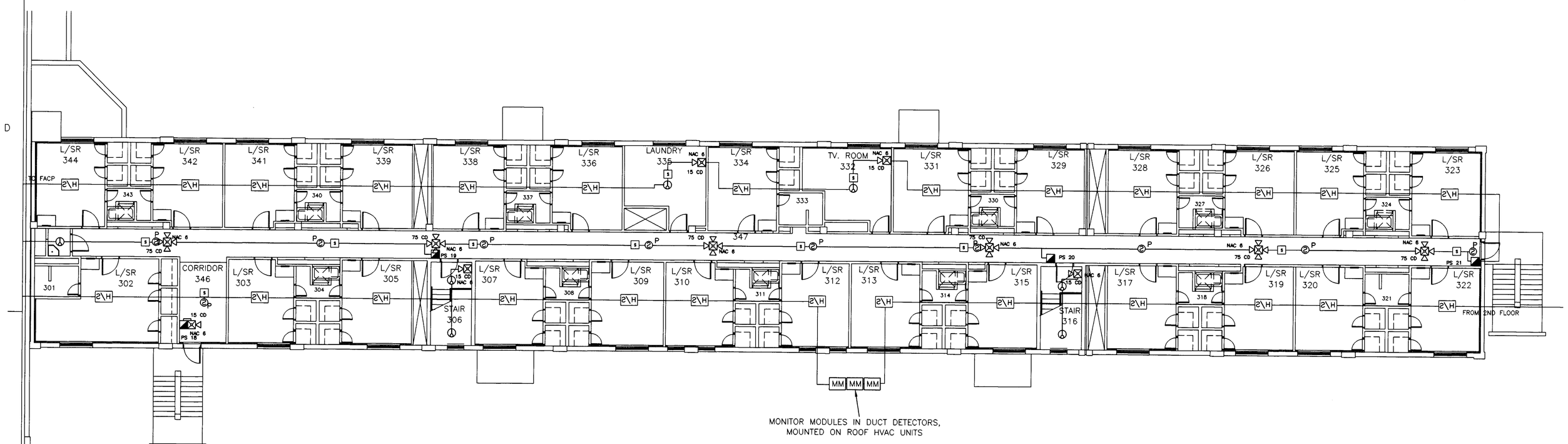
Sheet reference number:
A-102
Sheet 5 of 160

CONTRACT NO. W9126G-04-C-0034

DRAWING OF WORK AS BUILT

SHEETNUMBER

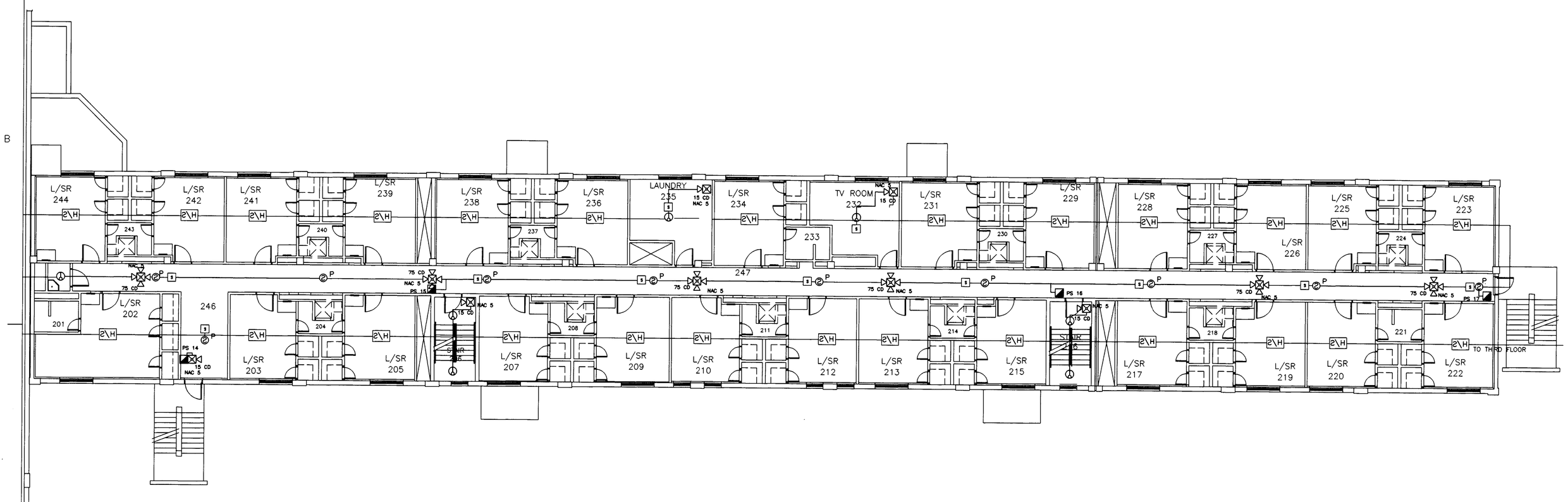
FB-SA



NEW WORK ELECTRICAL LIGHTING/SS PLAN – THIRD FLOOR
BLDG. 2448

TRUE NORTH

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



NEW WORK ELECTRICAL LIGHTING/SS PLAN – SECOND FLOOR
BLDG. 2448

TRUE NORTH

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

KEY PLAN

K:\A04012\BLDG 2448\e\ B2448E-111.dwg 07-16-2004 15:18

SHEETNUMBER

DRAWING OF WORK AS BUILT

US Army Corps of Engineers
District or Division

Sym.	Description	Date	Appr.
2	ADD KEYED NOTE 10	9-10-04	AW/CKD

Designed by: Jan Tyr
Cad by: JJ
Reviewed by:
Submitted by: Paul Waters
Date: 06/23/04 Rev.
Design file no: 111
Drawing code:
File name B2448E-111.dwg
Plot date: 09/13/04
Plot scale: 1:1 (100%)

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

FY04 OMA
ROOM REMODELS
FORT BLISS, TEXAS

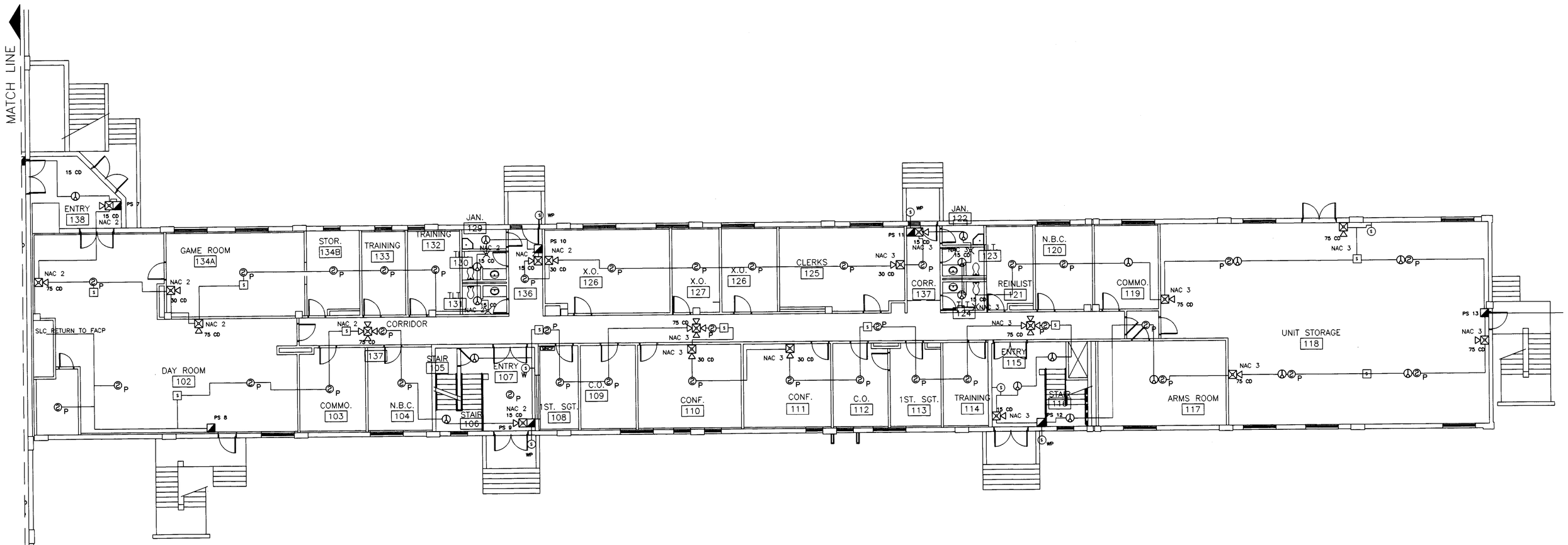
ELECTRICAL FLOOR LIGHTING/SS PLANS
SECOND & THIRD FLOORS
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

Sheet reference number:
E-111
Sheet 52 of 160

CONTRACT NO. W9126G-04-C-0034

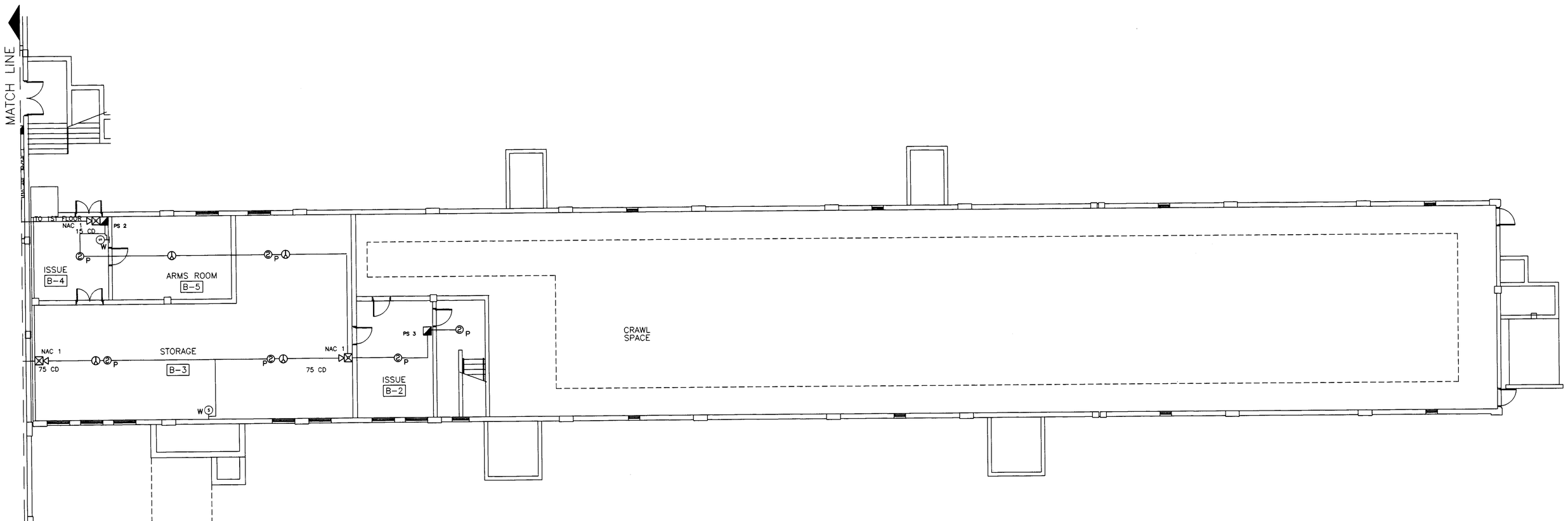
FB-SA



NEW WORK ELECTRICAL SPECIAL SYSTEMS PLAN – FIRST FLOOR
BLDG. 2448

TRUE NORTH

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



NEW WORK ELECTRICAL SPECIAL SYSTEMS PLAN – BASEMENT
BLDG. 2448

TRUE NORTH

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

KEY PLAN

K:\A04012\BLDG 2448\e\ B2448E-110.dwg 07-16-2004 15:07

DRAWING OF WORK AS BUILT

US Army Corps of Engineers
District or Division

Symbol	Description	Date	Appr.
1	ELABORATIONS	9-15-04	MARCHA

Designed by: JJ
Dwn by: JJ
Ckd by: JJ
Reviewed by: J. Lee
Submitted by: Paul Waters
Date: 08/23/04 Rev.
Design file no. 110
Drawing code: E
File name B2448E-110
Plot date: 08/13/04
Plot scale: 1/8"=1'0"

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

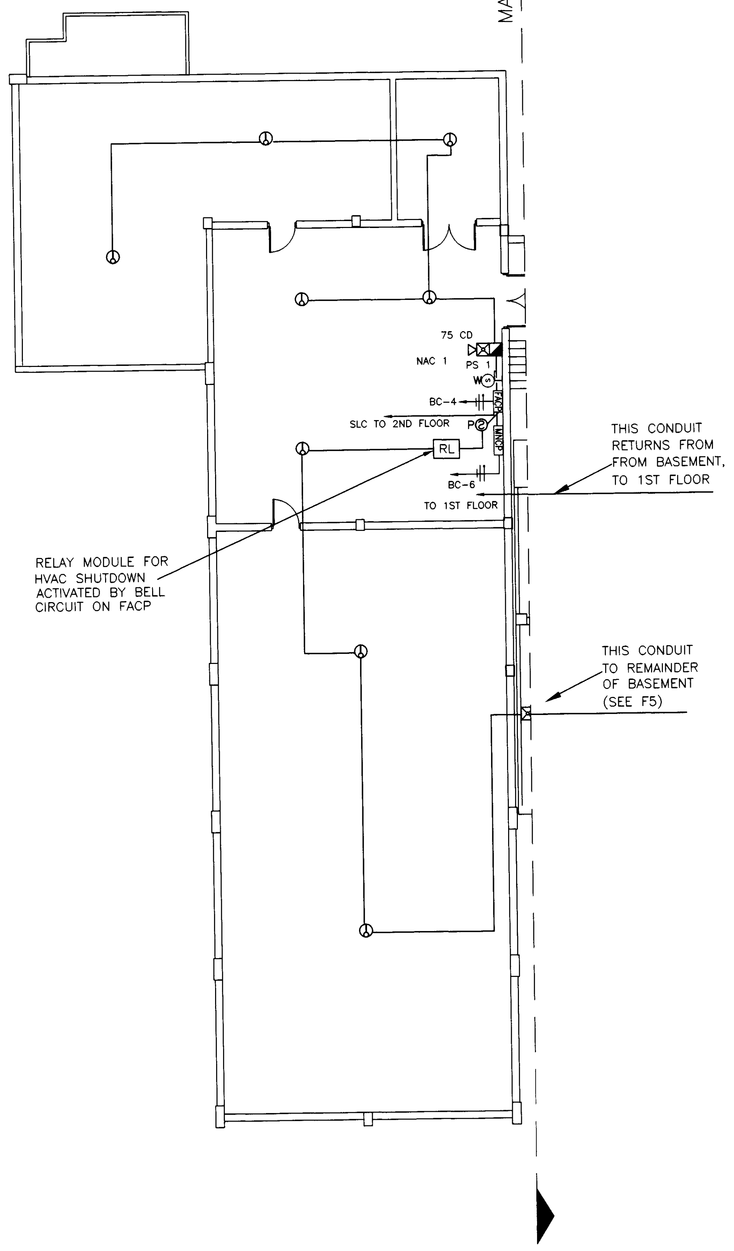
NEW SPECIAL SYSTEMS PLANS
BASEMENT AND FIRST FLOOR
BUILDING 2448
SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

Sheet reference number:
E-110
Sheet 51 of 160

CONTRACT NO. W9126G-04-C-0034

SHEETNUMBER

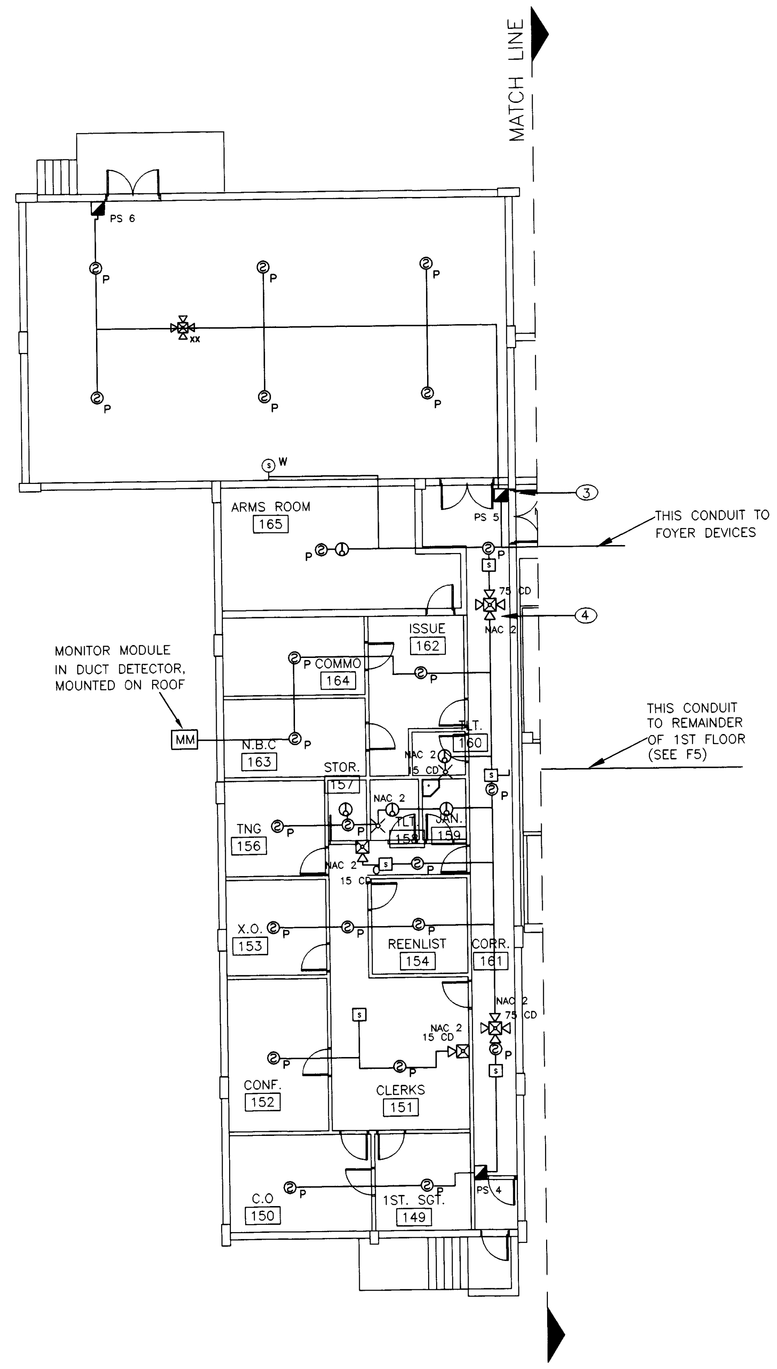
FB-SA



NEW WORK ELECTRICAL SPECIAL SYSTEMS PLAN – BASEMENT
BLDG. 2448

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

TRUE NORTH



NEW WORK ELECTRICAL SPECIAL SYSTEMS PLAN – FIRST FLOOR
BLDG. 2448

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

TRUE NORTH

WIRE LEGEND		
SLC	SLC	16/2 F.P.L.R ORANGE 16/4 F.P.L.R RED (SOUNDER)
NAC	NAC	14/2 F.P.L.R. BLUE
SPEAKER	SPKR	14/2 F.P.L.R. RED

LEGEND BUILDING 2448

SYMBOL	DESCRIPTION	BACKBOX TYPE	QUANTITY
	MANUAL STATION, ADDRESSABLE	SINGLE GANG (2-1/8" DEEP) RING. MOUNT 48" A.F.F. TO TOP	20
XX	AUDIO/VISUAL UNIT WALL MOUNT	SINGLE GANG (2-1/8" DEEP) 80" A.F.F. TO BOTTOM OR 6" BELOW CEILING TO TOP OF BOX. (WHICH EVER IS LOWER) XX = INDICATES CANDELA RATING	32
XX	AUDIO/VISUAL UNIT – CEILING MOUNT	SINGLE GANG (2-1/8" DEEP) MOUNT IN MIDDLE OF CEILING XX = INDICATES CANDELA RATING	17
XX	STROBE UNIT WALL MOUNT	SINGLE GANG (2-1/8" DEEP) 80" A.F.F. TO BOTTOM OR 6" BELOW CEILING TO TOP OF BOX. (WHICH EVER IS LOWER) XX = INDICATES CANDELA RATING	6
S	MASS NOTIFICATION SPEAKER WP = WATERPROOF	SINGLE GANG (2-1/8" DEEP) WITH 1 1/2" EXTENSION – 80" A.F.F. TO BOTTOM MOUNT OUTDOOR SPEAKER ABOVE DOOR	6
S	MASS NOTIFICATION SPEAKER CEILING MOUNT	SINGLE GANG (2-1/8" DEEP) W/TILE BRIDGE	37
P	SMOKE DETECTOR – PHOTOELECTRIC ADDRESSABLE	4 SQUARE (2-1/8" DEEP) WITH 3" ROUND PLASTER RING (CEILING)	82
H	COMBINATION SMOKE & HEAT DETECTOR ADDRESSABLE	4 SQUARE (2-1/8" DEEP) WITH 3" ROUND PLASTER RING (CEILING)	52
R/F	HEAT DETECTOR – COMBINATION RATE OF RISE & FIXED TEMP ADDRESSABLE	4 SQUARE (2-1/8" DEEP) WITH 3" ROUND PLASTER RING (CEILING)	50
F.A.C.P	FIRE ALARM CONTROL PANEL	SURFAEC/SEMI FLUSH MOUNTELECTRICAL TO MOUNT BOX AND PROVIDE DEDICATED 120 VAC GROUNDED CIRCUIT IN BOX. MOUNT 60" TO CENTER OF CAN	1
A.V.P.S.	AUXILIARY POWER SUPPLY	SURFACE/SEMI FLUSH/ELECTRICAL TO MOUNT BOX AND PROVIDE DEDICATED 120 VAC GROUNDED CIRCUIT IN BOX. MOUNT 60" TO CENTER OF CAN	1
MNCP	MASS NOTIFICATION CONTROL PANEL	SURFAEC/SEMI FLUSH MOUNTELECTRICAL TO MOUNT BOX AND PROVIDE DEDICATED 120 VAC GROUNDED CIRCUIT IN BOX. MOUNT 60" TO CENTER OF CAN	1

2448
SLC 1

Address Room Type/Description
01 Panel Heat Detector
02 Attic Heat Detector
03 Attic Heat Detector
04 Mechanical Room Heat Detector
05 Mechanical Room Heat Detector
06 Mechanical Room Heat Detector
07 Mechanical Room Heat Detector
08 Mechanical Room Heat Detector
09 Mechanical Room Heat Detector
10 Basement Smoke Detector
11 Basement Heat Detector
12 Basement Smoke Detector
13 Basement Heat Detector
14 Basement Smoke Detector
15 Basement Smoke Detector
16 Basement Heat Detector
17 Basement Smoke Detector
18 Basement Smoke Detector
19 Basement Heat Detector
20 Mailroom Smoke Detector
21 102 Smoke Detector
22 102 Smoke Detector
23 102 Smoke Detector
24 134 Smoke Detector
25 138 Heat Detector
26 124 Smoke Detector
27 103 Smoke Detector
28 104 Smoke Detector
29 104 Smoke Detector
30 133 Smoke Detector
31 132 Smoke Detector
32 129 Heat Detector
33 130 Heat Detector
34 131 Heat Detector
35 107 Heat Detector
36 107 Smoke Detector
37 136 Smoke Detector
38 108 HW Smoke Detector
39 108 Smoke Detector
40 109 Smoke Detector
41 126 Smoke Detector
42 110 Smoke Detector
43 127 Smoke Detector
44 110 HW Smoke Detector
45 126 Smoke Detector
46 111 Smoke Detector
47 125 Smoke Detector
48 112 Smoke Detector
49 112 HW Smoke Detector
50 113 Smoke Detector
51 113 Smoke Detector
52 122 Heat Detector
53 123 Heat Detector
54 124 Smoke Detector
55 114 Smoke Detector
56 121 Smoke Detector
57 115 Heat Detector
58 115 Stairs Heat Detector
59 120 HW Smoke Detector
60 120 Smoke Detector
61 119 Heat Detector
62 117 HW Smoke Detector
63 117 Heat Detector
64 117 Smoke Detector
65 118 Heat Detector
66 118 Smoke Detector
67 118 Heat Detector
68 118 Smoke Detector
69 118 Smoke Detector
70 118 Heat Detector
71 118 Heat Detector
72 118 Smoke Detector
73 166 HW Smoke Detector
74 160 HW Smoke Detector
75 151 HW Smoke Detector
76 149 Smoke Detector
77 150 Smoke Detector
78 151 Smoke Detector
79 152 Smoke Detector
80 154 Smoke Detector
81 154 HW Smoke Detector
82 153 Smoke Detector
83 156 Smoke Detector
84 157 Heat Detector
85 157 Smoke Detector
86 158 Heat Detector
87 159 Heat Detector
88 160 Heat Detector
89 163 Smoke Detector
90 162 Smoke Detector
91 164 Smoke Detector
92 165 Smoke Detector
93 165 Heat Detector
94 166 Smoke Detector
95 166 Heat Detector
96 166 Heat Detector
97 166 Smoke Detector
98 166 Heat Detector

SLC 2

Address Room Type/Description
01 3RD Flr West Closet Heat Detector
02 302 Smoke/Heat Detector
03 344 Smoke/Heat Detector
04 342 HW Smoke Detector
05 342 Smoke/Heat Detector
06 346 Smoke Detector
07 303 Smoke/Heat Detector
08 341 Smoke/Heat Detector
09 339 HW Smoke Detector
10 339 Smoke/Heat Detector
11 305 Smoke/Heat Detector
12 338 Smoke/Heat Detector
13 338 HW Smoke Detector
14 306 UPPER Heat Detector
15 306 LOWER Heat Detector
16 307 Smoke/Heat Detector
17 336 Smoke/Heat Detector
18 309 Smoke/Heat Detector
19 309 HW Smoke Detector
20 335 Heat Detector
21 310 Smoke/Heat Detector
22 334 Smoke/Heat Detector
23 312 HW Smoke Detector
24 332 Heat Detector
25 312 Smoke/Heat Detector
26 313 Smoke/Heat Detector
27 331 Smoke/Heat Detector
28 315 HW Smoke Detector
29 315 Smoke/Heat Detector
30 329 Smoke/Heat Detector
31 316 Upper Heat Detector
32 316 Lower Heat Detector
33 317 Smoke/Heat Detector
34 317 HW Smoke Detector
35 328 Smoke/Heat Detector
36 326 Smoke/Heat Detector
37 319 Smoke/Heat Detector
38 320 HW Smoke Detector
39 320 Smoke/Heat Detector
40 325 Smoke/Heat Detector
41 323 Smoke/Heat Detector
42 322 Smoke/Heat Detector
43 322 HW Smoke Detector
44 2nd Flr Hall Closet Heat Detector
45 244 Smoke/Heat Detector
46 202 Smoke/Heat Detector
47 242 HW Smoke Detector
48 242 Smoke/Heat Detector
49 246 Smoke Detector
50 203 Smoke/Heat Detector
51 241 Smoke/Heat Detector
52 205 HW Smoke Detector
53 205 Smoke/Heat Detector
54 239 Smoke/Heat Detector
55 238 Smoke/Heat Detector
56 238 Smoke Detector
57 206 Upper Heat Detector
58 206 Lower Heat Detector
59 207 Smoke/Heat Detector
60 230 Smoke/Heat Detector
61 209 Smoke/Heat Detector
62 209 HW Smoke Detector
63 235 Heat Detector
64 210 Smoke/Heat Detector
65 234 Smoke/Heat Detector
66 212 HW Smoke Detector
67 212 Smoke/Heat Detector
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69 213 Smoke/Heat Detector
70 231 Smoke/Heat Detector
71 215 HW Smoke Detector
72 215 Smoke/Heat Detector
73 229 Smoke/Heat Detector
74 216 Upper Heat Detector
75 216 Lower Heat Detector
76 217 Smoke/Heat Detector
77 217 HW Smoke Detector
78 228 Smoke/Heat Detector
79 226 Smoke/Heat Detector
80 219 Smoke/Heat Detector
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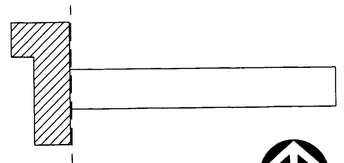
85 222 Smoke/Heat Detector
86 221 Smoke



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Mark	Description	Date	Mark
					9-15-04	AMD/01

CLARIFICATIONS

Date: 06/23/04 Rev.
Design file no. 03
Drawing code: E
Scale: 1/8"=1'-0"
Plot date: 06/23/04
Plot scale: 40 SHADED

Designed by: JJ
Dwn by: JJ
Ckd by: JJ
Reviewed by: JJ
Submitted by: Saul Alvarez

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. NE
ALBUQUERQUE, NM 87110

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

NEW SPECIAL SYSTEMS PLAN
BASEMENT AND FIRST FLOOR
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

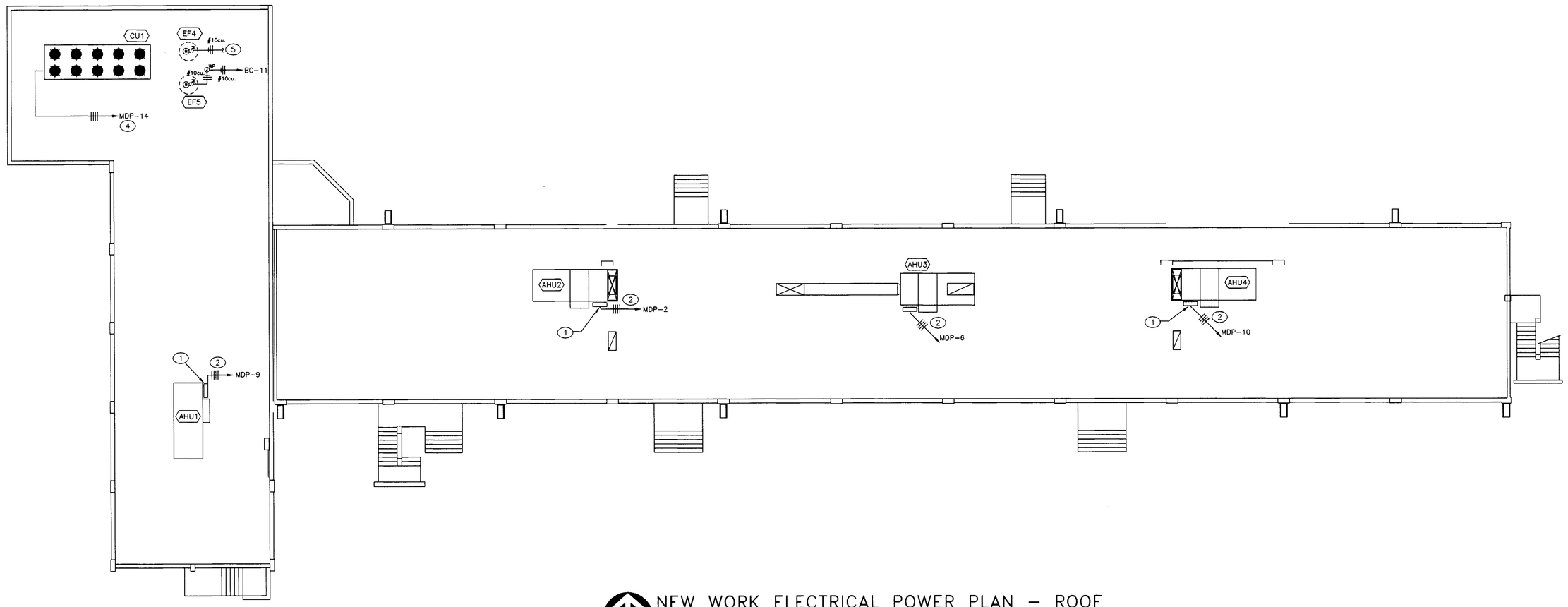
Sheet reference number:
E-109
Sheet 50 of 160

CONTRACT NO. W9126G-04-C-0034

DRAWING OF WORK AS BUILT

SHEETNUMBER

FB-SA



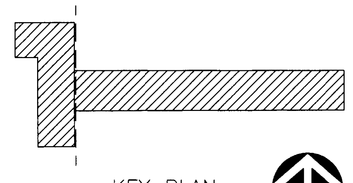
NEW WORK ELECTRICAL POWER PLAN – ROOF
BLDG. 2448

TRUE NORTH

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

KEYED NOTES:

1. 30A 600V 3P+E.G., FUSIBLE HEAVY DUTY SAFETY SWITCH IN NEMA 3R ENCLOSURE. PROVIDE (3) 15A LPS 600V FUSES.
2. 3/4"C WITH (3)–#10CU., (1)–#10CU. GND.
3. 3/4"C WITH (3)–#8CU., (1)–#10CU. GND.
4. DOWN TO REFRIGERATION LEAK DETECTION CONTROL PANEL. PROVIDE AN OVERRIDE SWITCH ADJACENT TO CONTROL PANEL. WIRE EXHAUST FAN SUCH THAT EITHER THE CONTROL PANEL OR OVERRIDE SWITCH SHALL CONTROL THE ON/OFF CAPABILITIES OF THE EXHAUST FAN.



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.

Designed by: A. VILALOBOS
Dwn by: A. VILALOBOS
Date: 03/06/2006
Design file no. 12108
Submitted by: A. VILALOBOS
Plot date: 03/06/2006

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORPS OF ENGINEERS

BARNHART/TAYLOR, INC.
1400 TRANSMOUNTAIN
EL PASO, TEXAS 79902

Title bar
RENOVATE BARRACKS
FORT BLISS, TEXAS

ELECTRICAL NEW WORK POWER
BUILDING 2448
ROOF

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

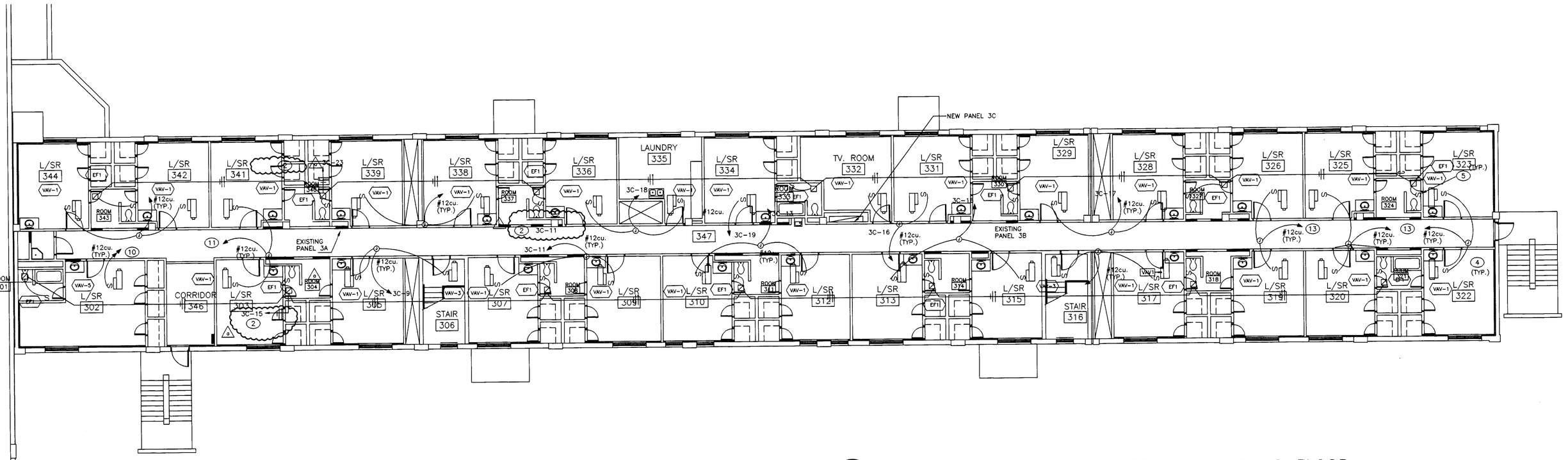
Sheet reference number:
E-108
Sheet 49 of 160

CONTRACT NO. W9126G-04-C-0034

DRAWING OF WORK AS BUILT

SHEETNUMBER

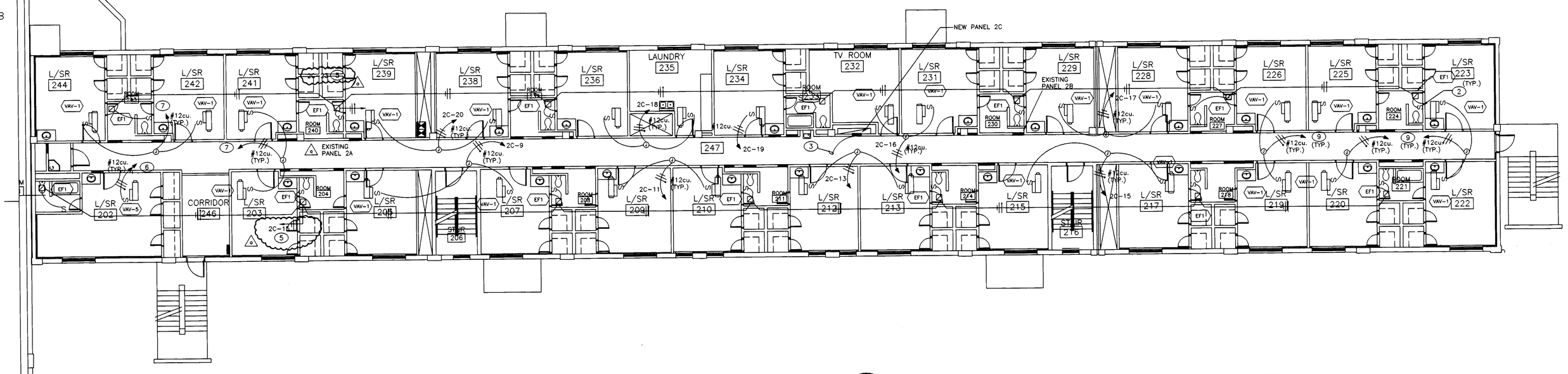
FB-SA



NEW WORK ELECTRICAL POWER PLAN – THIRD FLOOR
BLDG. 2448

TRUE NORTH

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



NEW WORK ELECTRICAL POWER PLAN – SECOND FLOOR
BLDG. 2448

TRUE NORTH

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

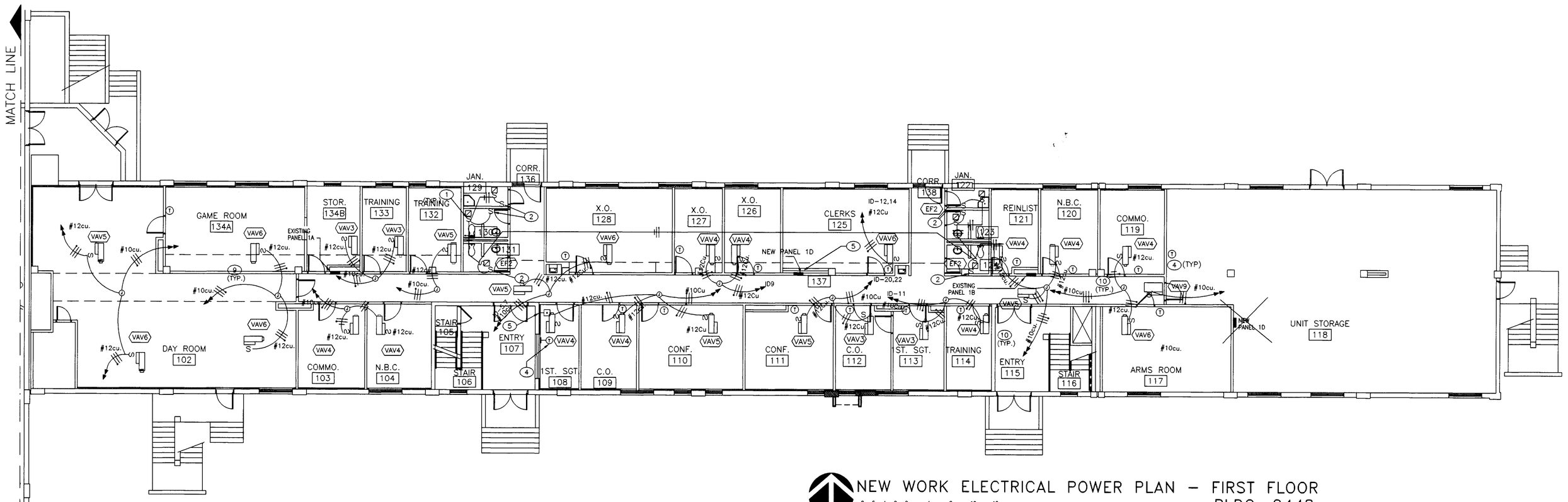
KEY PLAN

KEYED NOTES:

1. 2#10, 1#10G, 3/4"C.
2. PROVIDE 2#12, 1#12G, 3/4" C FOR SHUNT TRIP CONTROL. ROUTE CONDUIT TO EMERGENCY MUSHROOM HEAD PUSHBUTTOM LOCATED ON FIRST FLOOR ENTRY ROOM 107.
3. 1/2"C WITH PULLSTRING DOWN TO VAV CONTROLLER. CONTROL WIRING FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.
4. SAW CUT,PATCH, PAINT AND REPAIR WALL FOR INSTALLATION OF NEW SWITCH.
5. CONNECT TO AVAILABLE SPACES ON EXISTING PANEL LABELED 2A. PROVIDE 2/20A BREAKER TO MATCH EXISTING RATINGS. REPLACE EXISTING PANEL DIRECTORY WITH NEW TYPEWRITTEN DIRECTORY.
6. CONNECT TO AVAILABLE SPACES ON EXISTING PANEL LABELED 2A. PROVIDE 1/20A BREAKER TO MATCH EXISTING RATINGS. REPLACE EXISTING PANEL DIRECTORY WITH NEW TYPEWRITTEN DIRECTORY.
7. CONNECT TO AVAILABLE SPACES ON EXISTING PANEL LABELED 2B. PROVIDE 2/20A BREAKER TO MATCH EXISTING RATINGS. REPLACE EXISTING PANEL DIRECTORY WITH NEW TYPEWRITTEN DIRECTORY.
8. CONNECT TO AVAILABLE SPACES ON EXISTING PANEL LABELED 2B. PROVIDE 1/20A BREAKER TO MATCH EXISTING RATINGS. REPLACE EXISTING PANEL DIRECTORY WITH NEW TYPEWRITTEN DIRECTORY.
9. CONNECT TO AVAILABLE SPACES ON EXISTING PANEL LABELED 3A. PROVIDE 2/20A BREAKER TO MATCH EXISTING RATINGS. REPLACE EXISTING PANEL DIRECTORY WITH NEW TYPEWRITTEN DIRECTORY.
10. CONNECT TO AVAILABLE SPACES ON EXISTING PANEL LABELED 3A. PROVIDE 1/20A BREAKER TO MATCH EXISTING RATINGS. REPLACE EXISTING PANEL DIRECTORY WITH NEW TYPEWRITTEN DIRECTORY.
11. CONNECT TO AVAILABLE SPACES ON EXISTING PANEL LABELED 3B. PROVIDE 2/20A BREAKER TO MATCH EXISTING RATINGS. REPLACE EXISTING PANEL DIRECTORY WITH NEW TYPEWRITTEN DIRECTORY.
12. CONNECT TO AVAILABLE SPACES ON EXISTING PANEL LABELED 3B. PROVIDE 1/20A BREAKER TO MATCH EXISTING RATINGS. REPLACE EXISTING PANEL DIRECTORY WITH NEW TYPEWRITTEN DIRECTORY.

US Army Corps of Engineers
District or Division

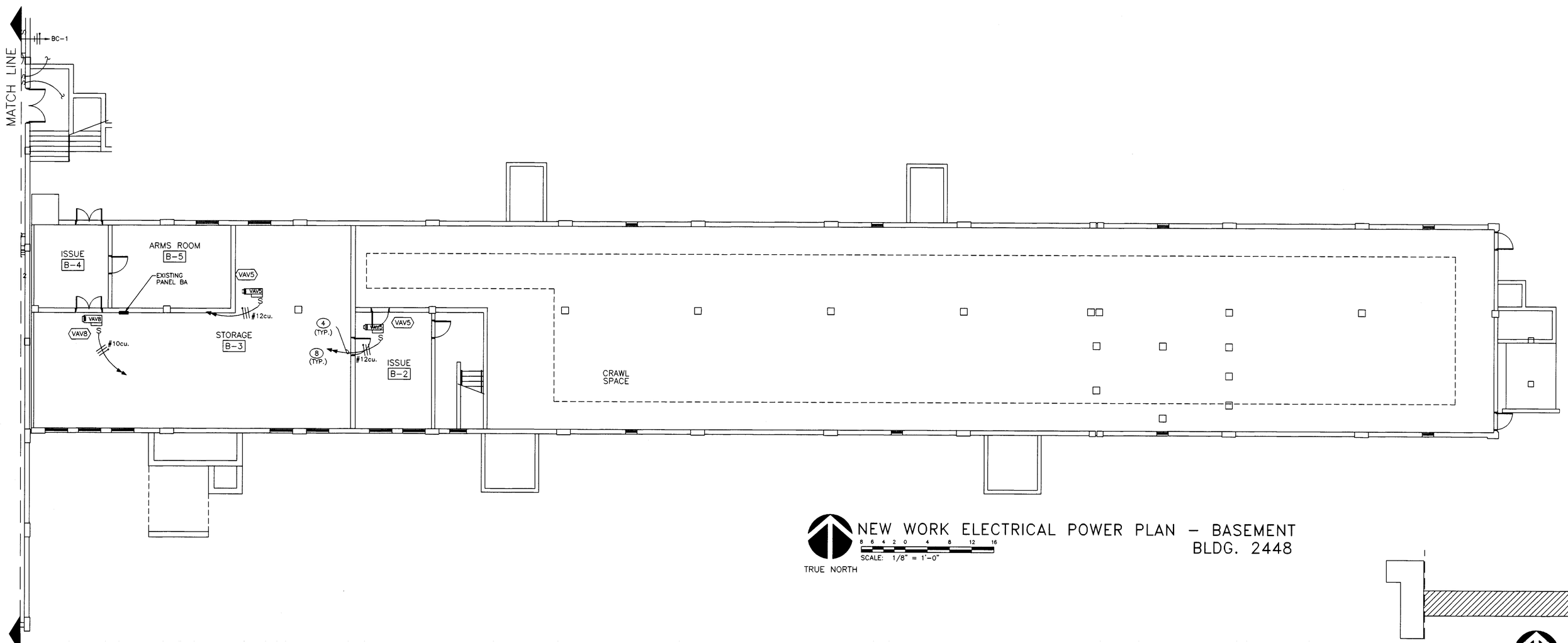
Mark	Description	Date	Appr.



NEW WORK ELECTRICAL POWER PLAN – FIRST FLOOR
BLDG. 2448

TRUE NORTH

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



NEW WORK ELECTRICAL POWER PLAN – BASEMENT
BLDG. 2448

TRUE NORTH

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

KEY PLAN

KEYED NOTES:

1. 120V, 20A, NEMA 1, MOTOR RATED SWITCH.
2. PROVIDE 2#12, 1#12G, 3/4" C FOR SHUNT TRIP CONTROL. ROUTE CONDUIT TO EMERGENCY MUSHROOM HEAD PUSHBUTTOM LOCATED ON FIRST FLOOR ENTRY ROOM 107.
3. 2-#10, 1-#10G, 3/4" C.
4. 1/2"C WITH PULLSTRING DOWN TO VAV BOX CONTROLLER. CONTROL WIRING FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.
5. INSTALL PANEL FLUSH. CUT WALL TO FIT PANEL AND PATCH AND PAINT TO MATCH SURRONDING WALL.
6. PROVIDE AN EMERGENCY MUSHROOM HEAD PUSHBUTTOM WITH (10) NO CONTACTS. PUSHBUTTOM SHALL ACTIVATE SHUNT TRIP OF SELECTED CIRCUIT BREAKERS. PROVIDE A NAMEPLATE THAT READS "OUTSIDE AIR SHUTDOWN". REFER TO PANEL SCHEDULES FOR MORE INFORMATION.
7. REFRIGERATION LEAK DETECTION LIGHT (FEDERAL SIGNAL 1215, RED DOME COLOR). OR APPROVED EQUIVALENT. REFER TO SHEET M604 FOR WIRING DIAGRAM. PROVIDE PLACARD NEXT TO LIGHT LABELED "REFRIGERATION LEAK DETECTION LIGHT".
8. CONNECT TO AVAILABLE SPACES ON EXISTING PANEL LABELED BA. PROVIDE 2/20A BREAKERS TO MATCH EXISTING RATINGS. REPLACE EXISTING PANEL DIRECTORY WITH NEW TYPEWRITTEN DIRECTORY.
9. CONNECT TO AVAILABLE SPACES ON EXISTING PANEL LABELED 1A. PROVIDE 2/20A BREAKERS TO MATCH EXISTING RATINGS. REPLACE EXISTING PANEL DIRECTORY WITH NEW TYPEWRITTEN DIRECTORY.
10. CONNECT TO AVAILABLE SPACES ON EXISTING PANEL LABELED 1B. PROVIDE 2/20A BREAKERS TO MATCH EXISTING RATINGS. REPLACE EXISTING PANEL DIRECTORY WITH NEW TYPEWRITTEN DIRECTORY.

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.	Mark	Description	Date	Appr.

Designed by: A. VELAZQUEZ
Drawn by: A. VELAZQUEZ
Submitted by: A. VELAZQUEZ
Date: 03/06/2006
Dwgs. file no. E-106
Plot date: 03/06/2006

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BARNHART/TAYLOR, INC.
1600 E. YANDELL
EL PASO, TEXAS 79902

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS
ELECTRICAL NEW WORK POWER
BASEMENT AND FIRST FLOOR
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

Sheet reference number:
E-106
Sheet 47 of 160

CONTRACT NO. W9126G-04-C-0034

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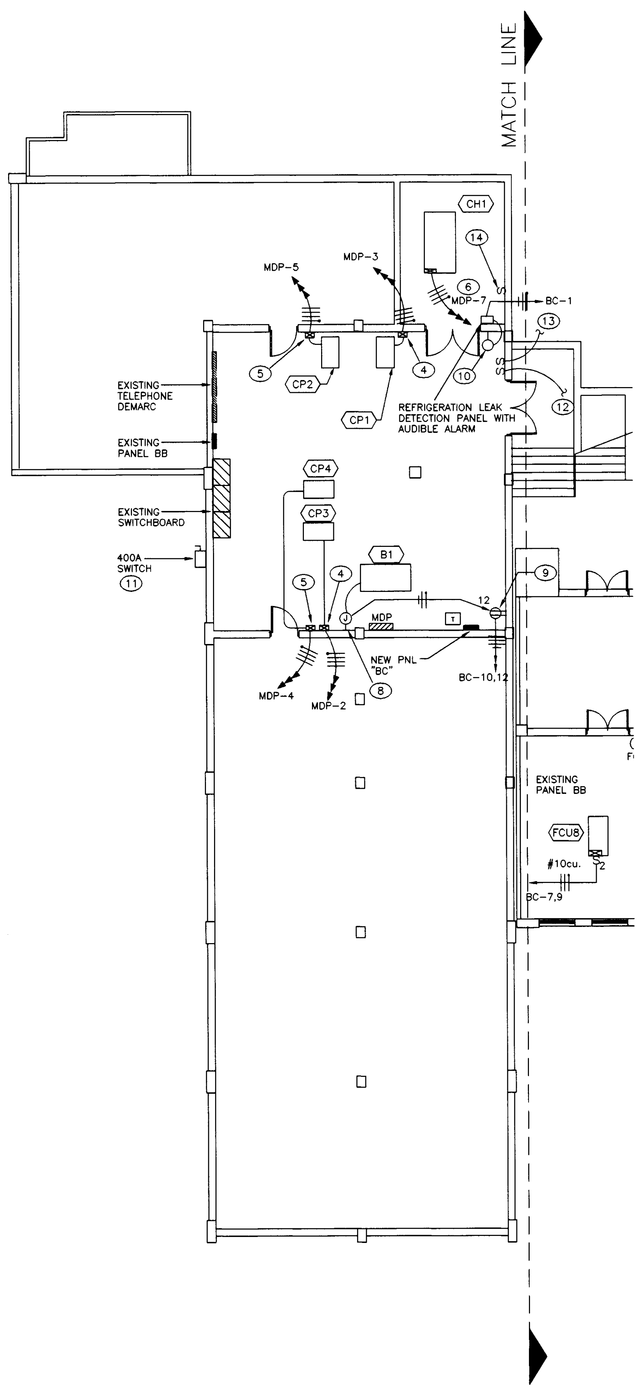
SHEETNUMBER

DRAWING OF WORK AS BUILT

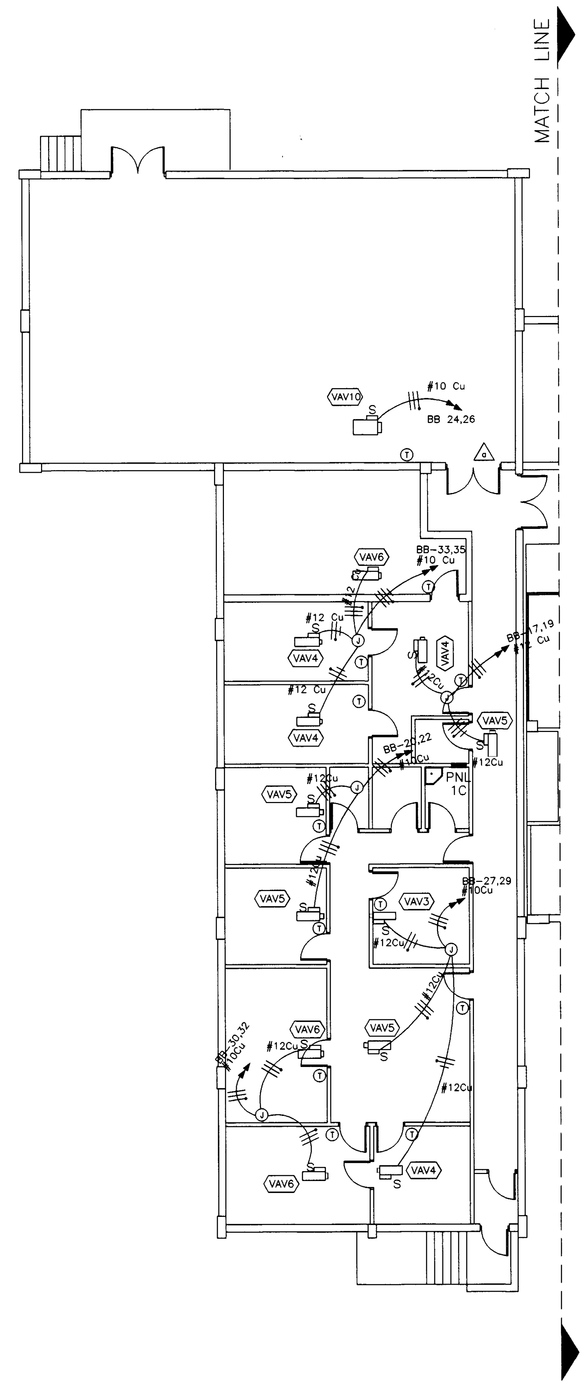
FB-SA



NEW WORK POWER PLAN – BASEMENT
BLDG. 2448

TRUE NORTH

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



NEW WORK POWER PLAN – FIRST FLOOR
BLDG. 2448

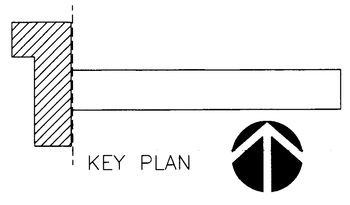
TRUE NORTH

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

KEYED NOTES:

1. ELECTRICAL DISCONNECT BY VAV BOX MANUFACTURER.
2. CONNECT TO AVAILABLE SPACES ON EXISTING PANEL PER KEYED NOTE 4. PROVIDE (1) 2/20A BREAKER TO MATCH EXISTING RATINGS. REPLACE EXISTING PANEL DIRECTORY WITH NEW TYPEWRITTEN DIRECTORY.
3. 1/2"C WITH PULLSTRING DOWN TO VAV BOX CONTROLLER. CONTROL WIRING FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.
4. EXISTING 3PH, 208/120V, 225A, 42C PANEL WITH AVAILABLE SPACES.
5. NEW 4" x 4" x 2" SCREW COVER PULL BOX. THREE 3/4"øC FROM BB PANEL LOCATED IN MECHANICAL ROOM FOR VAV-BOX POWER. MARK WIRE WITH VAV-ROOM DESIGNATION. THIS J-BOX WILL ACCEPT THE CONDUIT AS NOTED ON NOTE 6 BELOW.
6. TWO 3/4"C WITH (2)-#12 CU., (2)-#10 CU., (1)-#10 CU. GND.
   ONE 3/4"C WITH (3)-#12 CU., (2)-#10 CU., (1)-#10 CU. GND.
7. 2"øC WITH (3) - #2/0 CU., (1)-#2/0 CU. GND. △
8. SIZE 1 ,600V,3P, FULL-VOLTAGE, NON-REVERSING MAGNETIC STARTER IN NEMA 3R ENCLOSURE. PROVIDE PROPERLY SIZE OVERLOAD HEATERS. CONTROL COIL VOLTAGE SHALL BE 24V MOUNT H-O-A SELECTOR SWITCH ON FRONT OF STARTER ENCLOSURE.

   3/4"C WITH (3)-#12/0CU., (1)-#12 CU. GND.
9. 30A, 250V, 2P+E.G., NEMA1 DISCONNECT SWITCH. 3/4"C WITH (2)-#12 CU., (1)-#12 CU. NEUTRAL., (1)-#12 CU. GND.
10. JUNCTION BOX AT HEIGHT REQUIRED FOR CONNECTION TO BOILER CONTROL CIRCUIT. COORDINATE EXACT LOCATION WITH CONTRACTOR.
11. OUTLET MOUNTED AT 78" FOR CONNECTION TO CP-1.
12. REFRIGERATION LEAK DETECTION LIGHT (FEDERAL SIGNAL 1215, RED DOME COLOR). OR APPROVED EQUIVALENT. REFER TO SHEET M604 FOR WIRING DIAGRAM.
13. 600A 600V 3P+SN+E.G., FUSIBLE HEAVY DUTY SAFETY SWITCH IN NEMA 3R ENCLOSURE. PROVIDE (3) 600A LPS 600V FUSES.
14. TERMINATE AT PANEL BB. PROVIDE 2#12, 1#12G, 3/4"C FOR AHU'S BREAKER 120V SHUNT TRIP POWER. CONNECT TO CIRCUIT BC-12.
15. PROVIDE 2#12, 1#12G, 3/4"C FOR SHUNT TRIP CONTROL. ROUTE CONDUIT TO EMERGENCY MUSHROOM HEAD PUSHBUTTOM LOCATED ON FIRST FLOOR ENTRY ROOM 107.
16. OVER RIDE SWITCH FOR EF-4.
17. THE CONDUIT AND WIRE FROM PANEL BB TO AHU-1 WILL BE ROUTED TO PANEL BC. REUSE THE EXISTING CONDUIT AND WIRE AND TERMINATE WITH NEW CONDUIT, FITTINGS, AND WIRE WHERE NECESSARY.
18. THE CONDUIT AND WIRE FROM PANEL BB TO AHU-2 WILL BE ROUTED TO PANEL BC. REUSE THE EXISTING CONDUIT AND WIRE AND TERMINATE WITH NEW CONDUIT, FITTINGS, AND WIRE WHERE NECESSARY.
19. THE CONDUIT AND WIRE FROM PANEL BB TO AHU-3 WILL BE ROUTED TO PANEL BC. REUSE THE EXISTING CONDUIT AND WIRE AND TERMINATE WITH NEW CONDUIT, FITTINGS, AND WIRE WHERE NECESSARY.
20. THE CONDUIT AND WIRE FROM PANEL BB TO AHU-4 WILL BE ROUTED TO PANEL BC. REUSE THE EXISTING CONDUIT AND WIRE AND TERMINATE WITH NEW CONDUIT, FITTINGS, AND WIRE WHERE NECESSARY.
21. THE STORAGE TANK AND WATER HEATER WERE LEFT OUT IN THE ELECTRICAL AND SPECIAL SYSTEMS DRAWINGS. THE STORAGE TANK WILL BE ROTATED 180 DEG. THE BLIND FLANGE AT THE REAR OF THE TANK WILL FACE PUMP CP-1. THE STORAGE TANK WILL BE MOVED TOWARDS THE WATER HEATER AND BUTTED AGAINST THE WALL.



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.
A	DELETE KEYED NOTE 7 AND MODIFY KEYED NOTE 6	9-10-04	AMD001

Designed by: A. VILLALOBOS
Date: 03/06/2006
Dwn. by: A. VILLALOBOS
Design file no. E-105
Submitted by: A. VILLALOBOS
Plot date: 03/06/2006

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BARNHART/TAYLOR, INC.
1600 E. PAISANO
EL PASO, TEXAS 79902

FY04 OMA
REPAIR BARRACKS
FORT BLISS, TEXAS

ELECTRICAL, NEW WORK
BASEMENT AND FIRST FLOOR
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

Sheet reference number:
E-105
Sheet 46 of 160

CONTRACT NO. W9126G-04-C-0034

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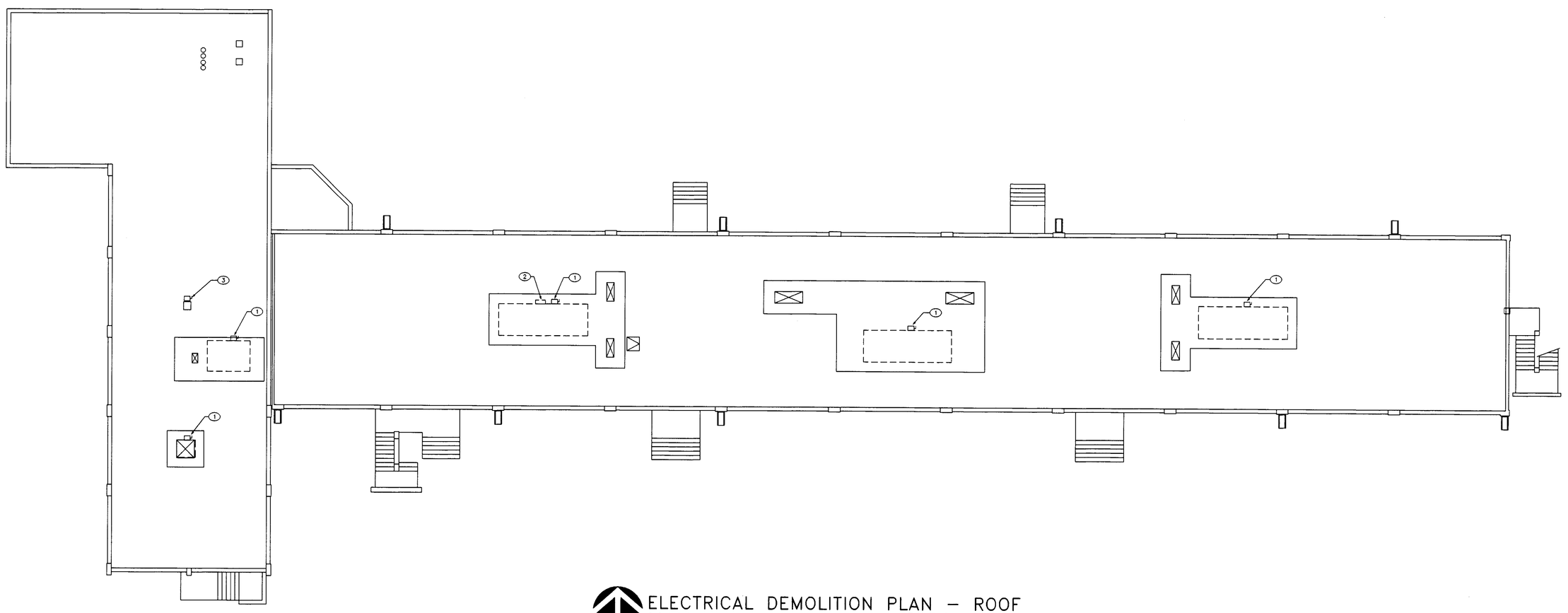
DRAWING OF WORK AS BUILT

SHEETNUMBER

FB-SA



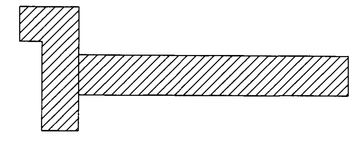
ELECTRICAL DEMOLITION PLAN – ROOF
BLDG. 2448

TRUE NORTH

SCALE: 3/32" = 1'–0"

KEYED NOTES:

1. REMOVE EXISTING SAFETY SWITCH IN IT'S ENTIRETY. REMOVE DISCONNECT SWITCH, CONDUIT AND WIRING BACK TO SOURCE OF POWER. IF SOURCE OF POWER IS A BREAKER, BREAKER TO BECOME A SPARE. REPLACE EXISTING PANEL DIRECTORY WITH NEW TYPEWRITTEN DIRECTORY.
2. REMOVE EXISTING HVAC CONTROL PANEL WITH H–O–A SWITCHES IN IT'S ENTIRETY. REMOVE CONDUIT AND WIRING BACK TO SOURCE OF POWER.
3. EXISTING EXHAUST FAN TO REMAIN. PROVIDE MEANS OF PROTECTING EXISTING ELECTRICAL ASSOCIATED WITH THE EXHAUST FAN DURING CONSTRUCTION.



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.

Mark	Description	Date	Appr.

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORPS OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

Designed by: JJ
Dwn by: JJ
Ckd by: JJ
Reviewed by: JJ
Submitted by: Paul Waters
Date: 08/23/04 Rev.
Design file no. 104
Drawing code: E
File name 04446-104
Plot date 8/23/04
Plot scale: as shown

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

ELECTRICAL ROOF DEMOLITION PLAN
BUILDING 2448

SOLICITATION NO. W9126G–04–B–0017
CONTRACT NO. W9126G–04–C–0034

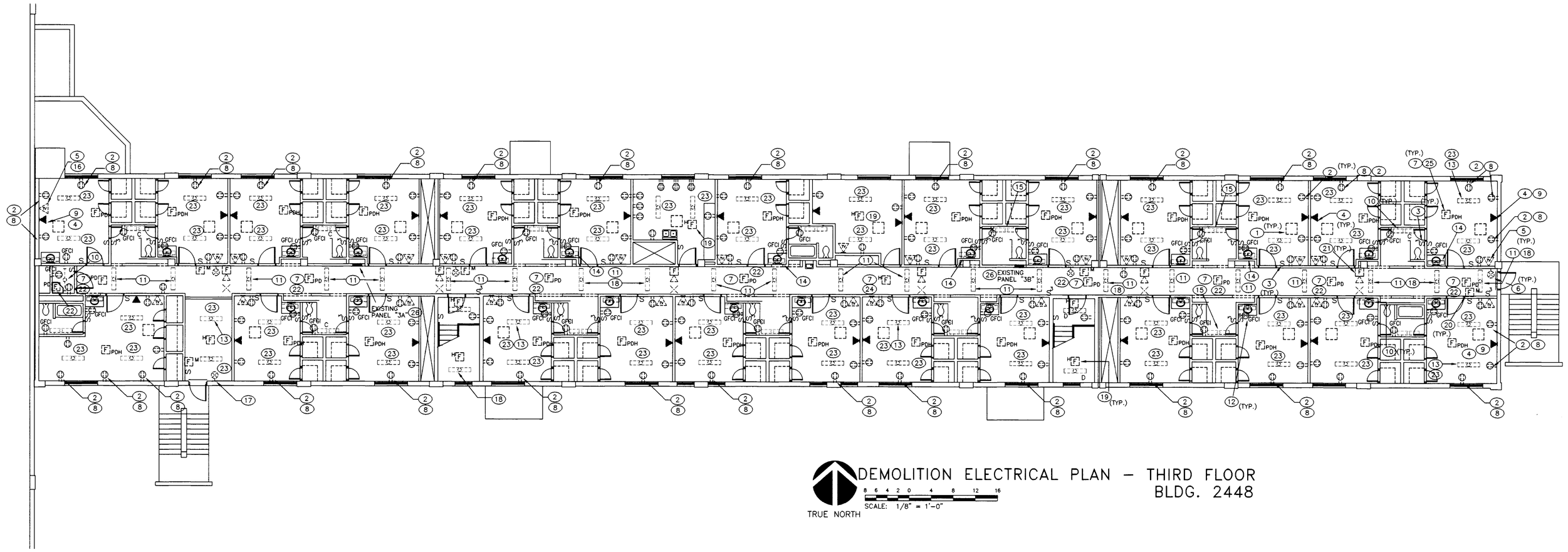
Sheet reference number:
E–104
Sheet 45 of 160

CONTRACT NO. W9126G–04–C–0034

DRAWING OF WORK AS BUILT

SHEETNUMBER

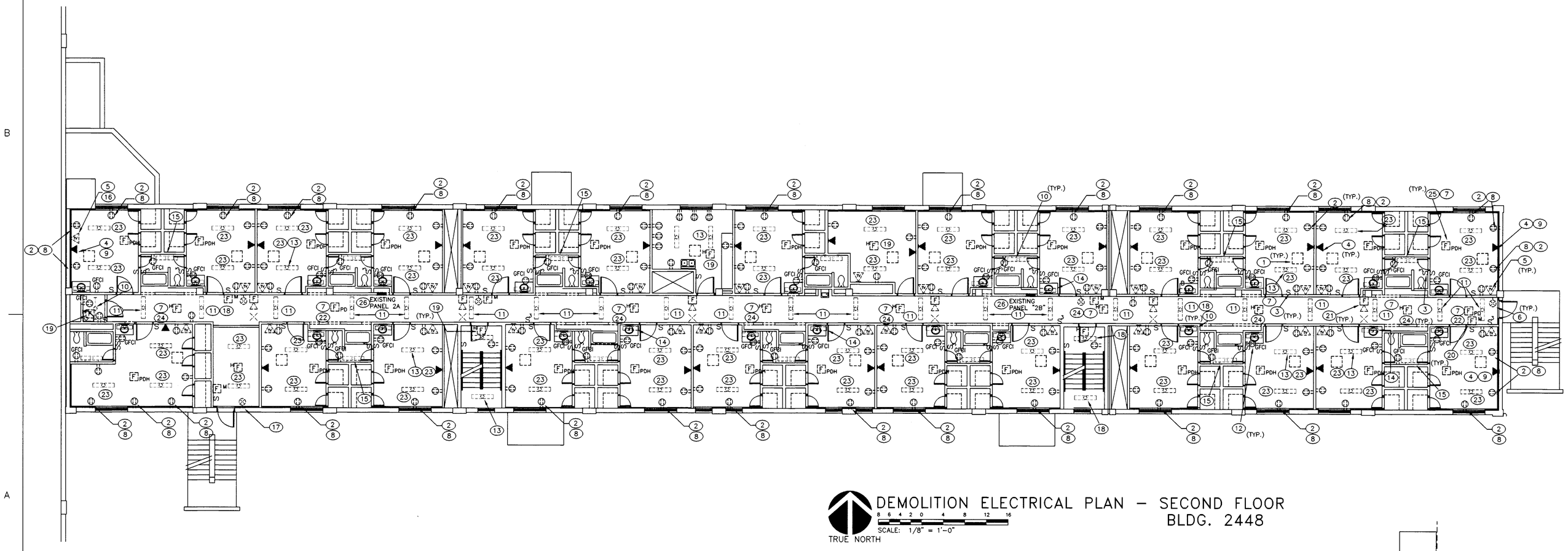
FB-SA



DEMOLITION ELECTRICAL PLAN – THIRD FLOOR
BLDG. 2448

TRUE NORTH

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



DEMOLITION ELECTRICAL PLAN – SECOND FLOOR
BLDG. 2448

TRUE NORTH

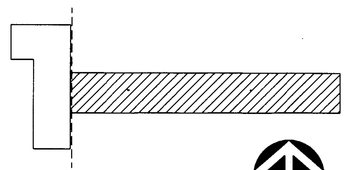
SCALE: 1/8" = 1'-0"

KEYED NOTES:

1. EXISTING FAN COIL UNIT TO BE REMOVED. REMOVE CONDUIT AND WIRING BACK TO SOURCE. REMOVE EXISTING THERMOSTAT AND FAN COIL SWITCH IN THEIR ENTIRETY. PROVIDE NEW CONNECTION TO NEW FAN COIL UNITS PER NEW WORK PLAN.
2. REMOVE AND REPLACE EXISTING OUTLET COVERPLATE WITH NEW COVERPLATE (SOLID BRASS).
3. REMOVE AND REPLACE EXISTING SWITCH COVERPLATE WITH NEW COVERPLATE (SOLID BRASS).
4. REMOVE AND REPLACE EXISTING TELEPHONE COVERPLATE WITH NEW COVERPLATE (SOLID BRASS).
5. REMOVE AND REPLACE EXISTING TELEVISION COVERPLATE WITH NEW COVERPLATE (SOLID BRASS).
6. EXISTING EXIT SIGN TO BE REMOVED AND LOWERED FOR INSTALLATION OF NEW GYPBOARD CEILING. RECONNECT TO EXISTING CIRCUIT.
7. EXISTING DETECTOR TO BE REMOVED DUE TO THE REMOVAL OF THE EXISTING CEILING. STORE AND PROTECT EXISTING DETECTOR. PROVIDE MEANS OF PROTECTING THE EXISTING DETECTOR'S CONDUIT AND WIRING DURING REMOVAL. ONCE NEW CEILING HAS BEEN INSTALLED, RECONNECT EXISTING DETECTOR TO EXISTING CIRCUIT. MAINTAIN CIRCUIT CONTINUITY.
8. EXISTING DUPLEX OUTLET TO BE REMOVED DUE TO INSTALLATION OF NEW GYPBOARD. PROVIDE NEW RAISED RING OR EXTENSION BOX FOR RE-MOUNTING EXISTING OUTLET. MAINTAIN CIRCUIT CONTINUITY.
9. EXISTING TELEPHONE OUTLET TO BE REMOVED DUE TO INSTALLATION OF NEW GYPBOARD. PROVIDE NEW RAISED RING OR EXTENSION BOX FOR RE-MOUNTING EXISTING TELEPHONE OUTLET. MAINTAIN CIRCUIT CONTINUITY.
10. SHOWN FOR INFORMATION ONLY UNLESS NOTED OTHERWISE. PROVIDE MEANS OF PROTECTING FIXTURE DURING DEMOLITION.
11. EXISTING CORRIDOR FIXTURE TO BE REMOVED DUE TO THE REMOVAL OF THE EXISTING CEILING. STORE AND PROTECT EXISTING FIXTURE. PROVIDE MEANS OF PROTECTING THE EXISTING FIXTURE CONDUIT AND WIRING DURING REMOVAL. ONCE NEW CEILING HAS BEEN INSTALLED, RECONNECT EXISTING FIXTURE TO EXISTING CIRCUIT. MAINTAIN CIRCUIT CONTINUITY. COORDINATE INSTALLATION WITH NEW ACCESS PANELS.
12. EXISTING GFCI OUTLET TO BE REMOVED AND REPLACED WITH NEW OUTLET AND COVERPLATE. REPLACE EXISTING OUTLET WITH NEW 20-AMP INDUSTRIAL SPECIFICATION GRADE GFCI OUTLET, IVORY COLORED WITH BRASS COVERPLATE. RECONNECT OUTLET TO EXISTING CIRCUIT. MAINTAIN CIRCUIT CONTINUITY.
13. REPLACE BURNT OUT LAMPS IN EXISTING 2-LAMP FIXTURE WITH (2) NEW LAMPS (32W T-8 COOL WHITE, 75 CRI).
14. REMOVE AND REPLACE EXISTING FIXTURE WITH NEW FIXTURE. NEW FIXTURE SHALL BE TYPE "B". RECONNECT FIXTURE TO EXISTING FIXTURE OUTLET BOX. MAINTAIN CIRCUIT CONTINUITY.
15. REMOVE AND REPLACE EXISTING FIXTURE WITH NEW FIXTURE. NEW FIXTURE SHALL BE TYPE "C". RECONNECT FIXTURE TO EXISTING FIXTURE OUTLET BOX. MAINTAIN CIRCUIT CONTINUITY.
16. EXISTING TELEVISION OUTLET TO BE REMOVED DUE TO INSTALLATION OF NEW GYPBOARD. PROVIDE NEW RAISED RING OR EXTENSION BOX FOR RE-MOUNTING EXISTING TELEVISION OUTLET. MAINTAIN CIRCUIT CONTINUITY.
17. EXISTING EXIT TO BE REMOVED DUE TO INSTALLATION OF NEW GYPBOARD. PROVIDE NEW RAISED RING OR EXTENSION BOX FOR RE-MOUNTING EXISTING EXIT. MAINTAIN CIRCUIT CONTINUITY.
18. REMOVE AND REPLACE EXISTING FIXTURE WITH NEW FIXTURE. NEW FIXTURE SHALL BE TYPE "A". RECONNECT FIXTURE TO EXISTING FIXTURE OUTLET BOX. MAINTAIN CIRCUIT CONTINUITY.
23. EXISTING FIXTURE TO BE REMOVED FOR INSTALLATION OF NEW MECHANICAL PIPING. ONCE NEW PIPING HAS BEEN INSTALLED, REMOUNT FIXTURE AND RECONNECT TO EXISTING CIRCUIT.
26. EXISTING RECESSED PANELBOARD TO BE REMOVED DUE TO WALL BEING DEMOLISHED. DISCONNECT, LABEL AND PROTECT EXISTING WIRING DURING REMOVAL. REINSTALL EXISTING PANELBOARD FLUSH IN NEW WALL AND RECONNECT EXISTING CIRCUITS TO THEIR RESPECTIVE BREAKER.

KEYED NOTES: OPTION 3

19. EXISTING HEAT DETECTOR TO BE REPLACED WITH NEW ADDRESSIBLE HEAT DETECTOR. REFER TO NEW WORK PLAN FOR MORE INFORMATION.
20. EXISTING PULL STATION TO BE REPLACED WITH NEW ADDRESSIBLE PULL STATION. REFER TO NEW WORK PLAN FOR MORE INFORMATION.
21. EXISTING HORN/STROBE TO BE REPLACED WITH NEW HORN/STROBE. REFER TO NEW WORK PLAN FOR MORE INFORMATION.
22. EXISTING SMOKE DETECTOR TO BE REPLACED WITH NEW ADDRESSIBLE SMOKE DETECTOR. REFER TO NEW WORK PLAN FOR MORE INFORMATION.
24. EXISTING HEAT DETECTOR TO BE REPLACED WITH NEW ADDRESSIBLE SMOKE DETECTOR. REFER TO NEW WORK PLAN FOR MORE INFORMATION.
25. EXISTING COMBINATION SMOKE/HEAT DETECTOR TO BE REPLACED WITH NEW COMBINATION SMOKE/HEAT DETECTOR. REFER TO NEW WORK PLAN FOR MORE INFORMATION.



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.

Date: 08/23/04 Rev.
Design file no. 103
Drawing code:
File name B2448E-103.dwg
Plot date: 08/23/04
Plot scale: 1:1 Sheet

Designed by: JJ
Cad by: JJ
Jam by: JJ
Reviewed by: JJ
Submitted by: Paul Waters

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

ELECTRICAL DEMOLITION SECOND & THIRD FLOOR PLANS
BUILDING 2448

SOLICITATION NO. W912GC-04-B-0017
CONTRACT NO. W912GC-04-C-0034

Sheet reference number:
E-103
Sheet 44 of 160

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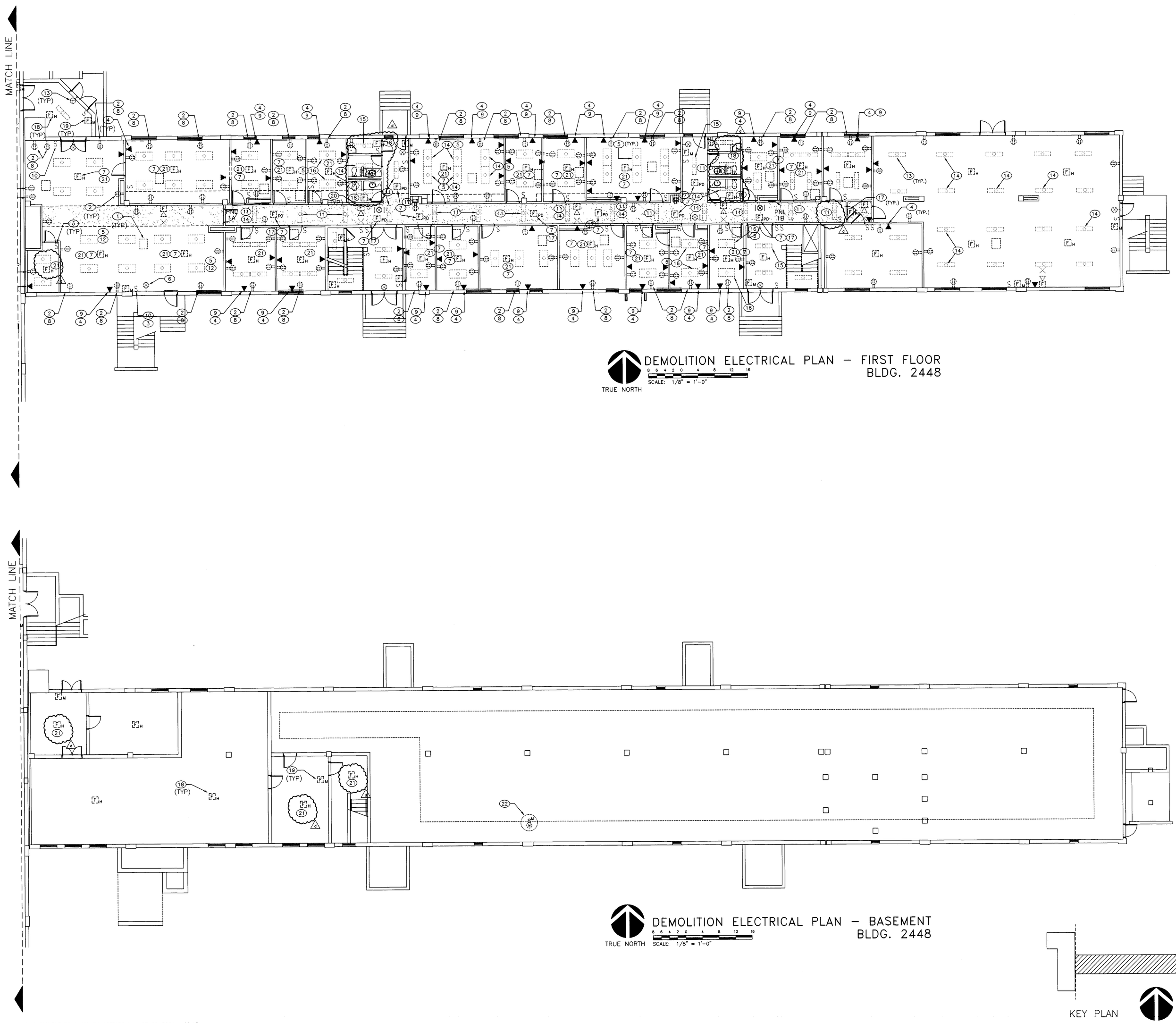
SHEETNUMBER

FB-5A



KEYED NOTES:

1. EXISTING FAN COIL UNIT TO BE REMOVED. REMOVE CONDUIT AND WIRING BACK TO SOURCE. REMOVE EXISTING THERMOSTAT AND FAN COIL SWITCH IN THEIR ENTIRETY. PROVIDE NEW CONNECTION TO NEW FAN COIL UNITS PER NEW WORK PLAN.
2. REMOVE AND REPLACE EXISTING OUTLET COVERPLATE WITH NEW COVERPLATE (SOLID BRASS).
3. REMOVE AND REPLACE EXISTING SWITCH COVERPLATE WITH NEW COVERPLATE (SOLID BRASS).
4. REMOVE AND REPLACE EXISTING TELEPHONE COVERPLATE WITH NEW COVERPLATE (SOLID BRASS).
5. REMOVE EXISTING FIXTURE IN LAY IN CEILING AS REQUIRED REPLACING OF DAMAGED GRID MEMBERS OR CEILING PANELS. CLEAN UP FIXTURE AND REINSTALL.
6. EXISTING WALL MOUNTED EXIT TO BE REMOVED DUE TO INSTALLATION OF NEW GYPBOARD. PROVIDE NEW RAISED RING OR EXTENSION BOX FOR RE–MOUNTING EXISTING EXIT. MAINTAIN CIRCUIT CONTINUITY.
7. EXISTING DETECTOR TO BE REMOVED DUE TO THE REMOVAL OF THE EXISTING CEILING. STORE AND PROTECT EXISTING DETECTOR. PROVIDE MEANS OF PROTECTING THE EXISTING DETECTOR'S CONDUIT AND WIRING DURING REMOVAL. ONCE NEW CEILING HAS BEEN INSTALLED, REINSTALL AND RECONNECT EXISTING DETECTOR TO EXISTING CIRCUIT. MAINTAIN CIRCUIT CONTINUITY.
8. EXISTING DUPLEX OUTLET TO BE REMOVED DUE TO INSTALLATION OF NEW GYPBOARD. PROVIDE NEW RAISED RING OR EXTENSION BOX FOR RE–MOUNTING EXISTING OUTLET. MAINTAIN CIRCUIT CONTINUITY.
9. EXISTING TELEPHONE OUTLET TO BE REMOVED DUE TO INSTALLATION OF NEW GYPBOARD. PROVIDE NEW RAISED RING OR EXTENSION BOX FOR RE–MOUNTING EXISTING TELEPHONE OUTLET. MAINTAIN CIRCUIT CONTINUITY.
10. EXISTING SWITCH TO BE REMOVED DUE TO INSTALLATION OF NEW GYPBOARD. PROVIDE NEW RAISED RING OR EXTENSION BOX FOR RE–MOUNTING EXISTING SWITCH. MAINTAIN CIRCUIT CONTINUITY.
11. EXISTING CORRIDOR FIXTURE TO BE REMOVED DUE TO THE REMOVAL OF THE EXISTING CEILING. STORE AND PROTECT EXISTING FIXTURE. PROVIDE MEANS OF PROTECTING THE EXISTING FIXTURE CONDUIT AND WIRING DURING REMOVAL. ONCE NEW CEILING HAS BEEN INSTALLED, REINSTALL AND RECONNECT EXISTING FIXTURE TO EXISTING CIRCUIT. MAINTAIN CIRCUIT CONTINUITY. COORDINATE INSTALLATION WITH NEW ACCESS PANELS.
12. REPLACE BURNT OUT LAMPS IN EXISTING 3–LAMP FIXTURE WITH (3) NEW LAMPS (32W T–8 COOL WHITE, 75 CRI).
13. SHOWN FOR INFORMATION ONLY. PROVIDE MEANS OF PROTECTING FIXTURE DURING DEMOLITION.
14. REPLACE BURNT OUT LAMPS IN EXISTING 2–LAMP FIXTURE WITH (2) NEW LAMPS (32W T–8 COOL WHITE, 75 CRI).
15. REMOVE AND REPLACE EXISTING FIXTURE WITH NEW FIXTURE. NEW FIXTURE SHALL BE TYPE "A". RECONNECT FIXTURE TO EXISTING FIXTURE OUTLET BOX. MAINTAIN CIRCUIT CONTINUITY.
16. REPLACE BURNT OUT LAMPS IN EXISTING 4–LAMP FIXTURE WITH (4) NEW LAMPS (32W T–8 COOL WHITE, 75 CRI).
22. REMOVE EXISTING SWITCH IN IT'S ENTIRETY. REMOVE SWITCH BOX, CONDUIT AND WIRING BACK TO SOURCE OF POWER. IF SOURCE OF POWER IS A BREAKER, BREAKER TO BECOME A SPARE. REPLACE EXISTING PANEL DIRECTORY WITH NEW TYPEWRITTEN DIRECTORY.

KEYED NOTES: OPTION 3

17 EXISTING SMOKE DETECTOR TO BE REPLACED WITH NEW ADDRESSIBLE SMOKE DETECTOR. REFER TO NEW WORK PLAN FOR MORE INFORMATION.

18 EXISTING HEAT DETECTOR TO BE REPLACED WITH NEW ADDRESSIBLE HEAT DETECTOR. REFER TO NEW WORK PLAN FOR MORE INFORMATION.

19 EXISTING PULL STATION TO BE REPLACED WITH NEW ADDRESSIBLE PULL STATION. REFER TO NEW WORK PLAN FOR MORE INFORMATION.

20 EXISTING HORN/STROBE TO BE REPLACED WITH NEW HORN/STROBE. REFER TO NEW WORK PLAN FOR MORE INFORMATION.

21. EXISTING HEAT DETECTOR TO BE REPLACED WITH NEW ADDRESSIBLE SMOKE DETECTOR. REFER TO NEW WORK PLAN FOR MORE INFORMATION.

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.	Mark	Description	Date	Appr.
	CLARIFICATIONS					5-15-04	AMF/KOA

Designed by: JJ | Date: 08/23/04 | Rev.
Dwn by: JJ | Ckd by: JJ | Design file no. 102
Reviewed by: | Drawing code:
Submitted by: Paul Waters | File name: B2448-ED102 Plot date: 08/13/04 Plot scale: 1:1 (PDF)

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORPS OF ENGINEERS

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FY04 O&M
RENOVATE BARRACKS
FORT BLISS, TEXAS

ELECTRICAL DEMOLITION PLAN
BASEMENT AND FIRST FLOOR
BUILDING 2448

SOLICITATION NO. W9126G–04–B–0017
CONTRACT NO. W9126G–04–C–0034

Sheet reference number:
E–102
Sheet 43 of 160

CONTRACT NO. W9126G–04–C–0034

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DRAWING OF WORK AS BUILT

SHEETNUMBER

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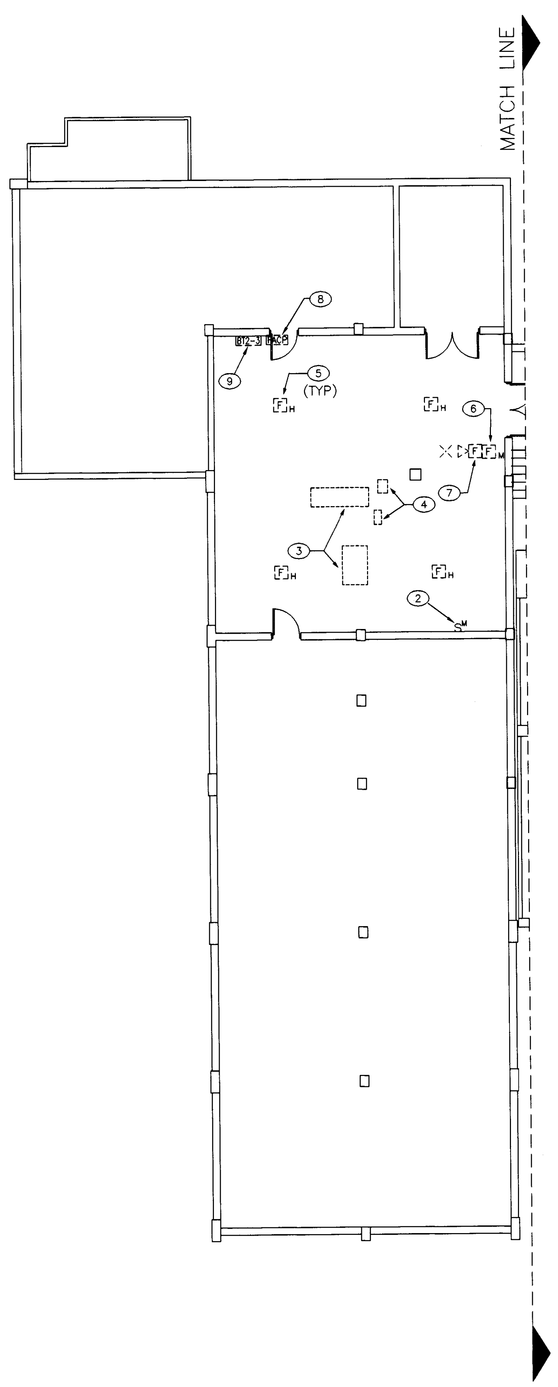
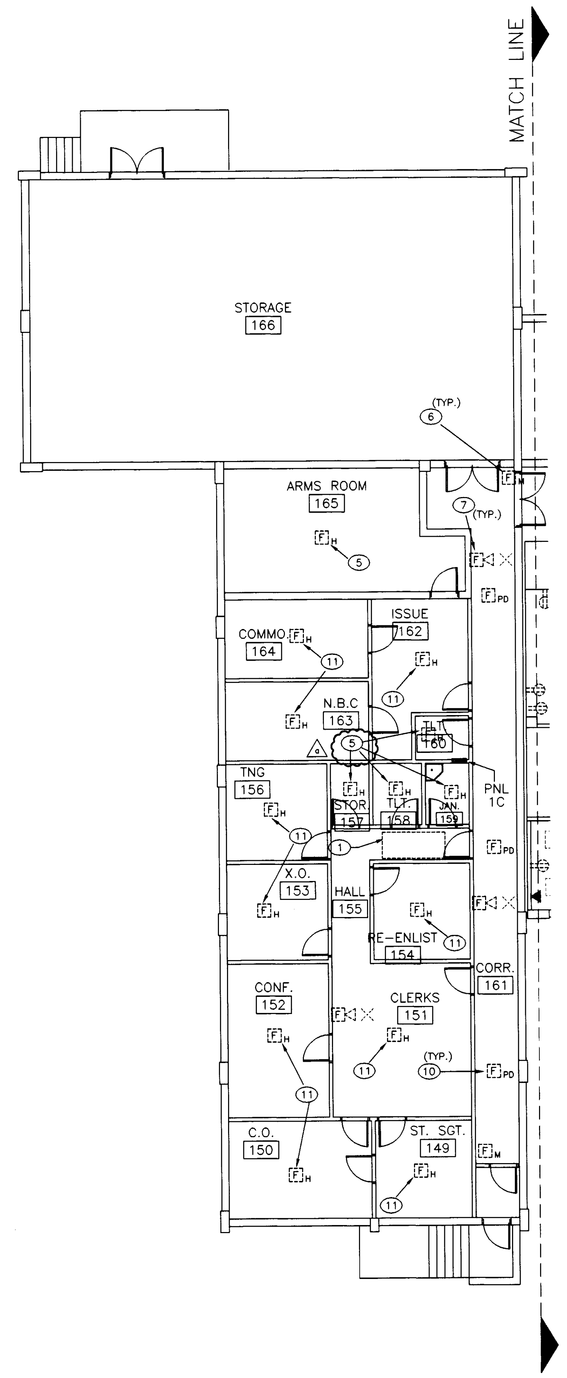


DEMOLITION ELECTRICAL PLAN – BASEMENT
BLDG. 2448

TRUE NORTH

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



DEMOLITION ELECTRICAL PLAN – FIRST FLOOR
BLDG. 2448

TRUE NORTH

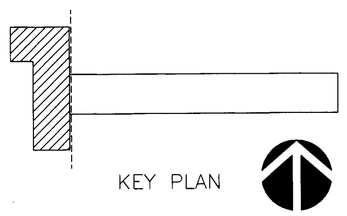
SCALE: 1/8" = 1'-0"

KEYED NOTES:

1. EXISTING FAN COIL UNIT TO BE REMOVED REMOVE CONDUIT AND WIRING BACK TO SOURCE. REMOVE EXISTING THERMOSTAT AND FAN COIL SWITCH IN THEIR ENTIRETY.
2. EXISTING CIRCULATING PUMP TO BE REMOVED. REMOVE JUNCTION BOX, MOTOR-RATED SWITCH, CONDUIT AND WIRING BACK TO SOURCE OF POWER. IF SOURCE OF POWER IS A BREAKER, BREAKER TO BECOME A SPARE. UPDATE PANEL DIRECTORY.
3. EXISTING BOILER TO BE REMOVED. REMOVE JUNCTION BOX, SAFETY SWITCH, CONDUIT AND WIRING BACK TO SOURCE OF POWER. IF SOURCE OF POWER IS A BREAKER, BREAKER TO BECOME A SPARE. UPDATE PANEL DIRECTORY.
4. EXISTING PUMP TO BE REMOVED. REMOVE JUNCTION BOX, SAFETY SWITCH, STARTER, CONDUIT AND WIRING BACK TO SOURCE OF POWER. IF SOURCE OF POWER IS A BREAKER, BREAKER TO BECOME A SPARE. UPDATE PANEL DIRECTORY.

KEYED NOTES: OPTION 3

5. EXISTING HEAT DETECTOR TO BE REPLACED WITH NEW ADDRESSIBLE HEAT DETECTOR. REFER TO NEW WORK PLAN FOR MORE INFORMATION.
6. EXISTING PULL STATION TO BE REPLACED WITH NEW ADDRESSIBLE PULL STATION. REFER TO NEW WORK PLAN FOR MORE INFORMATION.
7. EXISTING HORN/STROBE TO BE REPLACED WITH NEW HORN/STROBE. REFER TO NEW WORK PLAN FOR MORE INFORMATION.
8. EXISTING FIRE ALARM CONTROL PANEL TO BE REMOVED AND REPLACED WITH NEW. RETURN FIRE ALARM PANEL TO ELECTRIC SHOP/CUBE CORP.
9. EXISTING MONACO BT-3 TRANSCEIVER TO BE REMOVED AND REPLACED WITH NEW. RETURN TRANSCEIVER TO ELECTRIC SHOP/CUBE CORP.
10. EXISTING SMOKE DETECTOR TO BE REPLACED WITH NEW ADDRESSIBLE SMOKE DETECTOR. REFER TO NEW WORK PLAN FOR MORE INFORMATION.
11. EXISTING HEAT DETECTOR TO BE REPLACED WITH NEW ADDRESSIBLE SMOKE DETECTOR. REFER TO NEW WORK PLAN FOR MORE INFORMATION.



KEY PLAN

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DRAWING OF WORK AS BUILT

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.
A	CLARIFICATION ON PATCH WORK.	9-10-04	AMD001

Date: 06/23/04 Rev.
Design file no. 1010
Drawing code: E
Scale: 1/8"=1'-0"
File name: B2448-E0101
Plot date: 06/13/04
Plot scale: AS SHOWN

Designed by: JJ
Dwn by: JJ
Ckd by: JJ
Reviewed by: JJ
Submitted by: Paul Sisters

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FY04 OMA
REPOVATE BARRACKS
FORT BLISS, TEXAS

ELECTRICAL DEMOLITION PLAN
BASEMENT AND FIRST FLOOR
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

Sheet reference number:
E-101
Sheet 42 of 160

CONTRACT NO. W9126G-04-C-0034

SHEETNUMBER

FB-5A

LIGHTING

SYMBOL	DESCRIPTION
	LAY-IN 1x4 FLUORESCENT FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	LAY-IN 2x4 FLUORESCENT FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	LAY-IN 2x2 FLUORESCENT OR HID FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	FLANGED OR SURFACE MOUNTED FLUORESCENT FIXTURE AND OUTLET. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	FLANGE OR SURFACE MOUNTED 2x4 FLUORESCENT FIXTURE AND OUTLET. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	FLUORESCENT UTILITY STRIP FIXTURE AND OUTLET. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	LIGHTING FIXTURE INDICATED WITH CROSS SHADING IS CONNECTED TO EMERGENCY POWER SOURCE, OR HAS INTEGRAL BATTERY PACK 1350 LUMEN MIN.
	WALL MOUNTED FLUORESCENT FIXTURE AND OUTLET. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	CEILING MOUNTED EXIT FIXTURE AND OUTLET WITH DIRECTIONAL INDICATOR. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	WALL MOUNTED EXIT LIGHT FIXTURE AND OUTLET WITH DIRECTIONAL INDICATOR. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	SELF-CONTAINED TWO-HEAD EMERGENCY BATTERY PACK FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.
	FIXTURES. MAXIMUM 6'-0" LENGTH OF CONDUIT WITH REQUIRED CONDUCTORS ALONG WITH GREEN WIRE GROUND.

SWITCHES

SYMBOL	DESCRIPTION
S	SINGLE POLE WALL SWITCH. FLUSH MOUNTED UP 44" TO BOTTOM OF BOX UNLESS OTHERWISE INDICATED
S_2	DOUBLE POLE-SINGLE THROW WALL SWITCH. FLUSH MOUNTED UP 44" TO BOTTOM OF BOX UNLESS OTHERWISE INDICATED.
S_3	THREE WAY WALL SWITCH. FLUSH MOUNTED UP 44" TO BOTTOM OF BOX UNLESS OTHERWISE INDICATED
S_4	FOUR WAY WALL SWITCH. FLUSH MOUNTED UP 44" TO BOTTOM OF BOX UNLESS OTHERWISE INDICATED
S_M	MOTOR RATED SWITCH. SIZE AND POLES FOR MOTOR FURNISHED.
S_{WP}	WEATHERPROOF SWITCH. SURFACE MOUNTED UP 44" TO BOTTOM OF BOX UNLESS OTHERWISE INDICATED.

POWER

SYMBOL	DESCRIPTION
J	JUNCTION BOX, WALL OR CEILING MOUNTED.
JH	JUNCTION BOX FLUSH IN WALL. HEIGHT AS INDICATED FOR CONNECTION TO EQUIPMENT.
J	SCREW COVER JUNCTION BOX. SIZE AND TYPE AS SCHEDULED.
PB	IN-GRADE PULLBOX. SIZE AND TYPE AS SCHEDULED.
	DUPLEX CONVENIENCE OUTLET. UP 18" OR AS INDICATED.
	DOUBLE DUPLEX OUTLET, UP 18" OR AS INDICATED.
GFCI	GFCI DUPLEX CONVENIENCE OUTLET. UP 42" OR AS INDICATED.
WP GFCI	WP GFCI DUPLEX CONVENIENCE OUTLET. UP 18" OR AS INDICATED.
GFI R	ROOF MOUNTED SERVICE OUTLET PER NEC 210-63.
30	30 AMP., 250 VOLT RECEPTACLE UP 24" OR AS INDICATED.
T	THERMOSTAT UP 44" TO BOTTOM OF BOX UNLESS OTHERWISE INDICATED.
	3-SPD. FAN COIL SWITCH UP 44" TO BOTTOM OF BOX UNLESS OTHERWISE INDICATED.

MISCELLANEOUS

SYMBOL	DESCRIPTION
	BRANCH CIRCUIT IN WALLS OR CEILING.
	BRANCH CIRCUIT UNDER FLOOR.
	BRANCH CIRCUIT EXPOSED.
A-2,4	HOME RUN TO PANEL WITH BRANCH CIRCUIT NUMBERS INDICATED.
1 2 1	TIC MARKS REPRESENT NEUTRAL, HOT, SWITCH LEG, AND GROUND CONDUCTORS RESPECTIVELY. CONDUITS WITH NO TIC MARKS SHALL BE: "A HOT AND NEUTRAL", "A HOT AND SWITCH LEG", "A NEUTRAL AND SWITCH LEG", OR "HOT, NEUTRAL, AND GROUND", AS APPLICABLE.
E_{UG}	ELECTRICAL UNDERGROUND CIRCUIT, 2'-0" MINIMUM BELOW GRADE.
T_{UG}	TELEPHONE UNDERGROUND CIRCUIT, 2'-0" MINIMUM BELOW GRADE.
PE_{UG}	PRIMARY SERVICE ELECTRICAL UNDERGROUND CIRCUIT, 4'-0" MINIMUM BELOW GRADE.
SE_{UG}	SECONDARY SERVICE ELECTRICAL UNDERGROUND CIRCUIT, 3'-0" MINIMUM BELOW GRADE.
—EX—	EXISTING CONDUIT
—X— —X—	EXISTING TO BE REMOVED
—T—	TELEPHONE CONDUIT. MINIMUM 3/4" WITH PULL WIRE.
—T—►	1" CONDUIT WITH PULL WIRE TO TELEPHONE TERMINAL BOARD.
—FA—	FIRE ALARM CONDUIT, 3/4" MIN. UNLESS OTHERWISE INDICATED ON DRAWINGS WITH WIRING AS CALLED FOR IN SPECS.

FIRE ALARM

SYMBOL	DESCRIPTION
F M	FIRE ALARM MANUAL PULL STATION UP 44" TO BOTTOM OF BOX. SEE SPECIFICATIONS FOR REQUIREMENTS.
F 75	FIRE ALARM STROBE VISUAL SIGNAL UP 80" TO CENTER, SEE SPECIFICATIONS FOR REQUIREMENTS. NUMBER REPRESENTS CANDELA RATING
F 75	FIRE ALARM HORN/STROBE VISUAL SIGNAL UP 80" TO CENTER. SEE SPECIFICATIONS FOR REQUIREMENTS. NUMBER REPRESENTS CANDELA RATING
F PDH	F.A. COMBINATION AUTOMATIC SMOKE/HEAT DETECTOR.
F PD	F.A. AUTOMATIC SMOKE DETECTOR.
F 135;190° H	F.A. AUTOMATIC HEAT DETECTOR (135 - RATE OF RISE 135°, 190 - RATE OF RISE 190°.
FACP	FIRE ALARM CONTROL PANEL
FANN	FIRE ALARM REMOTE ANNUNCIATOR
NACPS	NAC EXTENDER POWER SUPPLY.

APPARATUS LEGEND

SYMBOL	DESCRIPTION
PMT	UTILITY PAD-MOUNT TRANSFORMER AS NOTED.
T	DRY-TYPE TRANSFORMER AS NOTED.
	SERVICE ENTRANCE RATED SWITCHBOARD.
	480/277V SURFACE MOUNTED DISTRIBUTION PANELBOARD. SEE PANEL SCHEDULE FOR CHARACTERISTICS.
	208/120V SURFACE MOUNTED DISTRIBUTION PANELBOARD. SEE PANEL SCHEDULE FOR CHARACTERISTICS.
	480/277V SURFACE MOUNTED PANELBOARD. SEE PANEL SCHEDULE FOR CHARACTERISTICS.
	480/277V FLUSH MOUNTED PANELBOARD. SEE PANEL SCHEDULE FOR CHARACTERISTICS.
	208/120V SURFACE MOUNTED PANELBOARD. SEE PANEL SCHEDULE FOR CHARACTERISTICS.
	208/120V FLUSH MOUNTED PANELBOARD. SEE PANEL SCHEDULE FOR CHARACTERISTICS.
Θ_2	MOTOR CONNECTION WITH HP INDICATED.
	MOTOR CONTROLLER INTEGRAL WITH EQUIPMENT.
	MOTOR CONTROLLER, PROVIDED AND INSTALLED UNDER DIV. 16. SIZE AND POLES FOR MOTOR FURNISHED.
R	SAFETY SWITCH, PROVIDED AND INSTALLED UNDER DIV. 16. TO HAVE POLES AND RATING
	COMBINATION MAGNETIC STARTER PROVIDED AND INSTALLED UNDER DIV. 16.
	CIRCUIT BREAKER
	FUSIBLE SWITCH
	SPECIAL CABINET AS NOTED.

VOICE/DATA/VIDEO LEGEND

SYMBOL	DESCRIPTION
▷	DATA OUTLET FLUSH IN WALL, 4 11/16" SQUARE BOX, 2-1/8" DEEP, ONE DEVICE COVER, UP 18" A.F.F. EXTEND 3/4"C WITH WIRING UP TO ACCESSIBLE CEILING SPACE.
▶	VOICE OUTLET FLUSH IN WALL, 4 11/16" SQUARE BOX, 2-1/8" DEEP, ONE DEVICE COVER, UP 18" A.F.F. EXTEND 3/4"C WITH WIRING UP TO ACCESSIBLE CEILING SPACE.
	COMMUNICATION PLYWOOD BACKBOARD WITH #6 GROUND. REFER TO DRAWINGS FOR SIZE, TYPE.
▷TV	TELEVISION OUTLET UP 18" OR AS INDICATED (75 OHM). 3/4" CONDUIT WITH WIRING STUBBED UP INTO ACCESSIBLE CEILING SPACE.

MASS NOTIFICATION

SYMBOL	DESCRIPTION
S	WALL MOUNTED SPEAKER AT 7'-0" A.F.F. OR AS INDICATED.
S	WEATHERPROOF EXTERIOR MOUNTED HORN, UP 12'-0" UNLESS NOTED OTHERWISE.
BT-MX	MASS NOTIFICATION TRANSCEIVER

GENERAL ELECTRICAL NOTES: (APPLICABLE TO ALL SHEETS)

A. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOOK THROUGH ALL DRAWINGS ASSOCIATED WITH THIS PROJECT. WORK ASSOCIATED WITH THE CONTRACTOR'S TRADE MAY BE SHOWN ON OTHER DRAWINGS. ANY ADDITIONAL COSTS RESULTING FROM THE FAILURE TO INCLUDE THESE ITEMS SHOWN ON OTHER DRAWINGS WILL BE INCURRED BY THE CONTRACTOR.

B. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VISIT EACH SITE TO FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS PRIOR TO BIDDING THIS PROJECT.

C. CONTRACTOR SHALL SAW CUT AND PATCH EXISTING WALLS OR OTHER MATERIAL ENCOUNTERED AS REQUIRED TO INSTALL NEW OUTLETS, SWITCHES, CONDUIT AND MISCELLANEOUS DEVICES. CONTRACTOR SHALL RESTORE WALL TO ITS ORIGINAL CONDITION AFTER INSTALLATION OF NEW OUTLETS, SWITCHES, CONDUIT AND MISCELLANOUS DEVICES HAVE BEEN INSTALLED.

D. THE CONTRACTOR SHALL NOT SCALE THE CONTRACT DOCUMENTS. THE CONTRACT DOCUMENTS ARE DIAGRAMMATIC IN NATURE AND DO NOT COMPLETELY DEPICT ALL EXISTING CONDITIONS. IN THE AREA.

E. THESE DRAWINGS ARE BASED UPON RECORD DOCUMENTS AND ORIGINAL DRAWINGS. TO THE BEST OF OUR KNOWLEDGE, EXISTING FIXTURES, DEVICES, CONDUIT,WIRING, ETC. ARE INSTALLED AS SHOWN ON THE RECORD DOCUMENTS AND ORIGINAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THESE CONDITIONS PRIOR TO BIDDING THE PROJECT AND NOTIFY THE CONTRACTING OFFICR OF ANY DISCREPANCIES.

F. IF POWER IS DISCONNECTED FROM AN ELECTRICAL FIXTURE, DEVICE, ETC. DUE TO THE REMOVAL OF OTHER ELECTRICAL ITEMS, THE CONTRACTOR SHALL PROVIDE ADDITIONAL CONDUIT, WIRING, ETC.. TO MAINTAIN CIRCUIT CONTINUITY.

G. ITEMS SHOWN AS EXISTING TO REMAIN SHALL REMAIN FUNCTIONAL. EXTEND AND/OR REVISE WIRING AS NECESSARY IN ORDER TO MAINTAIN CIRCUIT CONTINUITY.

H. DIRECTORIES IN EXISTING PANELS AFFECTED BY WORK UNDER THIS PROJECT SHALL BE REVISED TO REFLECT CHANGES. BREAKERS SERVING LOADS THAT ARE REMOVED SHALL BECOME SPARES UNLESS INDICATED OTHERWISE. PROVIDE NEW TYPE WRITTEN DIRECTORY IF EXISTING PANELBOARD IS MISSING DIRECTORY.

I. CONTACTOR SHALL COORDINATE INSTALLATION OF NEW LAY-IN FIXTURES WITH ARCHITECTURAL REFLECTED CEILING PLAN PRIOR TO INSTALLATION OF FIXTURES.

J. ALL EXPOSED CONDUIT SHALL BE PAINTED TO MATCH ADJACENT SURFACES.

K. PROVIDE BLANK METAL COVERPLATE OVER ALL UNUSED BOXES. PAINT COVERPLATE TO MATCH ADJACENT SURFACES.

L. OUTLET MOUNTING HEIGHTS INDICATED ON THE DRAWINGS ARE APPROXIMATE. THIS CONTRACTOR SHALL BE REPSONSIBLE FOR COORDINATING WITH OTHER TRADES FOR EXACT HEIGHT REQUIRED. THIS REQUIREMENT ALSO APPLIES TO SWITCHES, TELEPHONE OUTLETS, DATA OUTLETS, HVAC SENSORS, ETC.. ANY DEVICE THAT HAS TO BE RELOCATED DUE TO CONTRACTOR'S FAILURE TO COORDINATE LOCATION WITH COUNTERTOPS, CHALKBOARDS, TACKBOARDS, ETC. WILL BE DONE AT NO ADDITIONAL COST TO THE CONTRACTING OFFICER'S REPRESENTATIVE.

M. CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR THE MECHANICAL EQUIPMENT'S ELECTRICAL REQUIREMENTS, INCLUDING POWER, CONTROL, COMMUNICATION, AND MONITORING, OF EACH DEVICE PROVIDED AND/OR INSTALLED BY DIVISION 15 CONTRACTOR.

N. ALL SYSTEMS AND COMPONENTS SHALL BE APPROVED FOR THE PURPOSE FOR WHICH INSTALLED. ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND FROM ESTABLISHED NAFTA SUPPLIERS UNLESS OTHERWISE INDICATED.

O. ALL WORK SHALL CONFORM WITH FEDERAL, STATE, AND LOCAL CODES, RULES, AND REGULATIONS. ALL WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE SYSTEMS SHALL BE INSTALLED COMPLETE AND FULLY OPERATIVE UNLESS OTHERWISE INDICATED

P. CONTRACTOR SHALL SECURE AND PAY ALL REQUIRED PERMITS, FEES, INSPECTIONS AND TESTS UNLESS OTHERWISE INDICATED.

Q. THE CONTRACTOR SHALL COORDINATE WITH THE CONTRACTING OFFICER'S REPRESENTATIVE ANY REQUIRED SHUT-DOWNS OR TIE-INS RELATING TO THESE SYSTEMS. REQUESTS FOR SHUTDOWNS SHALL BE SUBMITTED IN WRITING AT LEAST ONE WEEK IN ADVANCE FOR APPROVAL BY THE CONTRACTING OFFICER'S REPRESENTATIVE. CONTRACTOR SHALL NOT PROCEED UNTIL WRITTEN AUTHORIZATION IS OBTAINED FROM THE CONTRACTING OFFICER'S REPRESENTATIVE.

R. WHERE THE DRAWINGS AND/OR SPECIFICATIONS INDICATE MATERIALS OR METHODS OF CONSTRUCTION IN EXCESS OF CODE REQUIREMENTS, THE DRAWINGS AND/OR SPECIFICATIONS SHALL GOVERN.

S. THE CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF THE ELECTRICAL SYSTEM. THE DEMOLITION PLAN SHALL BE USED AS A SCHEMATIC GUIDE TO DEMOLITION ONLY. ADDITIONAL DEMOLITION MAY BE REQUIRED TO COMPLETE THE WORK AS INDICATED ON THE DRAWINGS. DEMOLITION REQUIRED TO COMPLETE THE PROJECT WORK, BUT NOT INDICATED, SHALL BE INCLUDED IN THE CONTRACT SUM.

T. ITEMS REMOVED DURING DEMOLITION SHALL BE SALVAGED TO CONTRACTING OFFICER'S REPRESENTATIVE FOR THEIR "FIRST RIGHT OF ACCEPTANCE". IF CONTRACTING OFFICER'S REPRESENTATIVE DECIDES NOT TO ACCEPT THE REMOVED ITEMS, CONTRACTOR SHALL BE RESPONSIBLE FOR LOADING AND PROPERLY DISPOSING OF THESE ITEMS.

U. ITEMS INDICATED AS BEING REMOVED SHALL BE REMOVED COMPLETE WITH ALL ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE OF POWER OR TO NEAREST DEVICE THAT IS TO REMAIN.

V. ALL UNUSED CONDUIT SHALL BE REMOVED IN ITS ENTIRETY. ALL UNUSED COMMUNICATION WIRING SHALL BE REMOVED IT IT'S ENTIRETY BY THIS CONTRACTOR.

W. ANY CONDUIT THAT IS TO BE REMOVED BUT IS INACCESSIBLE WITHIN FLOOR SLAB SHALL BE CUT OFF PLUMB WITH FLOOR AND SEALED.

X. AFTER COMPLETION OF THE INSTALLATION, THE ENTIRE ELECTRICAL SYSTEM SHALL BE THOROUGHLY CLEANED. REMOVE ALL FOREIGN MATERIAL, DUST, PAINT, OIL, GREASE, UNNEEDED LABELS AND STICKERS FROM EQUIPMENT. REMOVE ALL DEBRIS ACCUMMULATED DURING CONSTRUCTION.

Y. CONTRACTOR SHALL SAW CUT AND PATCH ASPHALT, CONCRETE OR OTHER MATERIAL ENCOUNTERED AS REQUIRED TO INSTALL NEW UNDERGROUND CONDUITS. REFER TO ARCHITECTURAL SPECIFICATIONS FOR PATCHING REQUIREMENTS.

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.

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Design file no. 001
Drawing code:
File name: B2448E-001.dwg
Plot date: 08/13/04
Plot scale: NONE

Designed by: JJ
Dwn by:
Ckd by:
Reviewed by: JJ
Submitted by: Paul Walters

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FY04 O&M
RENOVATE BARRACKS
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LEGEND, NOTES
BUILDING 2448
SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

Sheet reference number:
E-001
Sheet 41 of 160

CONTRACT NO. W9126G-04-C-0034

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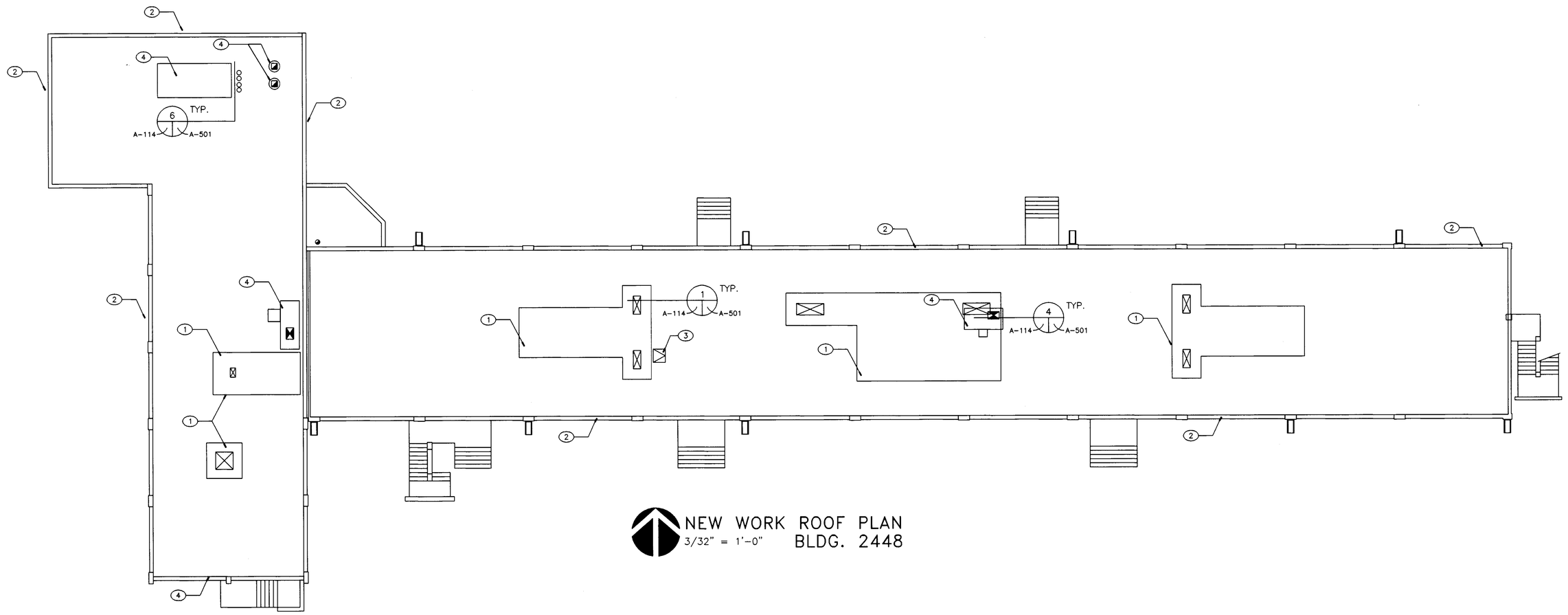
DRAWING OF WORK AS BUILT

SHEETNUMBER

FB- 5A



NEW WORK ROOF PLAN
3/32" = 1'-0" BLDG. 2448

GENERAL NOTES:

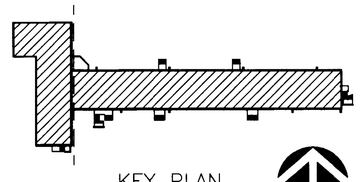
A. PROTECT EXISTING ROOFING MATERIAL WHILE DOING ROOF WORK. MODIFICATIONS/PATCHING TO THE ROOF SHALL BE PERFORMED TO COMPLY WITH EXISTING ROOF WARRANTY REQUISITES.

B. SEE MECHANICAL DRAWINGS FOR HVAC WORK.

C. SEE GENERAL ARCHITECTURAL SHEET A-501 FOR ROOF DETAILS.

KEYED NOTES:

1. PATCH ROOF AT AREAS OF MECHANICAL UNITS REMOVAL WITH SAME TYPE MATERIALS AS EXISTING. PROVIDE SHEATHING, ETC. AS REQUIRED
2. CLEAN GUTTERS AND DOWNSPOUTS.
3. PROVIDE NEW WEATHER STRIPING, REPAIR/ADJUST HARDWARE TO ROOF HATCH.
4. NEW MECHANICAL EQUIPMENT, SEE MECHANICAL DWGS.



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.

Mark	Description	Date	Appr.

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6500 LAUTONA BLVD, STE. 100
ALBUQUERQUE, NEW MEXICO 87110

Designed by: O.P.
Dwn by: J.M.
Chk by: J.M.
Reviewed by: C.S.
Submitted by: Paul Waters
Date: 06/23/04 Rev.
Design file no. Jw1pg1
Drawing code:
File name: B2448A114
Plot date: 06/14/04
Plot scale: 1/8"=1'-0"
Mark

FY04 JMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

NEW WORK ROOF PLAN
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

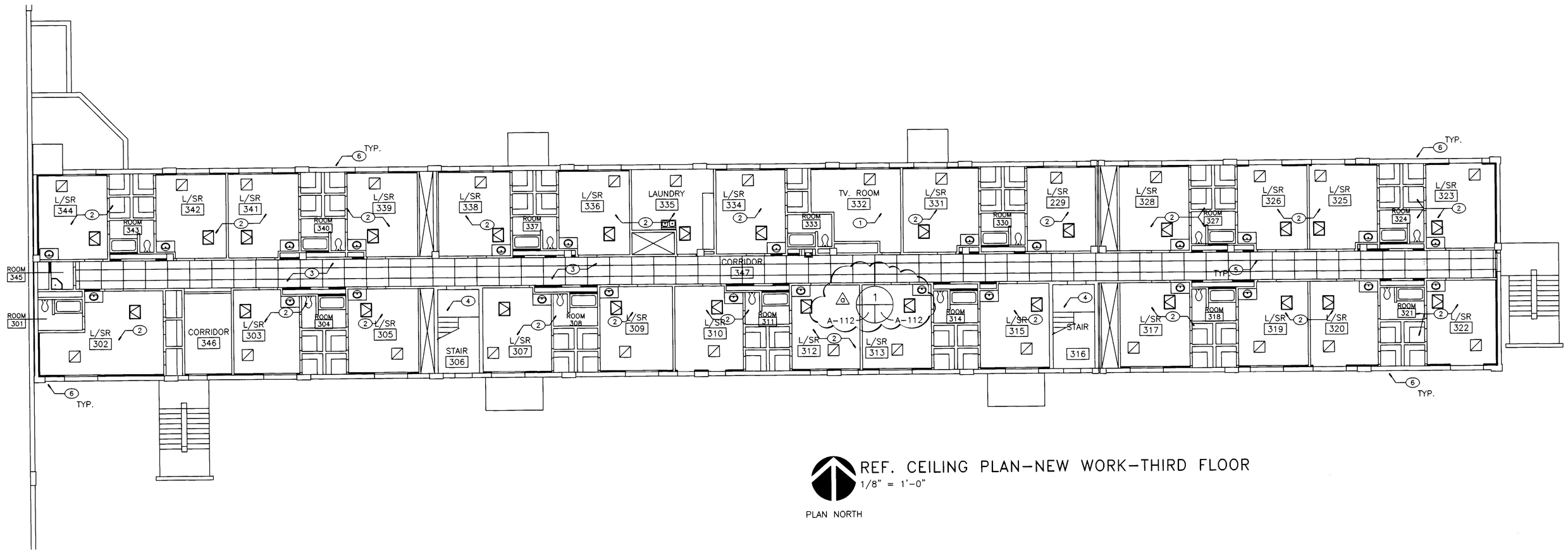
Sheet reference number:
A-114
Sheet 17 of 160

CONTRACT NO. W9126G-04-C-0034

DRAWING OF WORK AS BUILT

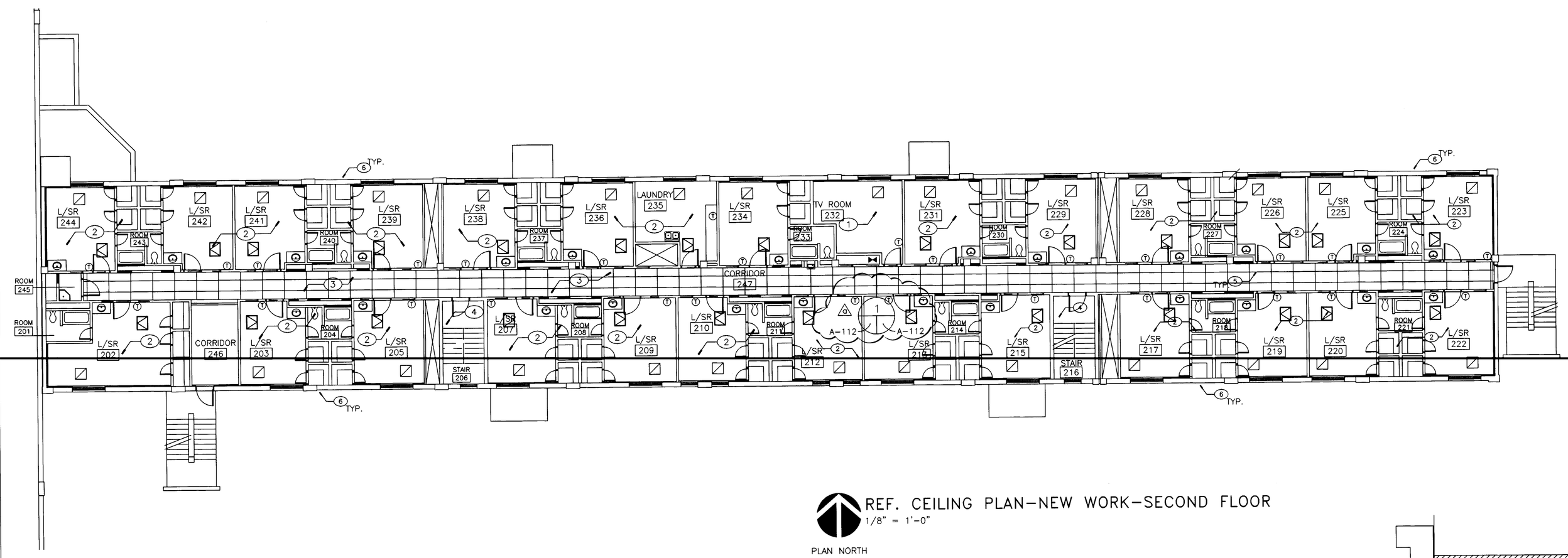
SHEETNUMBER

FB-SA



REF. CEILING PLAN–NEW WORK–THIRD FLOOR
1/8" = 1'-0"

PLAN NORTH



REF. CEILING PLAN–NEW WORK–SECOND FLOOR
1/8" = 1'-0"

PLAN NORTH

GENERAL NOTES:

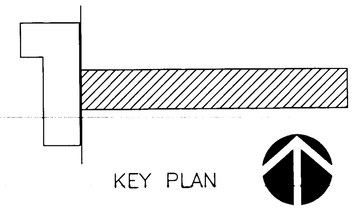
A. SEE ELECTRICAL DRAWINGS FOR WORK RELATED TO NEW ELECTRICAL WORK.
B. SEE MECHANICAL AND PLUMBING DRAWINGS FOR WORK RELATED TO NEW MECHANICAL/PLUMBING WORK.
C. NO MECHANICAL EQUIPMENT, SHALL PENETRATE STRUCTURAL COLUMNS, BEAMS, ETC

KEYED NOTES:

1. REINSTALL EXISTING CEILING TILES, REPLACE DAMAGED CEILING TILES AND CEILING GRID. PROVIDE NEW PERIMETER CEILING WALL ANGLES AT EXTERIOR WALL FURR-OUT.
2. PATCH AND REPAIR GYP. BD. CEILING, FINISH AS SCHEDULED, TYP. AT ALL SLEEPING ROOMS, CLOSETS, JANITOR'S ROOM, AND SHOWER ROOMS.
3. NEW 1 HR. GYP. BD. CEILING.
4. EXPOSED STRUCTURE, SEE FINISH SCHEDULE.
5. CEILING ACCESS PANEL.
6. NEW EXHAUST WALL DIFFUSER, TYP. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

LEGEND:

- WALL MOUNTED SUPPLY AIR DUCT
- CEILING SUPPLY AIR DUCT
- RETURN AIR DUCT
- LIGHT FIXTURE
- EXIT LIGHT FIXTURE
- 2' x 4' CEILING TILE
- CEILING ACCESS PANEL



KEY PLAN

US Army Corps of Engineers
District or Division

Symbol	Description	Date	Appr.
1	ADD DETAIL REFERENCE KEY ADDED	5-13-04	AMC001

Designed by: D.P. | Date: 08/23/04 | Rev.
Dwn by: J.C. | Ckd by: J.B. | Design file no. A-113
Reviewed by: | Drawing code:
Submitted by: Paul Waters | File name: B2A4A113 | File date: 08/13/04 | Plot scale: 1/8"=1'-0"

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BRW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

FY04 O&M
RENOVATE BARRACKS
FORT BLISS, TEXAS

REF. CLNG. 2ND. & 3RD. FLOOR
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

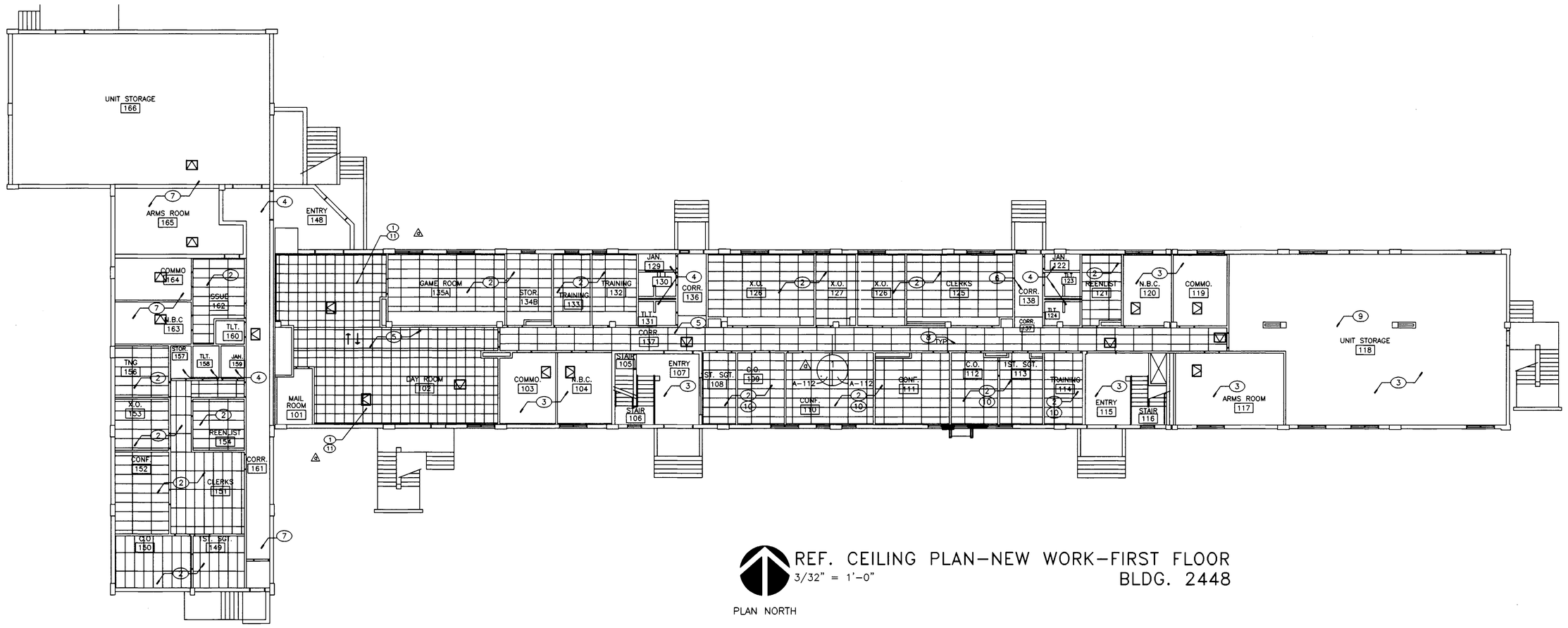
Sheet reference number:
A-113
Sheet 16 of 160

CONTRACT NO. W9126G-04-C-0034

DRAWING OF WORK AS BUILT

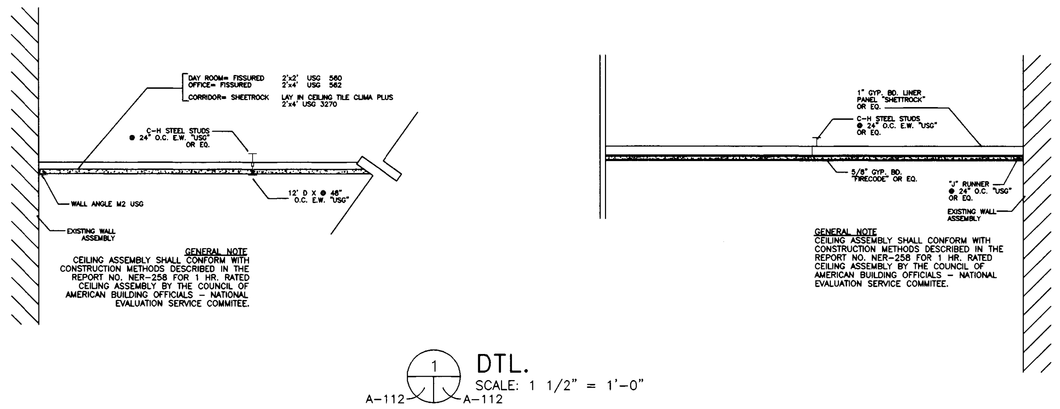
SHEETNUMBER

FB-5A

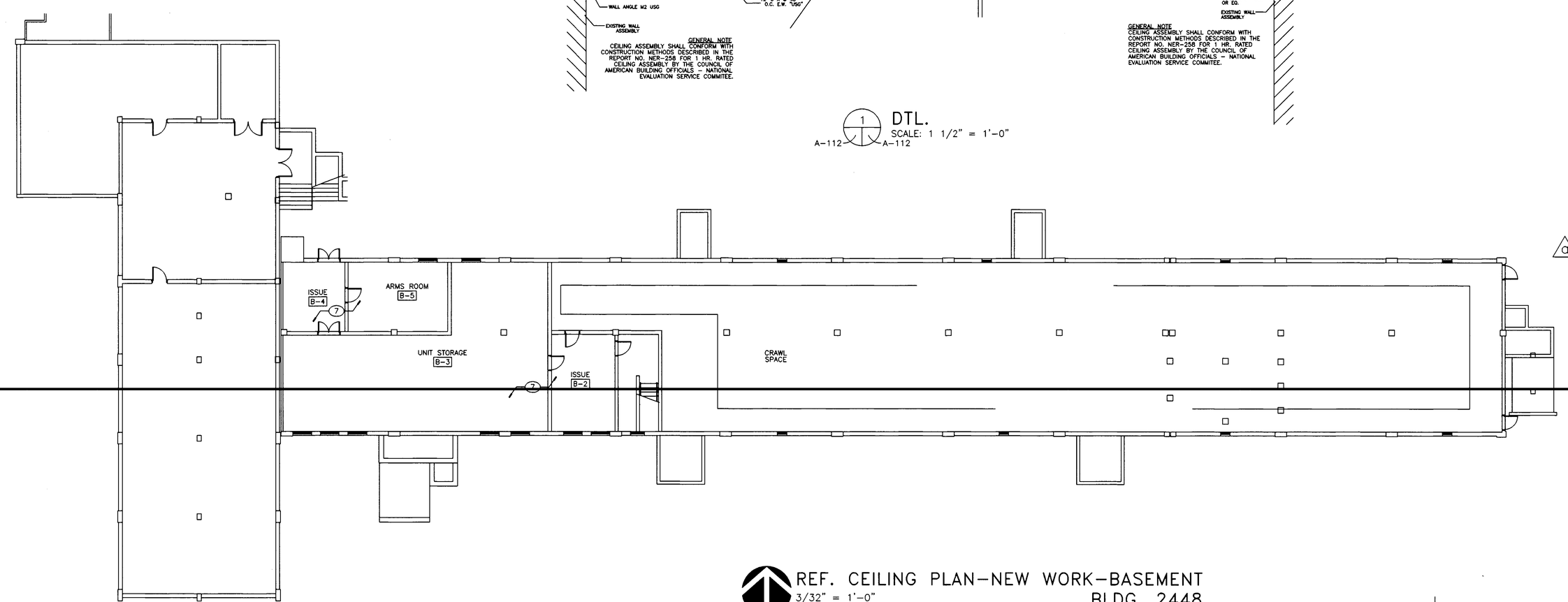


REF. CEILING PLAN–NEW WORK–FIRST FLOOR
3/32" = 1'-0"
BLDG. 2448

PLAN NORTH

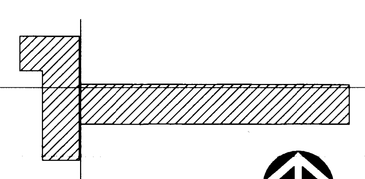


1 DTL.
A-112 A-112
SCALE: 1 1/2" = 1'-0"



REF. CEILING PLAN–NEW WORK–BASEMENT
3/32" = 1'-0"
BLDG. 2448

PLAN NORTH



KEY PLAN

GENERAL NOTES:

A. SEE ELECTRICAL DRAWINGS FOR WORK RELATED TO NEW ELECTRICAL WORK.

B. SEE MECHANICAL AND PLUMBING DRAWINGS FOR WORK RELATED TO NEW MECHANICAL/PLUMBING WORK.

KEYED NOTES:

1. PROVIDE ADDITIONAL "T" BAR TO FORM A 2' x 2' CEILING GRID. PROVIDE NEW PERIMETER CEILING WALL ANGLES THOUGHOUT.
2. REINSTALL EXISTING CEILING TILES, REPLACE DAMAGED CEILING TILES AND CEILING GRID. PROVIDE NEW PERIMETER CEILING WALL ANGLES AT EXTERIOR WALL FURR-OUT.
3. EXPOSED STRUCTURE, SEE FINISH SCHEDULE.
4. PATCH AND REPAIR GYP. BD. CEILING, FINISH AS SCHEDULED.
5. NEW 1 HR. GYP. BD. CEILING.
6. EXISTING GYP. BD. CEILING, FINISH AS SCHEDULED
7. NO WORK THIS AREA.
8. ACCESS PANEL.
9. MECHANICAL DUCTWORK, SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
10. REINSTALL EXISTING CEILING GRID AND ACOUSTICAL TILES. PROVIDE NEW PERIMETER CEILING WALL ANGLES THOUGHOUT.
11. SUSPENDED CEILING SYSTEM.

LEGEND:

- WALL MOUNTED SUPPLY AIR DUCT
- CEILING SUPPLY AIR DUCT
- RETURN AIR DUCT
- LIGHT FIXTURE
- EXIT LIGHT FIXTURE
- NEW 2' x 2' CEILING TILE/GRID
- CEILING ACCESS PANEL
- REINSTALLED 2' x 4' CEILING TILE

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.
2A	RELOCATED REVED NOTE AND ADDED DETAIL 1/A112	9-10-04	AMOOO1

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. SUITE 400
ALBUQUERQUE NEW MEXICO 87110

Designed by: D.P.
Drawn by: J.C.
Cked by: J.B.
Reviewed by: R.S.
Submitted by: Paul Waters
Date: 08/23/04 Rev.
Design file no. A-112
Drawing code:
File name: B2448A112
Plot date: 08/13/04
Plot scale: 1/8"=1'-0"

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

REF. CLNG. BASEMENT & 1ST. FLOOR
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

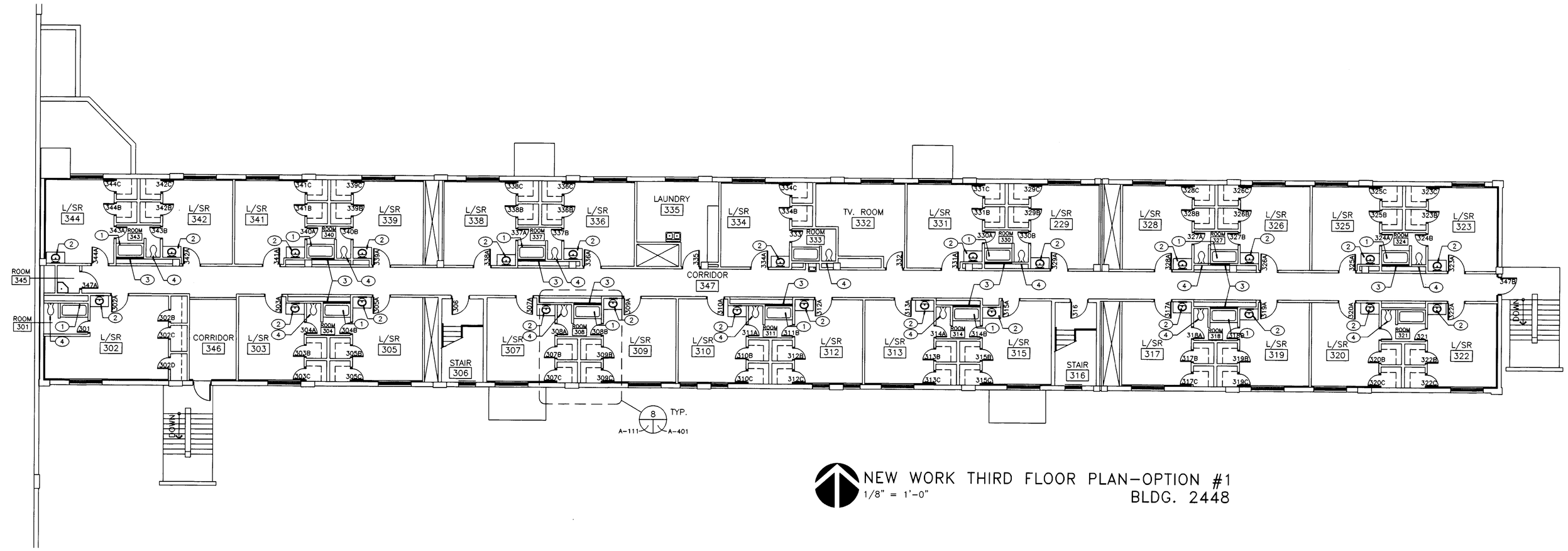
Sheet reference number:
A-112
Sheet 15 of 160

CONTRACT NO. W9126G-04-C-0034

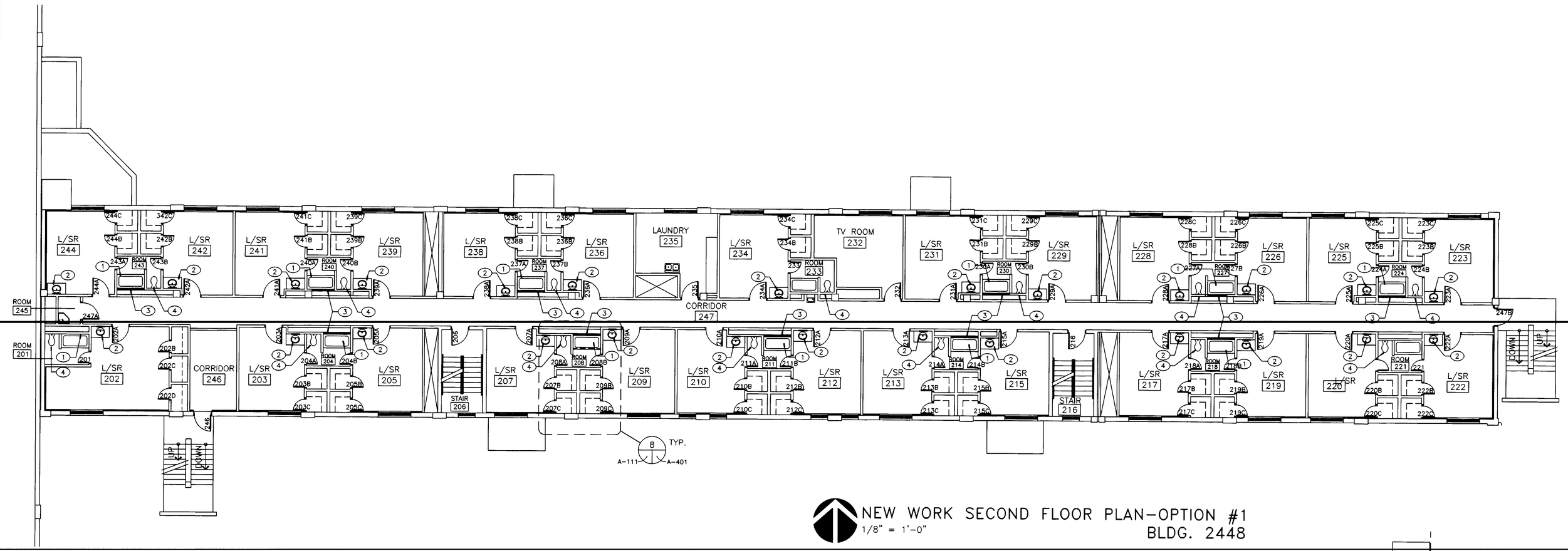
DRAWING OF WORK AS BUILT

SHEETNUMBER

FB-SA



NEW WORK THIRD FLOOR PLAN-OPTION #1
1/8" = 1'-0"
BLDG. 2448



NEW WORK SECOND FLOOR PLAN-OPTION #1
1/8" = 1'-0"
BLDG. 2448

KEY PLAN

GENERAL NOTES:

A. SEE PLUMBING DRAWINGS FOR WORK RELATED TO NEW MECHANICAL/PLUMBING WORK.
B. SEE ELECTRICAL DRAWINGS FOR WORK RELATED TO NEW ELECTRICAL WORK.

NEW WORK KEYED NOTES: ⬭

1. NEW BATHTUB. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION. PATCH CERAMIC TILE AS REQUIRED TO MATCH EXISTING FINISHES..
2. NEW LAVATORY. SEE PLUMBING DRAWINGS FOR REQUIREMENTS.
3. NEW CHASE WALL SEE WALL LEGEND.
4. AFTER NEW WORK HAS BEEN COMPLETED AS PER PLUMBING DRAWINGS, CLEAN AND REINSTALL TOILETS.

WALL TYPES

EXISTING WALL

EXISTING CMU WALL W/ 1" "Z" CHANNEL FURRING @ 16" O.C. & 5/8" GYP. BD.

3-5/8" 20 GAUGE METAL STUD @ 16" O.C. WITH WATER RESISTANT GYP. BD. ON ONE SIDE ONLY.

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.

Mark	Description	Date	Appr.

Date: 08/23/04 Rev.
Design file no.: x
Drawing code: x
File name: x
Plot date: 08/13/04
Plot scale: x

Designed by: x
Drawn by: x
Ckd by: x
Reviewed by: x
Submitted by: Paul Waters

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BRLW ARCHITECTS & ENGINEERS, INC
6200 UPTOWN BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

NEW WORK 2ND. & 3RD. FLOOR
BLDG. 2448
OPTION #1

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

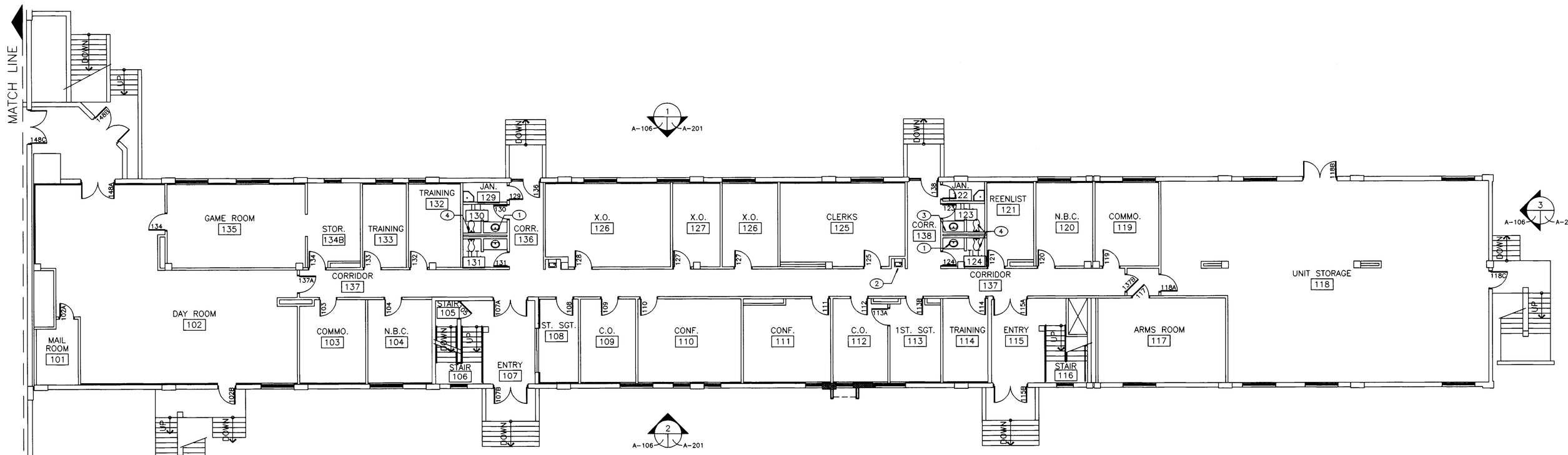
Sheet reference number:
A-111
Sheet 14 of 160

CONTRACT NO. W9126G-04-C-0034

SHEETNUMBER

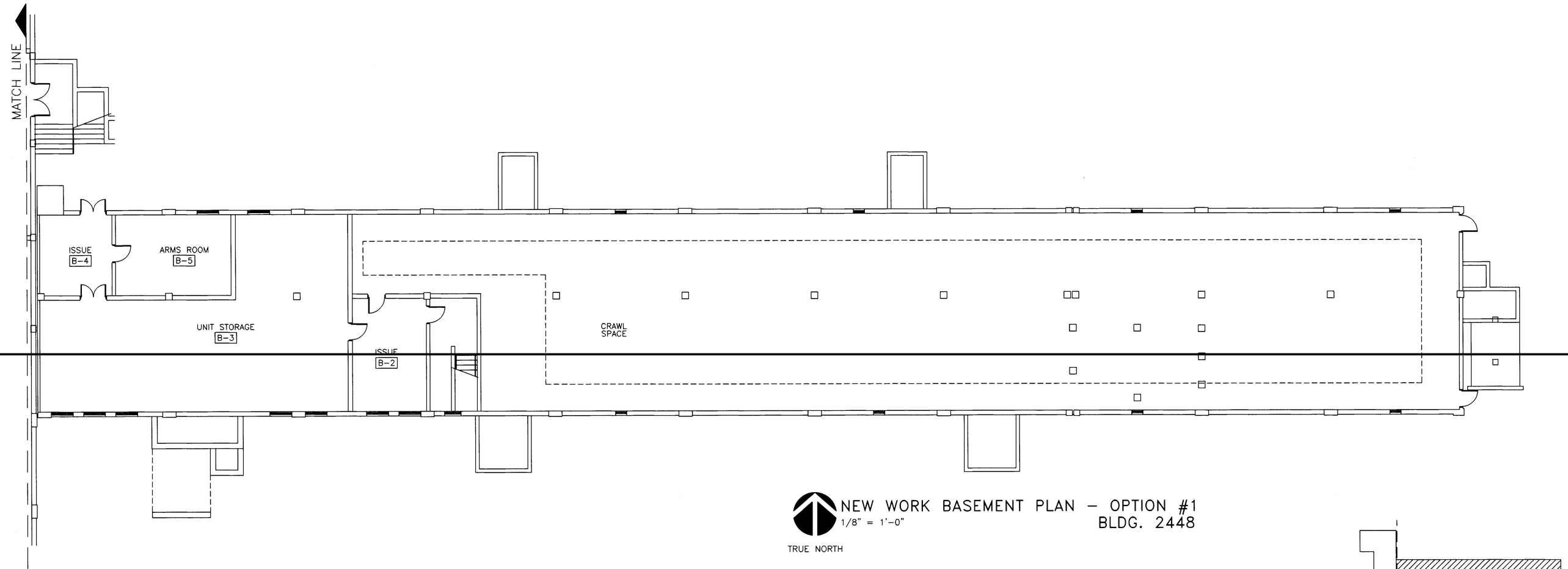
DRAWING OF WORK AS BUILT

FB-5A



NEW WORK FIRST FLOOR PLAN – OPTION #1
1/8" = 1'-0"
BLDG. 2448

TRUE NORTH



NEW WORK BASEMENT PLAN – OPTION #1
1/8" = 1'-0"
BLDG. 2448

TRUE NORTH

KEY PLAN

GENERAL NOTES:

A. REMOVE OLD CAULKING AND PROVIDE CONTINUOUS NEW CAULKING AT ALL COUNTERS SCHEDULED TO REMAIN.

NEW WORK KEYED NOTES:

1. INSTALL NEW LAVATORY, MODIFY EXISTING COUNTER AS REQUIRED, PATCH AND REPAIR AN NECESSARY.
2. PROVIDE AND INSTALL NEW WATER FOUNTAIN, SEE PLUMBING DWGS FOR TYPE.
3. INSTALL NEW LAVATORY FIXTURES, SEE PLUMBING DWGS.
4. INSTALL NEW TOILET FIXTUES, SEE PLUMBING DWGS.

WALL TYPES

EXISTING WALL

EXISTING CMU WALL W/ 1" "Z" CHANNEL FURRING @ 16" O.C. & 5/8" GYP. BD.

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.	Mark	Description	Date	Appr.

Date: 08/23/04 Rev.
Design file no. 04-110
Drawing code:
File name: B2448A110
Plot date: 08/31/04
Plot scale: 1/8"=1'-0"

Designed by: D.P.
Dwn by: L.A.S.
Ckd by: L.A.S.
Reviewed by: E.A.
Submitted by: Paul Waters

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLM ARCHITECTS & ENGINEERS, INC.
4100 JOHN ROAD, SUITE A-100
ALBUQUERQUE, NEW MEXICO 87110

7/104 BMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

NEW WORK BASEMENT & 1ST. FLOOR
BUILDING 2448
(OPTION #1)
SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

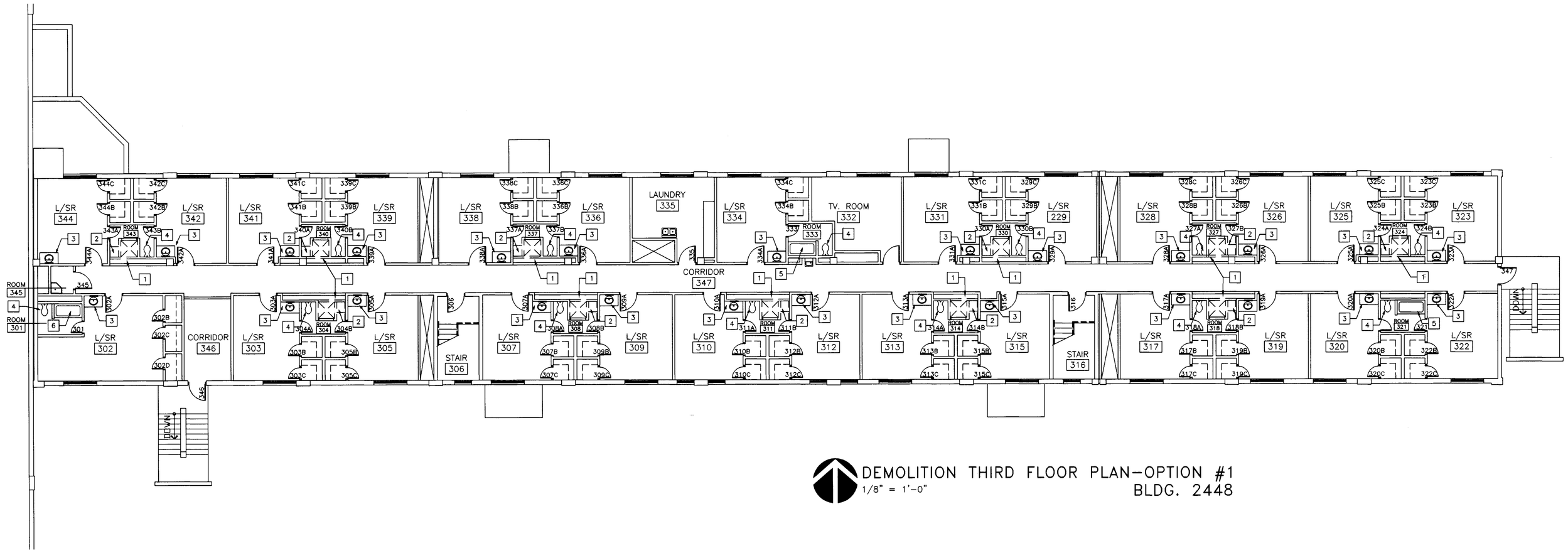
Sheet reference number:
A-110
Sheet 13 of 160

CONTRACT NO. W9126G-04-C-0034

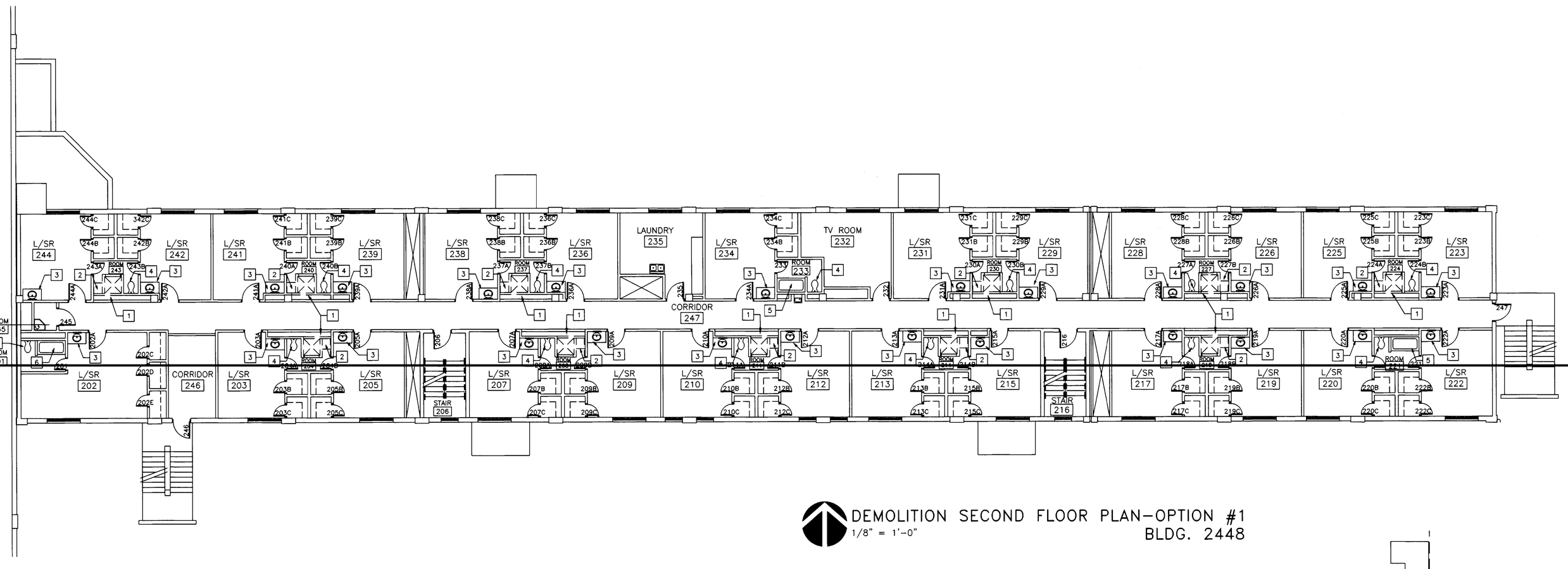
DRAWING OF WORK AS BUILT

SHEETNUMBER

FB- 5A



DEMOLITION THIRD FLOOR PLAN–OPTION #1
1/8" = 1'–0"
BLDG. 2448



DEMOLITION SECOND FLOOR PLAN–OPTION #1
1/8" = 1'–0"
BLDG. 2448

GENERAL NOTES:

A. CUT AND REMOVE PORTION OF GYP. BD. CEILING/ WALL AS REQUIRED FOR MECH. AND PLUMBING WORK, SEE MECHANICAL/PLUMBING DRAWINGS.
B. SEE ELECTRICAL DRAWINGS FOR WORK RELATED TO REMOVAL AND RELOCATION OF EMERGENCY LIGHT FIXTURES, ALARM DEVICES, ETC.
C. SEE PLUMBING DRAWINGS FOR WORK RELATED TO REMOVAL AND RELOCATION OF PLUMBING FIXTURES.

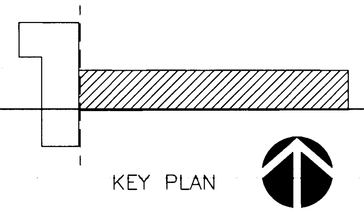
DEMOLITION KEYED NOTES:

1. PORTION OF WALL TO BE REMOVED FOR THE INSTALLATION OF NEW SHOWER BATHTUB. REMOVE FLOOR AND WALL TILE FROM REMAINING WALLS, AS NECESSARY FOR THE INSTALLATION OF NEW PLUMBING FIXTURE..
2. EXISTING SHELVING TO BE REMOVED.
3. REMOVE EXISTING LAVATORY SEE PLUMBING DWGS. FOR PLUMBING FIXTURE WORK REQUIREMENTS..
4. EXISTING TOILET TO BE REMOVED AND STORED FOR REINSTALLATION, SEE PLUMBING DWGS. FOR NEW WORK.
5. EXISTING BATH TUB TO REMAIN.
6. EXISTING BATH TUB TO BE REMOVED

DEMOLITION KEYED NOTES WALL LEGEND:

========== EXISTING WALL TO BE DEMOLISHED.

———————— EXISTING WALL TO REMAIN.



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.

Designed by: CDP
Dwn by: J.C.
Ckd by: J.B.
Reviewed by: J.A.
Submitted by: Paul Waters
Date: 06/23/04 Rev.
Design file no. A-109
Drawing code:
File name 02148A109
Plot date 06/23/04
Plot scale 1"=1'-0"

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

DEMOLITION 2ND. & 3RD. FLOOR
BLDG. 2448
OPTION #1

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

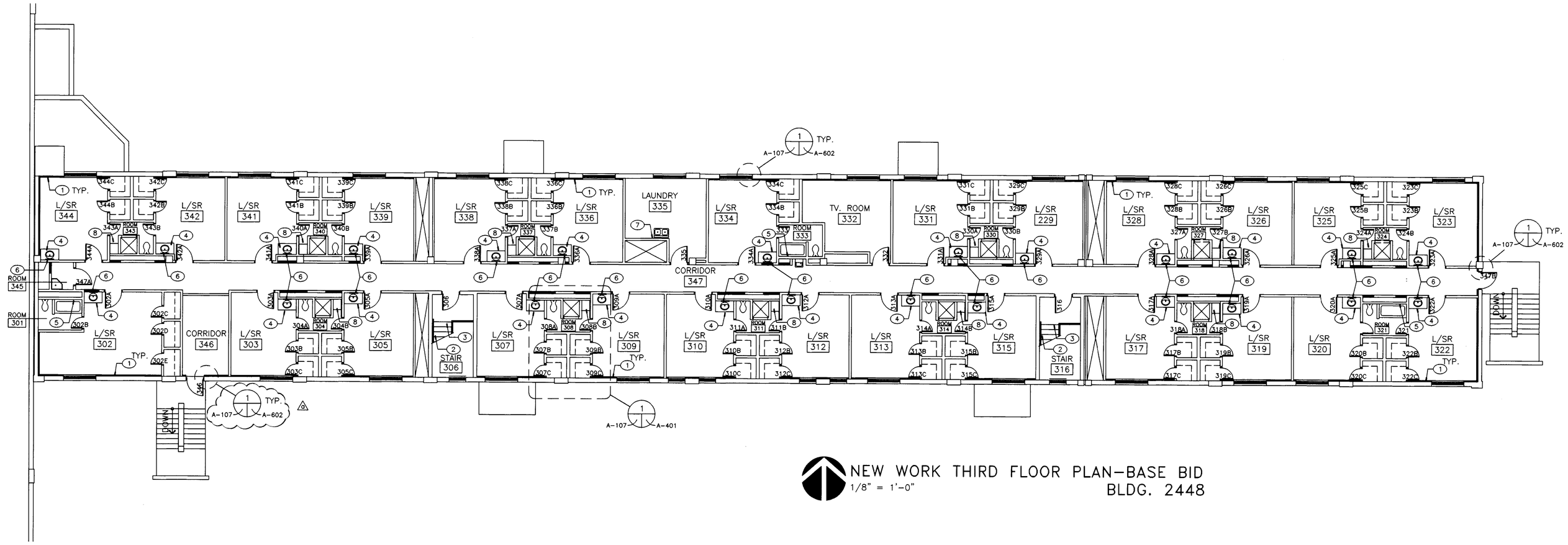
Sheet reference number:
A–109
Sheet 12 of 160

CONTRACT NO. W9126G–04–C–0034

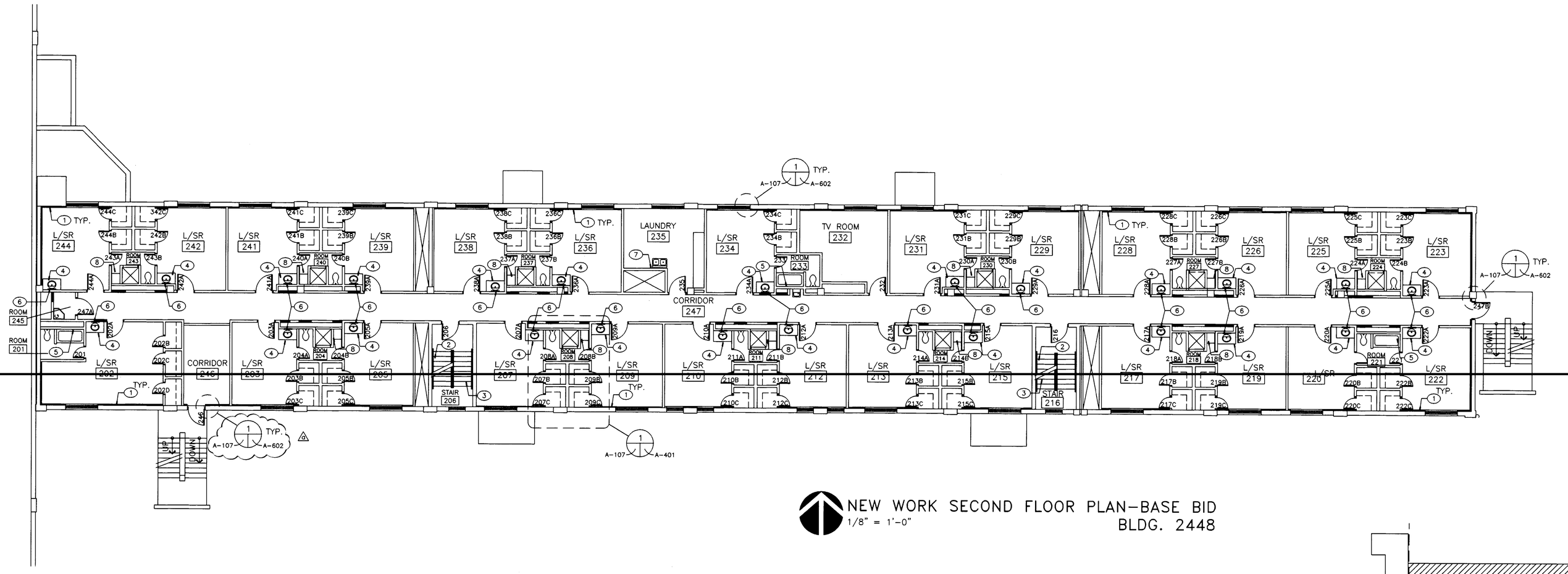
DRAWING OF WORK AS BUILT

SHEETNUMBER

FB-5A



NEW WORK THIRD FLOOR PLAN–BASE BID
1/8" = 1'-0"
BLDG. 2448



NEW WORK SECOND FLOOR PLAN–BASE BID
1/8" = 1'-0"
BLDG. 2448

GENERAL NOTES:

A. REPLACE DAMAGED WEATHER STRIPING AT ALL EXTERIOR DOORS.
B. REPLACE BROKEN GLAZING AT WINDOWS AND VISION PANELS AT DOORS.
C. CLEAN BATHROOM FLOORS WITH MURATIC ACID SOLUTION.
D. REINSTALL DOOR HARDWARE, ROOM PLATES, KICK PLATES, ETC. TO DOORS.
F. SEE ELECTRICAL DRAWINGS FOR WORK RELATED TO NEW ELECTRICAL WORK.
G. SEE PLUMBING DRAWINGS FOR WORK RELATED TO NEW MECHANICAL/PLUMBING WORK.
H. CLEAN, POINT, REPAIR/REPLACE AND SEAL CERAMIC TILE IN BATHROOMS FLOORS AND WALLS AS NEEDED.
I. REMOVE OLD CAULKING AND PROVIDE CONTINUOUS NEW CAULKING AT ALL COUNTERS SCHEDULED TO REMAIN.
J. REPAIR/REPLACE DAMAGED CLOSET RODS AND SHELVING IN SLEEPING ROOM CLOSETS, PAINT ALL SHELVING.
K. PROVIDE WINDOW SCREENS THROUGHOUT
L. REPAIR/ADJUST WINDOW FRAMES WHERE REQUIRED.

NEW WORK KEYED NOTES: ⬭

1. WALL FURR-OUT AT EXISTING EXPOSED CMU WALL., SEE WALL TYPES.
2. PAINT HANDRAIL, COLOR TO BE SELECTED BY CONTRACT OFFICER.
3. PROVIDE FULL COVER SAFETY TREADS AT STAIRS.
4. EXISTING VANITY TO REMAIN
5. APPLY NEW CONT. CAULKING AROUND EXISTING BATHTUB.
6. NEW MEDICINE CABINET, CAULK ALL AROUND. MATCH EXISTING SIZE.
7. PROVIDE 4' WIDE x 4' HIGH CERAMIC TILE WAINSCOT AT SINK.
8. PAINT ALL EXISTING SHELVING AT SHOWER ROOM, TYP.

WALL TYPES

EXISTING WALL

EXISTING CMU WALL W/ 1" "Z" CHANNEL FURRING @ 16" O.C. & 5/8" GYP. BD.

3-5/8", 20 GAUGE METAL STUD @ 16" O.C. WITH WATER RESISTANT GYP. BD. ON ONE. SIDE ONLY. FINISH TO MATCH ADJACENT FINISH.

KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.
AA	REFERENCE DETAIL	9-10-04	AMJ0031

Designed by: D.P. | Dwn by: J.C. | Ckd by: J.A. | Reviewed by: S.A. | Submitted by: Paul Waters | Date: 08/23/04 | Rev. | Design file no. | Drawing code: | File name: B2448A107 | Plot date: 08/23/04 | Plot scale: 1/8"=1'-0"

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPM ARCHITECTS & ENGINEERS, INC.
1100 CENTRAL AVE. SW
ALBUQUERQUE, NEW MEXICO 87110

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

NEW WORK 2ND. & 3RD. FLOOR–BASE BID
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

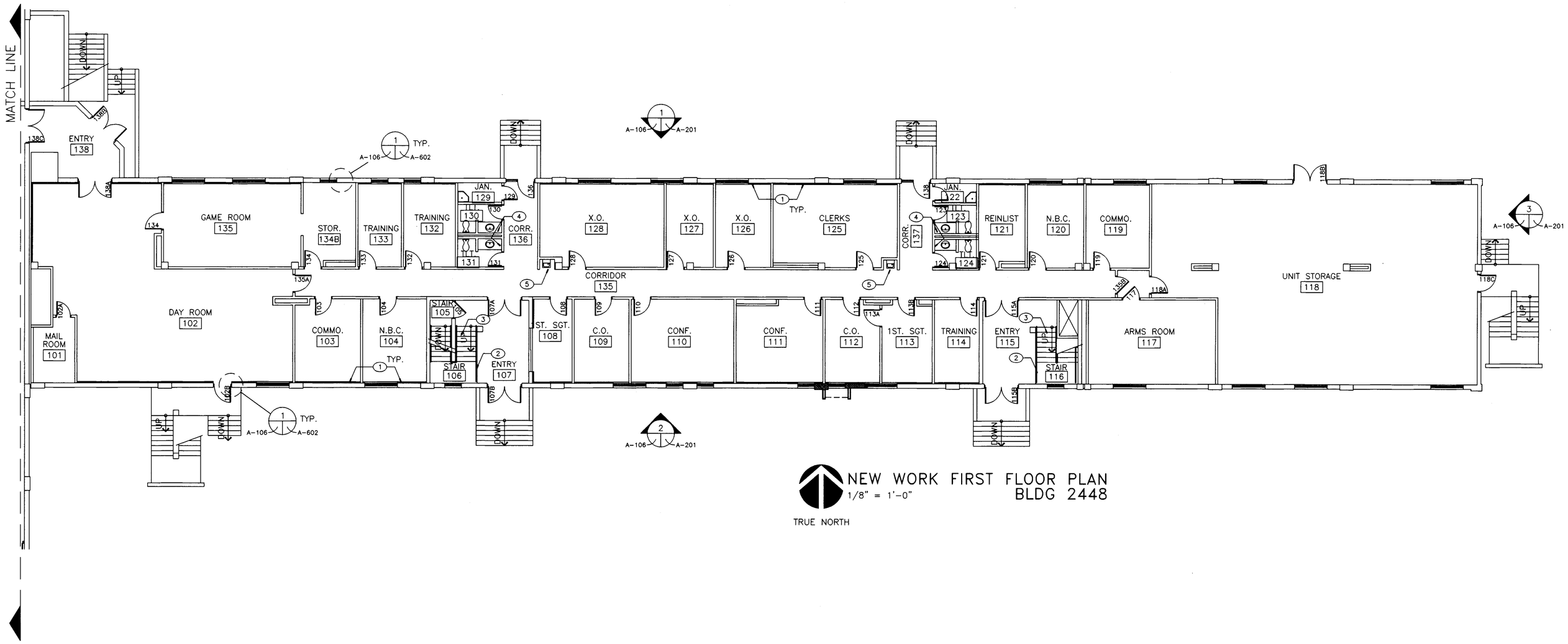
Sheet reference number:
A-107
Sheet 10 of 160

CONTRACT NO. W9126G-04-C-0034

DRAWING OF WORK AS BUILT

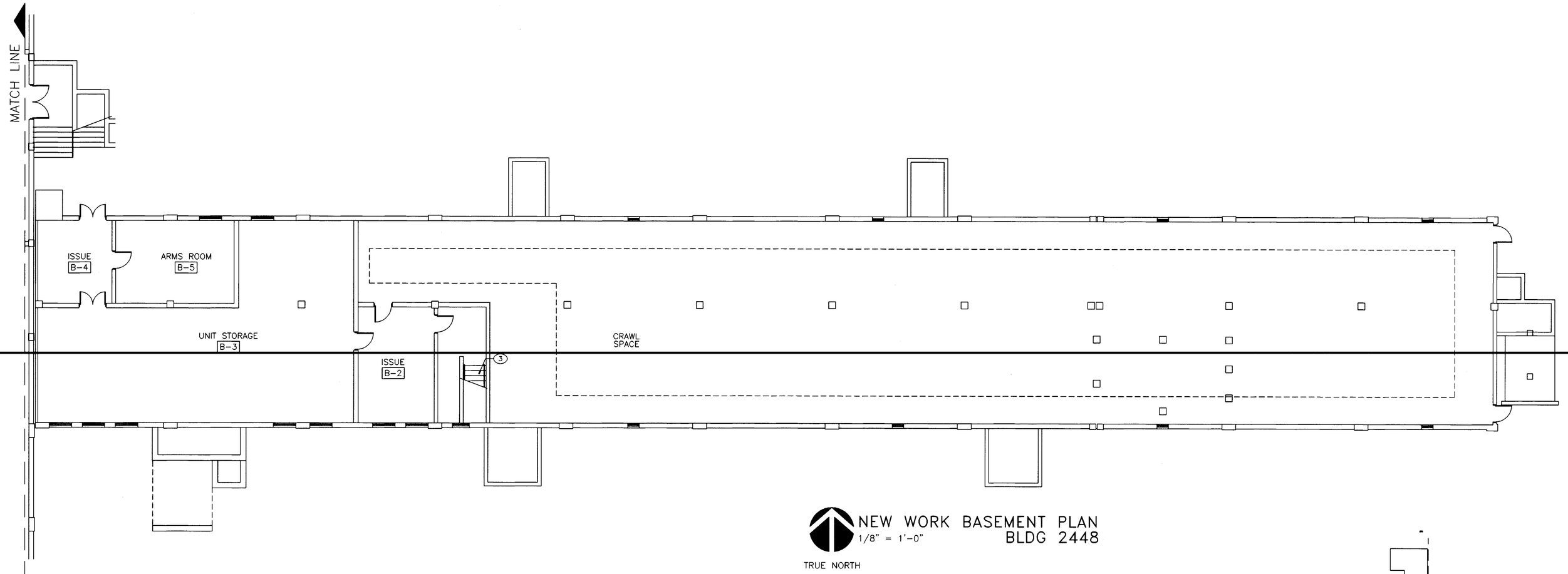
SHEET NUMBER

FB-5A



NEW WORK FIRST FLOOR PLAN
1/8" = 1'-0"
BLDG 2448

TRUE NORTH



NEW WORK BASEMENT PLAN
1/8" = 1'-0"
BLDG 2448

TRUE NORTH

KEY PLAN

GENERAL NOTES:

A. AFTER APPLYING WALL FINISHES, REINSTALL TACK BOARDS, DISPLAY CABINETS, ETC. AT ORIGINAL LOCATION.
B. SEE FINISH SCHEDULE FOR NEW FINISHES.
C. CLEAN, POINT, REPAIR/REPLACE AND SEAL CERAMIC TILE IN BATHROOMS FLOORS AND WALLS AS NEEDED.
D. REMOVE OLD CAULKING AND PROVIDE CONTINUOUS NEW CAULKING AT ALL COUNTERS SCHEDULED TO REMAIN.
E. PROVIDE WINDOW SCREENS THROUGHT.
F. REPAIR/ADJUST WINDOW FRAMES WHERE REQUIRED.
G. REINSTALL DOOR HARDWARE, ROOM PLATES, KICK PLATES, ETC. TO DOORS.
H. REPLACE DAMAGED WEATHER STRIPING AT ALL EXTERIOR DOORS/FRAMES.

OPTION #2

PROVIDE A WOODEN TACKBOARD IN CORRIDOR AND ENTRYWAY, EXACT LOCATION OF INSTALLATION TO BE DETERMINED.

REFER TO FINISH SCHEDULE FOR WALL FINISH REPLACEMENT AT ENTIRE CORRIDORS IN BUILDING 2448, FIRST FLOOR ONLY.

NEW WORK KEYED NOTES: ⬭

1. WALL FURR-OUT AT EXISTING EXPOSED CMU WALL., SEE WALL TYPES.
2. PAINT HANDRAIL, COLOR TO BE SELECTED BY CONTRACT OFFICER
3. PROVIDE FULL COVER SAFETY TREADS AT STAIRS.
4. APPLY NEW CAULKING AT ALL EXISTING MILLWORK.
5. CLEAN/REPAIR EXISTING DRINKING FOUNTAINS.

WALL TYPES

EXISTING WALL

EXISTING CMU WALL W/ 1" "Z" CHANNEL FURR-OUT @ 16" O.C. & 5/8" GYP. BD.

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BRLW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

Designed by: D.P.
Drawn by: J.C.
Chkd by: J.B.
Reviewed by: R.A.L.
Submitted by: Paul Waters
Date: 08/23/04
Rev.
Design file no. A-106
Drawing code:
File name: B2448A106
Plot date: 08/23/04
Plot scale: 1/8"=1'-0"

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

NEW WORK BASEMENT & 1ST. FLOOR
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

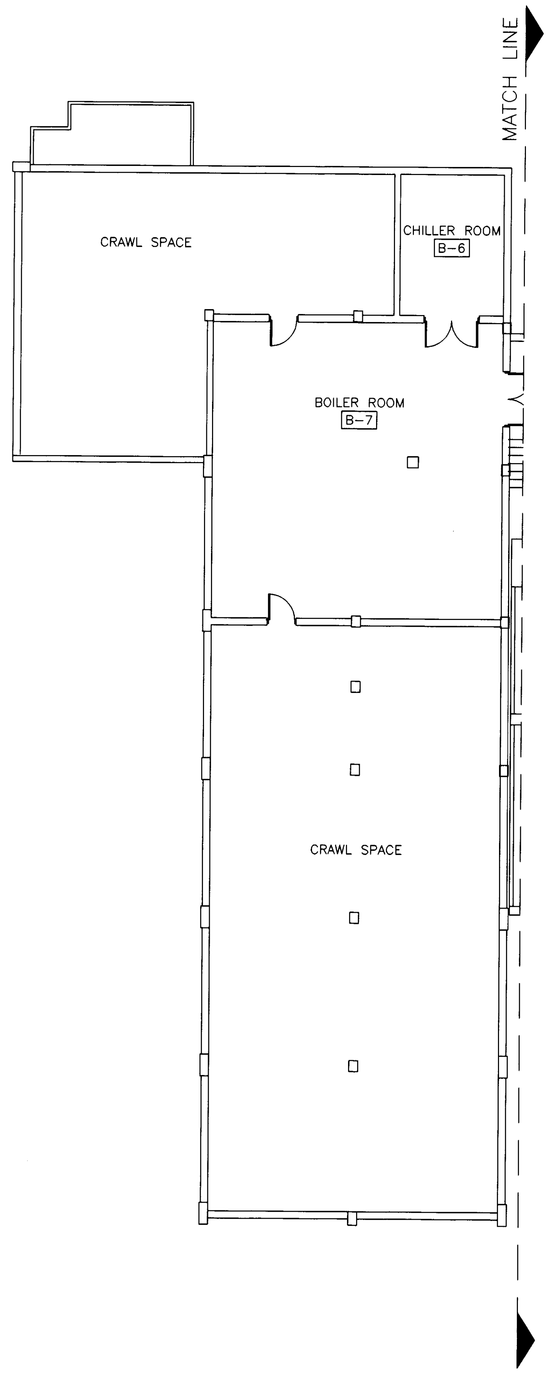
Sheet reference number:
A-106
Sheet 9 of 160

CONTRACT NO. W9126G-04-C-0034

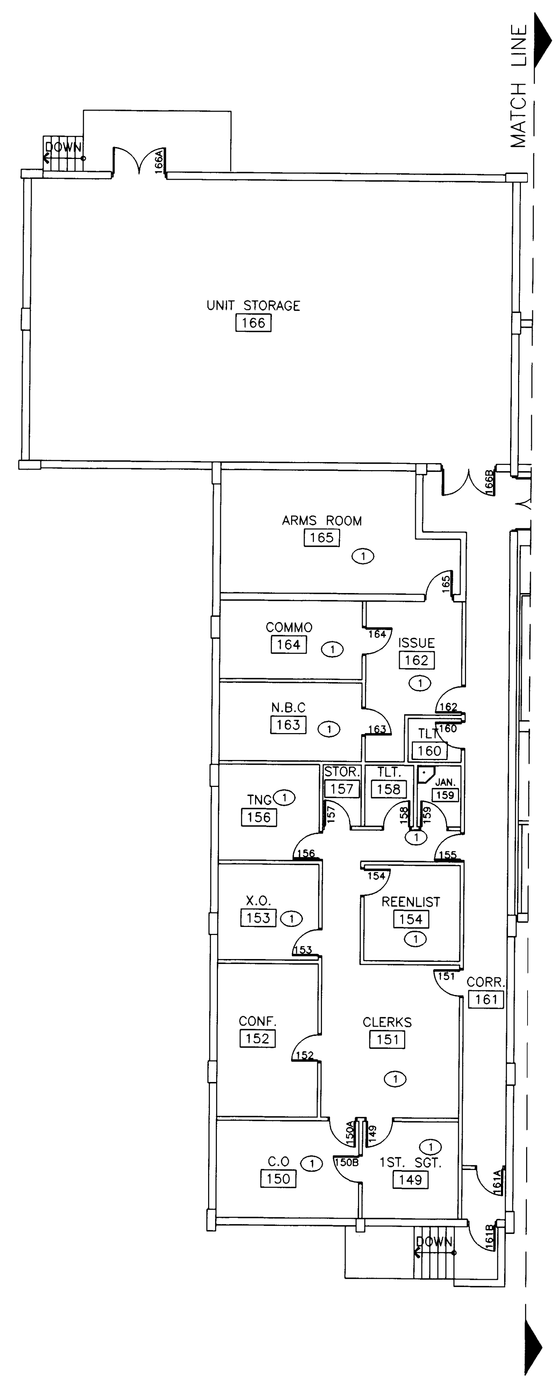
DRAWING OF WORK AS BUILT

SHEETNUMBER

FB-SA



NEW WORK BASEMENT PLAN
1/8" = 1'-0"
BLDG 2448
TRUE NORTH



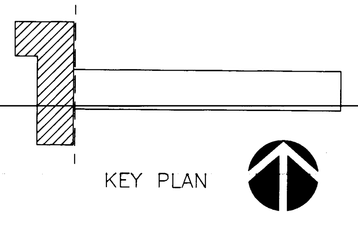
NEW WORK FIRST FLOOR PLAN
1/8" = 1'-0"
BLDG 2448
TRUE NORTH

GENERAL NOTES:

A. SEE ELECTRICAL DRAWINGS FOR WORK RELATED TO NEW ELECTRICAL WORK.
B. SEE PLUMBING DRAWINGS FOR WORK RELATED TO NEW MECHANICAL/PLUMBING WORK.

KEYED NOTES:

1. REINSTALL CLG TILES. REFER TO REFLECTED CLG. PLAN.



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.

Date: 08/23/04 Rev.
Design file no. A-105
Drawing code:
File name: B2448A105
Plot date: 08/13/04
Plot scale: 1/8"=1'-0"

Designed by: D.P.
Dwn by: J.C.
Ckd by: J.G.
Reviewed by: K.L.
Submitted by: Paul Waters

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

NEW WORK BASEMENT & 1ST. FLOOR
HAMMER HEAD
BUILDING 2448

SOLICITATION NO. W91256-04-B-0017
CONTRACT NO. W91256-04-C-0034

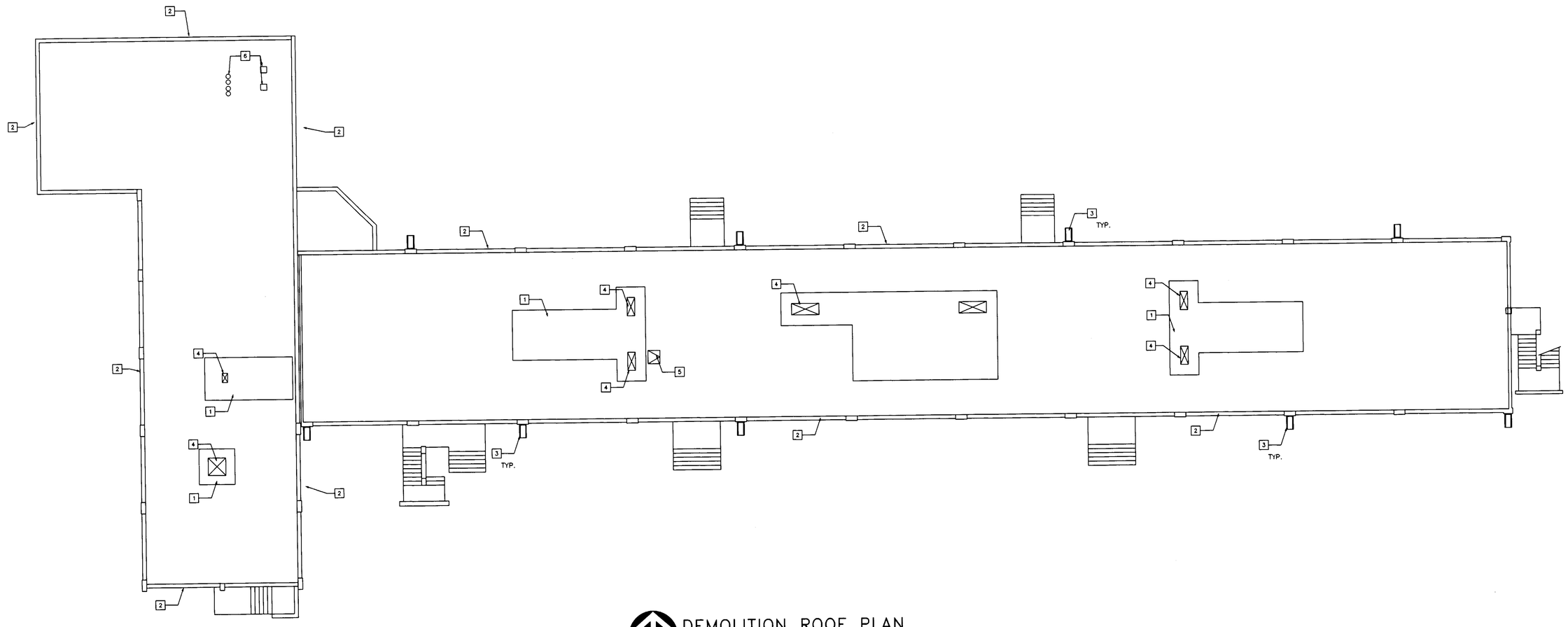
Sheet reference number:
A-105
Sheet 8 of 160

CONTRACT NO. W91256-04-C-0034

SHEETNUMBER

DRAWING OF WORK AS BUILT

FB-SA



DEMOLITION ROOF PLAN
3/32" = 1'-0"
BLDG 2448

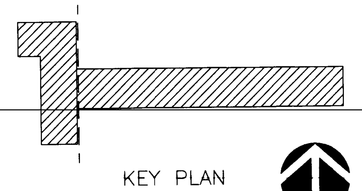
TRUE NORTH

GENERAL NOTES:

A. SEE ELECTRICAL DRAWINGS FOR WORK RELATED NEW ELECTRICAL WORK.
B. SEE PLUMBING DRAWINGS FOR WORK RELATED TO NEW MECHANICAL/PLUMBING WORK.
C. PROTECT OPENINGS FOR SAFETY AND FROM WEATHER.
D. CONTRACTOR TO COMPLY WITH EXISTING ROOF MANUFACTURERS SPECIFICATIONS ON ROOFING MODIFICATIONS. CONTACT OWNER FOR MANUFACTURERS ROOF WARRANTY.

KEYED NOTES:

1. REMOVE EQUIPMENT CURBS AND PREPARE ROOF FOR INSTALLATION OF ROOF PATCHING.
2. CLEAN GUTTERS AND DOWN SPOUTS FROM DEBRIS AND REPAIR AS REQUIRED.
3. EXISTING SPLASH BLOCK BELOW, PROVIDE NEW WHERE MISSING.
4. PREPARE EXISTING ROOF PENETRATION FOR CAPPING.
5. EXISTING ROOF HATCH TO REMAIN.
6. PROVIDE NEW ROOF PENETRATION FOR NEW MECHANICAL EQUIPMENT. SEE MECHANICAL DWGS.



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.	Mark	Description	Date	Appr.

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

Designed by: E.P.
Dwn by: J.C.
Ckd by: L.A.B.
Reviewed by: E.A.
Submitted by: Paul Waters
Date: 06/23/04 Rev.
Design file no. 1-4-03
Drawing code: X
File name: 01A06X1A
Plot date: 06/15/04
Plot scale: 1/8"=1'-0"

BPLW ARCHITECTS & ENGINEERS, INC.
2000 LOUISIANA BLVD NE, STE 400
ALBUQUERQUE, NEW MEXICO 87110

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

DEMOLITION ROOF PLAN
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

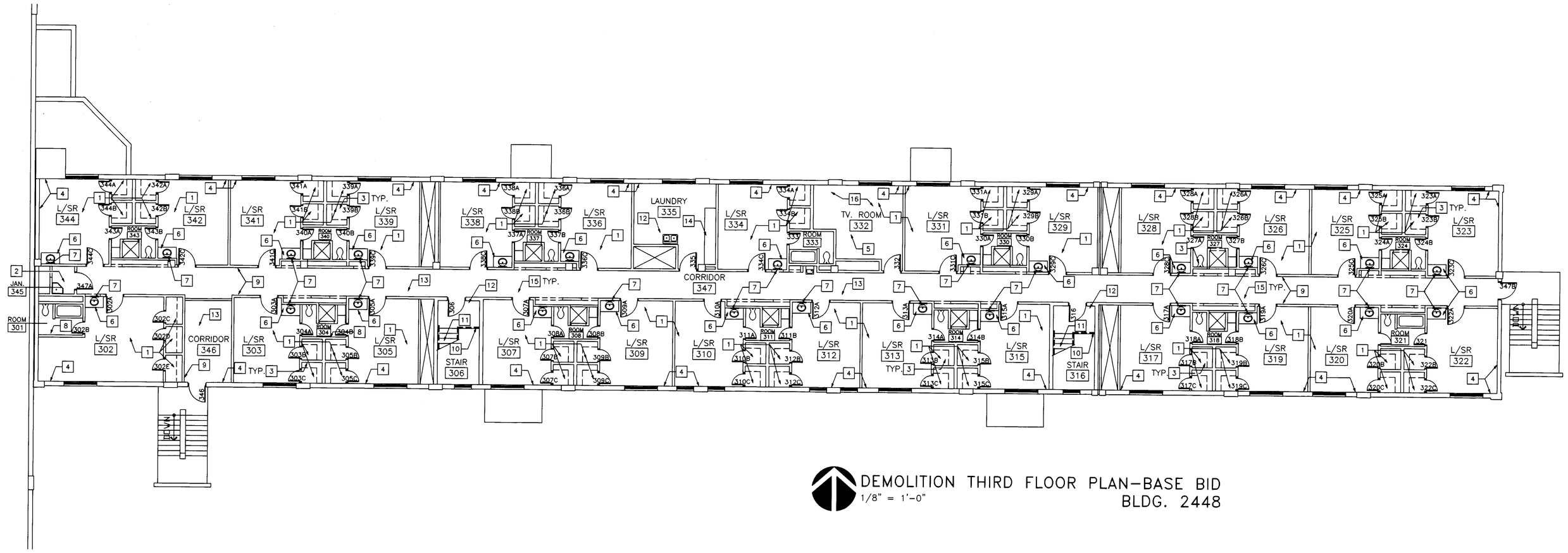
Sheet reference number:
A-104
Sheet 7 of 160

CONTRACT NO. W9126G-04-C-0034

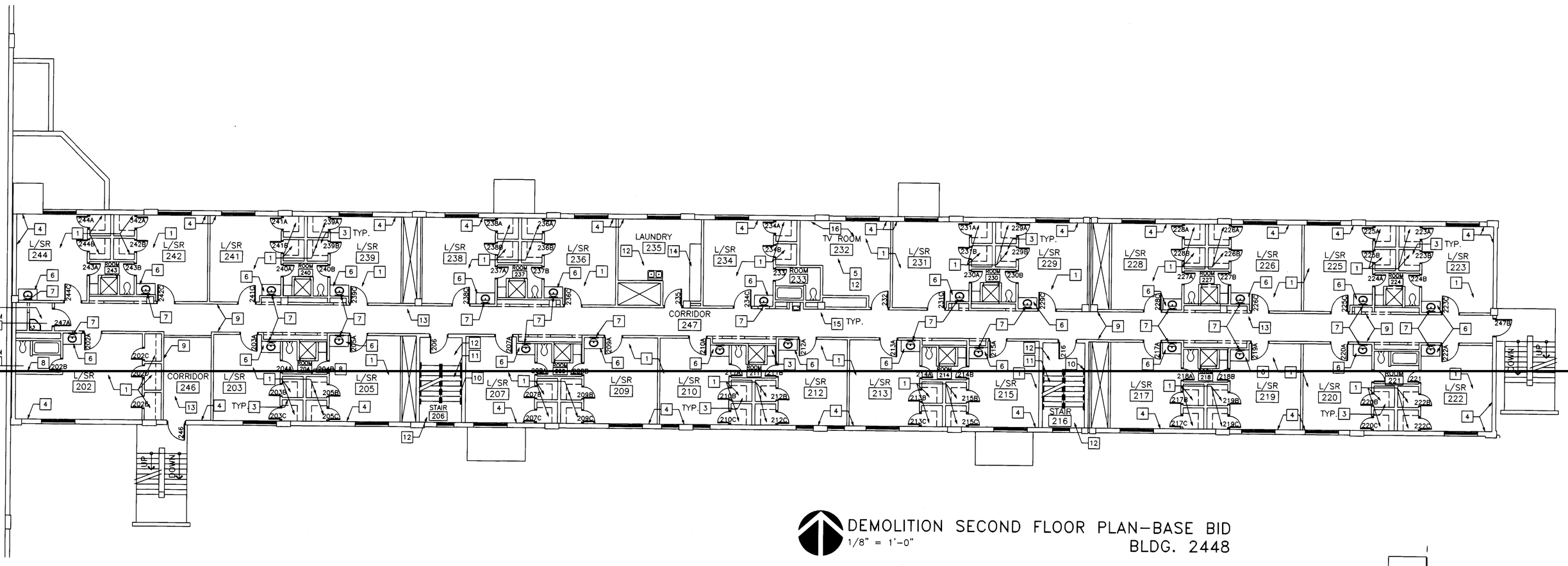
DRAWING OF WORK AS BUILT

SHEETNUMBER

FB-SA



DEMOLITION THIRD FLOOR PLAN–BASE BID
1/8" = 1'-0"
BLDG. 2448



DEMOLITION SECOND FLOOR PLAN–BASE BID
1/8" = 1'-0"
BLDG. 2448

GENERAL NOTES:

A. REMOVE TACK BOARDS, DISPLAY CABINETS, ETC. FROM WALL. CLEAN/REPAIR AND STORE FOR REINSTALLATION.

B. REMOVE PLATE ROOM NUMBER ETC. FROM DOOR/FRAMES CLEAN/REPAIR AND STORE FOR REINSTALLATION. IN ORDER TO PREVENT DAMAGE TO WOOD DOORS DO NOT REMOVE PLATES IF THEY ARE ADHERED TO DOOR.

C. REFER TO DOOR SCHEDULE FOR DOORS TO BE REFINISHED. ALL DOORS SHALL BE STRIPPED AND FINISHED IN PLACE. IT IS THE CONTRACTORS OPTION TO REMOVE HARDWARE FROM THE DOOR AND FRAME FOR NEW WORK.

D. CUT AND REMOVE PORTION OF GYP. BD. CEILING/ WALL AS REQUIRED FOR MECH. AND PLUMBING WORK. SEE MECHANICAL/PLUMBING DRAWINGS.

E. REMOVE DRAPERY HANGER/BRACKETS. STORE FOR RELOCATION. DISCARD DAMAGED AND REPLACE WITH NEW.

F SEE ELECTRICAL DRAWINGS FOR WORK RELATED TO REMOVAL AND RELOCATION OF EMERGENCY LIGHT FIXTURES, ALARM DEVICES, ETC.

G. SEE PLUMBING DRAWINGS FOR WORK RELATED TO REMOVAL AND RELOCATION OF PLUMBING FIXTURES.

H. TYP. AT ALL CLOSET, REMOVE DAMAGED SHELVING/COAT HANGERS. PREPARE FOR INSTALLATION OF NEW ITEMS. ACCOUNT FOR 40 SF. OF SHELVING & 100 LINEAR FT. FOR HANGER, MATCH EXISTING. (THROUGHOUT BLDG. 2448).

I. STRIP AND REMOVE RUST FROM ALL DOOR FRAMES INTERIOR AND EXTERIOR). PATCH HOLES WHERE REQUIRED. PREPARE FOR NEW FINISHES.

J. TYP. AT ALL SHOWER/TLT. ROOMS, AT AREAS OF PAINT PEALING OFF AND WHERE MOLDING EXISTS (CEILING/WALL) SCRAPE SURFACE AND PREPARE FOR NEW FINISHES, ASSUME 300 S.F. THROUGHOUT BLDG. 2448.

K. REMOVE WATER DAMAGED GYP. AT CEILING AND WALLS IN SHOWER ROOMS. ASSUME 100 S.F. THROUGHOUT BLDG. 2448.

L. LEVEL PATCHING AND APPLY TEXTURE TO MATCH ADJACENT SURFACES. ACCOUNT FOR 200 S.F. THROUGHOUT BLDG. 2448

M. PROVIDE AND INSTALL MISSING AND DAMAGED LOCK SETS ON CLOSET DOORS. ASSUME 10 SETS. MATCH EXISTING. THROUGHOUT BLDG. 2448

N. AT BUILDING 2448 REMOVE ALL BLINDS FOR THE EXCEPTION OF THE BLINDS AT THE STAIR CASE AND THE HAMMER HEAD AREA. CLEAN WINDOW FOR INSTALLATION OF NEW BLINDS. ACCOUNT FOR A TOTAL OF 85 BLINDS FOR 1ST, 2ND AND 3RD FLOORS.

O. SERVICE AND ASSURE FIRE EXTINGUISHERS AND CABINETS ARE IN PROPER WORKING CONDITION TYPICAL OF 3 PER FLOOR.

P. IN AREAS WHERE THERE HAS BEEN WATER DAMAGE TO THE SHEETROCK OR DISCOLORATION, THE SHEETROCK NEEDS TO BE REMOVED. IN THE PROCESS OF REMOVING THE CONTRACTOR SHOULD KEEP THE MATERIAL WET WITH EITHER A BIOCIDE OR A 10% BLEACH SOLUTION (1 PART BLEACH TO 10 PARTS WATER). CONTRACTOR SHOULD CUT APPROXIMATELY 2" TO 3" BEYOND EITHER THE WATER DAMAGE OR DISCOLORATION TO ASSURE ALL THE DAMAGED AREAS ARE REMOVED. CONTRACTOR WILL DISPOSE OF ALL MATERIAL REMOVED PER BASE STANDARDS.

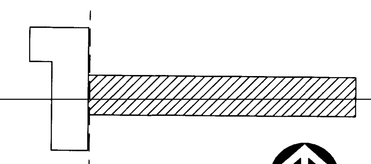
DEMOLITION KEYED NOTES:

1. EXISTING CARPET, PAD, AND VINYL BASE TO BE REMOVED AND DISPOSED. PREPARE FLOOR SLAB FOR NEW FINISHES.
2. EXISTING FLOOR FINISHES TO REMAIN, PATCH AS NECESSARY.
3. REMOVE PORTION OF GYP. BD CEILING FOR NEW HVAC WORK. REFER TO MECHANICAL/PLUMBING FOR EXTENT OF NEW WORK.
4. EXISTING WOOD TRIM MOUNTED ON WALL TO BE REMOVED FOR NEW WALL FURR-OUT
5. REMOVE AND DISPOSE EXISTING DAMAGED ACOUSTICAL GRID/CEILING TILES.
6. EXISTING VANITY CABINET/PLUMBING FIXTURE TO REMAIN. REMOVE OLD SEALANT AT BACK AND SIDE SPLASH AND REPLACE IT WITH NEW.
7. REMOVE EXISTING MEDICINE CABINET
8. NOT USED.
9. EXISTING FABRIC & FRP WALL COVERING TO REMAIN, PATCH AND REPAIR WHERE REQUIRED.
10. WITH EXISTING HANDRAILS IN-PLACE, STRIP AND PAINT.
11. REMOVE ALL STAIR SAFETY COVER TREADS AT ALL INTERIOR STAIRS.
12. REMOVE EXISTING VCT FLOORING AND WALL BASE, PREPARE SLAB FOR NEW FINISHES.
13. REMOVE EXISTING RUBBER FLOOR AND WALL BASE, PREPARE SLAB FOR NEW FINISHES.
14. REMOVE OLD CAULKING FROM MILLWORK. PREPARE SURFACES FOR NEW CAULKING. PREPARE SURFACE FOR NEW FINISH WHERE PLASTIC LAM. IS MISSING.
15. REMOVE EXISTING GYP. BD CEILING IN ITS ENTIRETY FOR NEW HVAC WORK.
16. REMOVE EXISTING CEILING GRID AND ACOUSTICAL TILE IN ITS ENTIRETY FOR MECHANICAL WORK, STORE FOR REINSTALLATION. DISCARD PERIMETER CEILING SUPPORT WALL ANGLES AND REPLACE WITH NEW.

WALL LEGEND:

========== EXISTING WALL TO BE DEMOLISHED.

═══════ EXISTING WALL TO REMAIN.



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	App.

Designed by: D.P.
Date: 09/23/04 Rev.
Cad by: J.C.
Design file no. ARCH-03
Reviewed by: T.
Drawing code: A
Reviewed by: J.M.
Submitted by: Paul Waters
Rev. date: 08/13/04
Plot scale: 1"=1'-0"

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORPS OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

DEMOLITION 2ND & 3RD FLOOR–BASE BID
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

Sheet reference number:
A–103
Sheet 6 of 160

CONTRACT NO. W9126G–04–C–0034

SHEETNUMBER

DRAWING OF WORK AS BUILT

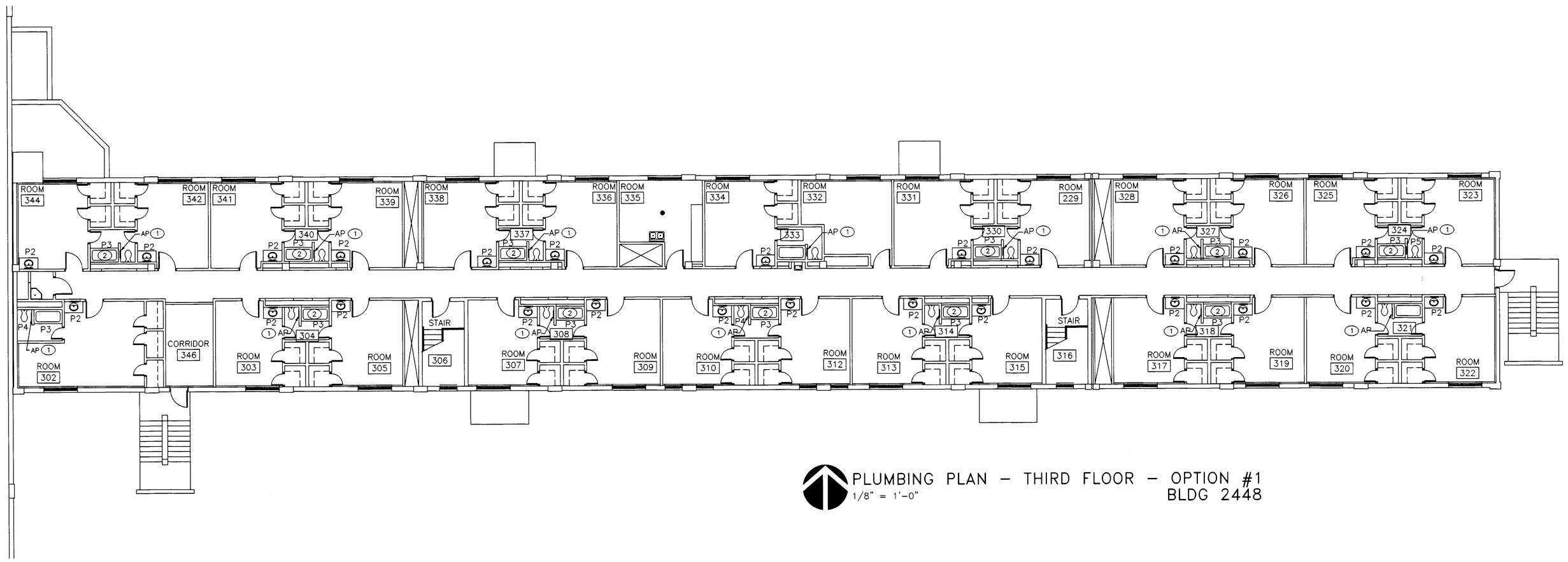
FB-5A

GENERAL NOTES:

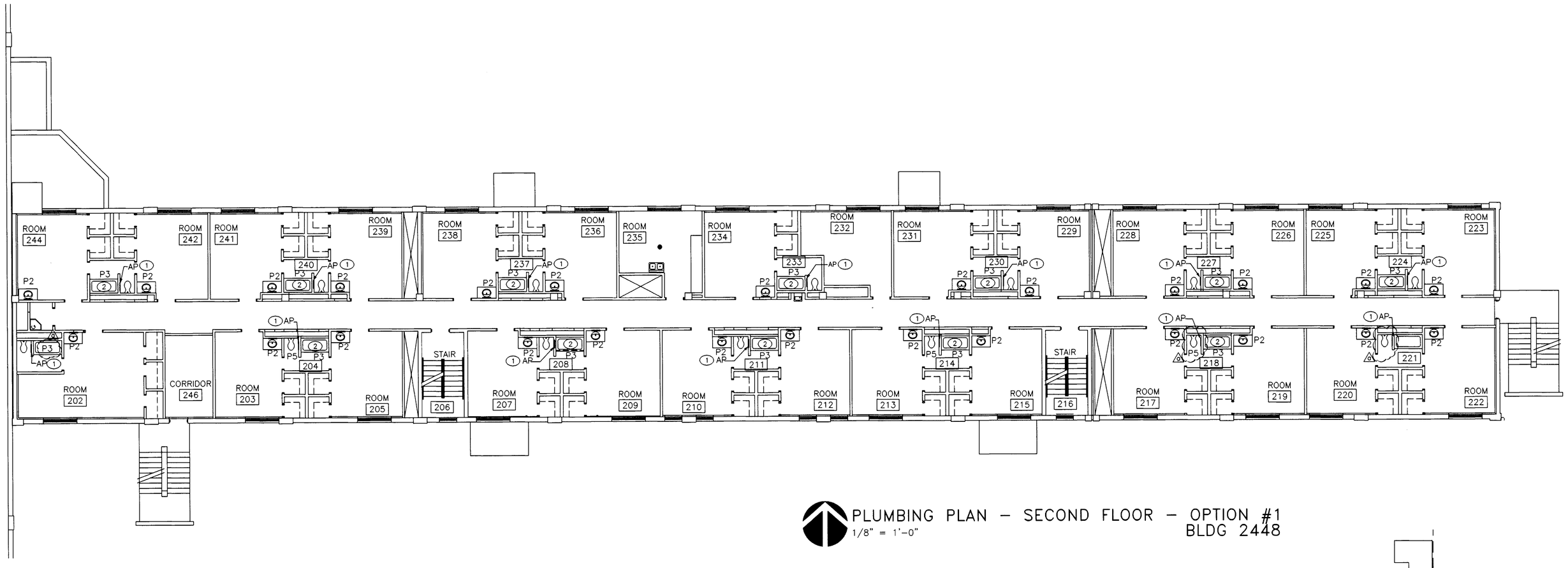
A. WATER CLOSETS TO BE REMOVED, CLEANED AND REPLACED.
B. REPLACE BEESWAX JOINT SEAL AT ALL WATERCLOSETS.
C. CONNECT EXISTING FIXTURES PIPING TO NEW MAIN WITH ISOLATION VALVES INCLUDING DRINKING FOUNTAIN.

KEYED NOTES: ⬭

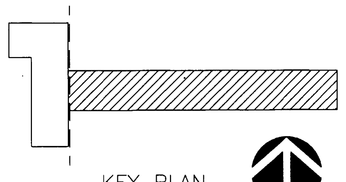
1. PROVIDE NEW FLOOR PENETRATION AND EXTEND SEWER TO NEW TUB DRAIN LOCATION.



PLUMBING PLAN – THIRD FLOOR – OPTION #1
1/8" = 1'-0"
BLDG 2448



PLUMBING PLAN – SECOND FLOOR – OPTION #1
1/8" = 1'-0"
BLDG 2448



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Date	Description	Appr.
A	9-10-04	PLUMBING MODIFICATIONS	MAD/001

Designed by: Dwn by: ES | Ckd by: PL | Date: 09/23/04 | Rev.
Reviewed by: J. Brasuell | Submitted by: Paul Wolters | Design file no. P-111 | Drawing code: 11 | File name: 02448-111 | File date: 09/10/04 | Plot scale: 1/8" = 1'0"

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORPS OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS
PLUMBING PLAN
SECOND AND THIRD FLOOR
BLDG. 2448
OPTION #1
SOLICITATION NO. W912GG-04-B-0017
CONTRACT NO. W912GG-04-C-0034

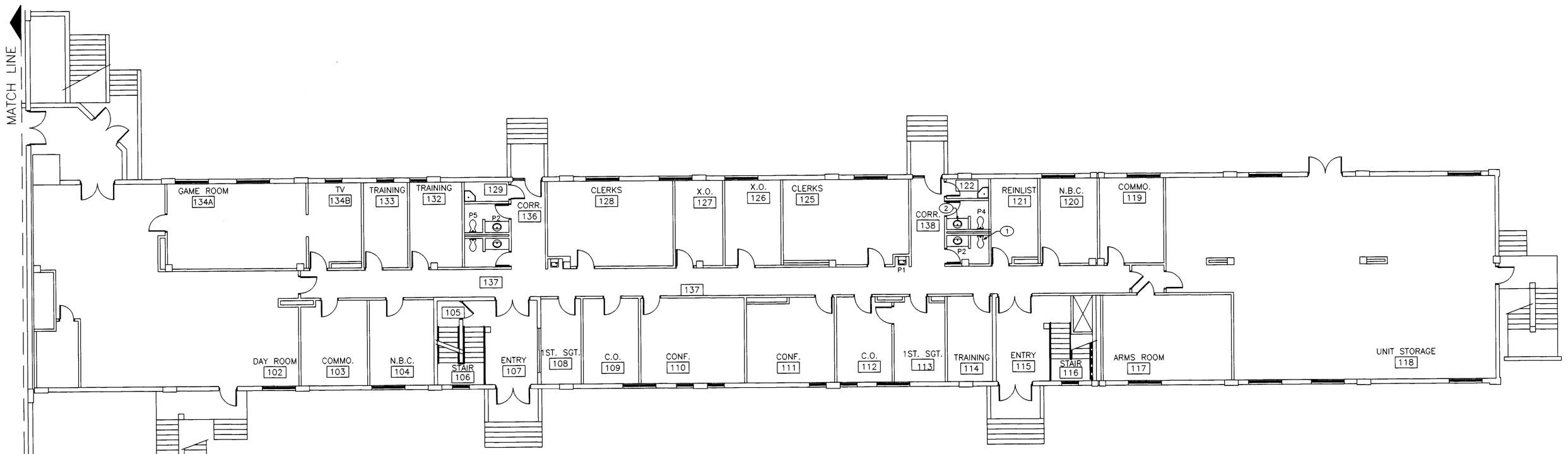
Sheet reference number:
P-111
Sheet 40 of 160

CONTRACT NO. W9126G-04-C-0034

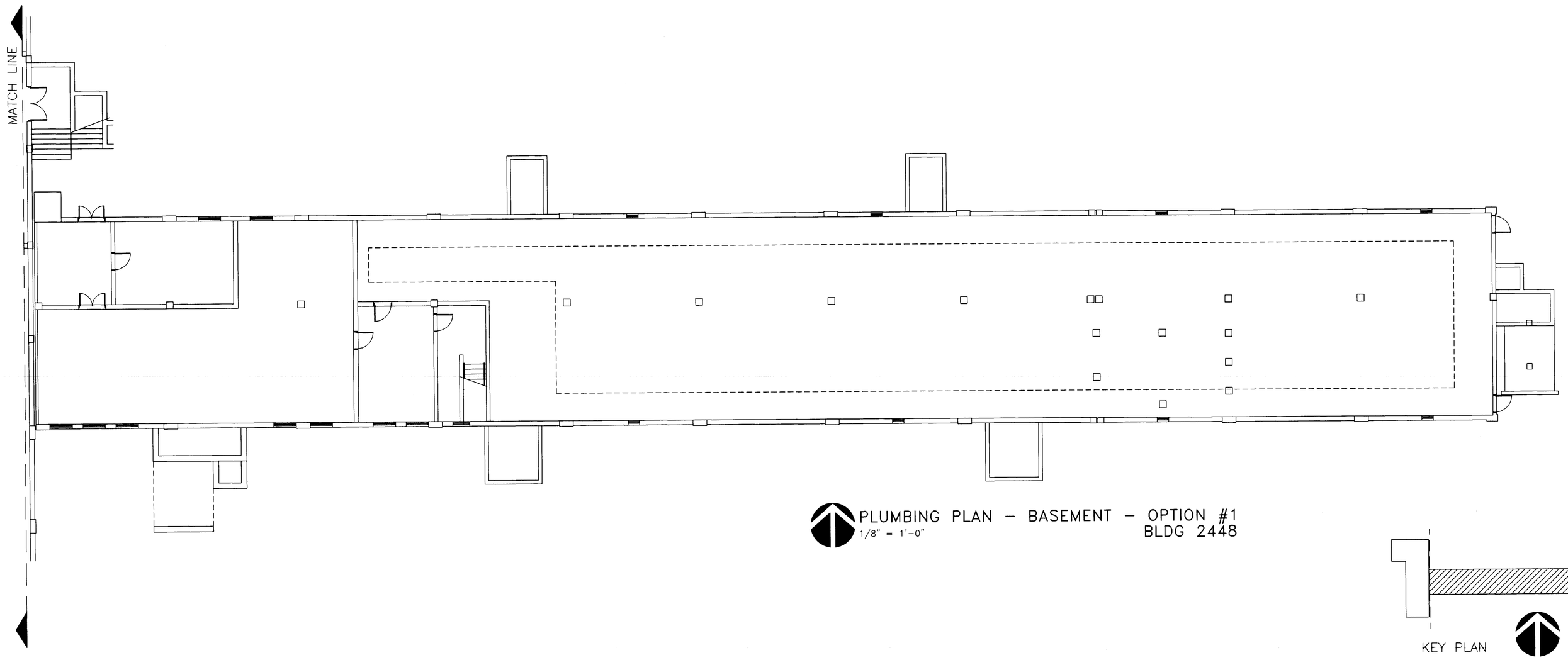
DRAWING OF WORK AS BUILT

SHEETNUMBER

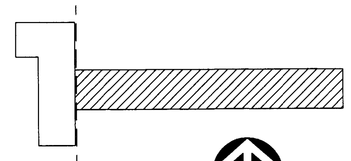
FB-SA



PLUMBING PLAN – FIRST FLOOR – OPTION #1
1/8" = 1'-0"
BLDG 2448



PLUMBING PLAN – BASEMENT – OPTION #1
1/8" = 1'-0"
BLDG 2448



KEY PLAN

GENERAL NOTES:

A. WATER CLOSETS TO BE REMOVED, CLEANED AND REPLACED.
B. REPLACE BEESWAX JOINT SEAL AT ALL WATERCLOSETS.
C. CONNECT EXISTING FIXTURES PIPING TO NEW MAIN WITH ISOLATION VALVES INCLUDING DRINKING FOUNTAIN.

KEYED NOTES:

1. EXISTING TOILET WITH NEW FLUSH VALVE, P4
2. NEW LAVATORY WITH NEW FAUCET, SIMILAR TO P2.

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.
2	REVISE NOTE		
1		9-10-04	AM/001

Date: 09/23/04 Rev.

Designed by: PL | Dwn by: PL | Ckd by: PL | Reviewed by: J. Bruscoff | Submitted by: Paul Waters

Survey file no. p-119

Drawing code: TP

File name: B2448P-110
Plot date: 09/13/04
Plot scale: 1/8" = 1'-0"

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6500 LAMONA BLVD., SUITE A-100
ALBUQUERQUE, NEW MEXICO 87110

TITLE OAK
RENOVATE BARRACKS
FORT BLISS, TEXAS
PLUMBING PLAN
BASEMENT AND FIRST FLOOR
BLDG 2448
OPTION #1
SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

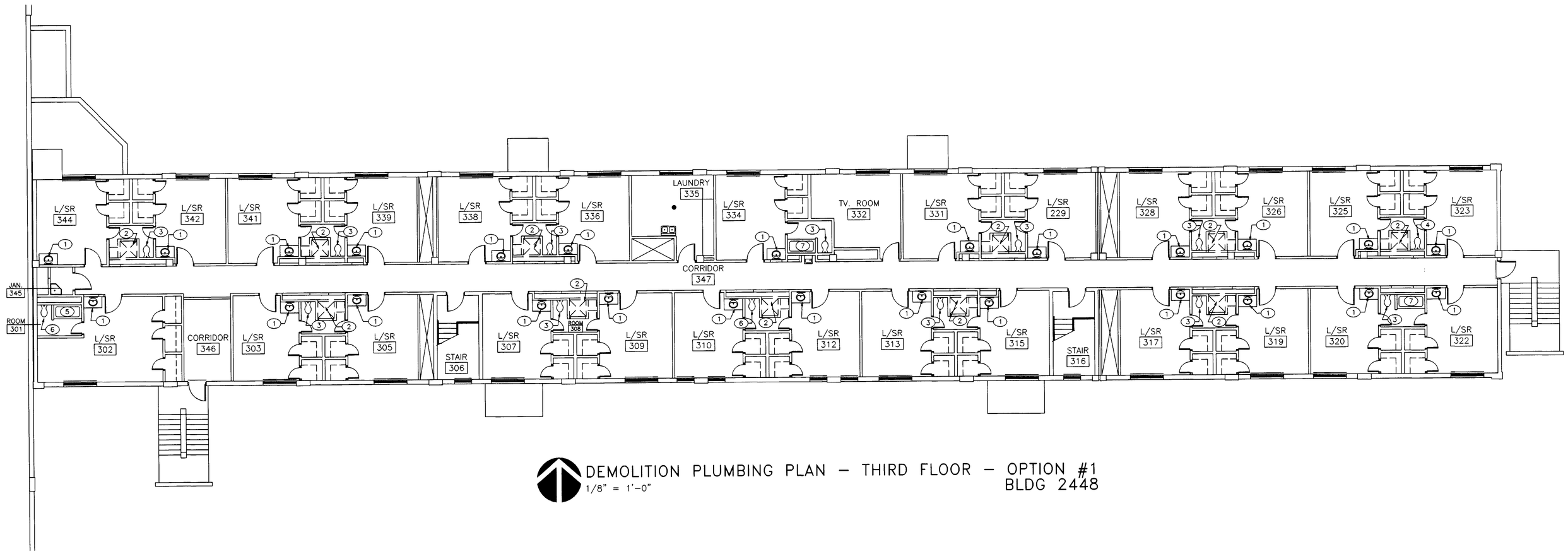
Sheet reference number:
P-110
Sheet 39 of 160

CONTRACT NO. W9126G-04-C-0034

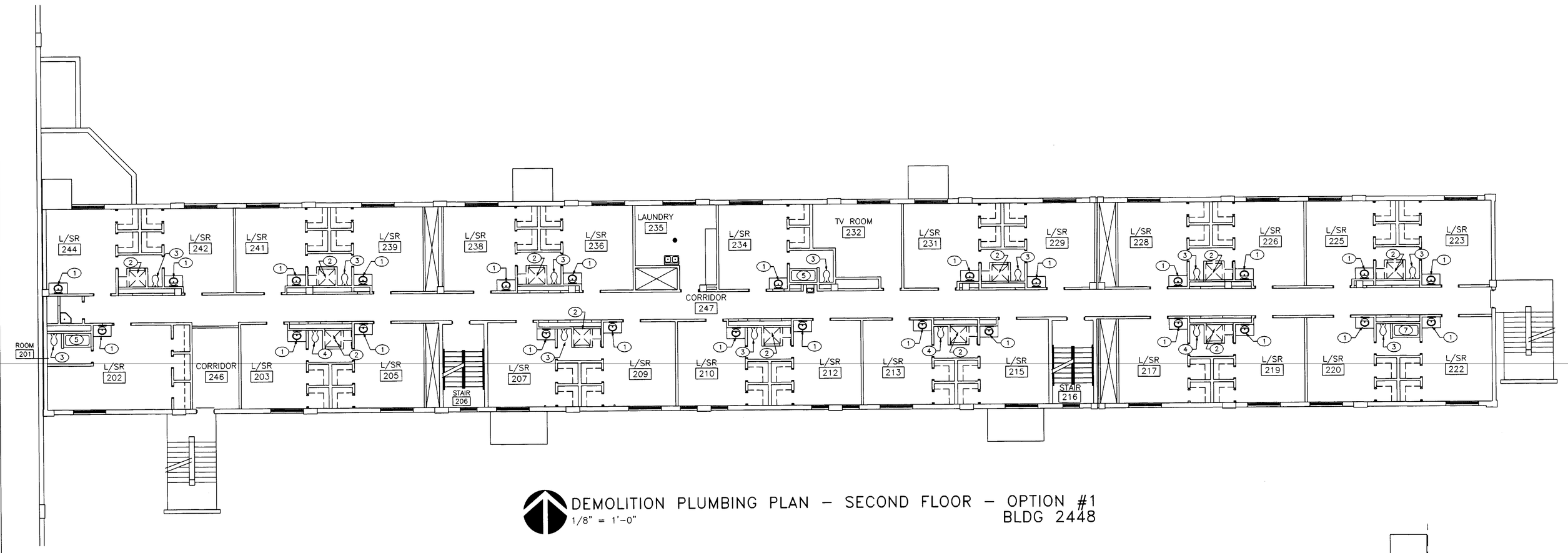
DRAWING OF WORK AS BUILT

SHEETNUMBER

FB-SA



DEMOLITION PLUMBING PLAN – THIRD FLOOR – OPTION #1
1/8" = 1'-0"
BLDG 2448



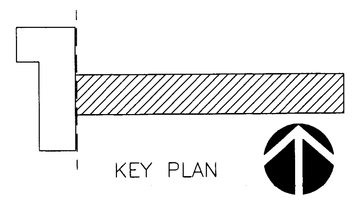
DEMOLITION PLUMBING PLAN – SECOND FLOOR – OPTION #1
1/8" = 1'-0"
BLDG 2448

GENERAL NOTES:

A. THE DRAWINGS WERE GENERATED FROM EXISTING CONSTRUCTION DRAWINGS. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN DOCUMENTS AND FIELD CONDITIONS.
B. ALL SUPPORTS, HANGERS, BRACKETS AND MOUNTING ASSEMBLIES FOR THE SYSTEM REQUIRED TO BE REMOVED SHALL BE REMOVED COMPLETELY.
C. ALL EQUIPMENT/MATERIALS REMOVED SHALL BE TRANSPORTED FROM THIS SITE AND DISPOSED OF BY THIS CONTRACTOR UNLESS OTHERWISE NOTED.
D. ALL WORK INVOLVED WITH THE REMOVAL AND DEMOLITION OF THE PLUMBING SYSTEM SHALL BE CAREFULLY COORDINATED TO AVOID DAMAGE TO THE REMAINING SYSTEMS AND FINISHES.
E. WATER CLOSETS TO BE REMOVED AND CLEANED.
F. REPLACE BEESWAX JOINT SEAL AT ALL WATERCLOSETS.
G. CONNECT EXISTING FIXTURES PIPING TO NEW MAIN WITH ISOLATION VALVES INCLUDING DRINKING FOUNTAIN.

KEYED NOTES:

1. REMOVE EXISTING LAVATORY AND ASSOCIATED PIPING.
2. REMOVE EXISTING SHOWER AND ALL ASSOCIATED PIPING. CAP EXISTING FLOOR PENETRATION.
3. EXISTING TOILET TO BE REMOVED, CLEANED AND STORED FOR REUSE.
4. EXISTING TOILET TO BE REMOVED, CLEANED AND STORED FOR REUSE. TOILET SEAT TO BE REMOVED, SEE SCHEDULE.
5. EXISTING TUB TO BE REMOVED WITH ALL ASSOCIATED PIPING.
6. EXISTING TOILET TO BE REMOVED, CLEANED AND STORED FOR REUSE. FLUSH VALVE TO BE REMOVED, SEE SCHEDULE.
7. EXISTING TUB TO REMAIN.



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.

Date: 08/23/04 Rev.
Design file no. 09
Drawing code: 09
Drawing: B1448P09
Plot date: 08/13/04
Plot scale: 1/8"=1'-0"

Designed by: PL
Dwn by: PL
Ckd by: PL
Reviewed by: J. Broscoff
Submitted by: Paul Masters

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
1000 LOMAS BOULEVARD, N.E.
ALBUQUERQUE, NEW MEXICO 87110

FY04 GWA
RENOVATE BARRACKS
DEMOLITION PLUMBING PLAN
FORT BLISS, TEXAS
SECOND AND THIRD FLOOR
BLDG – 2448
OPTION #1
SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

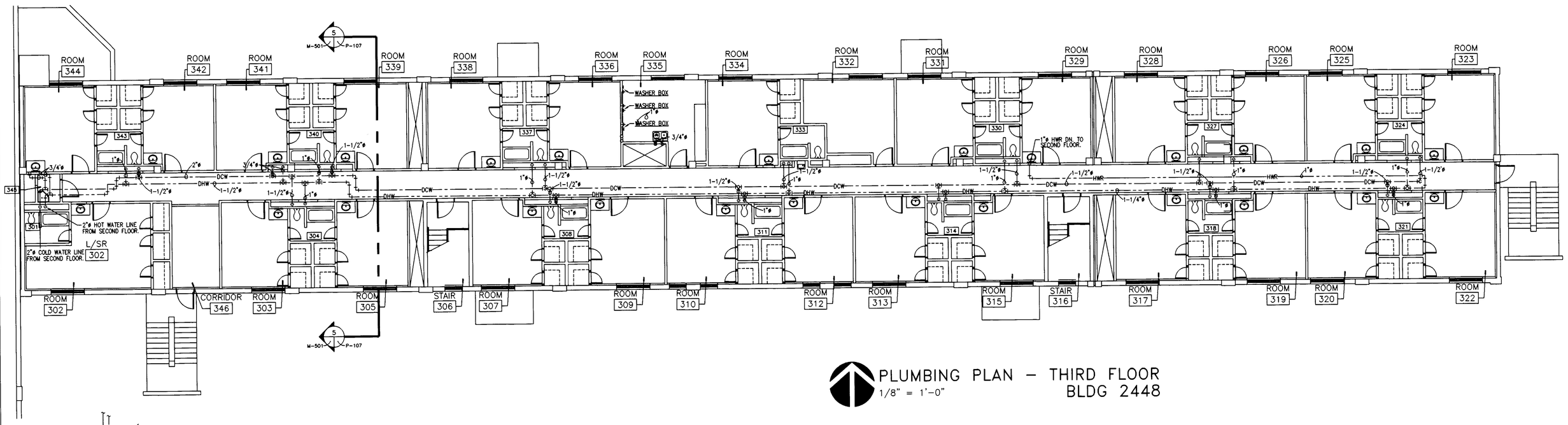
Sheet reference number:
P-109
Sheet 38 of 160

CONTRACT NO. W9126G-04-C-0034

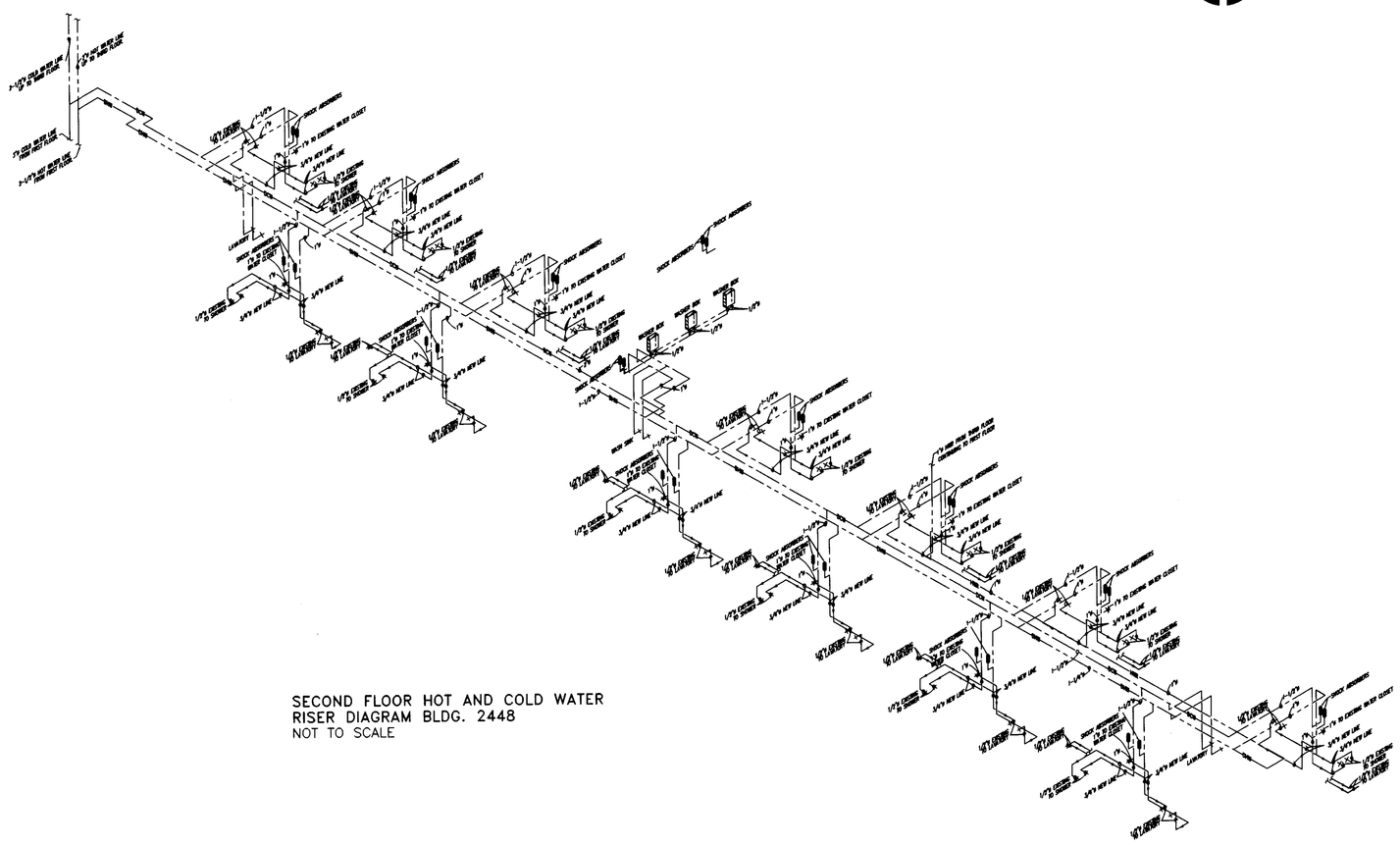
DRAWING OF WORK AS BUILT

SHEETNUMBER

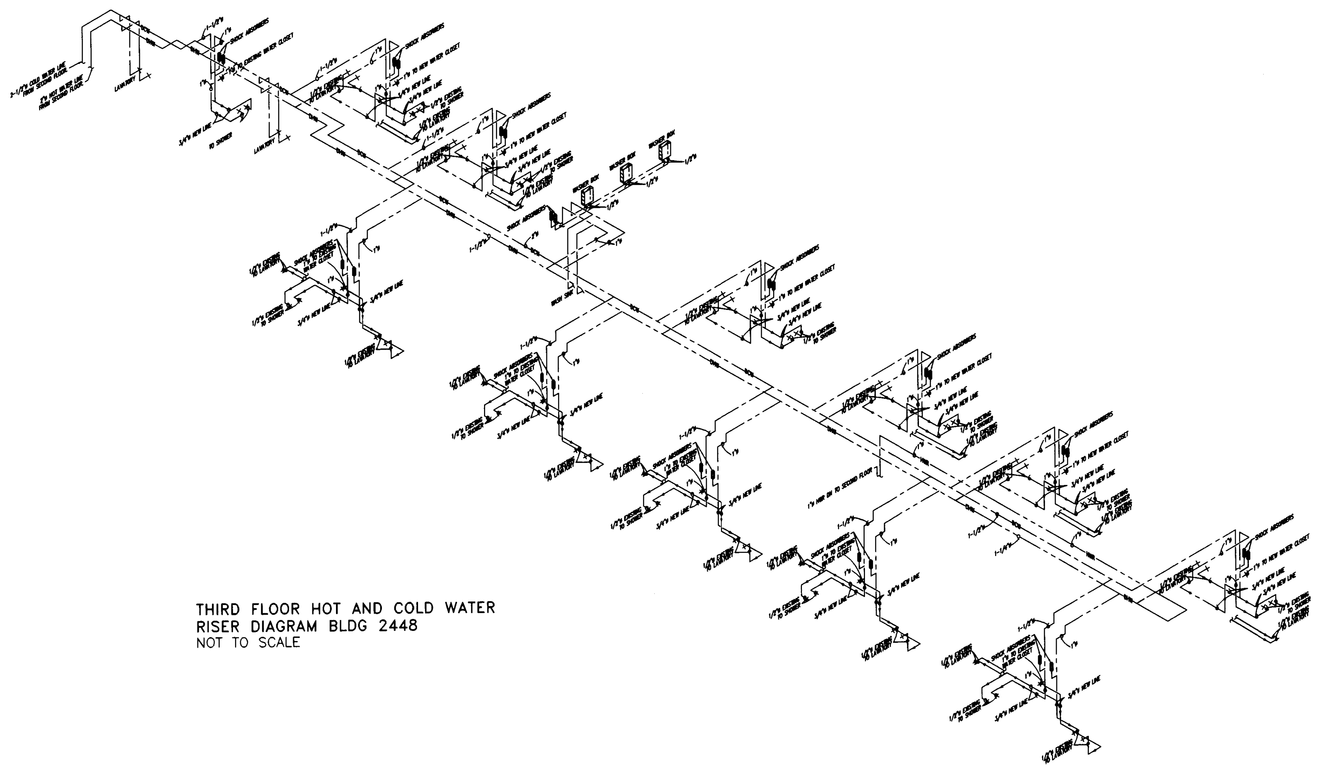
F3-5A



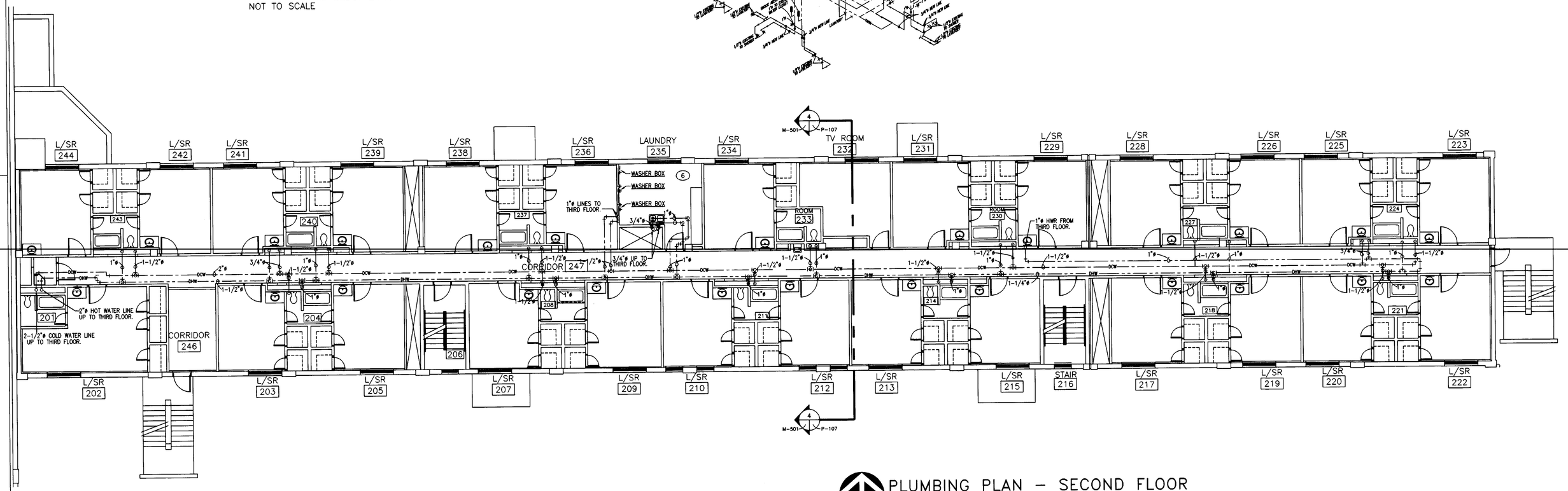
PLUMBING PLAN – THIRD FLOOR
1/8" = 1'-0"
BLDG 2448



SECOND FLOOR HOT AND COLD WATER
RISER DIAGRAM BLDG. 2448
NOT TO SCALE



THIRD FLOOR HOT AND COLD WATER
RISER DIAGRAM BLDG 2448
NOT TO SCALE



PLUMBING PLAN – SECOND FLOOR
1/8" = 1'-0"
BLDG 2448

KEY PLAN

GENERAL NOTES:

A. THE DRAWINGS WERE GENERATED FROM EXISTING CONSTRUCTION DRAWINGS. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN DOCUMENTS AND FIELD CONDITIONS.
B. ALL PIPING SHALL BE RUN IN THE MOST EXPEDITIOUS MANNER IN ORDER TO MINIMIZED OFFSETS. PLANS ARE DIAGRAMMATIC AND DO NOT INDICATE EXACT ROUTING.

KEYED NOTES:

1. EXISTING WASHING MACHINE BOXES, PROVIDE REQUIRED CONNECTION.
2. PROVIDE 2" COLD, 1 1/2" HOT WATER LINES TO SUPPLY WASHING MACHINE BOXES. PROVIDE A WATER HAMMER ARRESTOR ON BOTH COLD WATER AND HOT WATER SUPPLY TO WASHING MACHINE BOXES, SIMILAR TO WILKINS SIZE A OR APPROVED EQUAL. PROVIDE ACCESS DOOR AS REQUIRED.
3. PROVIDE NEW P-TRAP WITH WATER LINE CONNECTION.
4. TRAP PRIMER (TP) EXTEND 1/2" COLD WATER SOFT COPPER TO P-TRAP AT FLOOR DRAIN.

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.
2	REVISE NOTES	9-15-04	AMOOOS4

Designed by: J. VILLALOBOS
Dwn by:
Ckd by:
Date: 03/06/2006
Submitted by: J. VILLALOBOS
Plot date: 02/06/2006

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BARNHART/TAYLOR, INC.
1000 E. MONTANA
EL PASO, TEXAS 79902

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

PLUMBING PLAN
SECOND AND THIRD FLOOR
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

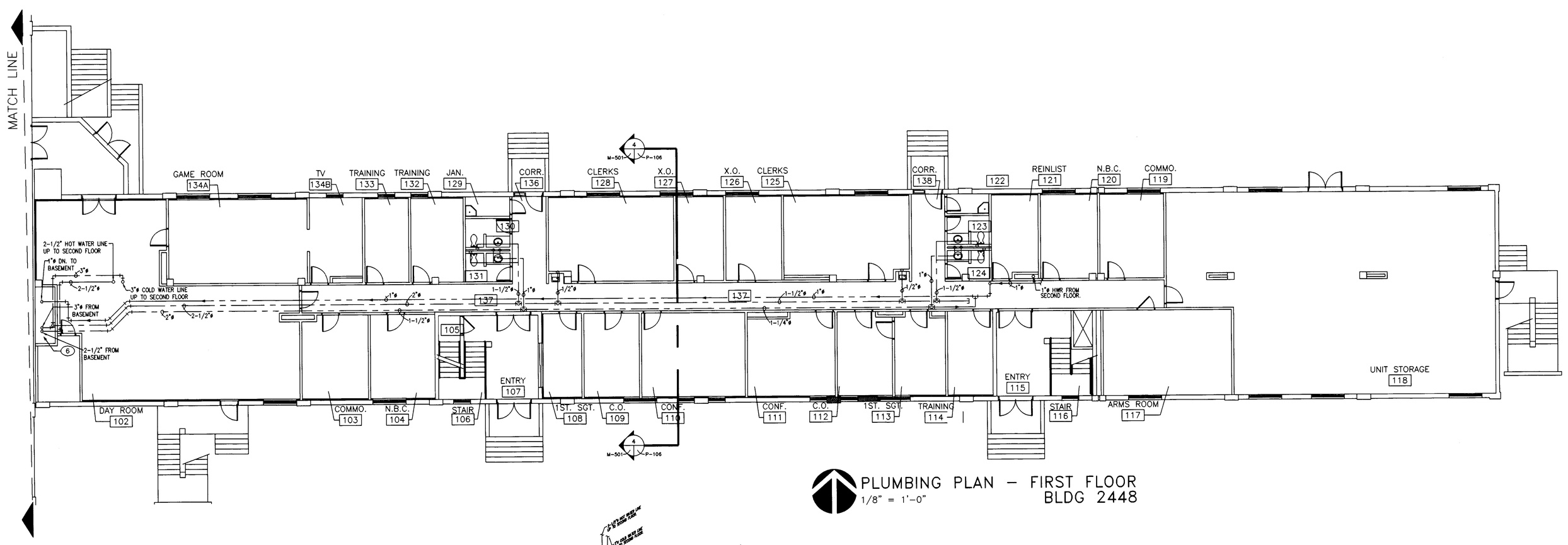
Sheet reference number:
P-107
Sheet 36 of 160

CONTRACT NO. W9126G-04-C-0034

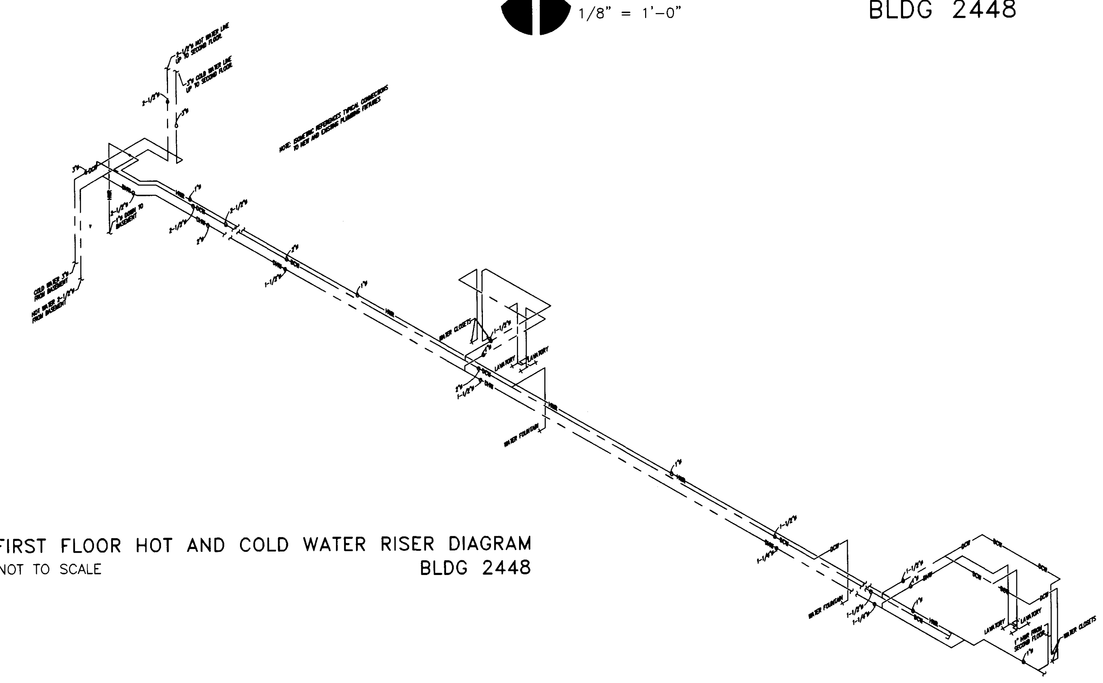
DRAWING OF WORK AS BUILT

SHEETNUMBER

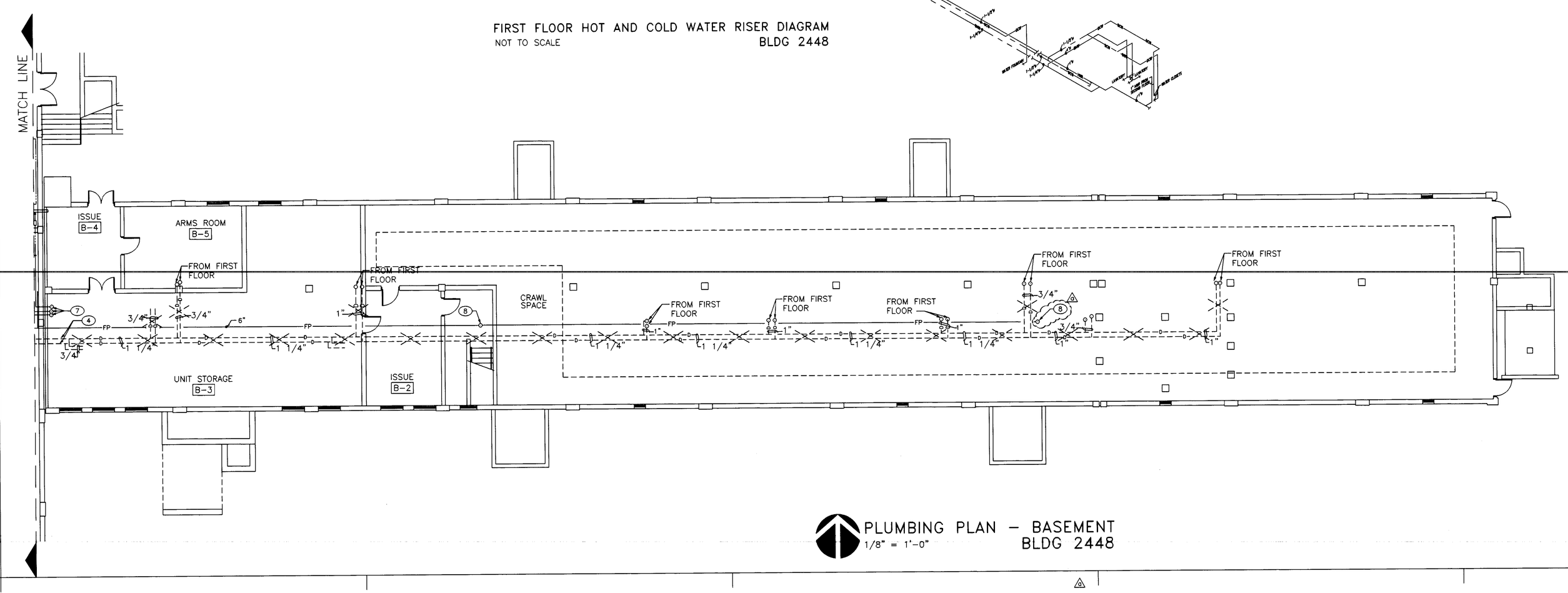
FB-5A



PLUMBING PLAN – FIRST FLOOR
1/8" = 1'-0"
BLDG 2448



FIRST FLOOR HOT AND COLD WATER RISER DIAGRAM
NOT TO SCALE
BLDG 2448



PLUMBING PLAN – BASEMENT
1/8" = 1'-0"
BLDG 2448

KEY PLAN

GENERAL NOTES:

A. THE DRAWINGS WERE GENERATED FROM EXISTING CONSTRUCTION DRAWINGS. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN DOCUMENTS AND FIELD CONDITIONS.
B. ALL PIPING SHALL BE RUN IN THE MOST EXPEDITIOUS MANNER IN ORDER TO MINIMIZED OFFSETS. PLANS ARE DIAGRAMMATIC AND DO NOT INDICATE EXACT ROUTING.
C. ALL DOMESTIC WATER SHALL BE RUN IN CORRIDOR .

KEYED NOTES:

1. NOT USED.
2. SECONDARY DRAIN LINE.
3. NOT USED.
4. 3" COLD WATER, 2 1/2" HOT WATER AND 1" HOT CIRCULATING WATER FROM BASEMENT.
5. COLD, HOT AND HOT CIRCULATING WATER LINES TO FIRST FLOOR.
6. EXISTING FIRE LINE STAND PIPE.

US Army Corps of Engineers
District or Division

No.	Description	Date	Appr.
2	PIPE MODIFICATION, REVISE NOTES	9-10-04	MMORI

Designed by: J. VILLALOBOS
Dwn by: K.MOTA
Ckd by:
Date: 03/06/2006
Design file no. P-106
Submitted by: J. VILLALOBOS
Plot date: 03/06/2006

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BARNHART/TAYLOR, INC.
1600 E. YANDELL
EL PASO, TEXAS 79902

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS
PLUMBING PLAN
BASEMENT AND FIRST FLOOR
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

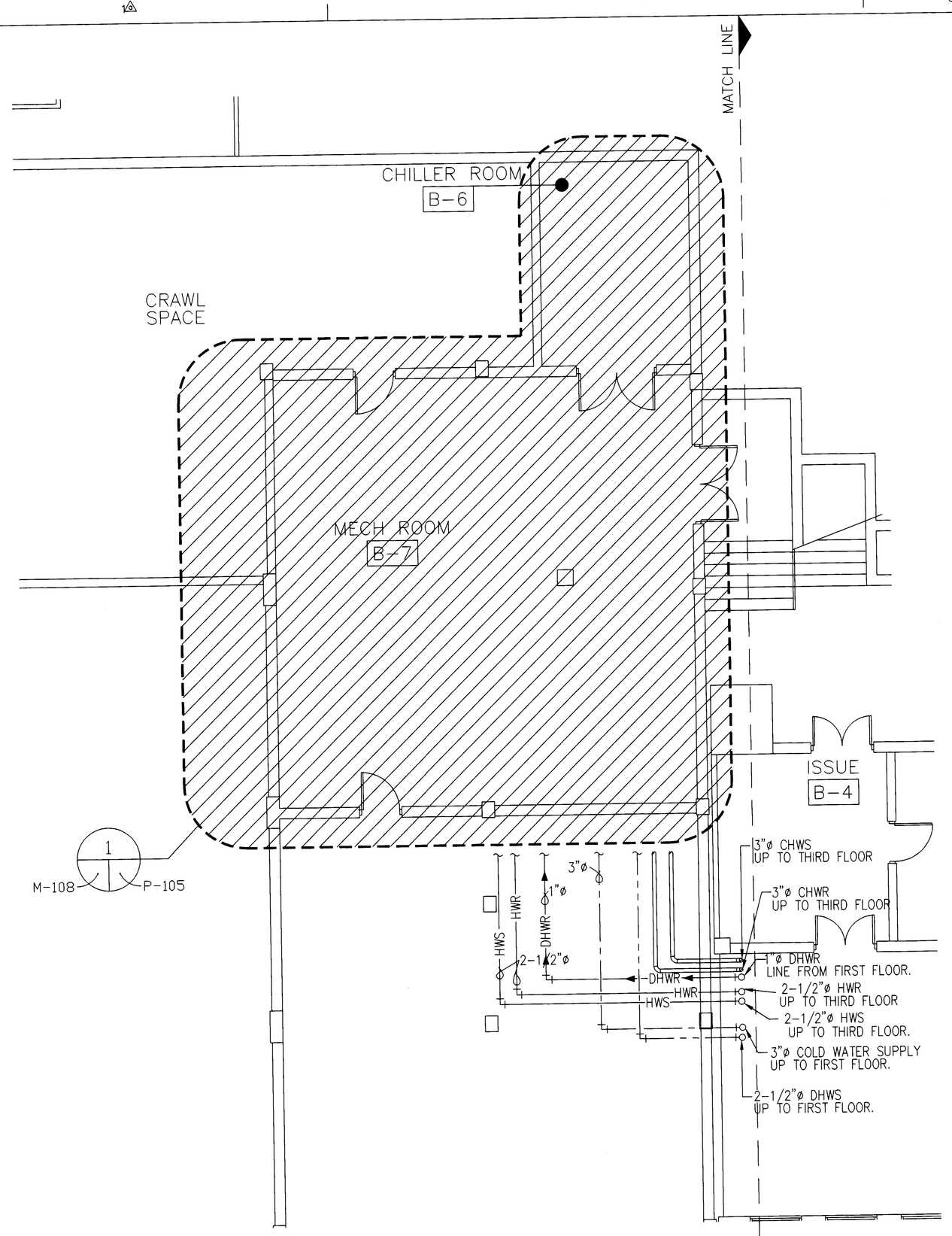
Sheet reference number:
P-106
Sheet 35 of 160

CONTRACT NO. W9126G-04-C-0034

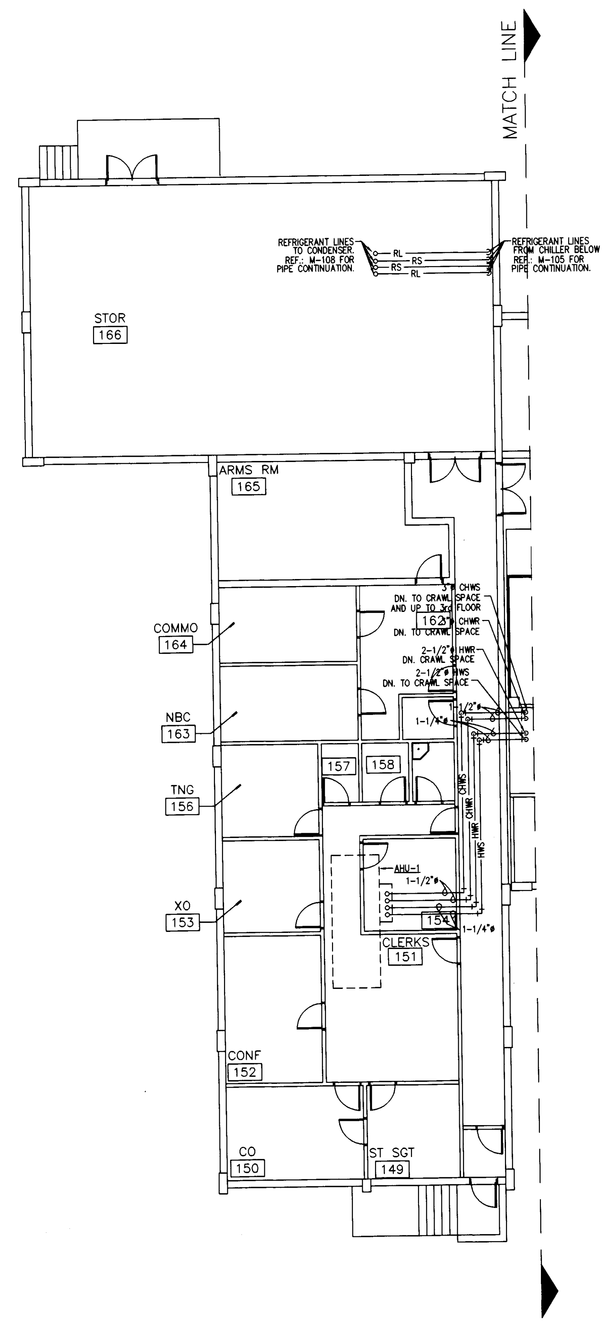
DRAWING OF WORK AS BUILT

SHEETNUMBER

F13-3A



PLUMBING PLAN – BASEMENT
1/4" = 1'-0"
BLDG 2448



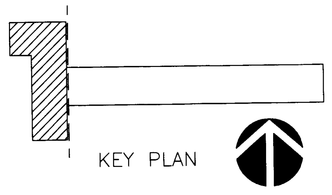
PLUMBING PLAN – FIRST FLOOR
1/8" = 1'-0"
BLDG 2448

GENERAL NOTES:

A. THE DRAWINGS WERE GENERATED FROM EXISTING CONSTRUCTION DRAWINGS. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN DOCUMENTS AND FIELD CONDITIONS.
B. ALL PIPING SHALL BE RUN IN THE MOST EXPEDITIOUS MANNER IN ORDER TO MINIMIZED OFFSETS. PLANS ARE DIAGRAMMATIC AND DO NOT INDICATE EXACT ROUTING.

KEYED NOTES:

1. TERMINATE 1 1/4" CONDENSATE DRAIN AND SECONDARY CONDENSATE DRAIN PIPE 2" ABOVE FLOOD RIM OF EXISTING MOP BASIN. SEE ALSO CONDESATE DRAIN TRAP DETAIL 1/P501
2. SECONDARY CONDENSATE DRAIN LINE.
3. RUN HOT WATER LINE LOW ALONG WALL.
4. CONNECT TO EXISTING HOT WATER STORAGE TANK WITH DIELECTRIC UNION AND BALL VALVE.
5. 3" COLD WATER, 2 1/2" HOT WATER AND 3/4" HOT CIRCULATING WATER TO FIRST FLOOR.
6. SEE GAS CONNECTION DETAIL 2/P501.
7. EXTEND 1 1/4" PRIMARY AND SECONDARY CONDENSATE DRAIN LINE TO NEAREST FLOOR DRAIN IN THIS AREA.



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.
A	REVISE NOTE. PLUMBING MODIFICATIONS	9-10-04	AMOOD1

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORPS OF ENGINEERS

Designed by: J. VILLALOBOS
Date: 03/06/2006
Drawn by: A.MOTA
Design file no. P-105
Submitted by: J. VILLALOBOS
Plot date: 03/06/2006

BARNHART/TAYLOR, INC.
1600 E. YANDELL
EL PASO, TEXAS 79902

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

PLUMBING PLAN
HAMMERHEAD, BASEMENT AND FIRST FLOOR
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

Sheet reference number:
P-105
Sheet 34 of 160

CONTRACT NO. W9126G-04-C-0034

DRAWING OF WORK AS BUILT

SHEETNUMBER

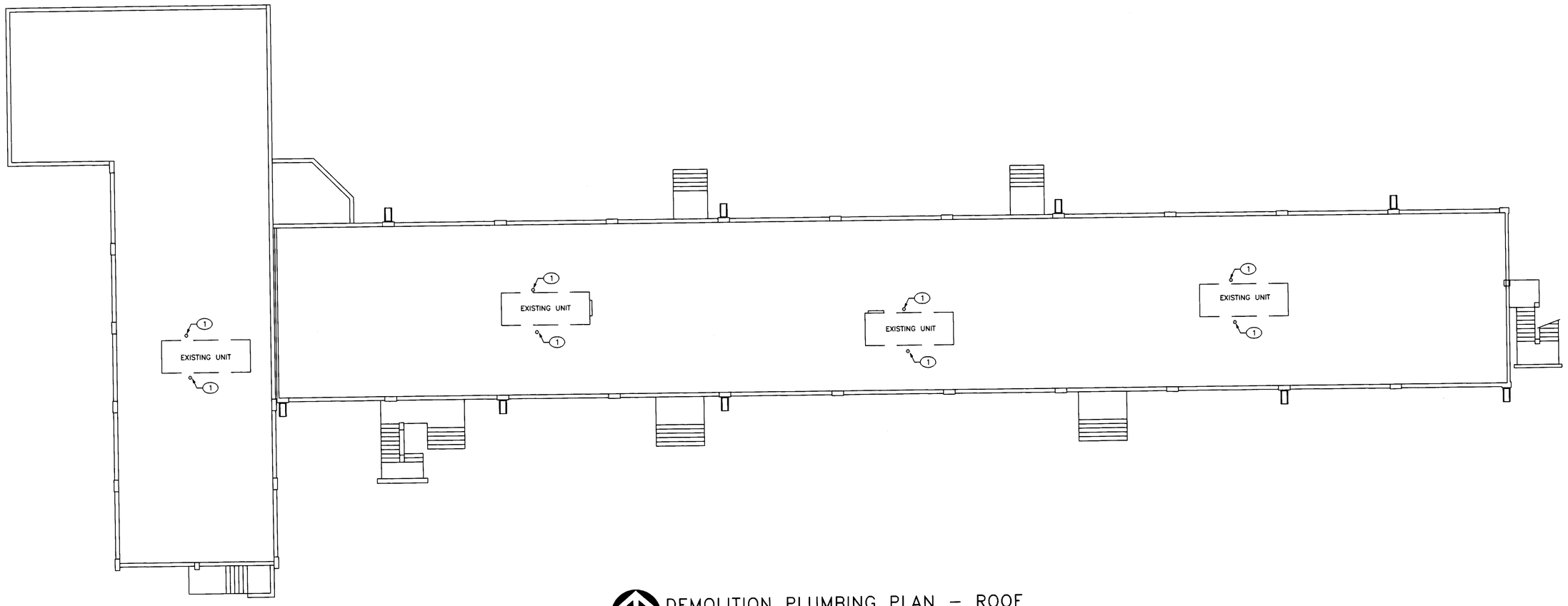
FB-SA

GENERAL NOTES:

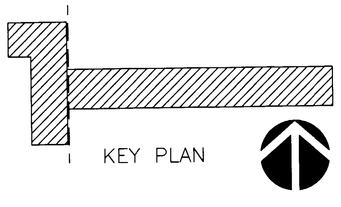
A. THE DRAWINGS WERE GENERATED FROM EXISTING CONSTRUCTION DRAWINGS. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN DOCUMENTS AND FIELD CONDITIONS.
B. ALL SUPPORTS, HANGERS, BRACKETS AND MOUNTING ASSEMBLIES FOR THE SYSTEM REQUIRED TO BE REMOVED SHALL BE REMOVED COMPLETELY.
C. ALL EQUIPMENT/MATERIALS REMOVED SHALL BE TRANSPORTED FROM THIS SITE AND DISPOSED OF BY THIS CONTRACTOR UNLESS OTHERWISE NOTED.
D. ALL WORK INVOLVED WITH THE REMOVAL AND DEMOLITION OF THE PLUMBING SYSTEM SHALL BE CAREFULLY COORDINATED TO AVOID DAMAGE TO THE REMAINING SYSTEMS AND FINISHES.

KEYED NOTES:

1 EXISTING 1/2" COLD WATER LINE TO BE REMOVE IN ITS ENTIRETY.



DEMOLITION PLUMBING PLAN – ROOF
3/32" = 1'-0"
BLDG 2448



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.	Mark	Description	Date	Appr.

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6500 LAVONA BLVD, SUITE 100
ALBUQUERQUE, NEW MEXICO 87110

Designed by: PL
Dwn by: EB
Ckd by: PL
Reviewed by: J.Sharp
Submitted by: Paul Waters
Date: 09/23/04
Rev:
Design file no. P-104
Drawing code:
File name: B2448P104
Plot date: 09/13/04
Plot scale: 1/8" = 1'-0"

FY04 DMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

DEMOLITION PLUMBING PLAN – ROOF
BLDG – 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

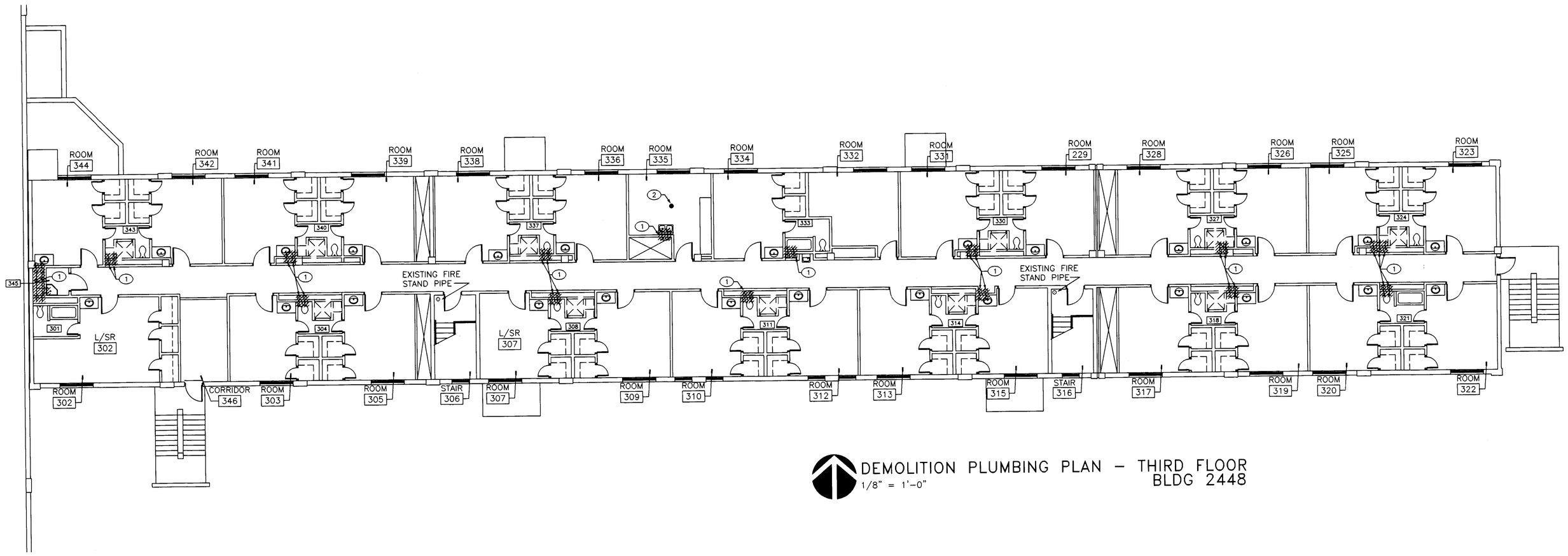
Sheet reference number:
P-104
Sheet 33 of 160

CONTRACT NO. W9126G-04-C-0034

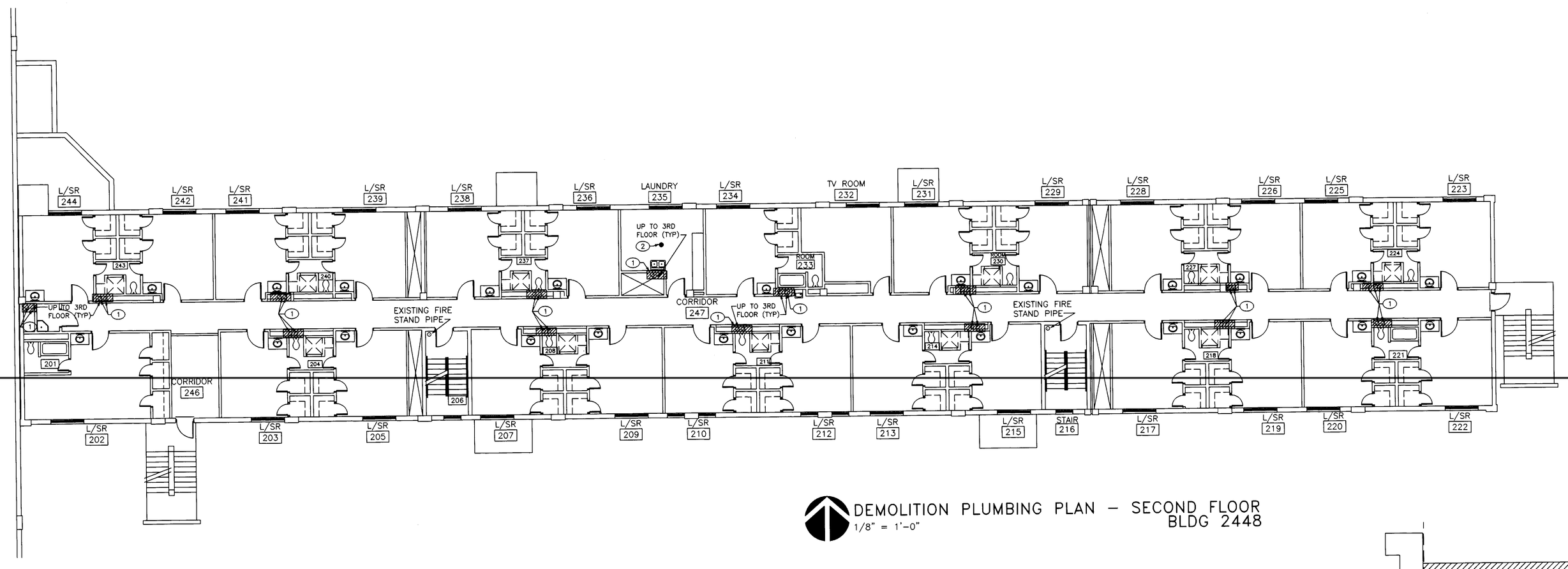
DRAWING OF WORK AS BUILT

SHEETNUMBER

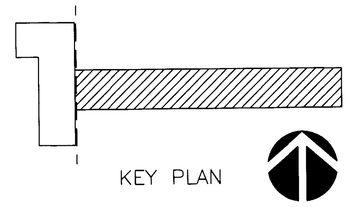
FB-SA



DEMOLITION PLUMBING PLAN – THIRD FLOOR
BLDG 2448
1/8" = 1'-0"



DEMOLITION PLUMBING PLAN – SECOND FLOOR
BLDG 2448
1/8" = 1'-0"



KEY PLAN

GENERAL NOTES:

A. THE DRAWINGS WERE GENERATED FROM EXISTING CONSTRUCTION DRAWINGS. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN DOCUMENTS AND FIELD CONDITIONS.
B. ALL SUPPORTS, HANGERS, BRACKETS AND MOUNTING ASSEMBLIES FOR THE SYSTEM REQUIRED TO BE REMOVED SHALL BE REMOVED COMPLETELY.
C. ALL EQUIPMENT/MATERIALS REMOVED SHALL BE TRANSPORTED FROM THIS SITE AND DISPOSED OF BY THIS CONTRACTOR UNLESS OTHERWISE NOTED.
D. ALL WORK INVOLVED WITH THE REMOVAL AND DEMOLITION OF THE PLUMBING SYSTEM SHALL BE CAREFULLY COORDINATED TO AVOID DAMAGE TO THE REMAINING SYSTEMS AND FINISHES.

KEYED NOTES:

1. REMOVE ALL EXISTING PIPING INCLUDING TYPE "M" OF DOMESTIC COLD, HOT AND CIRCULATING WATER. REMOVE ALL BRANCHES TO EXISTING PLUMBING FIXTURES.
2. REMOVE TRAP FROM FLOOR DRAIN, SEE SHEET P-107 FOR NEW WORK.

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.

Date: 08/23/04 Rev.
Design file no. P-103
Drawing code: D3
File name: B2448DP03
Plot date: 8/23/04
Plot scale: 1/8" = 1'0"

Designed by: R. Tyler
Dwn by: E3
Ckd by: RL
Reviewed by: J. Brasseff
Submitted by: Paul Walters

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORPS OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

DEMOLITION PLUMBING PLAN
SECOND AND THIRD FLOOR
BLDG – 2448
SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

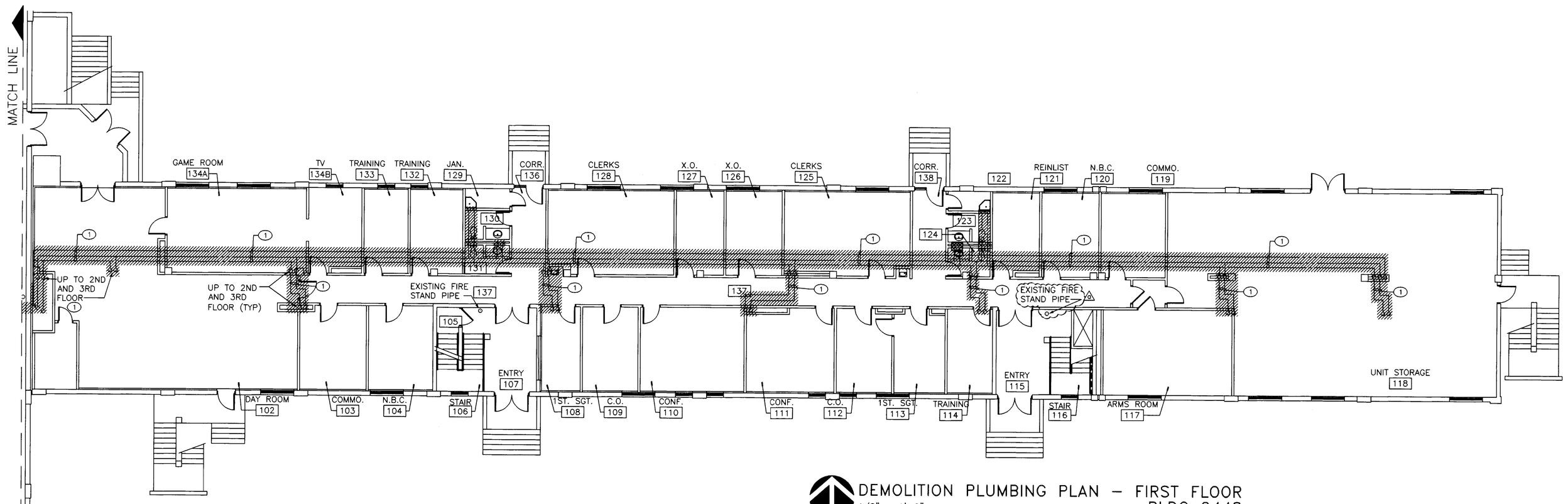
Sheet reference number:
P-103
Sheet 32 of 160

CONTRACT NO. W9126G-04-C-0034

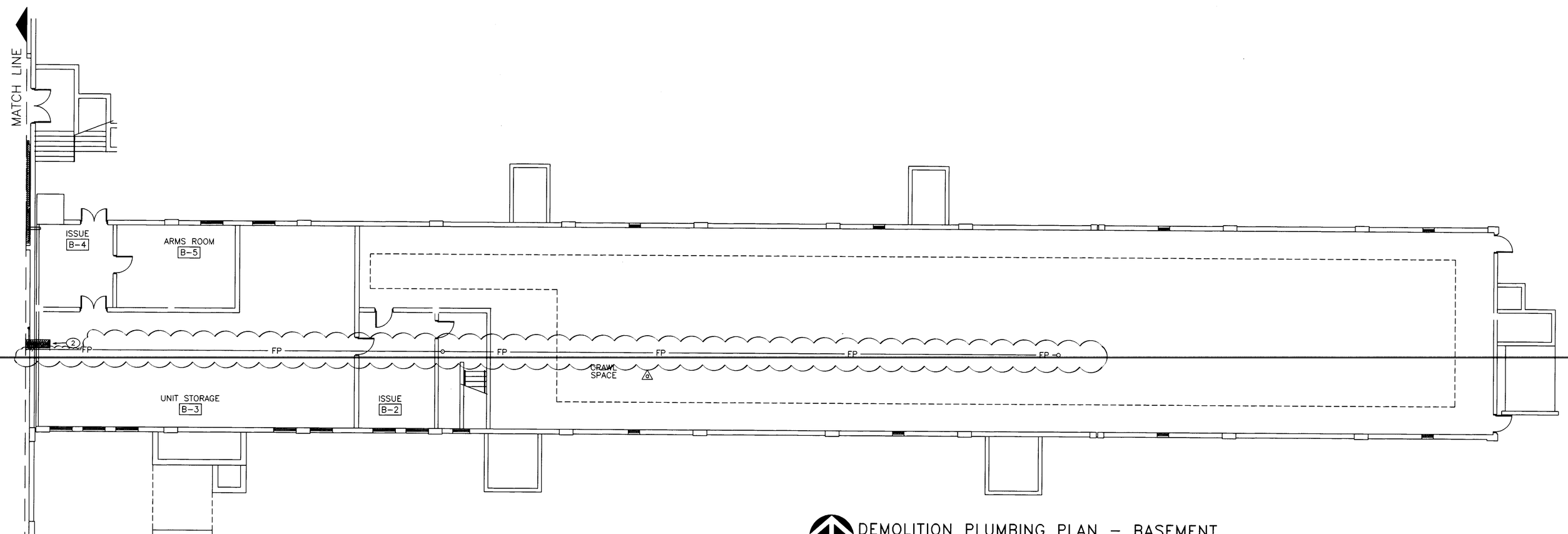
DRAWING OF WORK AS BUILT

SHEETNUMBER

FB-5A



DEMOLITION PLUMBING PLAN – FIRST FLOOR
1/8" = 1'-0"
BLDG 2448



DEMOLITION PLUMBING PLAN – BASEMENT
1/8" = 1'-0"
BLDG 2448

KEY PLAN

GENERAL NOTES:

A. THE DRAWINGS WERE GENERATED FROM EXISTING CONSTRUCTION DRAWINGS. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN DOCUMENTS AND FIELD CONDITIONS.
B. ALL SUPPORTS, HANGERS, BRACKETS AND MOUNTING ASSEMBLIES FOR THE SYSTEM REQUIRED TO BE REMOVED SHALL BE REMOVED COMPLETELY.
C. ALL EQUIPMENT/MATERIALS REMOVED SHALL BE TRANSPORTED FROM THIS SITE AND DISPOSED OF BY THIS CONTRACTOR UNLESS OTHERWISE NOTED.
D. ALL WORK INVOLVED WITH THE REMOVAL AND DEMOLITION OF THE PLUMBING SYSTEM SHALL BE CAREFULLY COORDINATED TO AVOID DAMAGE TO THE REMAINING SYSTEMS AND FINISHES.

KEYED NOTES:

1. REMOVE ALL DOMESTIC COLD, HOT AND CIRCULATING WATER PIPING.
2. REMOVE PIPING GOING TO FIRST FLOOR. SEE FIRST FLOOR PLAN.

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.
2	FIRE LINE CLARIFICATIONS	9-10-04	AMD001

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

Designed by: PL
Dwn by: ES
Ckd by: PL
Reviewed by: J. Lobrand
Submitted by: Paul Waters
Date: 08/23/04 Rev.
Design file no: P-102
Drawing code: D1 D2 D3
File name: B2448P102
Plot date: 08/13/04
Plot scale: 1/8" = 1'-0"

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS
DEMOLITION PLUMBING
BASEMENT AND FIRST FLOOR
BLDG – 2448
SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

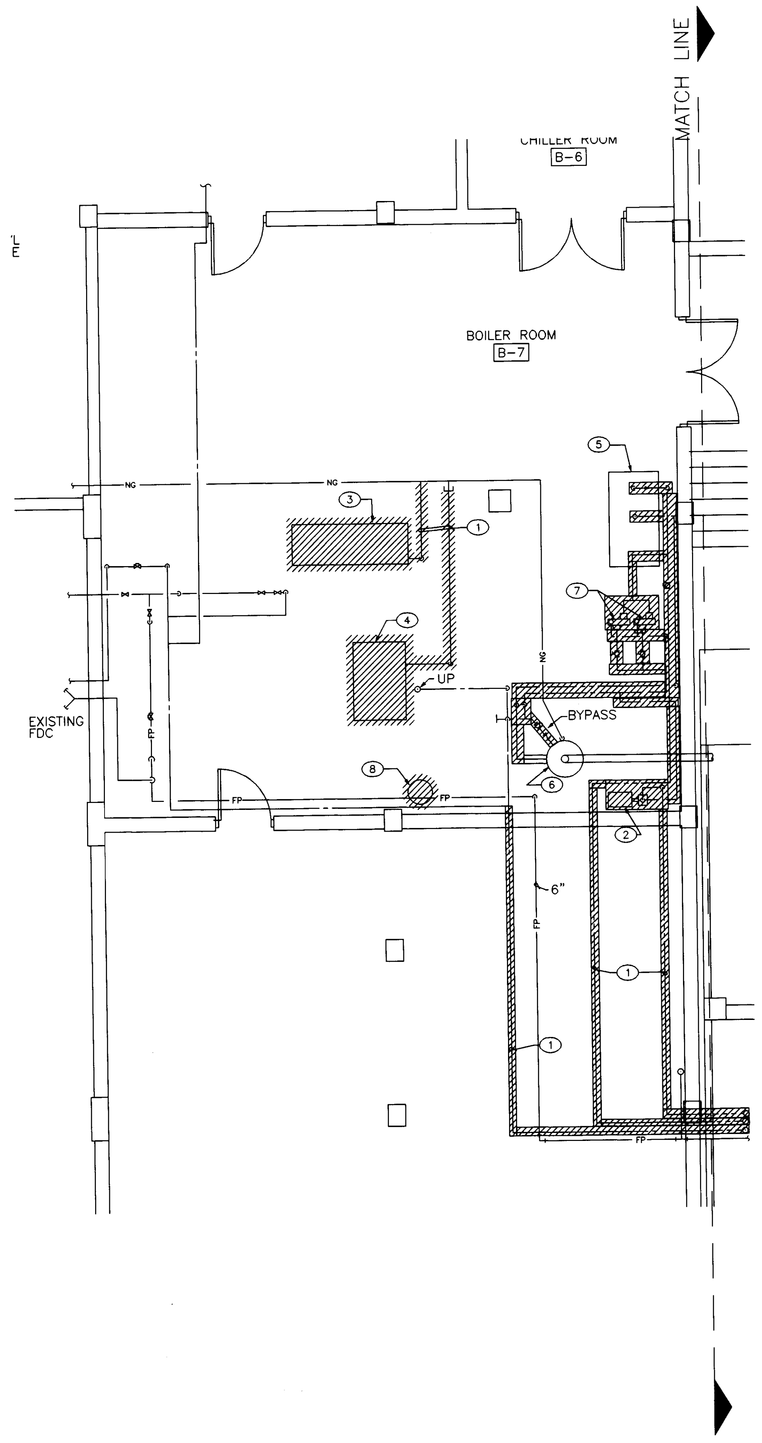
Sheet reference number:
P-102
Sheet 31 of 160

CONTRACT NO. W9126G-04-C-0034

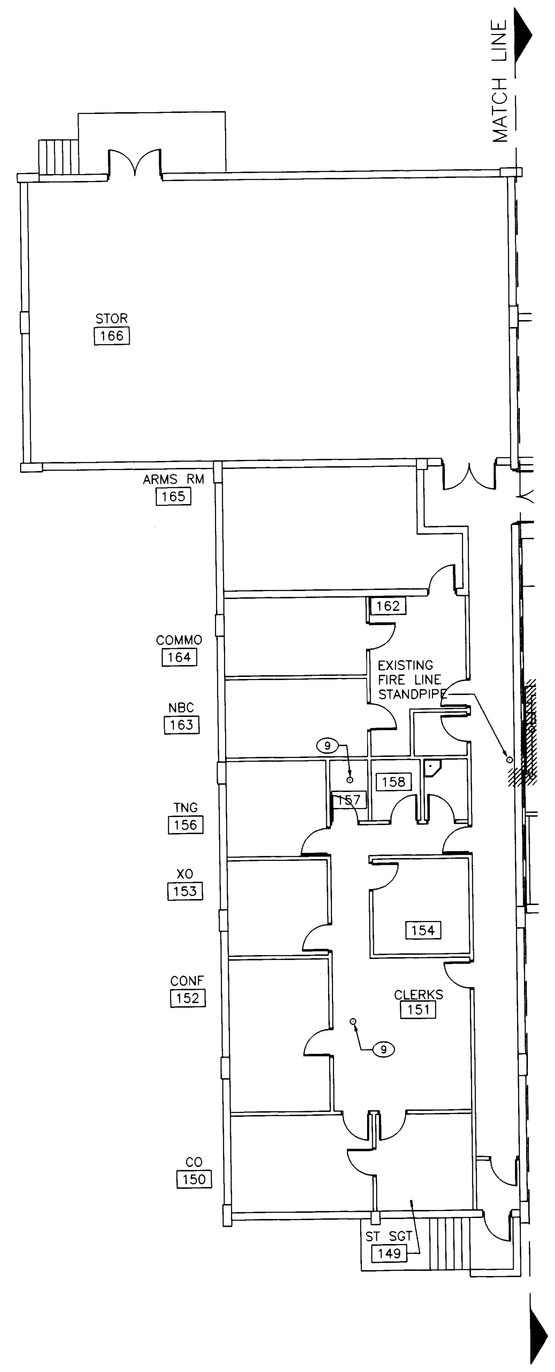
SHEETNUMBER

DRAWING OF WORK AS BUILT

FB-5A



DEMOLITION PLUMBING PLAN – BASEMENT
BLDG 2448
1/4" = 1'-0"



DEMOLITION PLUMBING PLAN – FIRST FLOOR
BLDG 2448
1/8" = 1'-0"

GENERAL NOTES:

A. THE DRAWINGS WERE GENERATED FROM EXISTING CONSTRUCTION DRAWINGS. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN DOCUMENTS AND FIELD CONDITIONS.
B. ALL SUPPORTS, HANGERS, BRACKETS AND MOUNTING ASSEMBLIES FOR THE SYSTEM REQUIRED TO BE REMOVED SHALL BE REMOVED COMPLETELY.
C. ALL EQUIPMENT/MATERIALS REMOVED SHALL BE TRANSPORTED FROM THIS SITE AND DISPOSED OF BY THIS CONTRACTOR UNLESS OTHERWISE NOTED.
D. ALL WORK INVOLVED WITH THE REMOVAL AND DEMOLITION OF THE PLUMBING SYSTEM SHALL BE CAREFULLY COORDINATED TO AVOID DAMAGE TO THE REMAINING SYSTEMS AND FINISHES.

KEYED NOTES:

1. EXISTING PIPING TO BE REMOVED.
2. EXISTING CIRCULATING PUMP TO BE REMOVED.
3. EXISTING BOILER TO BE REMOVED, REFER TO MECHANICAL REMOVAL PLANS.
4. EXISTING ABANDONED BOILER TO BE REMOVED, REFER TO MECHANICAL REMOVAL PLANS.
5. EXISTING HOT WATER STORAGE TANK TO REMAIN.
6. EXISTING WATER HEATER TO REMAIN.
7. EXISTING MIXING VALVES TO BE REMOVED.
8. REMOVE EXISTING EXPANSION TANK, REFER TO MECHANICAL REMOVAL PLANS.
9. EXISTING 1/2" COLD WATER LINE TO BE REMOVED IN ITS ENTIRETY.

KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. SUITE 41
ALBUQUERQUE, NEW MEXICO 87110

Designed by: R. Dan by: D. Chkd by: R. Reviewed by: J. Brasscoff Submitted by: Total Access
Date: 06/23/04 Rev.
Design file no. 04001
Drawing code: D1
Drawn: BAMBPW01 Plot date: 06/15/04 Plot scale: 1/8" = 1'0"

FY04 OMA
REPAIR BARRACKS
FORT BLISS, TEXAS

DEMOLITION PLUMBING PLAN
HAMMERHEAD BASEMENT AND FIRST FLOOR
BLDG – 2448

SOLICITATION NO. W912GG-04-B-0017
CONTRACT NO. W9126G-04-C-0034

Sheet reference number:
P-101
Sheet 30 of 160

CONTRACT NO. W9126G-04-C-0034

DRAWING OF WORK AS BUILT

SHEETNUMBER

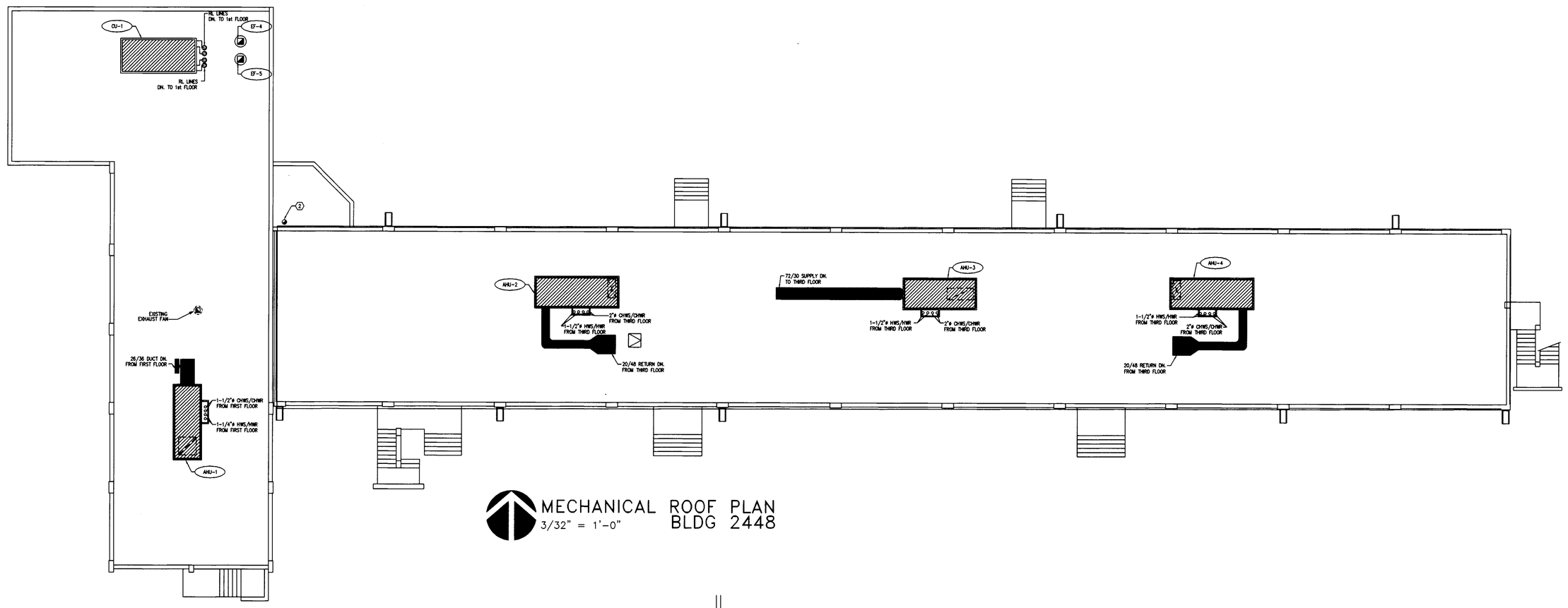
FB-SA

GENERAL NOTES:

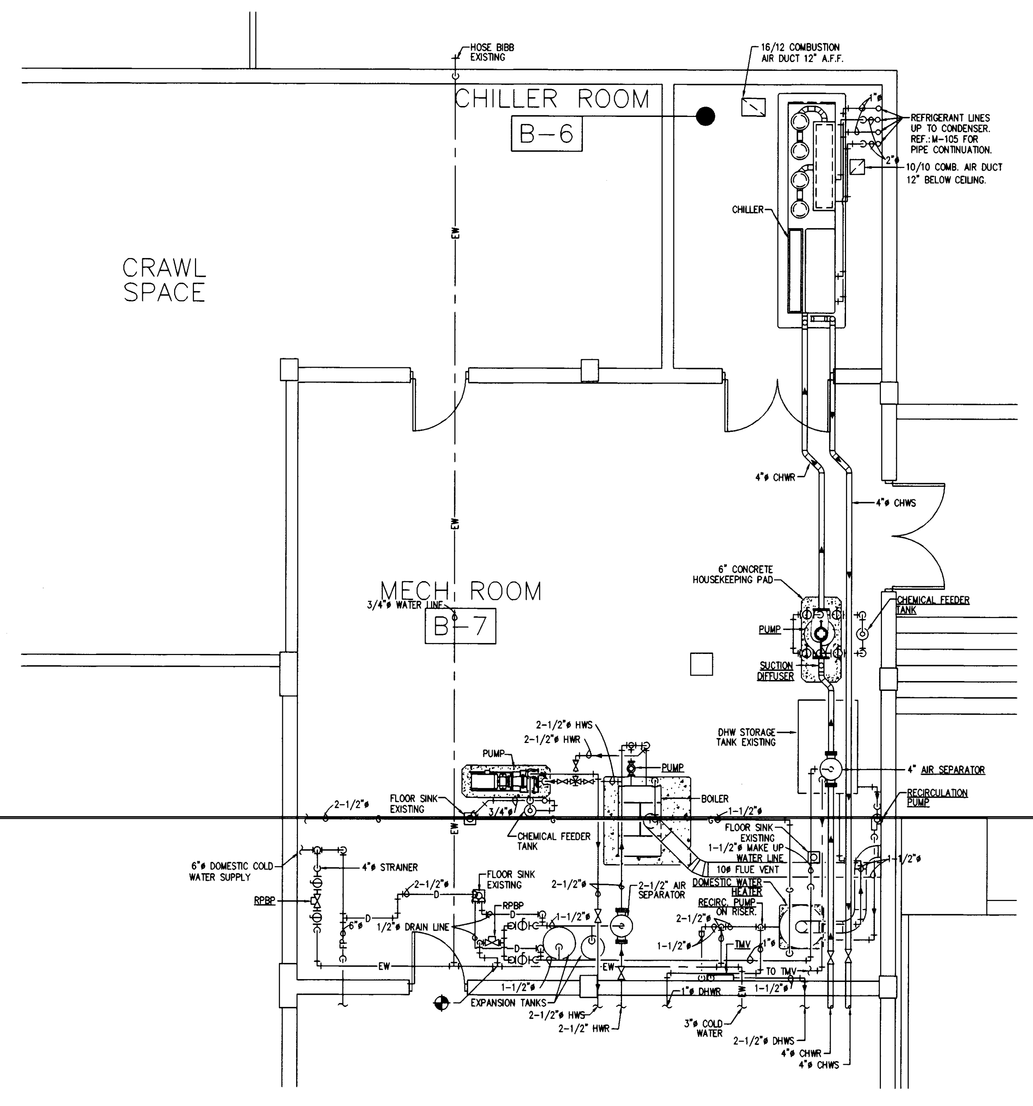
A. SEE DETAIL 11/M501 FOR ROOFTOP EXHAUSTERS.
B. ALL CHILLED WATER AND HEATING WATER VALVES AT THE AIR HANDLERS SHALL BE 3-WAY UNLESS OTHERWISE INDICATED. SEE DETAILS 7/M501 AND 9/M501.
C. SEE SHEET M401 FOR BOILER AND CHILLER PIPING SCHEMATICS.

KEYED NOTES: ⬭

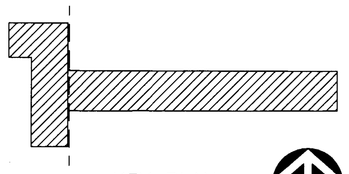
1. IN INSULATED PIPING VESTIBULE.
2. BOILER STACK EXTENDED IN CHIMNEY, PROVIDE APPROVED STACK CAP.



MECHANICAL ROOF PLAN
3/32" = 1'-0"
BLDG 2448



MECHANICAL ROOM PLAN
1/4" = 1'-0"
BLDG 2448
M-105 M-108



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.
0	REVISE NOTES	9-10-04	AMO001

Designed by: J. VILLALOBOS
Drawn by: K.MOTA
Submitted by: J. VILLALOBOS
Date: 03/06/2006
Drawing file no. M-108
Plot date: 03/06/2006

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BARNHART/TAYLOR, INC.
600 E. YANDELL
EL PASO, TEXAS 79902

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

MECHANICAL BASEMENT & ROOF PLAN
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

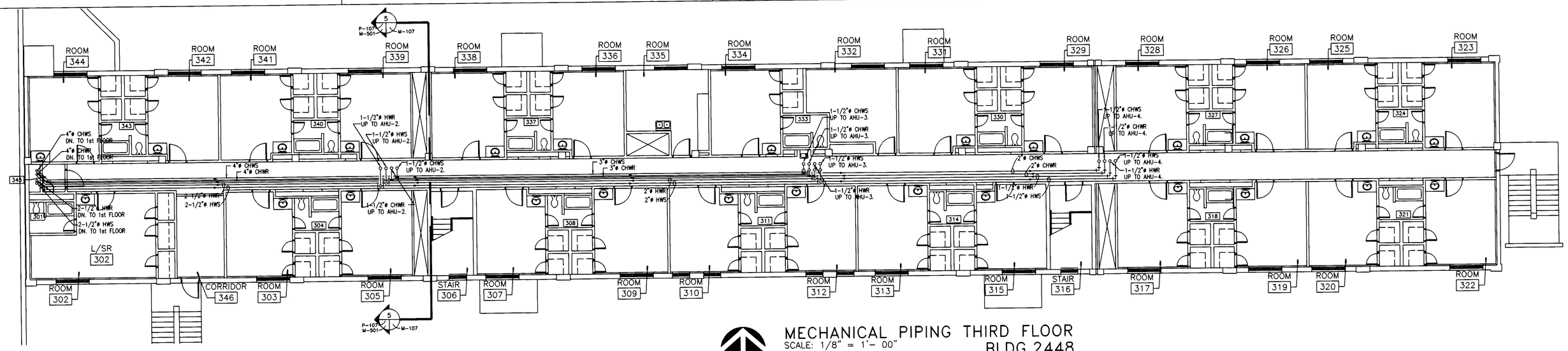
Sheet reference number:
M-108
Sheet 29 of 160

CONTRACT NO. W9126G-04-C-0034

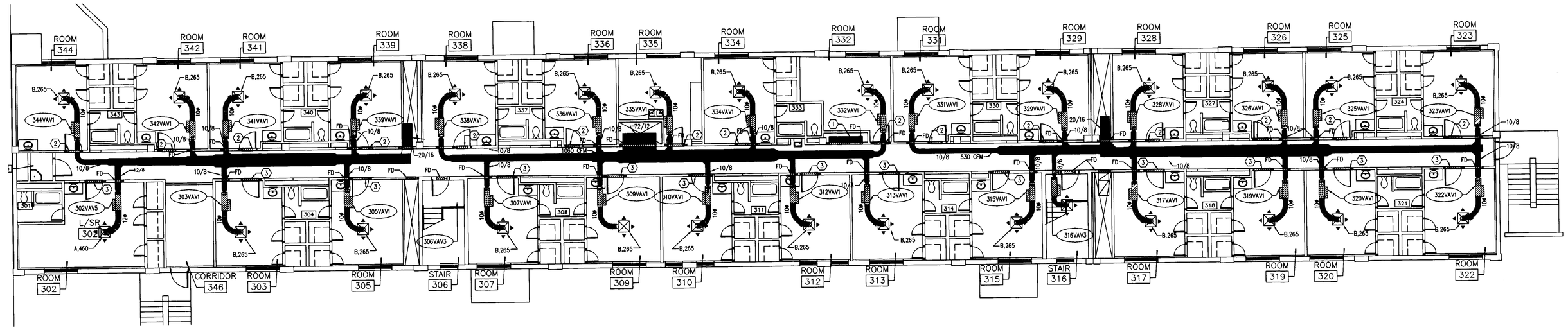
DRAWING OF WORK AS BUILT

SHEETNUMBER

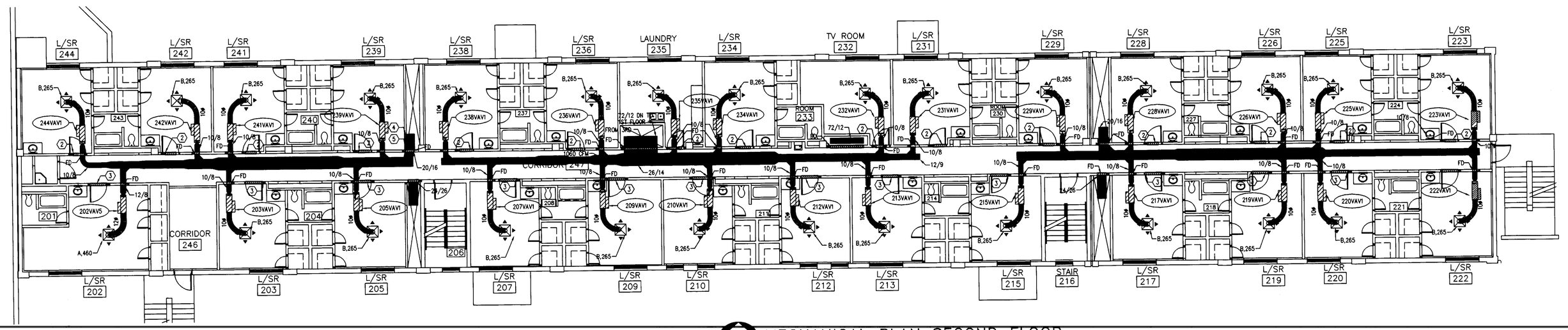
FB-SA



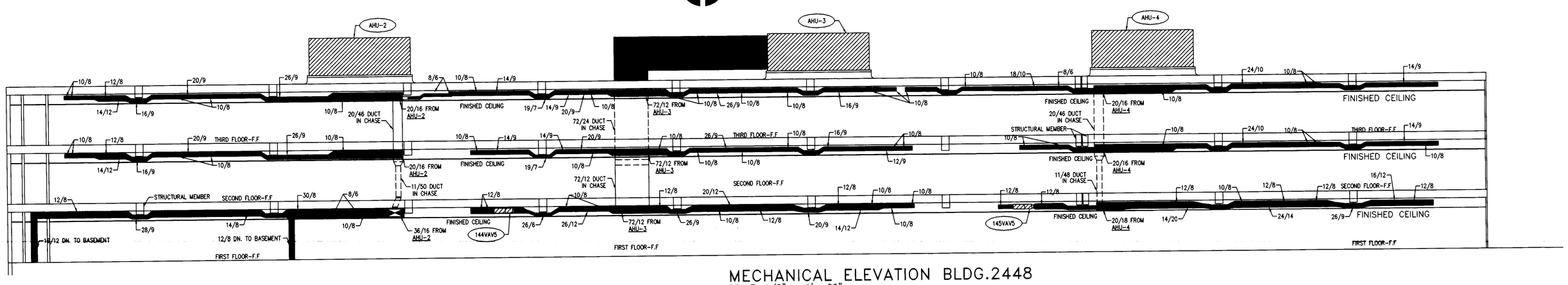
MECHANICAL PIPING THIRD FLOOR
SCALE: 1/8" = 1'- 00"
BLDG.2448



MECHANICAL PLAN THIRD FLOOR
1/8" = 1'-0"
BLDG 2448



MECHANICAL PLAN SECOND FLOOR
1/8" = 1'-0"
BLDG 2448



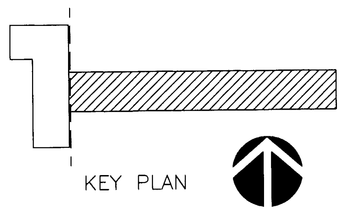
MECHANICAL ELEVATION BLDG.2448
SCALE: 1/8" = 1'- 00"

GENERAL NOTES:

A. SEE DETAIL 5/M501 FOR FAN COIL UNIT INSTALLATION.
B. SEE DETAIL 10/M501 FOR DUCT CONNECTION DETAIL.
C. ALL FAN COIL UNIT HW VALVES SHALL BE TWO-WAY, MODULATING, UNLESS OTHERWISE INDICATED. SEE DETAIL 8/M501.
D. ALL FAN COIL UNIT CW VALVES SHALL BE TWO-WAY, 2-POSITION, UNLESS OTHERWISE INDICATED. SIMILAR TO DETAIL 8/M501.
E. SEE DETAIL 6/M501 FOR CEILING MOUNTED EXHAUST FANS.
F. CONTRACTOR SHALL ROUTE THE HYDRONIC PIPING IN SUCH A MANNER AS TO MINIMIZE OFFSETS.
G. RETURN AIR TRANSFER OPENINGS ARE 36X6 UNLESS OTHERWISE NOTED.

KEYED NOTES:

1. 1/2" ChWS/R, 1/2" HWS/R TO UNIT.
2. 3/4" ChWS/R, 1/2" HWS/R TO UNIT.
3. 24X16, OUTSIDE AIR DUCT BALANCING DAMPER ABOVE CEILING. BALANCE TO 1180 CFM. (DISCHARGE TO PLENUM) SEE 14/M501.
4. 3-WAY ChW AND HW VALVE AT THIS LOCATION.
5. VARIABLE SPEED PUMPS PRESSURE SENSOR LOCATION.



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.
A	HVAC MODIFICATION	9-10-04	AMDOOI

Symbol	Description	Date	Appr.

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

Designed by: J. VILLALOBOS
Dwn by: S.GRTA
Submitted by: J. VILLALOBOS
Date: 03/06/2006
Design file no. M-107
Plot date: 03/06/2006

BERNHART/TAYLOR, INC.
1600 E. YANDELL
EL PASO, TEXAS 79902

FY04 OMA
RENOVATIONS
FORT BLISS, TEXAS

MECHANICAL SECOND & THIRD FLOOR PLANS
BUILDING 2448

SOLICITATION NO. W912GC-04-B-0017
CONTRACT NO. W9126G-04-C-0034

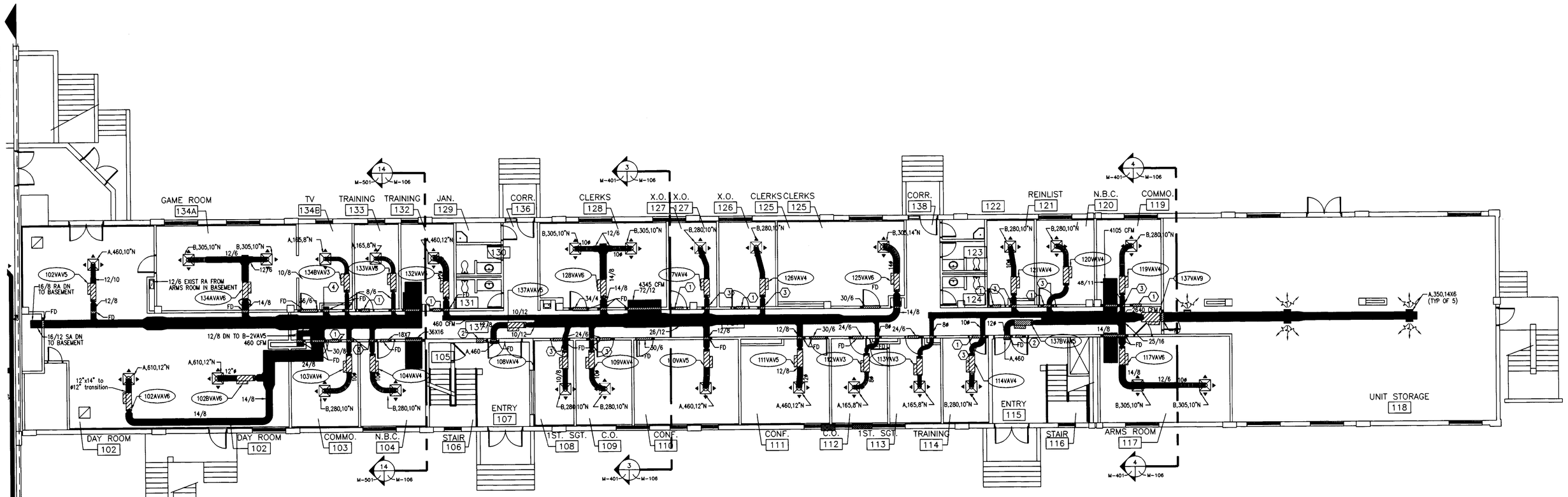
Sheet reference number:
M-107
Sheet 28 of 160

CONTRACT NO. W9126G-04-C-0034

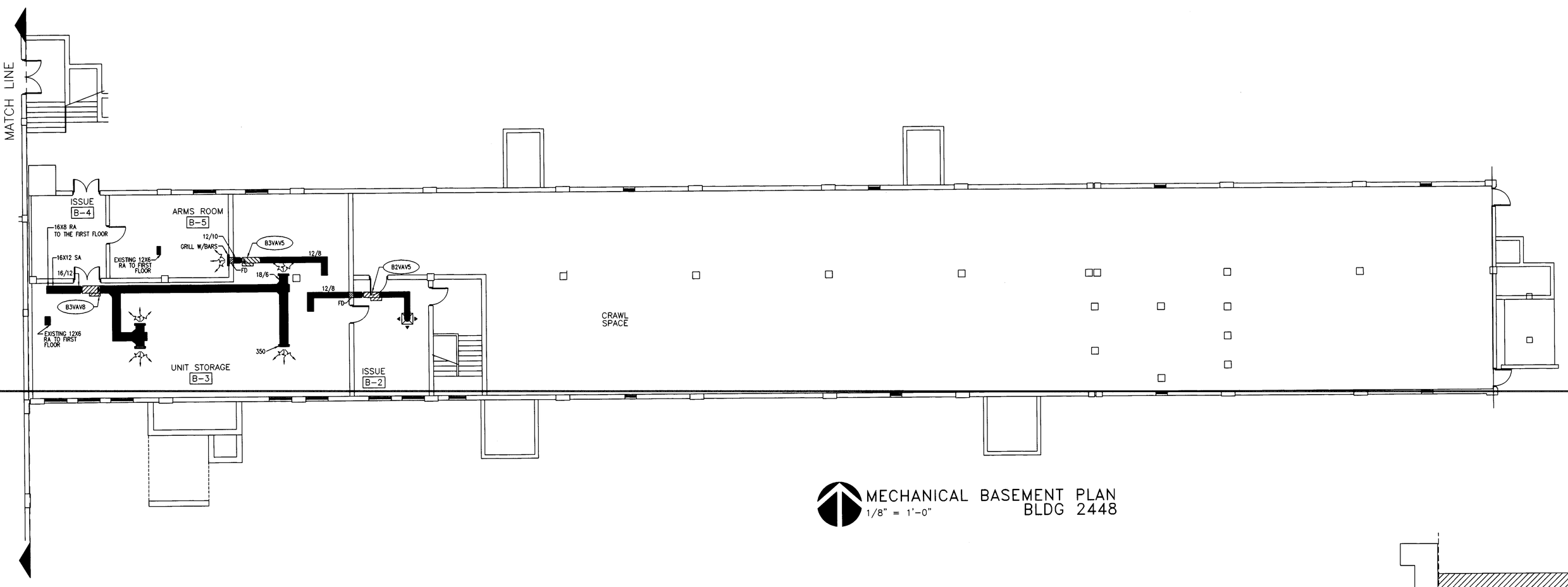
DRAWING OF WORK AS BUILT

SHEETNUMBER

FB-SA



MECHANICAL FIRST FLOOR PLAN
1/8" = 1'-0"
BLDG 2448



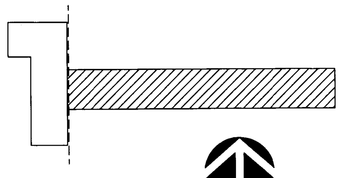
MECHANICAL BASEMENT PLAN
1/8" = 1'-0"
BLDG 2448

GENERAL NOTES:

A. SEE DETAIL 5/M501 FOR FAN COIL UNIT INSTALLATION.
B. SEE DETAIL 10/M501 FOR DUCT CONNECTION DETAIL.
C. ALL FAN COIL UNIT HW VALVES SHALL BE TWO-WAY, MODULATING, UNLESS OTHERWISE INDICATED. SEE DETAIL 8/M501.
D. ALL FAN COIL UNIT CW VALVES SHALL BE TWO-WAY, 2-POSITION, UNLESS OTHERWISE INDICATED. SIMILAR TO DETAIL 8/M501.
E. SEE DETAIL 6/M501 FOR CEILING MOUNTED EXHAUST FANS.
F. CONTRACTOR SHALL ROUTE THE HYDRONIC PIPING IN SUCH A MANNER AS TO MINIMIZE OFFSETS.
G. RETURN AIR TRANSFER OPENINGS ARE 36X6 UNLESS OTHERWISE NOTED.

KEYED NOTES:

1. 1/2" ChWS/R, 1/2" HWS/R TO UNIT.
2. 3/4" CHWS/R, 1/2" HWS/R TO UNIT.
3. 24X16, OUTSIDE AIR DUCT BALANCING DAMPER ABOVE CEILING. BALANCE TO 2635 CFM.
4. OUTSIDE AIR DUCT AND BALANCING DAMPER ABOVE CEILING. BALANCE TO CFM LISTED. (DISCHARGE TO PLENUM) SEE 14/M501.
5. 3-WAY ChW AND HW VALVE AT THIS LOCATION.
6. REFRIGERATION LEAK DETECTION REMOTE BEACON.
7. HVAC SHUTDOWN EMERGENCY SWITCH SERVING AIR HANDLERS AND EXHAUSTERS.



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.
1	REVISE NOTES	9-15-04	AMD004

Designed by: J. VILLALOBOS
Dwn by:
Ckd by:
Date: 03/06/2006
Design file no.
Lib file
Plot date: 03/06/2006
Submitted by: J. VILLALOBOS

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BARNHART/TAYLOR, INC.
1000 E. MONTANA
EL PASO, TEXAS 79902

FY04 DMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

MECHANICAL BASEMENT
FIRST FLOOR PLAN
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

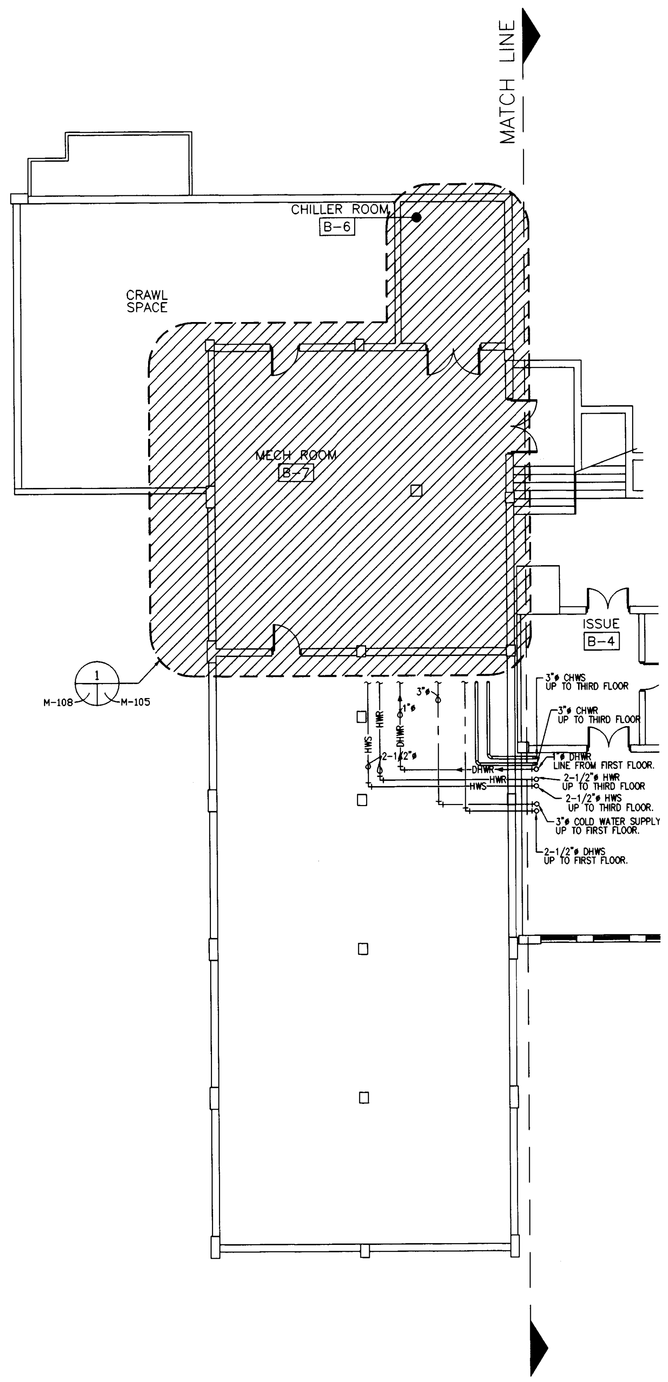
Sheet reference number:
M-106
Sheet 27 of 160

CONTRACT NO. W9126G-04-C-0034

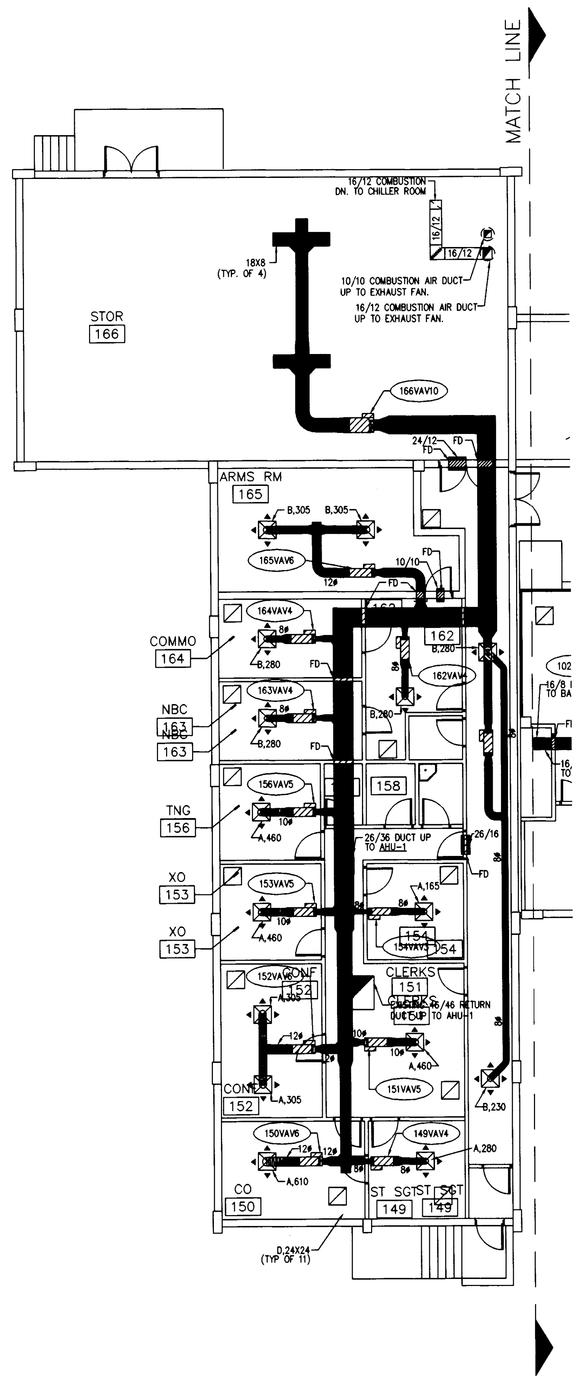
DRAWING OF WORK AS BUILT

SHEETNUMBER

FB-SA



MECHANICAL BASEMENT FLOOR PLAN
1/8" = 1'-0"
BLDG 2448



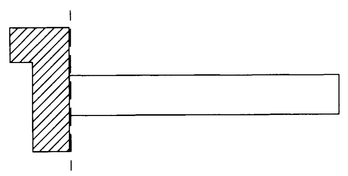
MECHANICAL FIRST FLOOR PLAN
1/8" = 1'-0"
BLDG 2448

GENERAL NOTES:

A. SEE DETAIL 5/M501 FOR FAN COIL UNIT INSTALLATION.
B. SEE DETAIL 10/M501 FOR DUCT CONNECTION DETAIL.
C. ALL FAN COIL UNIT HW VALVES SHALL BE TWO-WAY, MODULATING, UNLESS OTHERWISE INDICATED. SEE DETAIL 8/M501.
D. ALL FAN COIL UNIT CW VALVES SHALL BE TWO-WAY, 2-POSITION, UNLESS OTHERWISE INDICATED. SIMILAR TO DETAIL 8/M501.
E. SEE DETAIL 6/M501 FOR CEILING MOUNTED EXHAUST FANS.
F. CONTRACTOR SHALL ROUTE THE HYDRONIC PIPING IN SUCH A MANNER AS TO MINIMIZE OFFSETS.
G. RETURN AIR TRANSFER OPENINGS ARE 36X6 UNLESS OTHERWISE NOTED.

KEYED NOTES:

1. 18x8, OUTSIDE AIR DUCT AND BALANCING DAMPER ABOVE CEILING. BALANCE TO 725 CFM.



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.

Mark	Description	Date	Appr.

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORPS OF ENGINEERS

Designed by: A.WILALVIS05
Date: 03/06/2006
Dwn by: A.WILALVIS05
Design file no. M-1119
Submitted by: A.WILALVIS05
Plot date: 03/06/2006

BARNHART/TAYLOR, INC.
1400 E. YANDELL
EL PASO, TEXAS 79902

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

MECHANICAL HAMMERHEAD BASEMENT & FIRST FLOOR PLANS
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

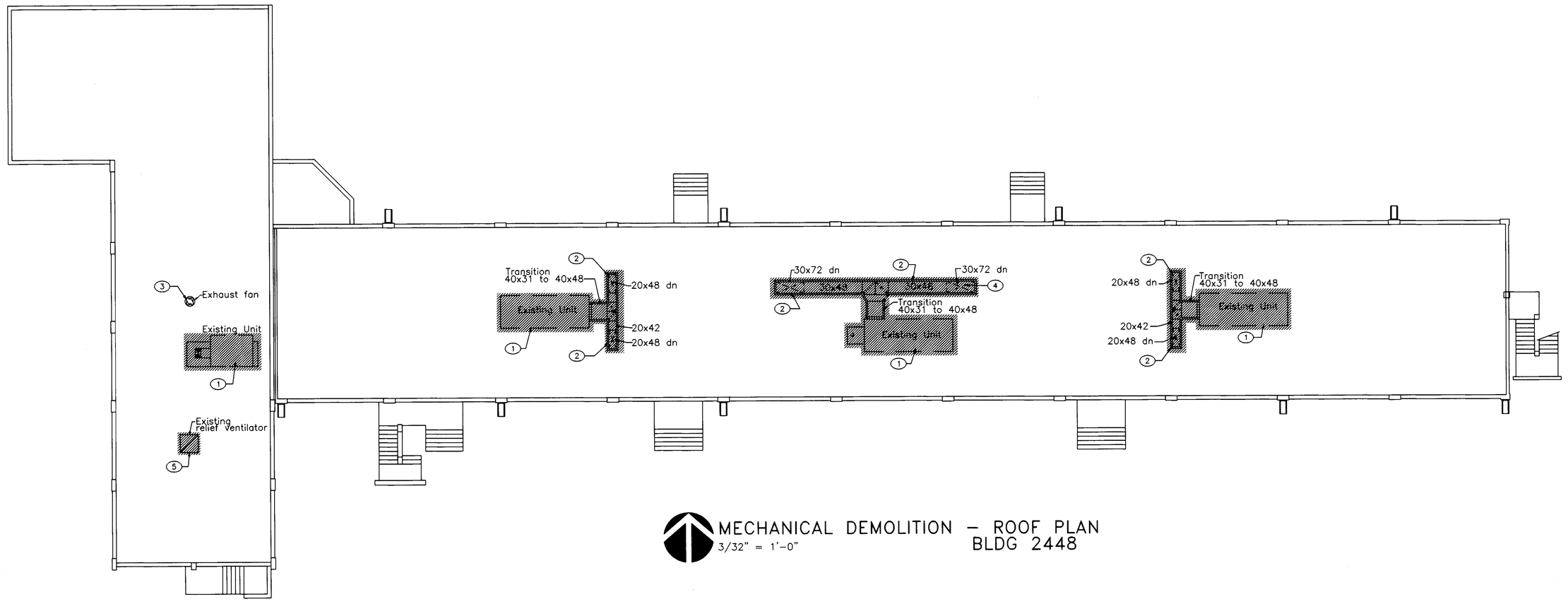
Sheet reference number:
M-105
Sheet 26 of 160

CONTRACT NO. W9126G-04-C-0034

DRAWING OF WORK AS BUILT

SHEETNUMBER

FB-SA



MECHANICAL DEMOLITION – ROOF PLAN
3/32" = 1'-0"
BLDG 2448

GENERAL NOTES:

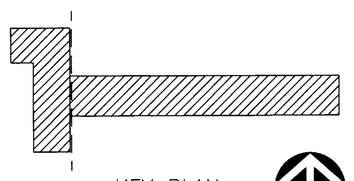
A. ANY HYDRONIC HEATING PIPING NOT SHOWN AS BEING REMOVED SHALL BE ABANDONED IN PLACE. SOME PIPING THAT IS ABANDONED IN PLACE MAY CONFLICT WITH THE INSTALLATION, ACCESS AND/OR MAINTENANCE OF THE NEW MECHANICAL SYSTEMS. LOCALIZED REMOVAL OF THIS PIPING WILL BE ACCOMPLISHED AT NO ADDITIONAL COST TO THE GOVERNMENT.

KEYED NOTES:

1. REMOVE EXISTING EVAPORATIVE COOLING IN ITS ENTIRETY.
2. REMOVE EXISTING DUCTWORK. SEE ARCHITECTURAL FOR PATCHING ALL ROOF OPENINGS.
3. ROOFTOP EXHAUSTER TO REMAIN.
4. EXISTING ROOF PENETRATION TO REMAIN FOR RE-USE.
5. REMOVE RELIEF VENTILATOR.

REMOVAL NOTES

A. THE DRAWINGS WERE GENERATED FROM EXISTING CONSTRUCTION DRAWINGS ISSUED FOR THE INSTALLATION OF THE SYSTEMS AS THEY ARE NOW INSTALLED. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN DOCUMENTS AND FIELD CONDITIONS.
B. ALL SUPPORTS, HANGERS, BRACKETS AND MOUNTING ASSEMBLIES FOR ALL SYSTEMS REQUIRED TO BE DEMOLISHED OR REMOVED SHALL ALSO BE REMOVED COMPLETELY.
C. ALL EQUIPMENT/MATERIALS REMOVED SHALL BE TRANSPORTED FROM THIS SITE AND DISPOSED OF BY THIS CONTRACTOR UNLESS OTHERWISE NOTED.
D. ALL WORK INVOLVED WITH THE REMOVAL AND DEMOLITION OF THE MECHANICAL SYSTEM SHALL BE CAREFULLY COORDINATED TO AVOID DAMAGE TO THE REMAINING SYSTEMS AND EXISTING FINISHES.



KEY PLAN

US Army Corps of Engineers
District or Division

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORPS OF ENGINEERS

Designed by: PL
Drawn by: BR
Checked by: PL
Reviewed by: J.Barnard
Submitted by: Paul Waters
Date: 08/23/04 Rev.
Design file no. M-104
Drawing code: M
File name: B2448M104
Plot date: 08/13/04
Plot scale: 1/8" = 1'-0"

BRW ARCHITECTS & ENGINEERS, INC.
6200 UPTOWN BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

MECHANICAL DEMOLITION PLANS
ROOF AND MECHANICAL ROOM
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

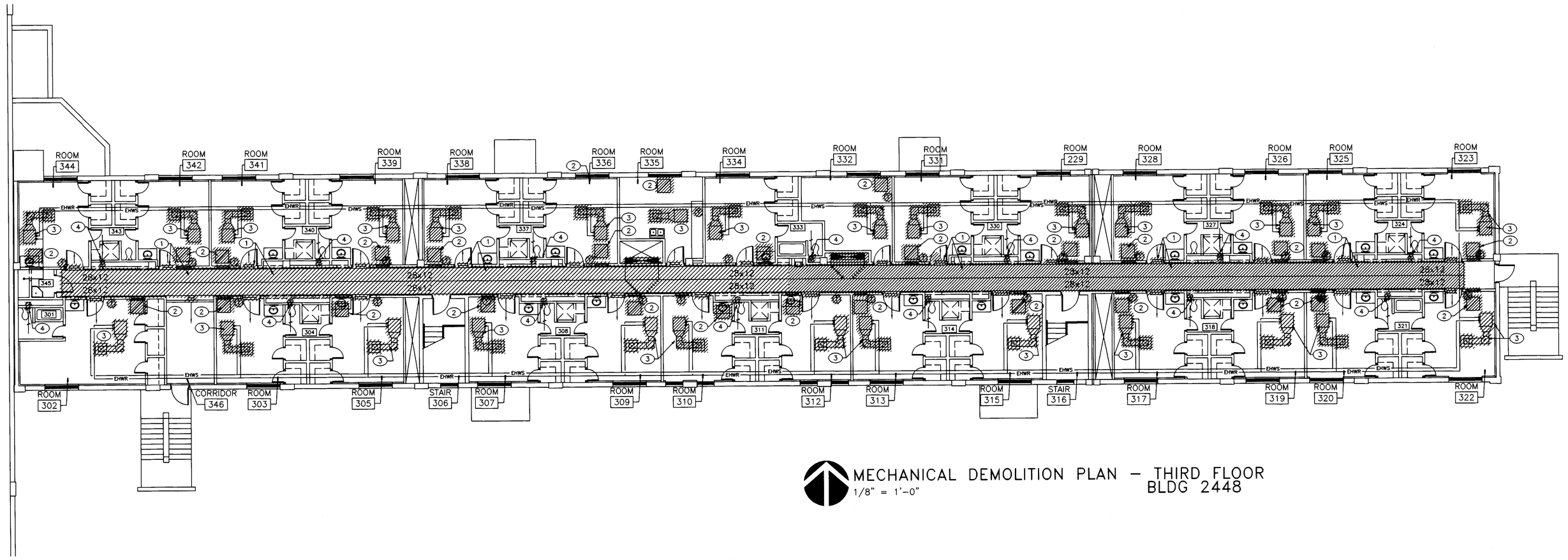
Sheet reference number:
M-104
Sheet 25 of 160

CONTRACT NO. W9126G-04-C-0034

DRAWING OF WORK AS BUILT

SHEETNUMBER

FB-SA



MECHANICAL DEMOLITION PLAN – THIRD FLOOR
BLDG 2448
1/8" = 1'-0"

GENERAL NOTES:

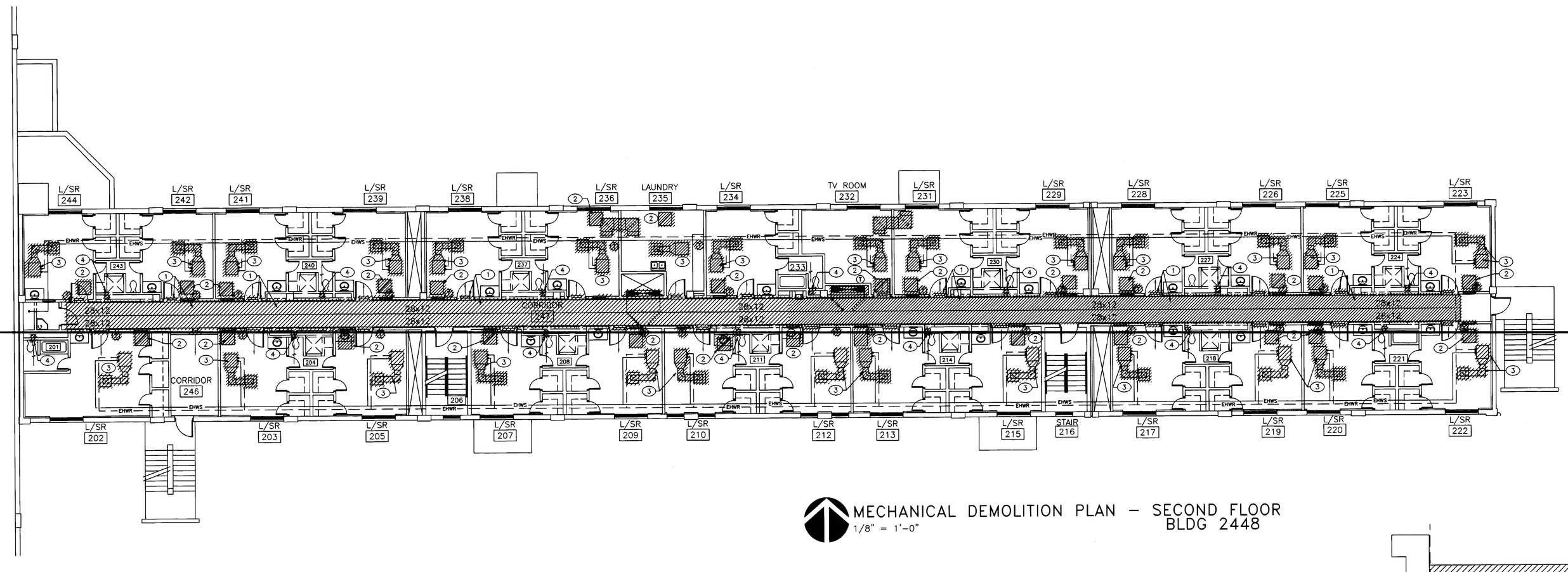
A. ANY HYDRONIC HEATING PIPING NOT SHOWN AS BEING REMOVED SHALL BE ABANDONED IN PLACE. SOME PIPING THAT IS ABANDONED IN PLACE MAY CONFLICT WITH THE INSTALLATION, ACCESS AND/OR MAINTENANCE OF THE NEW MECHANICAL SYSTEMS. LOCALIZED REMOVAL OF THIS PIPING WILL BE ACCOMPLISHED AT NO ADDITIONAL COST TO THE GOVERNMENT.

KEYED NOTES:

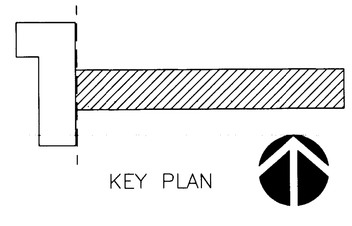
1. EXISTING EVAPORATIVE COOLING DUCTWORK AND SUPPLY AIR GRILLES TO BE REMOVED IN ITS ENTIRETY.
2. RETURN AIR GRILLES TO BE REMOVED.
3. REMOVE FAN COIL UNIT, DUCTWORK, SUPPLY GRILLES, COIL VALVES, THERMOSTAT AND SPEED SWITCH CAP HWS, HWR IN CEILING.
4. EXISTING EXHAUST DUCT AND REGISTER AND RISER TO BE REMOVED IN ITS ENTIRETY.

REMOVAL NOTES

A. THE DRAWINGS WERE GENERATED FROM EXISTING CONSTRUCTION DRAWINGS ISSUED FOR THE INSTALLATION OF THE SYSTEMS AS THEY ARE NOW INSTALLED. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN DOCUMENTS AND FIELD CONDITIONS.
B. ALL SUPPORTS, HANGERS, BRACKETS AND MOUNTING ASSEMBLIES FOR ALL SYSTEMS REQUIRED TO BE DEMOLISHED OR REMOVED SHALL ALSO BE REMOVED COMPLETELY.
C. ALL EQUIPMENT/MATERIALS REMOVED SHALL BE TRANSPORTED FROM THIS SITE AND DISPOSED OF BY THIS CONTRACTOR UNLESS OTHERWISE NOTED.
D. ALL WORK INVOLVED WITH THE REMOVAL AND DEMOLITION OF THE MECHANICAL SYSTEM SHALL BE CAREFULLY COORDINATED TO AVOID DAMAGE TO THE REMAINING SYSTEMS AND EXISTING FINISHES.



MECHANICAL DEMOLITION PLAN – SECOND FLOOR
BLDG 2448
1/8" = 1'-0"



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.

Designed by: PL
Dwn by: PL
Ckd by: PL
Reviewed by: Bob Wilson
Submitted by: Paul Waters
Date: 08/23/04
Rev.
Design file no: M-103
Drawing code: D
File name: B2448M103
Plot date: 08/13/04
Plot scale: 1/8" = 1'0"

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORPS OF ENGINEERS

BRW ARCHITECTS & ENGINEERS, INC.
6010 UPTOWN BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

MECHANICAL DEMOLITION PLANS
SECOND & THIRD FLOORS
BLDG 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

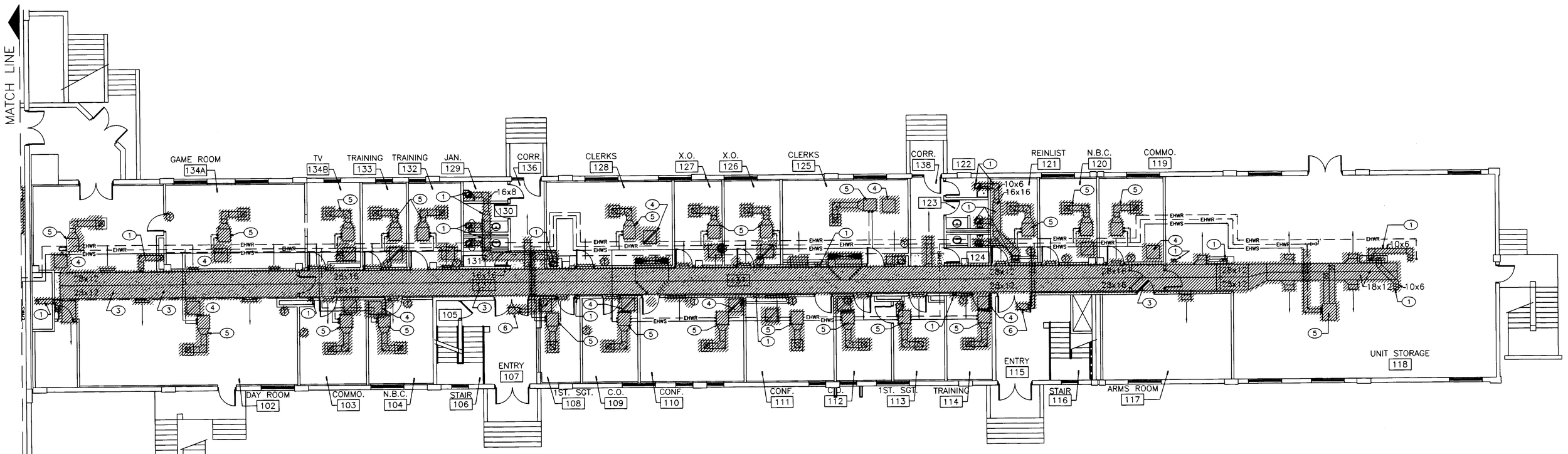
Sheet reference number:
M-103
Sheet 24 of 160

CONTRACT NO. W9126G-04-C-0034

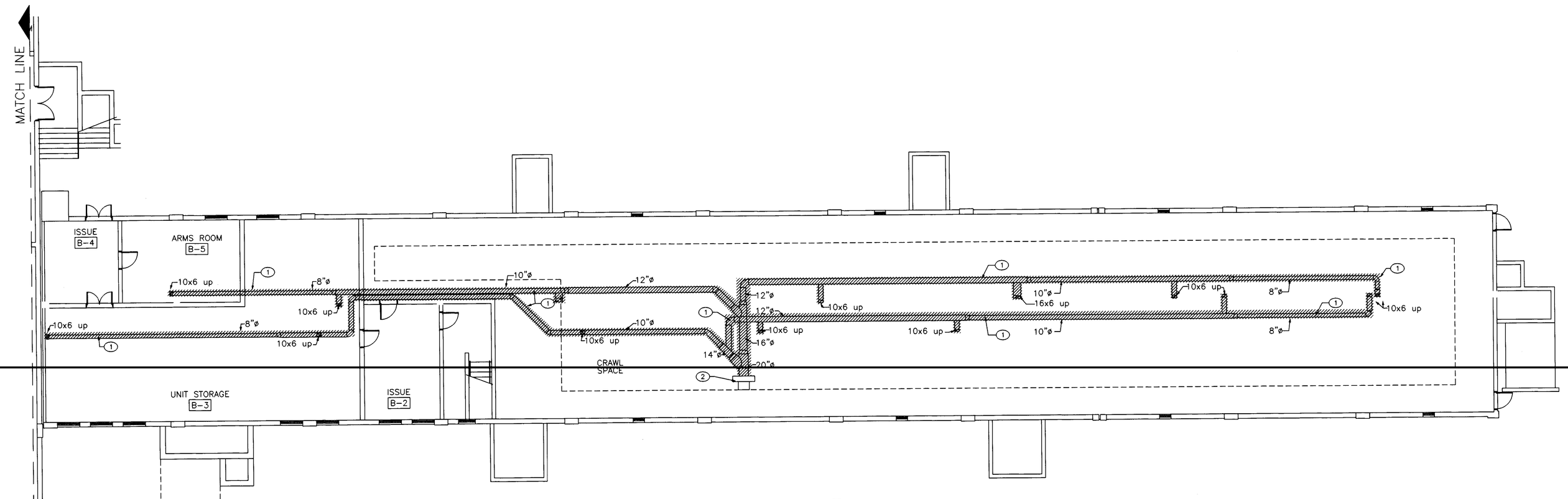
DRAWING OF WORK AS BUILT

SHEETNUMBER

FB-5A



MECHANICAL DEMOLITION PLAN – FIRST FLOOR
BLDG 2448
1/8" = 1'-0"



MECHANICAL DEMOLITION PLAN – BASEMENT
BLDG 2448
1/8" = 1'-0"

KEY PLAN

GENERAL NOTES:

A. ANY HYDRONIC HEATING PIPING NOT SHOWN AS BEING REMOVED SHALL BE ABANDONED IN PLACE. SOME PIPING THAT IS ABANDONED IN PLACE MAY CONFLICT WITH THE INSTALLATION, ACCESS AND/OR MAINTENANCE OF THE NEW MECHANICAL SYSTEMS. LOCALIZED REMOVAL OF THIS PIPING WILL BE ACCOMPLISHED AT NO ADDITIONAL COST TO THE GOVERNMENT.

KEYED NOTES:

1. EXISTING EXHAUST DUCT, REGISTER AND RISER TO BE REMOVED IN ITS ENTIRETY.
2. REMOVE EXHAUST FAN.
3. EXISTING EVAPORATIVE COOLING DUCTWORK AND SUPPLY AIR GRILLES TO BE REMOVED IN ITS ENTIRETY.
4. RETURN AIR GRILLES TO BE REMOVED.
5. REMOVE FAN COIL UNIT, DUCTWORK, SUPPLY GRILLES, COIL VALVES, THERMOSTAT AND SPEED SWITCH CAP HWS, HWR IN CEILING.
6. REMOVE UNIT HEATER AND PIPING. CAP HWS/HWR AT MAIN.

REMOVAL NOTES

A. THE DRAWINGS WERE GENERATED FROM EXISTING CONSTRUCTION DRAWINGS ISSUED FOR THE INSTALLATION OF THE SYSTEMS AS THEY ARE NOW INSTALLED. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN DOCUMENTS AND FIELD CONDITIONS.
B. ALL SUPPORTS, HANGERS, BRACKETS AND MOUNTING ASSEMBLIES FOR ALL SYSTEMS REQUIRED TO BE DEMOLISHED OR REMOVED SHALL ALSO BE REMOVED COMPLETELY.
C. ALL EQUIPMENT/MATERIALS REMOVED SHALL BE TRANSPORTED FROM THIS SITE AND DISPOSED OF BY THIS CONTRACTOR UNLESS OTHERWISED NOTED.
D. ALL WORK INVOLVED WITH THE REMOVAL AND DEMOLITION OF THE MECHANICAL SYSTEM SHALL BE CAREFULLY COORDINATED TO AVOID DAMAGE TO THE REMAINING SYSTEMS AND EXISTING FINISHES.

US Army Corps of Engineers
District or Division

Symbol	Description	Date	Appr.

Symbol	Description	Date	Appr.

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

Designed by: PL
Dwn by: BR
Ckd by: PL
Reviewed by: J. Brosseit
Submitted by: Paul Waters
Date: 08/23/04 Rev.
Design file no. 02
Drawing code: 02
Plot date: 08/13/04
Plot scale: 1/8 = 1'0"

BRW ARCHITECTS & ENGINEERS, INC.
6020 MIDDLE RIO GRANDE BLVD. SUITE 400
ALBUQUERQUE, NEW MEXICO 87110

FY04 OMA
REMOVE BARRACKS
FORT BLISS, TEXAS

MECHANICAL DEMOLITION PLANS
BASEMENT & FIRST FLOOR
BLDG 2448
SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

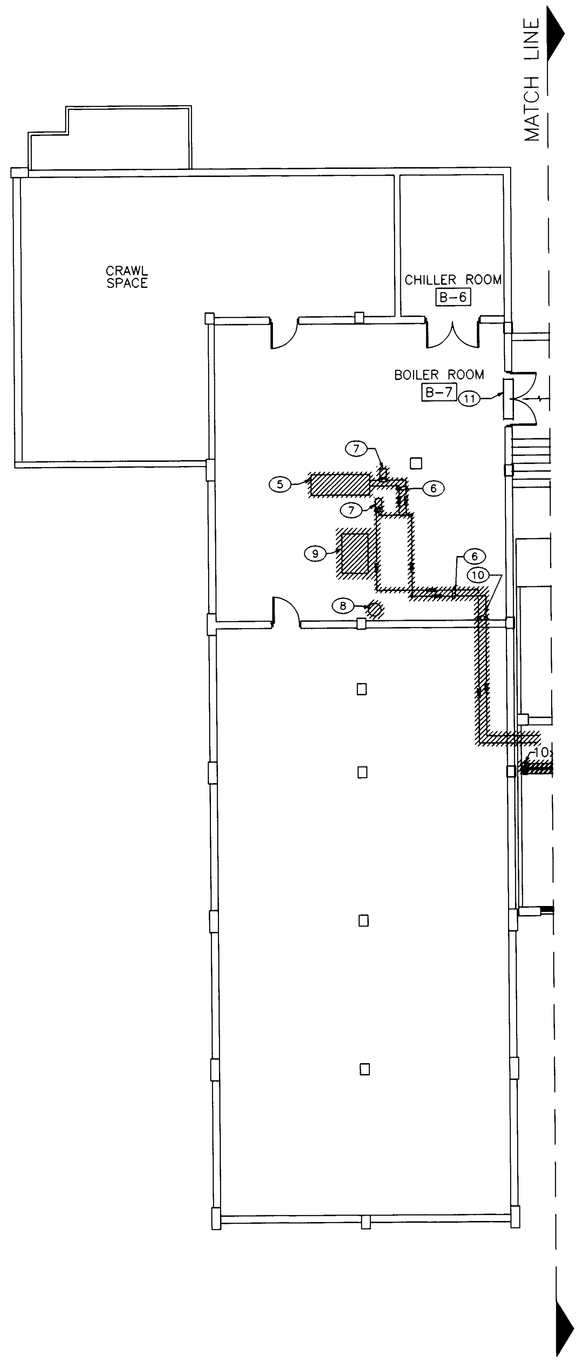
Sheet reference number:
M-102
Sheet 23 of 160

CONTRACT NO. W9126G-04-C-0034

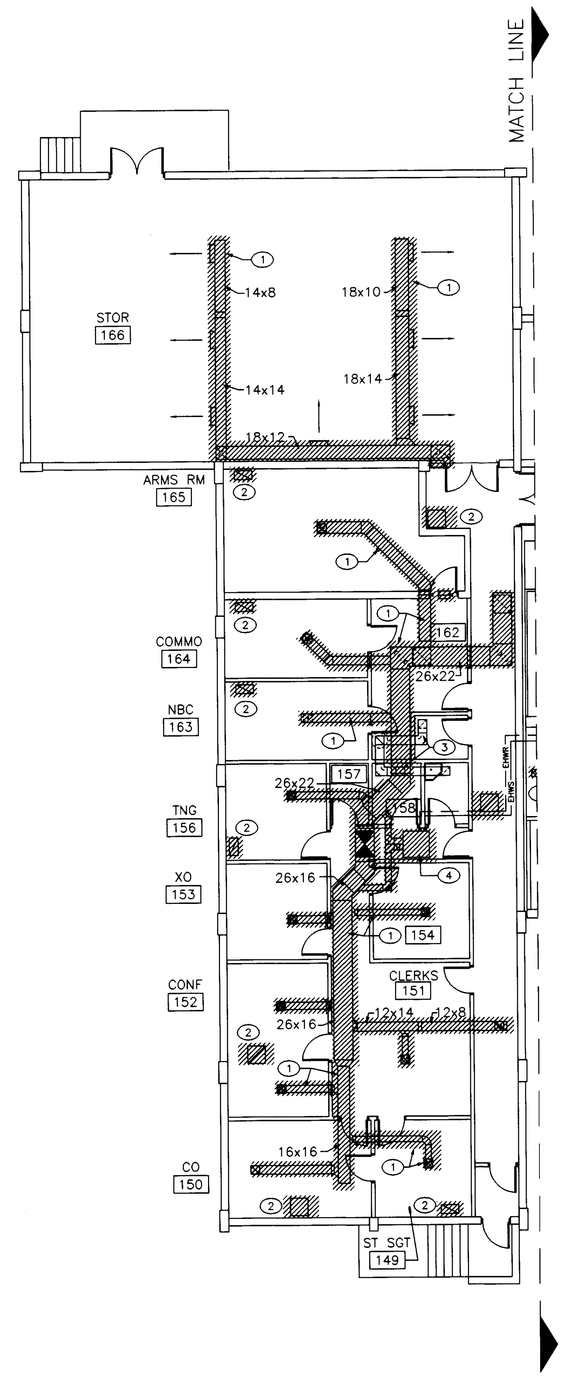
DRAWING OF WORK AS BUILT

SHEETNUMBER

FB-SA



MECHANICAL DEMOLITION PLAN – BASEMENT
BLDG 2448
1/8" = 1'-0"



MECHANICAL DEMOLITION PLAN – FIRST FLOOR
BLDG 2448
1/8" = 1'-0"

GENERAL NOTES:

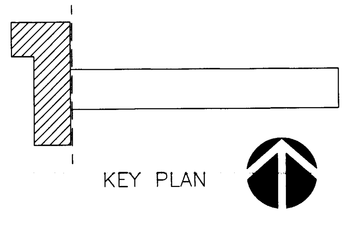
A. ANY HYDRONIC HEATING PIPING NOT SHOWN AS BEING REMOVED SHALL BE ABANDONED IN PLACE. SOME PIPING THAT IS ABANDONED IN PLACE MAY CONFLICT WITH THE INSTALLATION, ACCESS AND/OR MAINTENANCE OF THE NEW MECHANICAL SYSTEMS. LOCALIZED REMOVAL OF THIS PIPING WILL BE ACCOMPLISHED AT NO ADDITIONAL COST TO THE GOVERNMENT.

KEYED NOTES:

1. EXISTING EVAPORATIVE COOLING DUCTWORK AND SUPPLY AIR GRILLES TO BE REMOVED IN ITS ENTIRETY.
2. RETURN AIR GRILLES TO BE REMOVED.
3. EXHAUST DUCT TO REMAIN.
4. REMOVE FAN COIL UNIT, DUCTWORK, SUPPLY GRILLES, COIL VALVES, THERMOSTAT AND SPEED SWITCH. CAP HWS, HWR IN CEILING.
5. EXISTING BOILER TO BE REMOVED AND SALVAGED TO OWNER. COMPLETELY REMOVE BOILER TRIM AND BOILER FLUE THROUGH CHIMNEY TO MATCH EXISTING.
6. HEATING WATER PIPING TO BE REMOVED.
7. EXISTING PUMPS AND ACCESSORIES TO BE REMOVED.
8. REMOVE EXPANSION TANK AND ASSOCIATED ACCESSORIES.
9. ABANDONED BOILER TO BE REMOVED. COMPLETELY REMOVE BOILER TRIM AND BOILER FLUE THROUGH CHIMNEY TO MATCH EXISTING.
10. EXISTING CHEMICAL FEEDER TO BE REMOVED.
11. EXISTING OUTSIDE AIR INTAKE TO REMAIN.

REMOVAL NOTES

A. THE DRAWINGS WERE GENERATED FROM EXISTING CONSTRUCTION DRAWINGS ISSUED FOR THE INSTALLATION OF THE SYSTEMS AS THEY ARE NOW INSTALLED. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN DOCUMENTS AND FIELD CONDITIONS.
B. ALL SUPPORTS, HANGERS, BRACKETS AND MOUNTING ASSEMBLIES FOR ALL SYSTEMS REQUIRED TO BE DEMOLISHED OR REMOVED SHALL ALSO BE REMOVED COMPLETELY.
C. ALL EQUIPMENT/MATERIALS REMOVED SHALL BE TRANSPORTED FROM THIS SITE AND DISPOSED OF BY THIS CONTRACTOR UNLESS OTHERWISE NOTED.
D. ALL WORK INVOLVED WITH THE REMOVAL AND DEMOLITION OF THE MECHANICAL SYSTEM SHALL BE CAREFULLY COORDINATED TO AVOID DAMAGE TO THE REMAINING SYSTEMS AND EXISTING FINISHES.



KEY PLAN

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.
0	REUSE NOTES	9-10-04	AMD003

Mark	Description	Date	Appr.

Designed by: PL | Date: 08/23/04 | Rev.
Dwn by: PL | Ckd by: PL | Design file no. 1a-910
Reviewed by: J. Bosscoff | Drawing code: 01
Submitted by: Paul Nevares | File name: 01a1a8m101
Plot date: 08/13/04
Plot scale: 1/8 = 1'-0"

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
6100 CORPORATE DRIVE, SUITE 470
ALBUQUERQUE, NEW MEXICO 87110

FY04 GWA
RENOVATE BARRACKS
FORT BLISS, TEXAS

MECHANICAL DEMOLITION PLANS
HAMMERHEAD BASEMENT & FIRST FLOOR
BUILDING 2448
SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

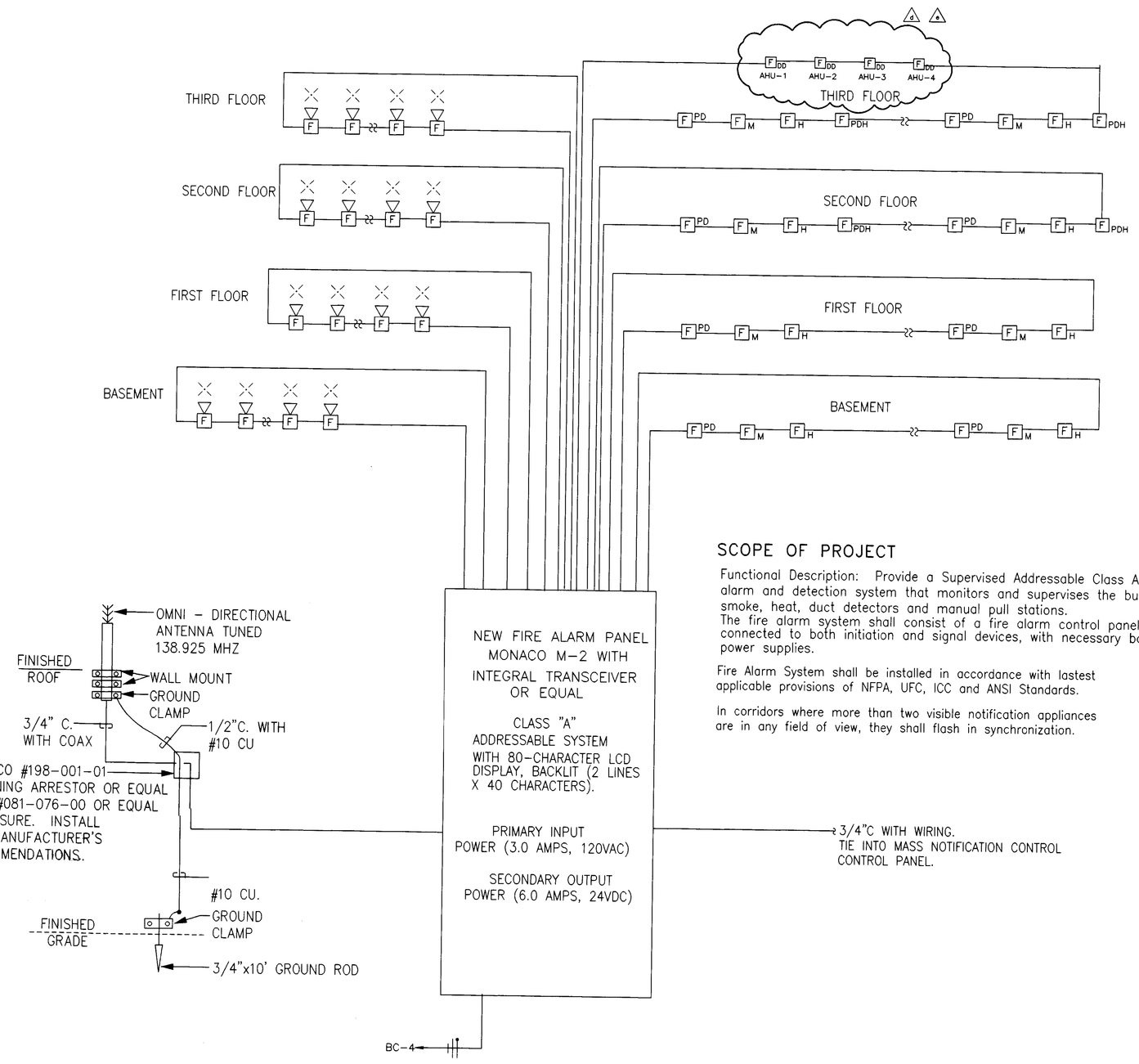
Sheet reference number:
M-101
Sheet 22 of 160

CONTRACT NO. W9126G-04-C-0034

DRAWING OF WORK AS BUILT

SHEETNUMBER

FB-SA



FIRE ALARM AND DETECTION SYSTEM DIAGRAM - OPTION 3

SCALE: NONE

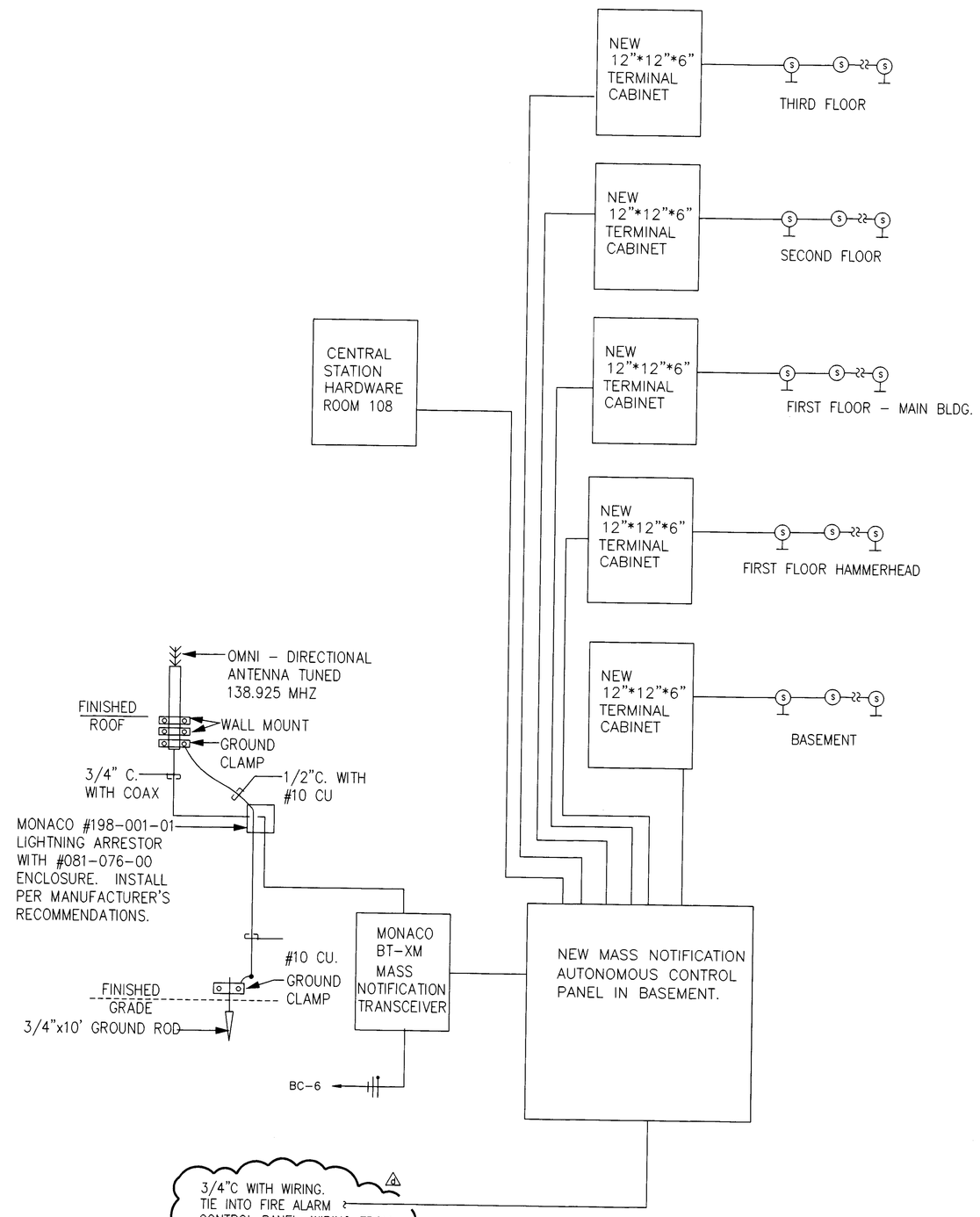
MINIMUM CONDUIT SIZE SHALL BE 3/4"C

SCOPE OF PROJECT

Functional Description: Provide a Supervised Addressable Class A fire alarm and detection system that monitors and supervises the building smoke, heat, duct detectors and manual pull stations.
The fire alarm system shall consist of a fire alarm control panel connected to both initiation and signal devices, with necessary backup power supplies.

Fire Alarm System shall be installed in accordance with lastest applicable provisions of NFPA, UFC, ICC and ANSI Standards.

In corridors where more than two visible notification appliances are in any field of view, they shall flash in synchronization.



MASS NOTIFICATION SYSTEM DIAGRAM - OPTION 5

SCALE: NONE

MINIMUM CONDUIT SIZE SHALL BE 3/4"C

US Army Corps of Engineers
District or Division

Mark	Description	Date	Appr.
4	ADDED CONTACTS TO AHU-3 AND AHU-4 BARNHART, TAYLOR, INC. REDRAWN TO ORIGINAL DOCUMENTS.	9-15-04	AM/DGK
3	CLARIFICATIONS		

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BPLW ARCHITECTS & ENGINEERS, INC.
100 WASHINGTON BLVD SE 87108
ALBUQUERQUE, NEW MEXICO 87110

Designed by: JJ
Dwn by: JJ
Ckd by: JJ
Reviewed by: JJ
Submitted by: Paul Waters
Date: 06/23/04
Design file no.
Code ident.
Drawing code: E
File name: B2448E-604.dwg
Plot date: 07-17-04
Plot scale: NONE

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

SPECIAL SYSTEMS
FIRE ALARM SYS
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

Sheet reference number:
E-604
Sheet 56 of 160

CONTRACT NO. W9126G-04-C-0034

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SHEETNUMBER

DRAWING OF WORK AS BUILT

FB-5A

DIST. PNL	DESCRIPTION	REMARKS:
MDP	480/277V, 3PH, 4W , 400 AMP M.C.B. , COPPER BUS, BOLT-ON BREAKERS, 22,000 AIC ,SURFACE MOUNTED, DOOR-IN-DOOR, NEUTRAL BAR (CU), GROUND BAR (CU),	CIRCUIT NUMBERING IS BY POLE POSITION. ALL BREAKERS SHALL BE FULLY RATED.

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD (KVA)	PHASE A	PHASE B	PHASE C	LOAD (KVA)	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1		SPACE	--/3		3.04			3.04			7	
						3.04		3.04	20/3	AHU-2	7	2
							3.04	3.04			7	
3	4	CP1	20/3	3.04	3.04				SHT	S H U N T T R I P		4
	4			3.04		3.04						
	4			3.04			3.04					
5	4	CP4	15/3	2.11	5.15			3.04			7	
	4			2.11		5.15		3.04	20/3	AHU-3	7	6
	4			2.11			5.15	3.04			7	
D 7	7	CH-1	175/3	43.51	43.51				SHT	S H U N T T R I P		8
	7			43.51		43.51						
	7			43.51			43.51					
9	7	AHU-1	15/3	2.11	5.15			3.04			7	
	7			2.11		5.15		3.04	20/3	AHU-4	7	10
	7			2.11			5.15	3.04			7	
11		S H U N T T R I P	SHT		0.00				SHT	S H U N T T R I P		12
						0.00						
							0.00					
13		SPACE	--/3		9.70			9.70			7	
						9.70		9.70	45/3	CU-1	7	14
							9.70	9.70			7	
		DEMAND LOADS MAY VARY FROM			69.59	69.59	69.59	**Phase Totals**				
		CONNECTED LOADS BECAUSE OF		**Connected KVA**	**208.8**		**251.11**	**Connected AMPS**				
		CODE DIVERSITIES.		**Demand KVA**	**241.4**	**480V**	**290.36**	**Demand AMPS**				

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA		Phase amps	
0	**Lighting - Non-Continuous**	0.00	1.00	0.00		Phase (A)	251.11
1	**Lighting -Continuous**	0.00	1.25	0.00		Phase (B)	251.11
2	**Receptacles**	0.00	1.00	0.00		Phase (C)	251.11
3	**Special Loads**	0.00	1.00	0.00			
4	**Motors**	15.45	1.00	15.45			
5	**Kitchen (Commercial)**	0.00	0.65	0.00			
6	**Heating**	0.00	1.00	0.00	Larger of the two loads per NEC 220-21		
7	**Cooling**	193.32	1.00	193.32	Larger of the two loads per NEC 220-21		
9	**Computer Outlets**	0.00	1.00	0.00			
10	**Exterior Lighting**	0.00	1.25	0.00			
	Subtotals	208.77		208.77			
	Largest Motor		130.53 0.25	32.63		Spare Capacity (Amps)	109.64
						Spare Capacity Load (%)	27.41%
	Total KVA	208.77		241.40			

Load Code "8" is used to assemble kva information only related to subfeed load (downstream panelboards). The kva values shown for Load Code "8" are dispersed amongst Load Codes "0-7" and "9-10" respectively.

PANEL	DESCRIPTION	REMARKS:
1D	208/120V, 3PH, 4W , 100 AMP M.C.B. , COPPER BUS, BOLT-ON BREAKERS, 10,000 AIC ,SURFACE MOUNTED, DOOR-IN-DOOR TRIM, NEUTRAL BAR (CU), GROUND BAR (CU)	CIRCUIT NUMBERING IS BY POLE POSITION. CIRCUIT BREAKERS FEEDING A/C EQUIPMENT SHALL BE "HACR" RATED. ALL BREAKERS SHALL BE FULLY RATED.

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD RLA	PHASE A	PHASE B	PHASE C	LOAD RLA	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	0	Closet Lights	20/1	0.87	6.38			4.52	20/1	BATHROOM EXHAUST FANS	4	2
3	0	Closet Lights	20/1	0.72		0.72			SHT	S H U N T T R I P		4
5	6	VAV-5(RM139), VAV-5(ENTRY107)	20/2	14.42			16.92	2.50	20/1	BATHROOM EXHAUST FANS	4	6
7	6	"	"	14.42	14.42				SHT	S H U N T T R I P		8
9	6	VAV-1(RM140), VAV-4(RM141)	20/1	13.32		14.04		0.72	20/1	Closet Lights	0	10
11	6	VAV-3(RM103),VAV-3(RM104)	20/1	13.32			26.64	13.32	20/1	VAV-1(RM108),VAV-1(RM109)	6	12
13	6	VAV-6(RM136),VAV-5(RM110)	20/2	14.42	28.31			13.89	20/2	VAV-5(RM117),VAV-1(RM125)	6	14
15	6	"	"	14.42		28.31		13.89	"	"	6	16
17	6	VAV-5(RM112),VAV-5(RM111)	20/2	14.42			14.42		--/1			18
19	6	"	"	14.42	14.42				--/1			20
21			--/1			13.32		13.32	20/1	VAV-1(RM128),VAV-4(RM114)	6	22
23			--/1				13.32	13.32	20/1	VAV-1(RM133),VAV-1(RM135)	6	24
25	6	VAV-5(RM115),VAV-5(ENTRY129)	20/2	14.42	14.42				--/1			26
27	6	"	"	14.42		14.42			--/1			28
29			--/1				0.00		--/1			30
31			--/1		0.00				--/1			32
33			--/1			0.00			--/1			34
35			--/1				0.00		--/1			36
37			--/1		0.00				--/1			38
39			--/1			0.00			--/1			40
41			--/1				0.00		--/1			42
		DEMAND LOADS MAY VARY FROM			76.96	70.81	71.3	Phase Totals				
		CONNECTED LOADS BECAUSE OF		**Connected KVA**	**2.53**		**7.02**	**Connected AMPS**				
		CODE DIVERSITIES.		**Connected KW**	**44.11**	**208V**	**132**	**Connected AMPS**				
							139.02	**Demand AMPS**				

Load Code	Load Summaries	Connected FLA	Factor	Demand KVA		Phase amps	
0	**Lighting - Non-Continuous**	2.31	1.00	2.31		Phase (A)	76.96
1	**Lighting -Continuous**	0.00	1.25	0.00		Phase (B)	70.81
2	**Receptacles**	0.00	1.00	0.00		Phase (C)	71.30
3	**Special Loads**	0.00	1.00	0.00			
4	**Motors**	7.02	1.00	7.02			
5	**Kitchen (Commercial)**	0.00	0.65	0.00			
6	**Heating**	209.74	1.00	209.74	Larger of the two loads per NEC 220-21		
7	**Cooling**	0.00	1.00	0.00	Larger of the two loads per NEC 220-21		
9	**Computer Outlets**	0.00	1.00	0.00			
10	**Exterior Lights**	0.00	1.25	0.00			
	Subtotals	219.07		219.07			
	Largest Motor		4.52 0.25	1.13		Spare Capacity (Amps)	28.70
						Spare Capacity Load (%)	28.70%
	Total KVA	219.07		220.20			

LIGHT FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER NAME AND NUMBER	LAMPS	TOTAL WATTS	MOUNTING	VOLTAGE
A	4'-2L WRAPAROUND FLUORESCENT, 10% THD ELECTRONIC BALLAST, T-8 LAMPS	LITHONIA LB-232-120-GEB10 OR EQUIVALENT	2-F032/841	62	SURFACE	120
B	3'-1L STEEL WALL BRACKET FLUORESCENT, 10% THD ELECTRONIC BALLAST, T-8 LAMPS	LITHONIA 11894-GEB-25WT8-WH-120 OR EQUIVALENT	1-F025/841	31	WALL	120
C	4'-2L STEEL WALL BRACKET FLUORESCENT, 10% THD ELECTRONIC BALLAST, T-8 LAMPS	LITHONIA WP232-120-GEB10-DO OR EQUIVALENT	2-F032/841	62	WALL	120
K	CLOSE TO CEILING DECORA FIXTURE, SMOOTH WHITE LENS, BRASS FINISH, 11" DIAMETER WITH (1) PL13 LAMP	ASL DL/13 OR EQUIVALENT	1-PL13/827	18	SURFACE	120

US Army Corps of Engineers
District or Division

Sym.	Description	Date	Appr.

Sym.	Description	Date	Appr.
	CLARIFICATIONS		
	PANEL MODIFICATIONS		

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BARNHART/TAYLOR, INC.
1600 E. YANDELL
EL PASO, TEXAS 79902

Designed by: A. VILLALOBOS
Drawn by: A. VILLALOBOS
Submitted by: A. VILLALOBOS
Design file no. E-603
Date: 03/06/2006
Plot date: 03/06/2006

FY04 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

PANEL AND FIXTURE SCHEDULES
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

Sheet reference number:
E-603
Sheet 55 of 160

CONTRACT NO. W9126G-04-C-0034

DRAWING OF WORK AS BUILT

SHEETNUMBER

FB-SA

LOAD CALCULATIONS: MSB

A. REVISED LOAD

PANEL 1A
REMOVED LOAD (0.5) KVA
ADDED LOAD 1.2 KVA
ADDED HEATING LOAD 6.0 KW

PANEL 1B
REMOVED LOAD (0.5) KVA
ADDED LOAD 1.1 KVA
ADDED HEATING LOAD 6.0 KW

PANEL 1C
REMOVED LOAD (1.2) KVA
ADDED LOAD 0.0 KVA
ADDED HEATING LOAD 0.0 KVA

PANEL 2A
REMOVED LOAD (1.3) KVA
ADDED LOAD 1.2 KVA
ADDED HEATING LOAD 4.7 KW

PANEL 2B
REMOVED LOAD (1.2) KVA
ADDED LOAD 1.4 KVA
ADDED HEATING LOAD 4.8 KW

PANEL 3A
REMOVED LOAD (1.3) KVA
ADDED LOAD 1.2 KVA
ADDED HEATING LOAD 4.7 KW

PANEL 3B
REMOVED LOAD (1.2) KVA
ADDED LOAD 1.4 KVA
ADDED HEATING LOAD 4.8 KW

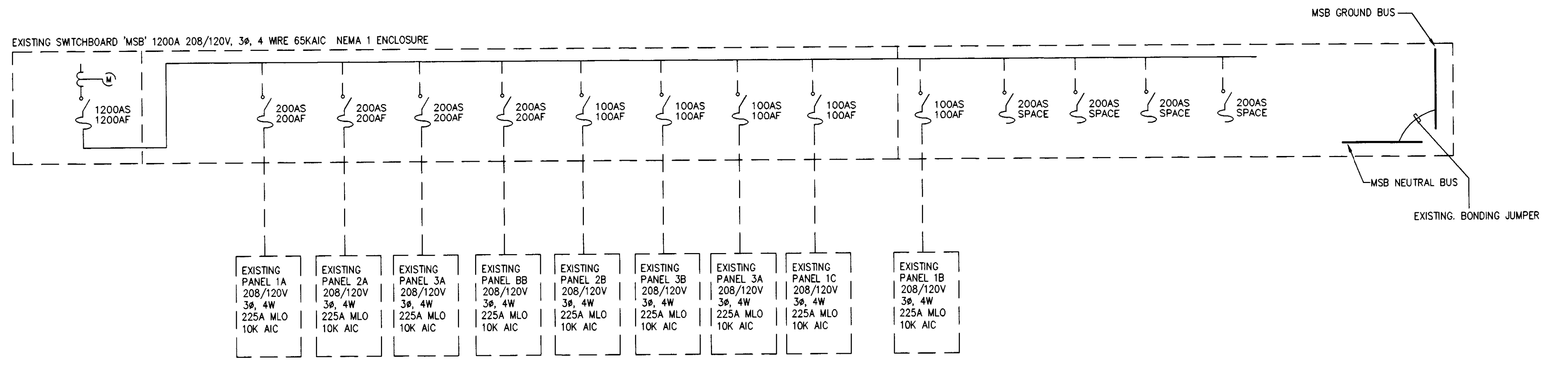
PANEL 8B
REMOVED LOAD (33) KVA
ADDED LOAD 0 KVA
ADDED HEATING LOAD 16.9 KW

PANEL 1D
NEW LOAD 1.94 KVA
NEW HEATING LOAD 22.89 KW

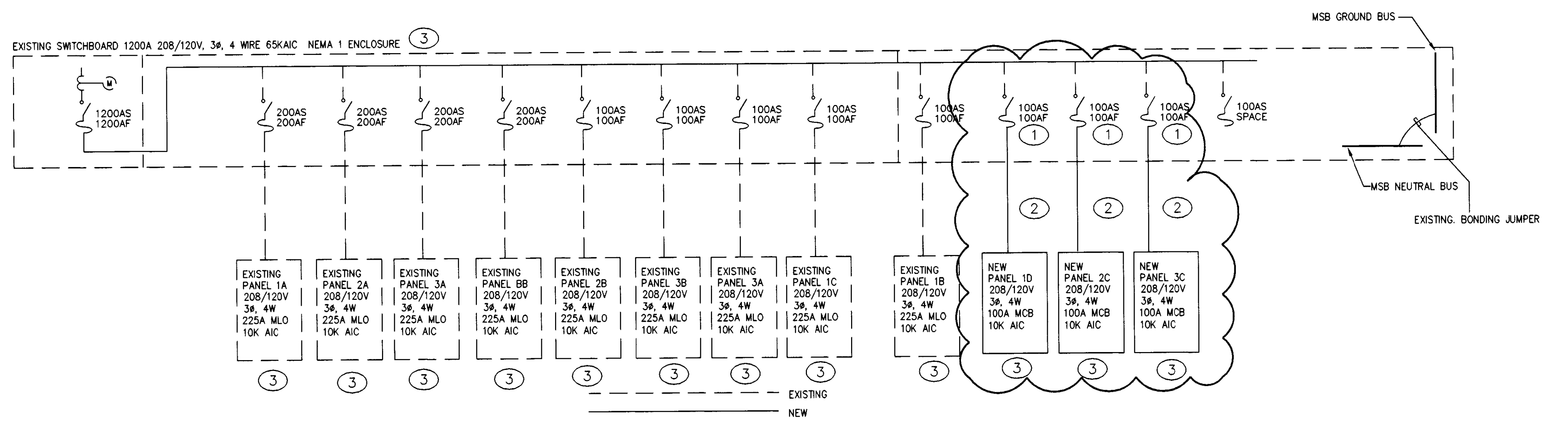
PANEL 2C
NEW LOAD 15 KVA
NEW HEATING LOAD 13.6 KVA

PANEL 3C
NEW LOAD 15 KVA
NEW HEATING LOAD 13.6 KVA

TOTAL ADDITIONAL LOAD -0.7 KVA
TOTAL ADDITIONAL HEATING LOAD 98 KW



EXISTING ONE-LINE DIAGRAM – MSB
SCALE: NONE



REVISED ONE-LINE DIAGRAM – MSB
SCALE: NONE

KEYED NOTES:

1. PROVIDE NEW 100A 3-POLE FUSIBLE SWITCH IN EXISTING 100A SPACE. FUSIBLE SWITCH SHALL BE QMB SERIES. PROVIDE ADDITIONAL MOUNTING HARDWARE AS NEEDED FOR INSTALLATION OF NEW FUSIBLE SWITCH. PROVIDE (3)-100A LPS FUSES.
2. 1 1/2"C WITH (4)-#1 CU., (1)-#1 CU. GND.
3. PROVIDE A PERMANENT PLAQUE OR DIRECTORY AT EACH SERVICE, FEEDER OR BRANCH CIRCUIT DISCONNECT LOCATION DENOTING THE AREA SERVED PER NEC 230-2(e). IN ADDITION, PROVIDE A PERMANENT PLAQUE OR DIRECTORY FOR EACH LOAD-SIDE PANELBOARD SERVED BY THE SERVICE BOARD. IT SHALL DENOTE THE CORRESPONDING SERVICE IT IS FED FROM AND ITS LOCATION.

PANEL 2C — DESCRIPTION: 208/120V, 3PH, 4W, 100 AMP M.C.B., COPPER BUS, BOLT-ON BREAKERS, 10,000 AIC, SURFACE MOUNTED, DOOR-IN-DOOR TRIM, NEUTRAL BAR (CU), GROUND BAR (CU)

REMARKS: CIRCUIT NUMBERING IS BY POLE POSITION. CIRCUIT BREAKERS FEEDING A/C EQUIPMENT SHALL BE "HACR" RATED. ALL BREAKERS SHALL BE FULLY RATED

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD RLA	PHASE A	PHASE B	PHASE C	LOAD RLA	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	0	Closet Lights 202, 203, 205	20/1	4.81	11.54			1.40	20/1	Closet Lights 223, 225, 226, 228, 229	0	2
3	0	Closet Lights 239, 241, 242, 244	20/1	8.17		10.09		0.40	20/1	Closet Lights 217, 219, 220, 222	0	4
5	0	Closet Lights 207, 209, 210, 212, 213, 215	20/1	8.17			10.09	0.40	20/1	NACPS	3	6
7		Spare			5.48			1.21	20/1	BATHROOM EXHAUST FANS	4	8
9	6	VAV-1(RM205), VAV-1(RM207)	20/1	13.33		13.33		0.88	SHT	SHUNT TRIP		10
11	6	VAV-1(RM209), VAV-1(RM210)	20/1	13.33			18.81	0.88	20/1	BATHROOM EXHAUST FANS	4	12
13	6	VAV-1(RM212), VAV-1(RM213)	20/1	13.33	13.33			1.14	SHT	SHUNT TRIP		14
15	6	VAV-1(RM215), VAV-1(RM217)	20/1	13.33		26.66			20/1	VAV-1(RM231), VAV-1(232)	6	16
17	6	VAV-1(RM228), VAV-1(RM229)	20/1	13.33			26.66	1.14	20/1	VAV-1(RM235), VAV-1(236)	6	18
19	6	VAV-1(RM234)	20/1	6.67	20.00				20/1	VAV-1(RM238), VAV-1(239)	6	20
21			--/1			0.00			--/1	Spare		22
23			--/1				0.00		--/1	Spare		24
25			--/1		0.00				--/1	Spare		26
27			--/1			0.00			--/1	Spare		28
29			--/1				0.00		--/1	Spare		30
31			--/1		0.00				--/1	Space		32
33			--/1			0.00			--/1	Space		34
35			--/1				0.00		--/1	Space		36
37			--/1		0.00				--/1	Space		38
39			--/1			0.00			--/1	Space		40
41			--/1				0.00		--/1	Space		42

DEMAND LOADS MAY VARY FROM		50.35	50.08	55.56	Phase Totals
CONNECTED LOADS BECAUSE OF	Connected KVA	3.95		10.96	Connected AMPS
CODE DIVERSITIES.	Demand KVA	30.17	208V	132	Demand AMPS
				142.96	TOTAL AMPS

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA		Phase amps	
0	Lighting – Non-Continuous	29.80	1.00	29.80		Phase (A)	50.35
1	Lighting –Continuous	0.00	1.25	0.00		Phase (B)	50.08
2	Receptacles	0.00	1.00	0.00		Phase (C)	55.56
3	Special Loads	1.92	1.00	1.92			
4	Motors	10.96	1.00	10.96			
5	Kitchen (Commercial)	0.00	0.65	0.00			
6	Heating	113.31	1.00	113.31	Larger of the two loads per NEC 220-21		
7	Cooling	0.00	1.00	0.00	Larger of the two loads per NEC 220-21		
9	Computer Outlets	0.00	1.00	0.00			
10	Exterior Lights	0.00	1.25	0.00			
	Subtotals	155.99		155.99			
	Largest Motor		5.48	0.25	1.37	Spare Capacity (Amps)	44.44
						Spare Capacity Load (%)	44.44
	Total	155.99		157.36			

PANEL 3C — DESCRIPTION: 208/120V, 3PH, 4W, 100 AMP M.C.B., COPPER BUS, BOLT-ON BREAKERS, 10,000 AIC, SURFACE MOUNTED, DOOR-IN-DOOR TRIM, NEUTRAL BAR (CU), GROUND BAR (CU)

REMARKS: CIRCUIT NUMBERING IS BY POLE POSITION. CIRCUIT BREAKERS FEEDING A/C EQUIPMENT SHALL BE "HACR" RATED. ALL BREAKERS SHALL BE FULLY RATED

CCT NO.	LOAD CODE	LOAD DESCRIPTION	BKR SIZE	LOAD RLA	PHASE A	PHASE B	PHASE C	LOAD RLA	BKR SIZE	LOAD DESCRIPTION	LOAD CODE	CCT NO
1	0	Closet Lights 302, 303, 305	20/1	4.81	11.54			6.73	20/1	Closet Lights 323, 325, 326, 328, 329	0	2
3	0	Closet Lights 339, 341, 342, 344	20/1	8.17		10.09		1.92	20/1	Closet Lights 317, 319, 320, 322	0	4
5	0	Closet Lights 307, 309, 310, 312, 313, 315	20/1	8.17			10.09	1.92	20/1	NACPS	3	6
7		Spare			5.48			5.48	20/1	BATHROOM EXHAUST FANS	4	8
9	6	VAV-1(RM305), VAV-3(RM306)	20/1	13.33		13.33		0.00	SHT	S H U N T T R I P		10
11	6	VAV-1(RM307), VAV-1(RM309)	20/1	13.33			18.81	5.48	20/1	BATHROOM EXHAUST FANS	4	12
13	6	VAV-1(RM310), VAV-1(RM312)	20/1	13.33	13.33			0.00	SHT	S H U N T T R I P		14
15	6	VAV-1(RM313), VAV-1(RM315)	20/1	13.33		26.66		13.33	20/1	VAV-1(RM331), VAV-1(RM332)	6	16
17	6	VAV-1(RM316), VAV-1(RM317)	20/1	13.33			26.66	13.33	20/1	VAV-1(RM335), VAV-1(RM336)	6	18
19	6	VAV-1(RM328), VAV-1(RM329)	20/1	13.33	26.66			13.33	20/1	VAV-1(RM338), VAV-1(RM339)	6	20
21	6	VAV-1(RM334)	20/1	6.67		6.67			--/1			22
23			--/1			0.00			--/1			24
25			--/1		0.00				--/1			26
27			--/1			0.00			--/1			28
29			--/1				0.00		--/1			30
31			--/1		0.00				--/1			32
33			--/1			0.00			--/1			34
35			--/1				0.00		--/1			36
37			--/1		0.00				--/1			38
39			--/1			0.00			--/1			40
41			--/1				0.00		--/1			42

DEMAND LOADS MAY VARY FROM		57.01	56.75	55.56	Phase Totals
CONNECTED LOADS BECAUSE OF	Connected KVA	3.95		10.96	Connected AMPS
CODE DIVERSITIES.	Connected KW	31.55	208V	132.00	Connected Amps
				142.96	Total Amps

Load Code	Load Summaries	Connected KVA	Factor	Demand KVA		Phase amps	
0	Lighting – Non-Continuous	29.80	1.00	29.80		Phase (A)	57.01
1	Lighting –Continuous	0.00	1.25	0.00		Phase (B)	56.75
2	Receptacles	0.00	1.00	0.00		Phase (C)	55.56
3	Special Loads	1.92	1.00	1.92			
4	Motors	10.96	1.00	10.96			
5	Kitchen (Commercial)	0.00	0.65	0.00			
6	Heating	119.97	1.00	119.97	Larger of the two loads per NEC 220-21		
7	Cooling	0.00	1.00	0.00	Larger of the two loads per NEC 220-21		
9	Computer Outlets	0.00	1.00	0.00			
10	Exterior Lights	0.00	1.25	0.00			
	Subtotals	162.65		162.65			
	Largest Motor		5.48	0.25	1.37	Spare Capacity (Amps)	44.44
						Spare Capacity Load (%)	44.44
	Total KVA	162.65		164.02			

US Army Corps of Engineers
District or Division

Mark	Appr.	Date	Description

Date: 03/06/2006
Design file no. L-462
Plot scale: 03/06/2006

Designed by: A. VILLALOBOS, A. VILLALOBOS
Submitted by: A. VILLALOBOS

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORP OF ENGINEERS

BARNHART/TAYLOR, INC.
1500 TAWAKONI
EL PASO, TEXAS 79902

FY06 OMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

EXISTING ONE-LINE
DIAGRAM
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

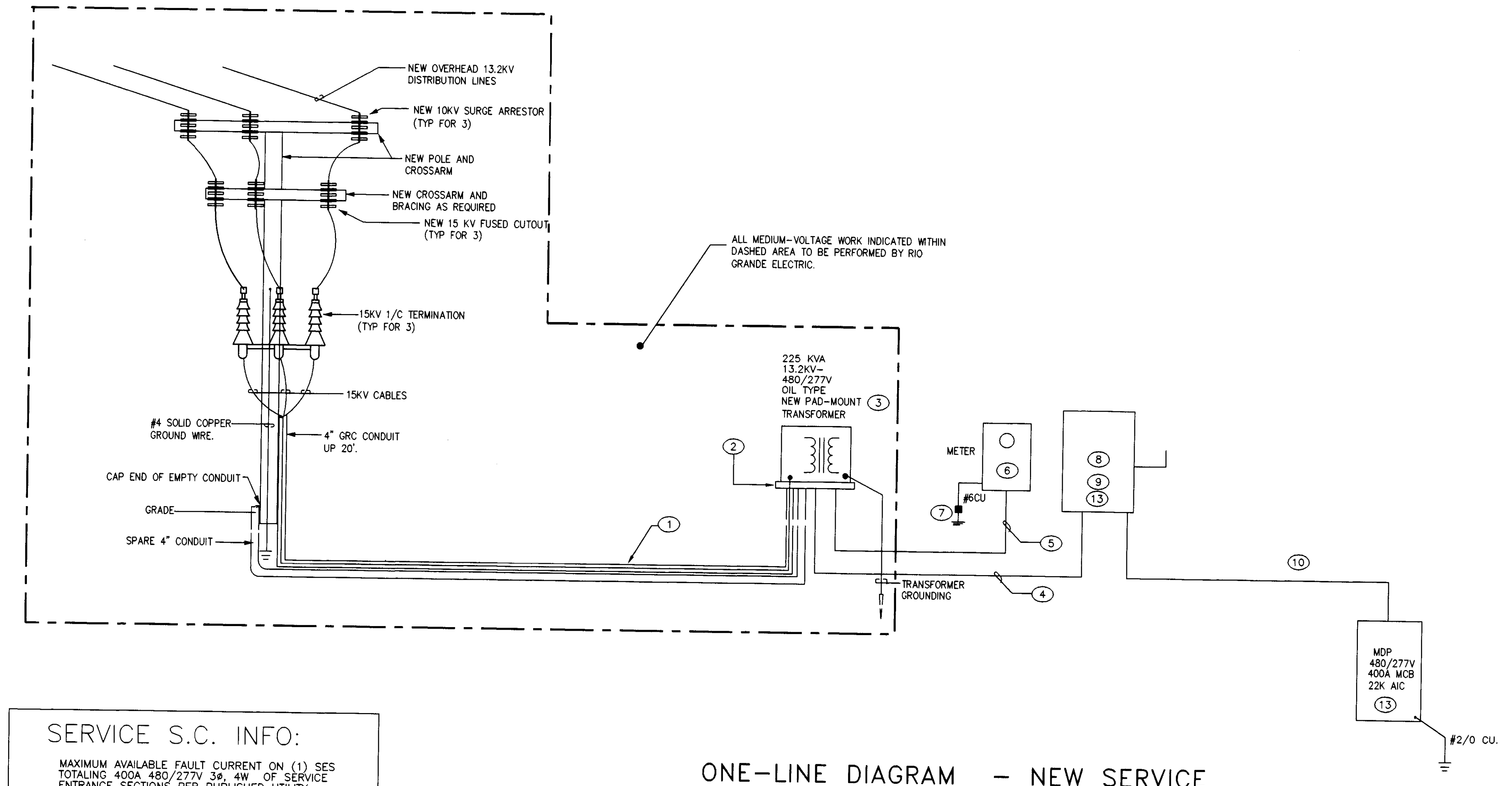
Sheet reference number:
E-602
Sheet 54 of 160

CONTRACT NO. W9126G-04-C-0034

DRAWING OF WORK AS BUILT

FB-5A

SHEETNUMBER

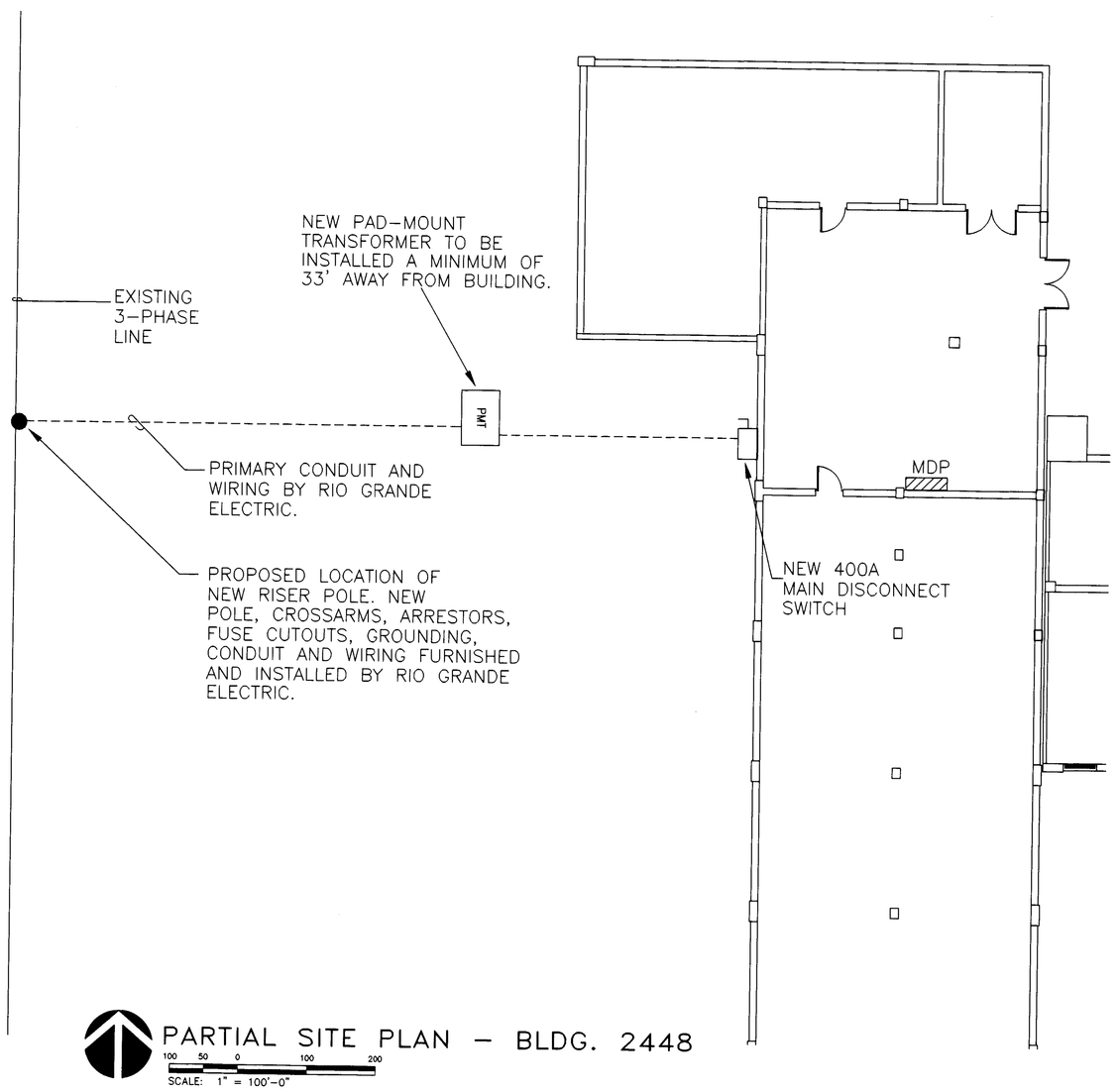


SERVICE S.C. INFO:

MAXIMUM AVAILABLE FAULT CURRENT ON (1) SES TOTALING 400A 480/277V 3φ, 4W OF SERVICE ENTRANCE SECTIONS PER PUBLISHED UTILITY STANDARDS IS 22,000 AIC.

ONE-LINE DIAGRAM – NEW SERVICE

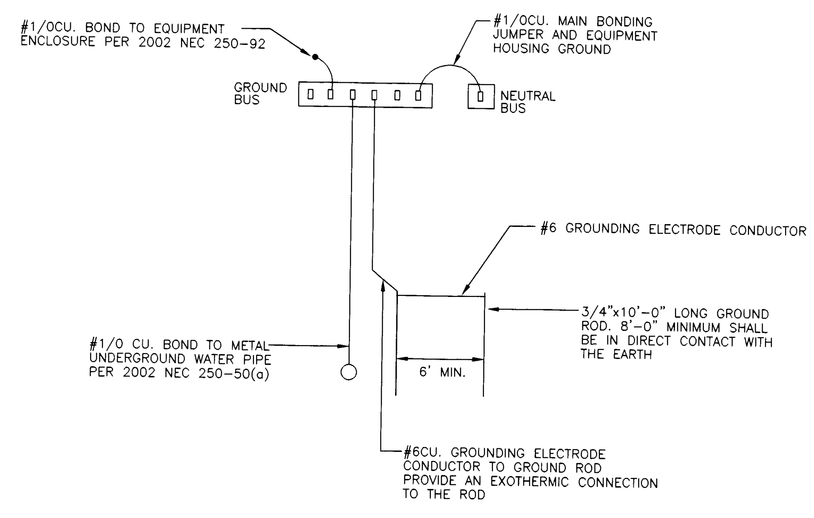
SCALE: NONE



PARTIAL SITE PLAN – BLDG. 2448

100 50 0 100 200

SCALE: 1" = 100'-0"



400 AMP GROUNDING DETAIL – MAIN SERVICE

SCALE: NONE

KEYED NOTES:

1. NEW UNDERGROUND PRIMARY CONDUIT AND WIRING TO BE FURNISHED AND INSTALLED BY RIO GRANDE ELECTRIC.
2. NEW TRANSFORMER PAD AND AGROUNDING TO BE FURNISHED AND INSTALLED BY RIO GRANDE ELECTRIC.
3. NEW PAD-MOUNT TRANSFORMER TO BE FURNISHED AND INSTALLED BY RIO GRANDE ELECTRIC.
4. PROVIDE (2)-3"C EACH WITH (4)-350KCMIL CU.. PARALLEL SERVICE. MINIMUM BURIAL DEPTH DEPTH SHALL BE 36" BELOW GRADE.
5. 1 1/4"C WITH METER WIRING.
6. METER SOCKET ENCLOSURE FURNISHED AND INSTALLED BY CONTRACTOR.
7. 3/4" X 10' COPPER CLAD GROUND ROD.
8. 400A 600V 3P+E.G., FUSIBLE HEAVY DUTY SAFETY SWITCH IN NEMA 3R ENCLOSURE. PROVIDE (3) 400A LPS 600V FUSES. SAFETY SWITCH SHALL BE SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT.
9. REFER TO GROUNDING DETAIL THIS SHEET.
10. PROVIDE (2)-3"C EACH WITH (4)-350KCMIL CU.. (1)-#1CU. GND.
13. PROVIDE A PERMANENT PLAQUE OR DIRECTORY AT EACH SERVICE, FEEDER OR BRANCH CIRCUIT DISCONNECT LOCATION DENOTING THE AREA SERVED PER NEC 230-2(e). IN ADDITION, PROVIDE A PERMANENT PLAQUOE OR DIRECTORY FOR EACH LOAD-SIDE PANELBOARD SERVED BY THE SERVICE BOARD. IT SHALL DENOTE THE CORRESPONDING SERVICE IT IS FED FROM AND ITS LOCATION.

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Mark	Description	Date	Appr.

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DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT
CORPS OF ENGINEERS

BARNHART/TAYLOR, INC.
1600 E. YANDELL
EL PASO, TEXAS 79902

Designed by: A. VILLALOBOS
Dwn by: A. VILLALOBOS
Submitted by: A. VILLALOBOS
Date: 03/06/2006
Design file no. E-601
Plot date: 03/06/2006

FY04 DMA
RENOVATE BARRACKS
FORT BLISS, TEXAS

ELECTRICAL ONE-LINE AND PARTIAL SITE PLAN
BUILDING 2448

SOLICITATION NO. W9126G-04-B-0017
CONTRACT NO. W9126G-04-C-0034

Sheet reference number:
E-601
Sheet 53 of 160

CONTRACT NO. W9126G-04-C-0034

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SHEETNUMBER

DRAWING OF WORK AS BUILT

FB-SA