









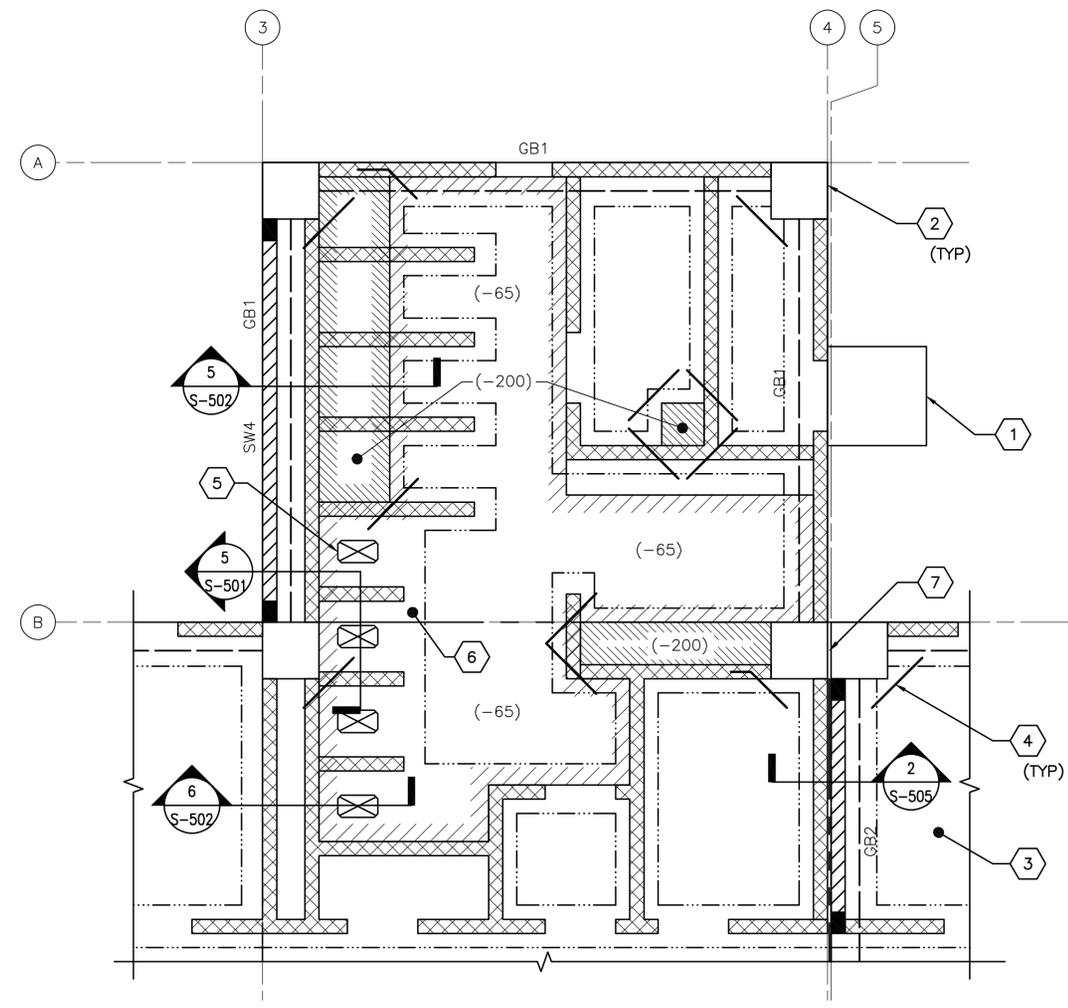


D

C

B

A



**1** ENLARGED LATRINE SLAB PLAN  
 S-101 SCALE: 1:50

**ENLARGED PLAN NOTES:**

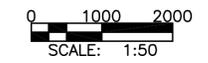
- REFER TO SHEET S-001 FOR STRUCTURAL NOTES AND DESIGN CRITERIA.
- FINISH FIRST FLOOR ELEVATION SHALL BE (DATUM 0.00MM) ALL PLUS OR MINUS DIMENSIONS INDICATED ON PLAN OR REFERRED TO IN NOTES RELATE TO FINISH FIRST FLOOR ELEVATION.
- SLAB-ON-GRADE IS 150 WITH #13 @ 300 OC EW LOCATED 38 FROM T/SLAB UON. WHERE NOTED, 300 SLAB-ON-GRADE SHALL BE REINFORCED W/ #13 @300 OC EW T&B.
- REFER TO FOUNDATION/SLAB PLAN ON SHEET S-101 FOR COLUMN DESIGNATION AND COLUMN SCHEDULE ON SHEET S-601.
- REFER TO FOUNDATION/SLAB PLAN ON SHEET S-101 FOR SHEARWALL DESIGNATION AND SHEARWALL SCHEDULE ON SHEET S-601.
- REFER TO FOUNDATION/SLAB PLAN ON SHEET S-101 FOR GRADE BEAM DESIGNATION AND GRADE BEAM SCHEDULE ON SHEET S-601.
- SEE TYP EXTERIOR AND INTERIOR CMU WALL REINFORCING DETAILS ON SHEET S-701.

**ENLARGED PLAN KEYNOTES:**

- CONC PAD (ENTRANCE) - SEE ARCH DWGS FOR INFORMATION
- REINF CONC COLUMN
- REINF CONC SLAB-ON-GRADE
- (2)-#13 RE-ENTRANT CORNER BARS - SEE S-701 FOR INFORMATION
- SLAB OPENING - COORDINATE W/ ARCH AND PLUMBING DWGS.
- 300 SLAB-ON-GRADE
- 50 ISOLATION JOINT BETWEEN STRUCTURES LOCATED ABOVE FIRST FLOOR SLAB-ON-GRADE

**PLAN LEGEND:**

- REINF CONC SHEAR WALL
- REINF CMU WALL
- CONTROL JOINT
- INDICATES DROP SLAB 65 BELOW FINISH FLOOR
- INDICATES DROP SLAB 200 BELOW FINISH FLOOR
- SLAB OPENING
- OUTLINE OF THICKENED SLAB AREAS
- GRADE BEAM



UNLESS OTHERWISE NOTED, LINEAR DIMENSIONS SHOWN ON DRAWINGS ARE IN MILLIMETERS (mm)

APPROVED:  
*Chris White*  
 A/E DESIGNER OF RECORD

SEAL:



US ARMY CORPS OF ENGINEERS  
 AFGHANISTAN ENGINEER DISTRICT

Date	Rev.	Description
	0	

Designed by: KMP/MMY	Checked by: CWW	Date: 2/23/10	Rev: 0
Dwn by: RCG	Reviewed by: LHM	Design file no.	
Submitted by: BAKER		Drawing code:	
		File name: ANABOSS-402P	
		Plot date: 2/22/10	
		Plot scale: 1:50	

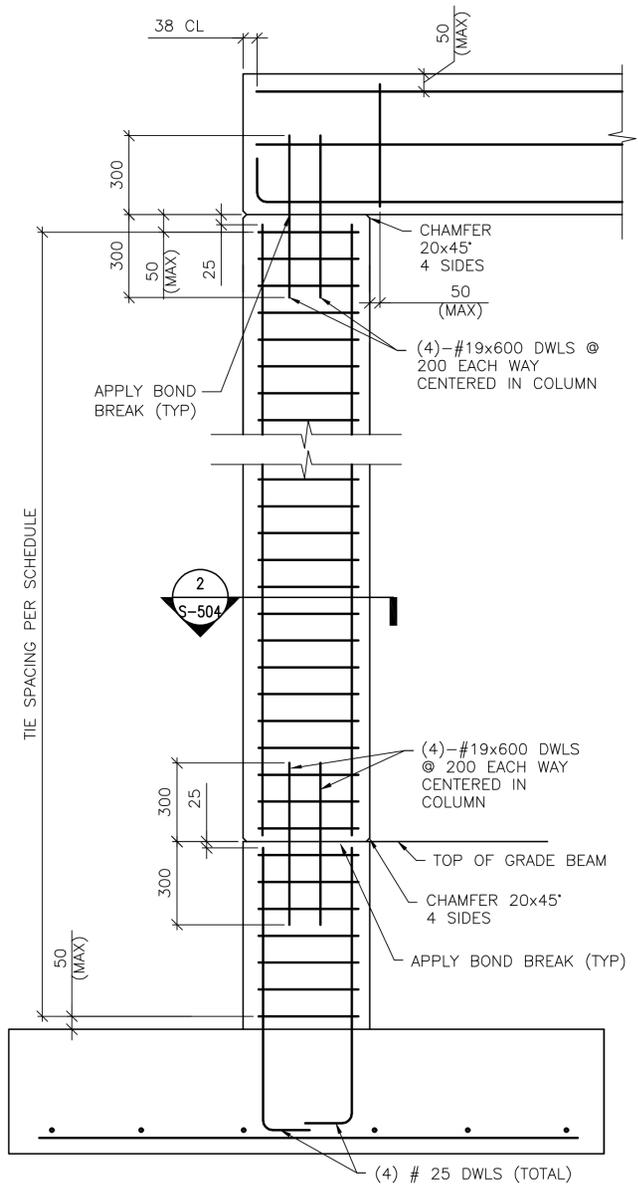
AFGHAN NATIONAL ARMY REGIONAL MILITARY TRAINING CENTER STANDARD DESIGN  
 SENIOR BOQ BARRACKS  
 ENLARGED LATRINE SLAB PLAN

Sheet reference number:  
**S-402**

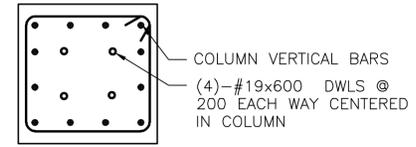






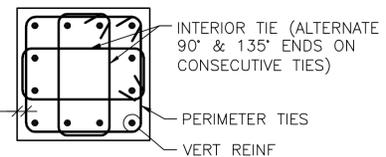


**1**  
S-504  
**1-STORY COLUMN REINF DETAILS**  
SCALE: NTS  
(WITH GRADE BEAM)

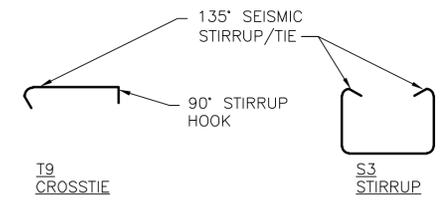
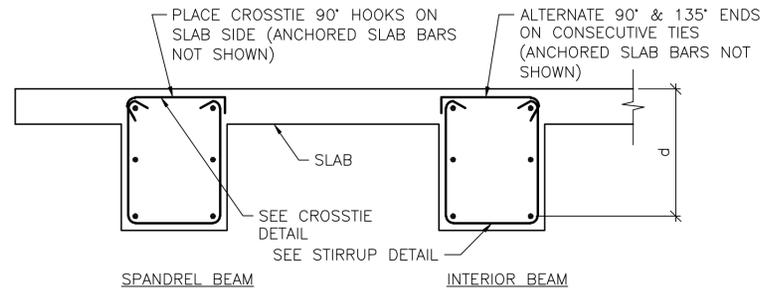


**DETAIL NOTE:**  
1. INTERIOR TIES NOT SHOWN FOR CLARITY. REFER TO DETAIL A THIS SHEET FOR INTERIOR TIE CONFIGURATION.

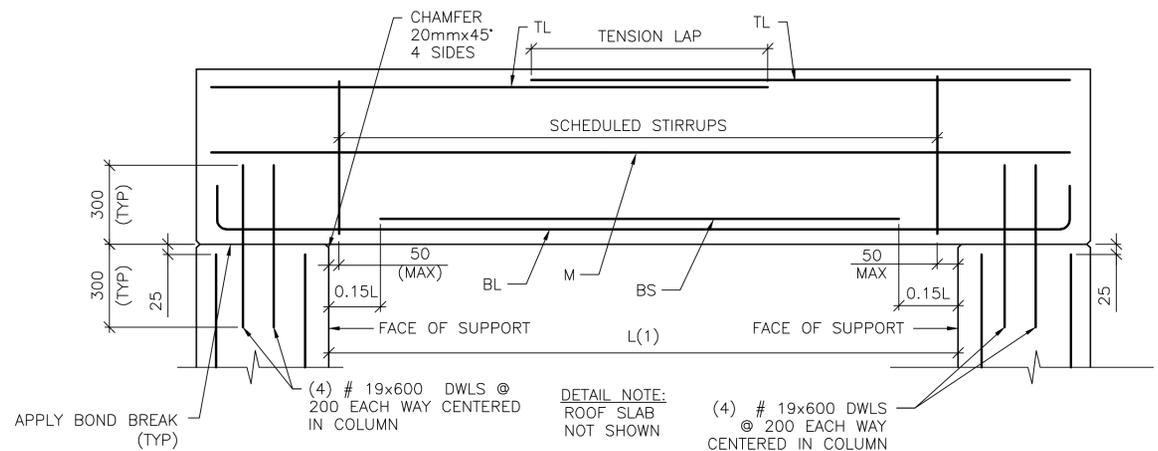
**2**  
S-503 S-504  
**SECTION**  
SCALE: NTS



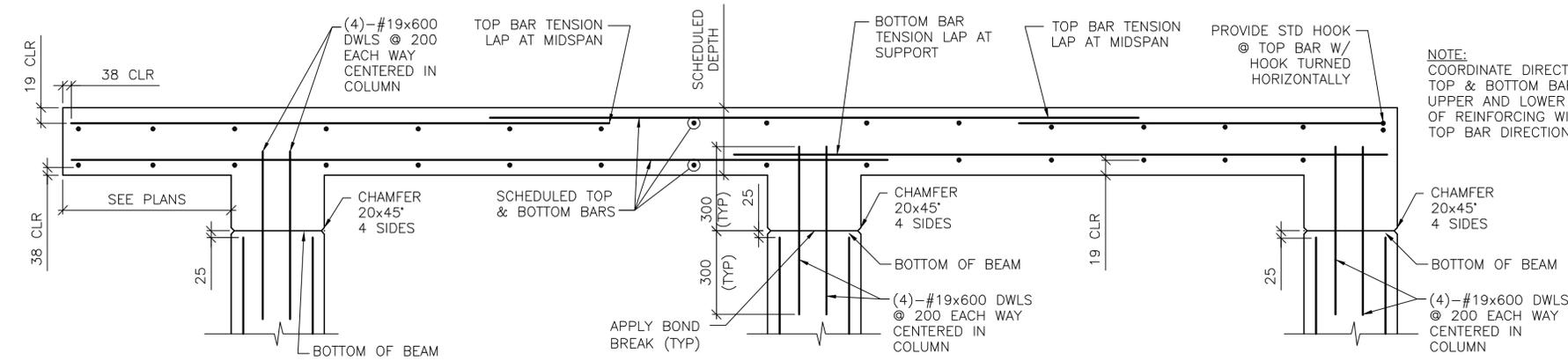
**A**  
S-504  
**12 BAR COLUMN**  
SCALE: NTS



**B**  
S-504  
**BEAM REINFORCEMENT DETAILS**  
SCALE: NTS



**3**  
S-504  
**SINGLE SPAN ROOF BEAM REINFORCING DETAIL**  
SCALE: NTS



**4**  
S-504  
**FRAMED SLAB REINFORCING DETAIL**  
SCALE: NTS

UNLESS OTHERWISE NOTED, LINEAR DIMENSIONS SHOWN ON DRAWINGS ARE IN MILLIMETERS (mm)

APPROVED:  
*Chris White*  
A/E DESIGNER OF RECORD



Rev.	Date	Description
0	2/23/10	Design file no.
		Drawing code:
		File name: ANMB005-50407
		Plot date: 2/23/2010
		Plot scale: 1:1

Designed by: KMP/MMY  
Dwn by: RCG  
Reviewed by: LHM  
Submitted by: BAKER

U.S. ARMY CORPS OF ENGINEERS  
AFGHANISTAN ENGINEER DISTRICT  
APO AE 96338

Michael Baker, Inc.  
A unit of Michael Baker Corporation  
Arlside Business Park  
100 Arlside Drive, PA, 15108  
www.mbakercorp.com

AFGHAN NATIONAL ARMY  
REGIONAL MILITARY TRAINING CENTER  
STANDARD DESIGN

SENIOR BOQ BARRACKS

BEAM & COLUMN DETAILS

Sheet reference number:  
**S-504**

1

2

3

4

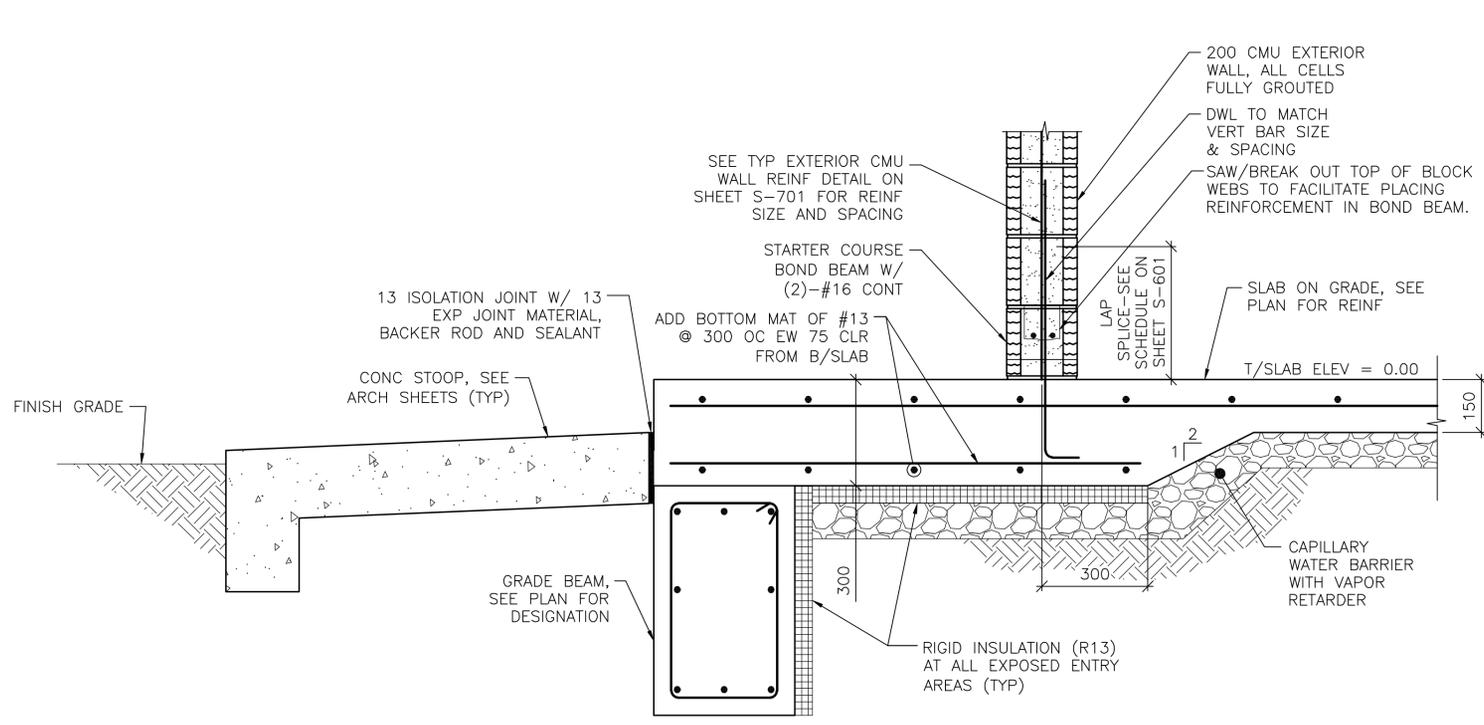
5

D

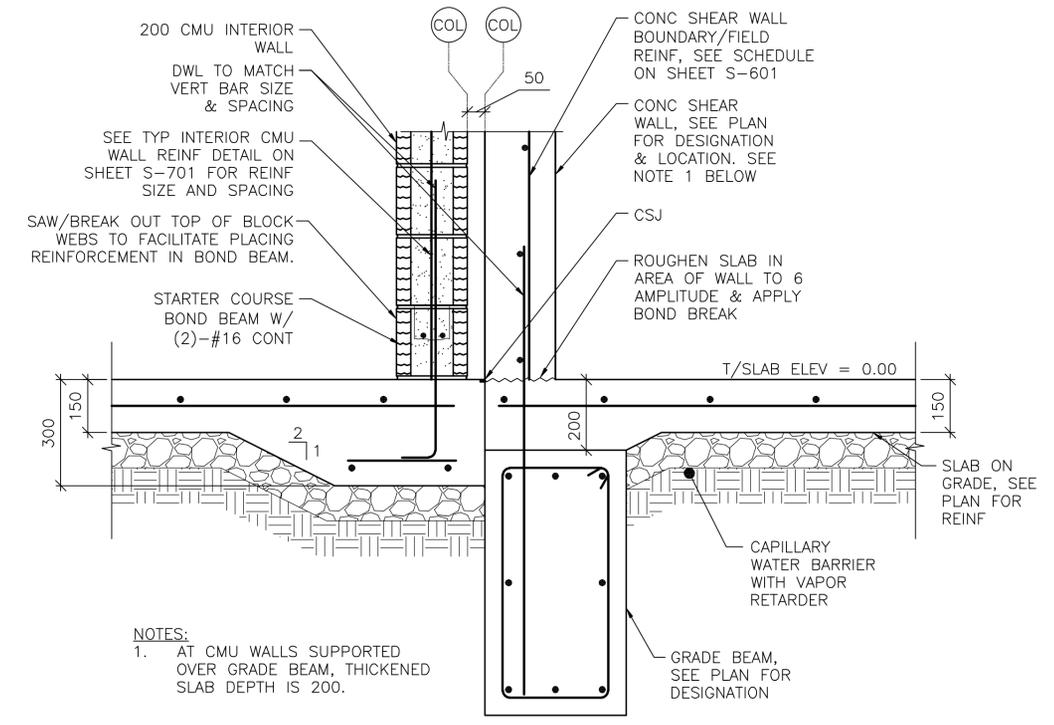
C

B

A

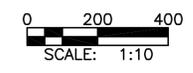


**SECTION 1**  
S-101 SCALE: 1:10



**SECTION 2**  
S-101 SCALE: 1:10

**NOTES:**  
1. AT CMU WALLS SUPPORTED OVER GRADE BEAM, THICKENED SLAB DEPTH IS 200.



UNLESS OTHERWISE NOTED, LINEAR DIMENSIONS SHOWN ON DRAWINGS ARE IN MILLIMETERS (mm)

APPROVED:  
*Chris M. White*  
A/E DESIGNER OF RECORD

SEAL:



Rev.	Date	Description	Appr.	Date
0	2/23/10	Design file no.		
		Drawn by: RCG		
		Checked by: CWV		
		Reviewed by: LHM		
		Submitted by: BAKER		

U.S. ARMY CORPS OF ENGINEERS  
AFGHANISTAN ENGINEER DISTRICT  
APO AE 96338  
Michael Baker Jr., Inc.  
A unit of Michael Baker Corporation  
100 Argosie Drive, PA, 15108  
www.mbakercorp.com

Designed by: KMP/MMY  
Dwn by: RCG  
Ckd by: CWV  
Reviewed by: LHM  
Submitted by: BAKER

Date: 2/23/10  
Design file no.  
Drawing code: ANMB00SS-008C  
File name: ANMB00SS-008C  
Plot date: 2/23/2010  
Plot scale: x:1

AFGHAN NATIONAL ARMY  
REGIONAL MILITARY TRAINING CENTER  
STANDARD DESIGN  
SENIOR BOQ BARRACKS  
MISCELLANEOUS SECTIONS

Sheet reference number:  
**S-505**

### CONCRETE REINFORCEMENT TENSION DEVELOPMENT/LAP SPLICE SCHEDULE

f'c = 28 MPa	LAP CLASS	UNCOATED BARS			
		TOP BARS		OTHER BARS	
BAR SIZES		CASE 1	CASE 2	CASE 1	CASE 2
#10 TO #19	A	50 BAR DIA	74 BAR DIA	38 BAR DIA	57 BAR DIA
	B	64 BAR DIA	96 BAR DIA	50 BAR DIA	74 BAR DIA
#22 TO #57	A	62 BAR DIA	93 BAR DIA	48 BAR DIA	71 BAR DIA
	B	80 BAR DIA	121 BAR DIA	62 BAR DIA	93 BAR DIA

- NOTES:**
- TABULATED TENSION DEVELOPMENT LENGTH VALUES ARE TAKEN FROM CRSI DESIGN HANDBOOK 2008 10TH ED.
  - TENSION DEVELOPMENT & TENSION LAP SPLICE LENGTHS ARE EXPRESSED AS MULTIPLES OF BAR DIAMETERS.
  - TABULATED VALUES ARE BASED ON MINIMUM YIELD STRENGTH OF REINFORCEMENT, fy, OF 420MPa.
  - CONCRETE IS NORMAL WEIGHT (2400Kg/m<sup>3</sup>) AND 28 DAY COMPRESSIVE STRENGTH = 28MPa.
  - TABULATED VALUES FOR BEAMS & COLUMNS ARE BASED ON TRANSVERSE REINFORCEMENT AND CONCRETE COVER MEETING MINIMUM CODE REQUIREMENTS.
  - CASES 1 & 2, WHICH DEPEND ON THE TYPE OF STRUCTURAL MEMBER, CONCRETE COVER, AND CENTER-TO-CENTER SPACING OF THE BARS ARE DEFINED IN THE TABLE BELOW.
  - LAP SPLICE LENGTHS (MINIMUM 300mm) ARE MULTIPLES OF TENSION DEVELOPMENT LENGTHS: CLASS A = 1.0(TENSION DEVELOPMENT LENGTH) & CLASS B = 1.3(TENSION DEVELOPMENT LENGTH)
  - TOP BARS ARE HORIZONTAL REINFORCEMENT WITH MORE THAN 300mm OF CONCRETE CAST BELOW THE BARS.
  - IT SHALL BE PERMISSIBLE TO CALCULATE WALL AND SLAB REINFORCEMENT TENSION DEVELOPMENT/SPLICE LENGTHS IN ACCORDANCE WITH ACI 12.2.3 OR TABLE 5.3(b) OF CRSI 2008 IN LIEU OF VALUES TABULATED ABOVE.

BEAMS, COLUMNS	CASE 1	CONCRETE COVER AT LEAST 1 BAR DIA AND CENTER-TO-CENTER SPACING AT LEAST 2 BAR DIA
	CASE 2	CONCRETE COVER LESS THAN 1 BAR DIA OR CENTER-TO-CENTER SPACING LESS THAN 2 BAR DIA
ALL OTHERS	CASE 1	CONCRETE COVER AT LEAST 1 BAR DIA AND CENTER-TO-CENTER SPACING AT LEAST 3 BAR DIA
	CASE 2	CONCRETE COVER LESS THAN 1 BAR DIA OR CENTER-TO-CENTER SPACING LESS THAN 3 BAR DIA

### CONCRETE COVER SCHEDULE

MINIMUM CONCRETE COVER PROTECTION FOR REINFORCEMENT BARS SHALL BE AS LISTED BELOW: (SEE ACI 318M-05, SECTION 7.7 FOR CONDITIONS NOT NOTED). DIMENSIONS FOR BAR PLACEMENT GIVEN IN SECTIONS AND DETAILS SHALL SUPERSEDE MINIMUM COVER REQUIREMENTS GIVEN HERE. DIMENSIONS ARE IN mm. PROVIDE STANDARD BAR CHAIRS AND SUPPORT BARS @1200mm MAXIMUM AS REQUIRED TO MAINTAIN CONCRETE PROTECTION SPECIFIED.

FOOTINGS (EARTH FORMED):	70
COLUMNS / PIERS (TO TIES)	40
GRADE BEAMS OR SLAB TURNED DOWN EDGES:	
TOP	40
BOTTOM (EARTH FORMED)	70
SIDES (EARTH FORMED)	70
SIDES (BOARD FORMED)	40
	#16 BAR & SMALLER
	#19 THRU #36 BAR
ELEVATED BEAMS & SLABS:	
BEAM TIES & STIRRUPS (NOT EXPOSED TO WEATHER)	40
BEAM TIES & STIRRUPS (EXPOSED TO WEATHER)	50
FLOOR SLABS (NOT EXPOSED TO WEATHER)	20
FLOOR SLABS (EXPOSED TO WEATHER)	
#19 & LARGER	50
#13 & SMALLER	40
ROOF SLAB BARS	25
SLABS ON GRADE	
NOT EXPOSED TO WEATHER (FROM TOP)	20
EXPOSED TO WEATHER (FROM TOP)	40
UTILITY TUNNEL WALLS, RETAINING WALLS AND SHEAR WALLS. (NO SURFACES SHALL BE EARTH FORMED)	
EARTH SIDE AND FRONT SIDE (EXPOSED TO WEATHER)	
#16 BAR AND SMALLER	40
#19 THRU #36 BAR	50

### COLUMN FOOTING SCHEDULE

MARK	FOOTING SIZE (mm)			FOOTING REINFORCING	REMARKS
	LENGTH	WIDTH	THICKNESS		
F1	2900	2900	300	(9)-#19 EW BOTT	-----
F2	3300	3300	300	(11)-#22 EW BOTT	-----
F3	3600	3600	300	(12)-#22 EW BOTT	-----
F4	4200	4200	350	(14)-#25 EW BOTT	-----
F5	4900	4900	450	(17)-#25 EW BOTT	-----
F6	6800	3200	300	(23)-#22 SHORT BOTT (11)-#19 LONG BOTT	-----

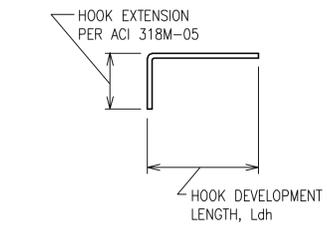
### CONCRETE SHEAR WALL SCHEDULE

MARK	TYPE	WALL LENGTH (L) (mm)	WALL REINFORCEMENT		REMARKS
			END ZONE	FIELD	
SW1	B	3600	(8)-#16 @ 150mm OC	#13 @ 300mm OC	-----
SW2	D	5000	(4)-#16 @ 150mm OC	#13 @ 300mm OC	-----
SW3	D	5000	(12)-#16 @ 150mm OC	#13 @ 300mm OC	-----
SW4	C	5700	(13)-#16 @ 150mm OC	#13 @ 300mm OC	-----

- NOTES:**
- WORK THIS SCHEDULE WITH SHEAR WALL DETAILS ON SHEETS S-702
  - SEE PLAN FOR LOCATION OF SHEAR WALL(S).
  - VERTICAL "FIELD" BARS MAY BE OMITTED IN LOCATION OF "END ZONE" REINFORCEMENT.
  - WALL FIELD REINF LISTED APPLIES TO VERT & HORIZ BARS.
  - WALL FIELD REINFORCEMENT CENTERED IN WALL.

### STANDARD HOOKS IN TENSION PER (ACI 318M-05)

HOOK DEVELOPMENT LENGTH (mm)	
BAR SIZE	f'c 28 MPa
#10	180
#13	250
#16	300
#19	380
#22	430
#25	480
#29	560
#32	610
#36	690

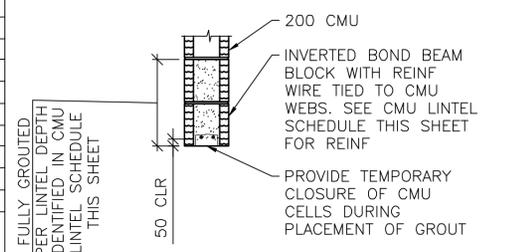


- NOTES:**
- CONCRETE IS NORMAL WEIGHT CONCRETE.
  - BAR YIELD STRENGTH, fy = 420 MPa
  - SIDE COVER REQUIREMENTS OF ACI SECT. 12.5.3 ARE ASSUMED TO NOT BE MET.
  - TIE OR STIRRUP REQUIREMENTS OF ACI SECT. 12.5.3 ARE ASSUMED TO NOT BE MET.
  - REDUCTION FOR EXCESS REINFORCEMENT IS NOT TAKEN.
  - HOOK DEVELOPMENT LENGTH IS VALID FOR 180° HOOKS ALSO.

### CMU OR CAST IN PLACE CONC LINTEL SCHEDULE (TYP)

OPENING TYPE OR SIZE, BEAM LOCATION OR TYPE	MAX SPAN (mm)	LINTEL DEPTH (mm)	REINFORCING BOTTOM
WALL OPENING	4000	600	(2)-#16 T&B
WALL OPENING	1900	400	(2)-#16 T&B
WALL OPENING	1000	400	(2)-#13 B

- NOTES:**
- STRUCTURAL SHEETS DO NOT INDICATE ALL OPENINGS IN MASONRY WALLS. VERIFY NUMBER, SIZE AND LOCATION OF ALL OPENINGS IN MASONRY WALLS FROM ARCHITECTURAL SHEETS AND APPROVED PLUMBING, MECHANICAL, AND ELECTRICAL SHOP DRAWINGS.
  - PROVIDE 200mm BEARING EA END.
  - FOR HEAD DETAILS REFER TO ARCHITECTURAL SHEETS.
  - REINFORCING SHALL BE ASTM A615M, GRADE 420. GROUT FOR CMU LINTELS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 14MPa AT 28 DAYS.
  - CONTRACTOR SHALL SUBMIT FOR APPROVAL SHOP DRAWINGS AND SCHEDULES SHOWING SIZE, SPAN, REINFORCEMENT, DETAILS, LOCATIONS, ETC.



**A LINTEL DETAIL**  
SCALE: NTS

### BEAM SCHEDULE

MARK	BEAM SIZE (mm)		BEAM REINFORCING							STIRRUPS			REMARKS
	DEPTH	WIDTH	BL	BS	T	TS	TC	M	SIZE	TYPE	SPACING		
GRADE BEAMS													
GB1	750/550/735	400	(2)-#16	---	(2)-#16	---	---	---	---	#13	S3 + T9	d/2	LOWER TOP TO 735 BETWEEN A4-B4; TO 550 BETWEEN A3-A4 & A3-B3
GB2	750	400	(2)-#25	(1)-#25	(2)-#25	(1)-#25	---	---	---	#13	S3 + T9	d/2	-----
ROOF BEAMS													
RB1	800	400	(2)-#22	(1)-#22	(2)-#19	---	---	---	---	#13	S3 + T9	d/2	-----
RB2	800	400	(2)-#25	(1)-#25	(2)-#22	---	---	---	---	#13	S3 + T9	d/2	-----
RB3	800	400	(3)-#29	(2)-#29	(2)-#25	---	---	---	---	#13	S3 + T9	d/2	-----

- NOTES:**
- WORK THIS SCHEDULE WITH BEAM REINFORCING DETAILS ON SHEETS S-503 AND S-504.
  - HOOKS SHOWN ON SECTIONS AND DETAILS SHALL BE 90° STD UON.
  - USE ONLY (1) TS AT BEAM COLUMN INTERSECTION WHERE REQ'D.

### COLUMN SCHEDULE

DESCRIPTION	COLUMN MARK	TYP UON	---	---	---
TYPE		12-BAR	---	---	---
DIMENSION		800mm SQ.	---	---	---
VERTICAL REINFORCEMENT		(12)-#29	---	---	---
TIES		#13 @ d/2	---	---	---
TOP OF ROOF ELEVATION		3800mm	---	---	---
TOP OF GRADE BEAM ELEVATION		-200mm	---	---	---
TOP OF FOOTING ELEVATION		-950mm	---	---	---

- NOTES:**
- WORK THIS SCHEDULE WITH COLUMN DETAILS ON SHEET S-504.
  - SEE FOOTING SCHEDULE ON THIS SHEET FOR FOOTING INFORMATION.
  - COLUMN TIES: INTERIOR TIES TO MATCH SIZE & SPACING OF PERIMETER TIES.
  - HOOKS SHOWN ON SECTIONS & DETAILS SHALL BE 90° STD UON.



Rev.	Date	Description	Mark

Designed by: KMP/AMMY  
Dwn by: RCG  
Reviewed by: LHM  
Submitted by: BAKER

Date: 2/23/10  
Design file no.:  
Drawing code: ANA808S-601SCH  
File name: ANA808S-601SCH  
Plot date: 2/23/2010  
Plot scale: XX

U.S. ARMY CORPS OF ENGINEERS  
AFGHANISTAN ENGINEER DISTRICT  
APO AE 96338  
Michael Baker Jr., Inc  
A Unit of Michael Baker Corporation  
Arlide Business Park  
100 Arside Drive, PA, 15108  
www.mbakercorp.com

AFGHAN NATIONAL ARMY  
REGIONAL MILITARY TRAINING CENTER  
STANDARD DESIGN

SENIOR BOQ BARRACKS

SCHEDULES

UNLESS OTHERWISE NOTED, LINEAR DIMENSIONS SHOWN ARE IN MILLIMETERS (mm)

APPROVED:

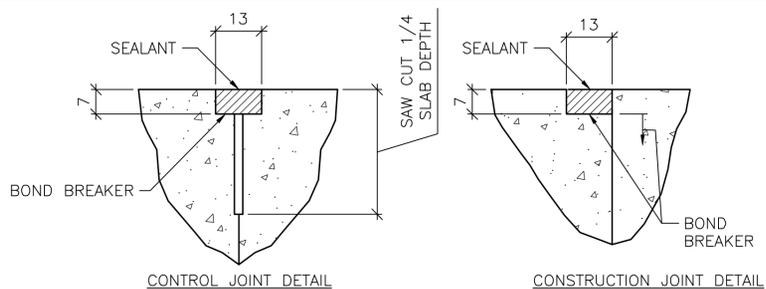
*Chris White*

A/E DESIGNER OF RECORD

SEAL:

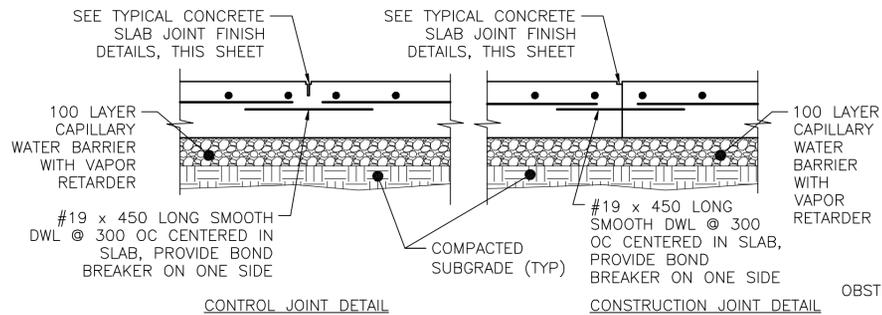


Sheet reference number:  
**S-601**



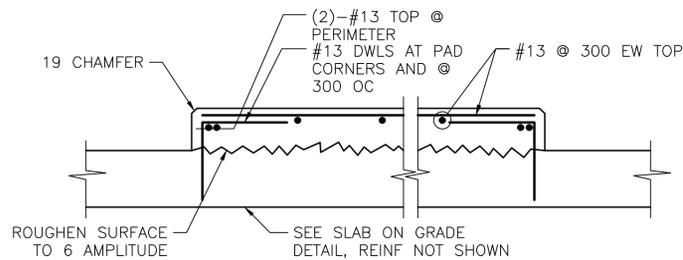
**TYPICAL CONCRETE SLAB JOINT FINISH DETAILS**

1  
S-701  
SCALE: NTS



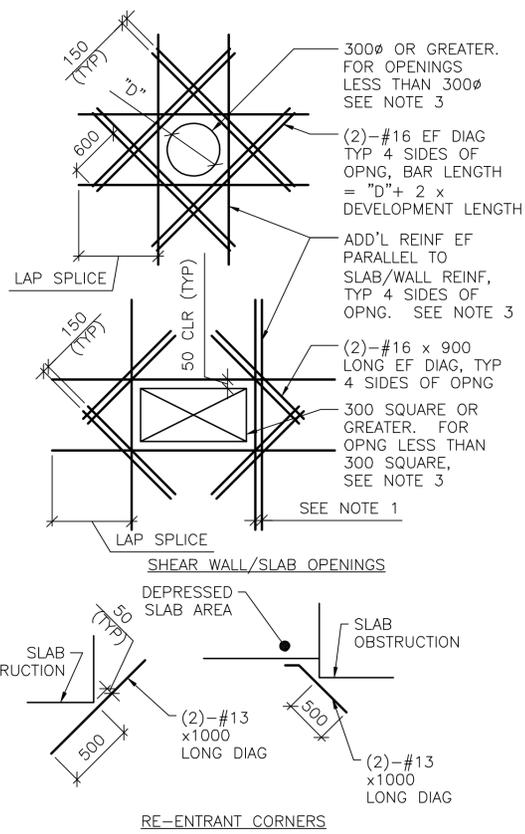
**TYPICAL SLAB ON GRADE JOINT DETAIL**

2  
S-701  
SCALE: NTS



**INTERIOR EQUIPMENT PAD DETAIL**

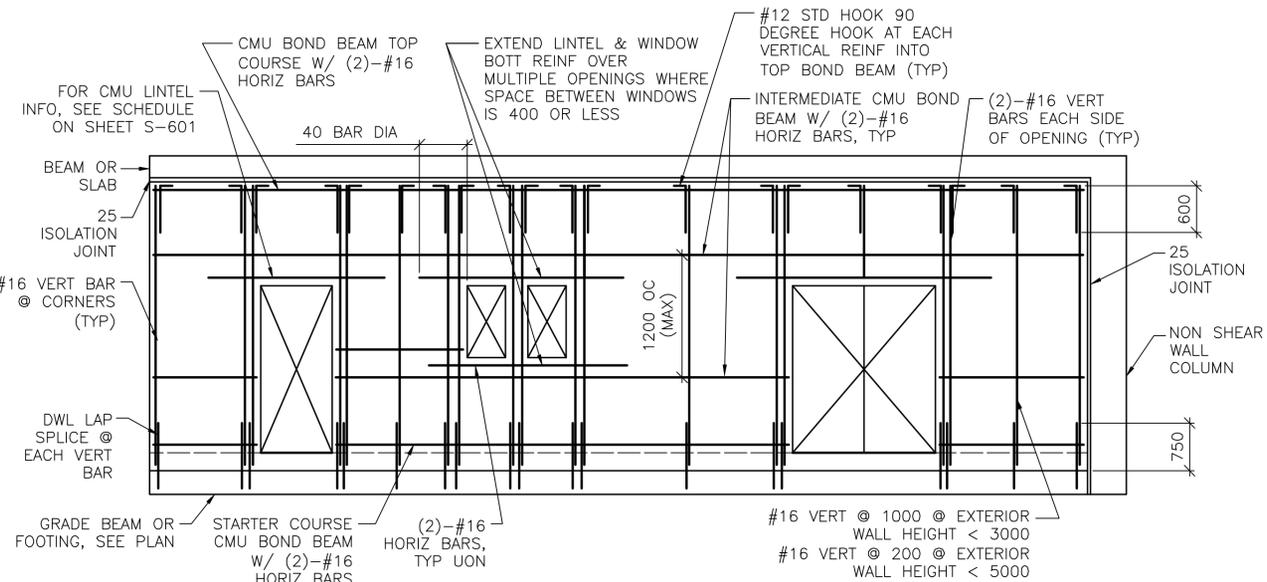
3  
S-701  
SCALE: NTS



- DETAIL NOTES:**
- WHERE MORE THAN ONE ADDITIONAL BAR IS REQUIRED PARALLEL TO THE EXISTING SLAB/WALL REINFORCING THE ADDITIONAL REINFORCING BARS SHALL BE SPACED AT 100 ON CENTER.
  - ADDITIONAL REINFORCING PARALLEL TO THE SLAB/WALL REINFORCING SHALL BE #16 BARS THAT PROVIDE A STEEL AREA ON EACH SIDE OF THE OPENING EQUAL TO 1/2 THE AREA OF THE REINFORCING CUT BY THE OPENING.
  - FOR OPENINGS WITH SIDES OR DIAMETERS LESS THAN 300 SPREAD THE SLAB/WALL REINFORCING TO CLEAR THE OPENING.

**ADD'L CONCRETE REINFORCEMENT DETAILS**

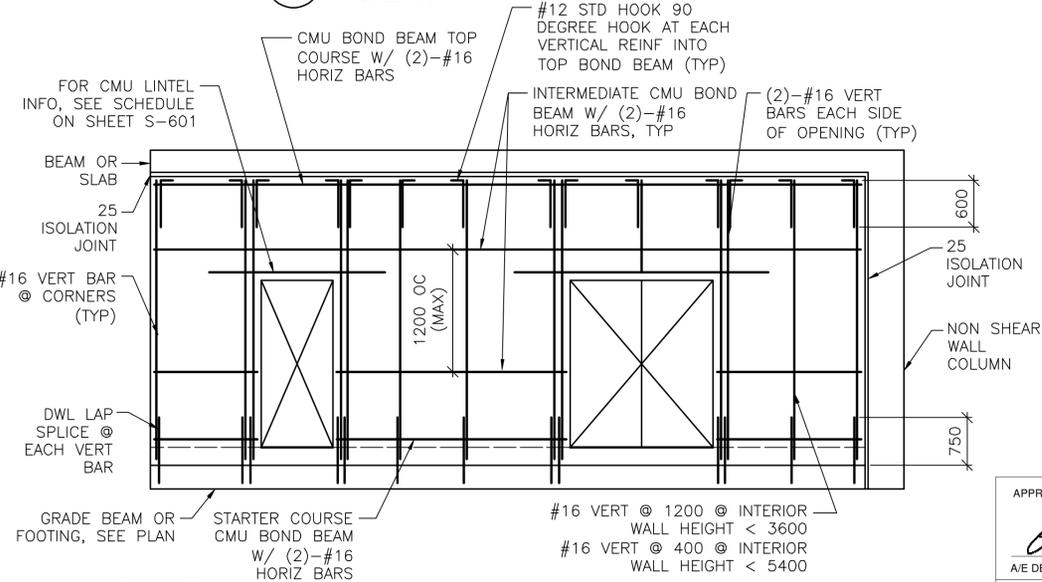
4  
S-701  
SCALE: NTS



- DETAIL NOTE:**
- CENTER VERT REINF IN WALL.
  - GROUT ALL CMU CELLS.
  - REFERENCE ARCH DWGS FOR JOINT INFORMATION
  - DOWELS BETWEEN TOP BOND BEAM AND BEAM/SLAB ABOVE (INCLUDING EMBEDDED PIPE SLEEVE) NOT SHOWN FOR CLARITY. SEE SPECIFIC S-500 SERIES DWGS FOR INFO.
  - FOR INFORMATION ON ALTERNATE CAST-IN-PLACE WALL BOND BEAMS, REFERENCE ALTERNATE TOP OF CMU WALL BRACING DETAILS THIS SHEET.

**TYP EXTERIOR CMU WALL REINF DETAIL**

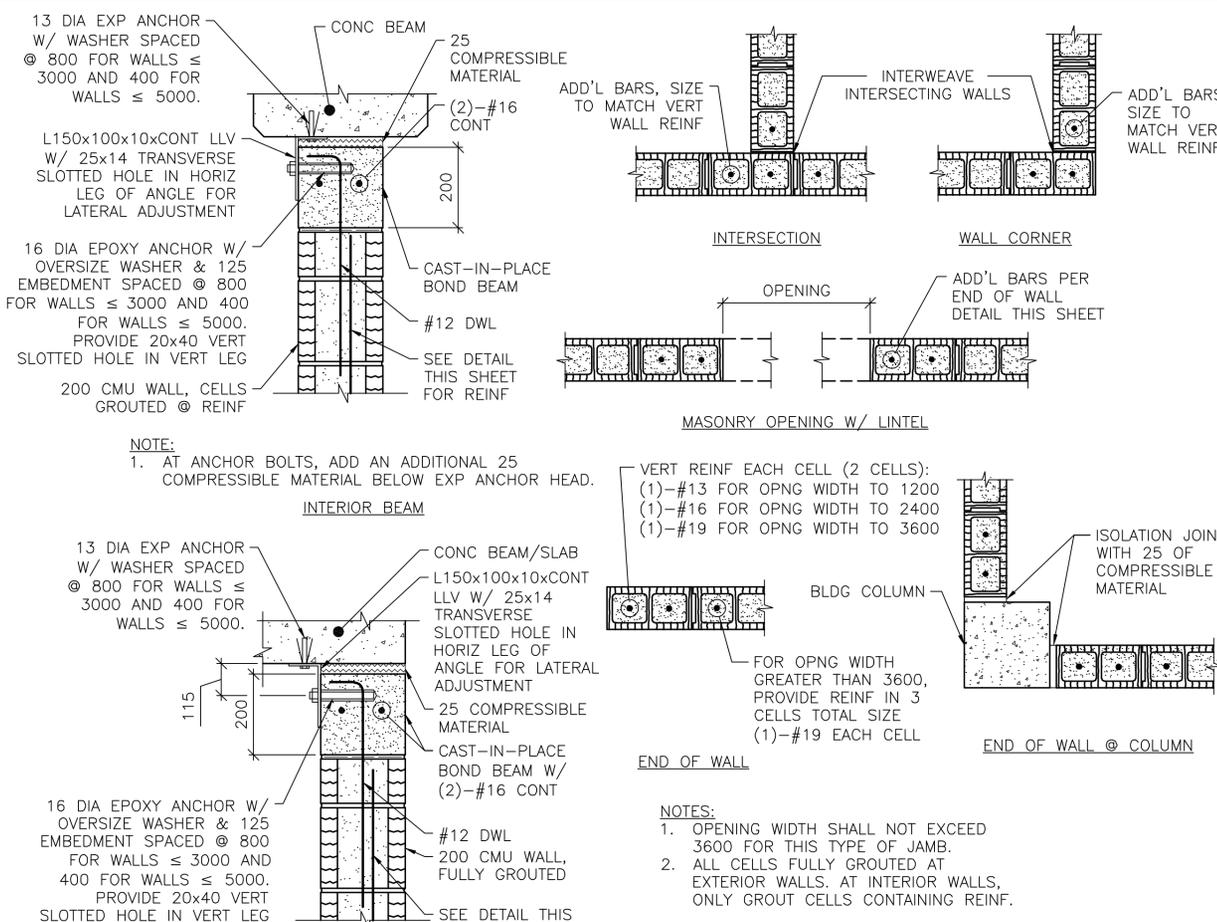
7  
S-701  
SCALE: NTS



- DETAIL NOTE:**
- CENTER VERT REINF IN WALL.
  - GROUT ALL CMU CELLS.
  - REFERENCE ARCH DWGS FOR JOINT INFORMATION
  - DOWELS BETWEEN TOP BOND BEAM AND BEAM/SLAB ABOVE (INCLUDING EMBEDDED PIPE SLEEVE) NOT SHOWN FOR CLARITY. SEE SPECIFIC S-500 SERIES DWGS FOR INFO.
  - FOR INFORMATION ON ALTERNATE CAST-IN-PLACE WALL BOND BEAMS, REFERENCE ALTERNATE TOP OF CMU WALL BRACING DETAILS THIS SHEET.

**TYP INTERIOR CMU WALL REINF DETAIL**

8  
S-701  
SCALE: NTS



- NOTES:**
- AT ANCHOR BOLTS, ADD AN ADDITIONAL 25 COMPRESSIBLE MATERIAL BELOW EXP ANCHOR HEAD.

- NOTES:**
- OPENING WIDTH SHALL NOT EXCEED 3600 FOR THIS TYPE OF JAMB.
  - ALL CELLS FULLY GROUTED AT EXTERIOR WALLS. AT INTERIOR WALLS, ONLY GROUT CELLS CONTAINING REINF.

**TYP CMU DETAILS**

6  
S-701  
SCALE: NTS

UNLESS OTHERWISE NOTED, LINEAR DIMENSIONS SHOWN ARE IN MILLIMETERS (mm)

APPROVED:  
*Chris White*  
A/E DESIGNER OF RECORD

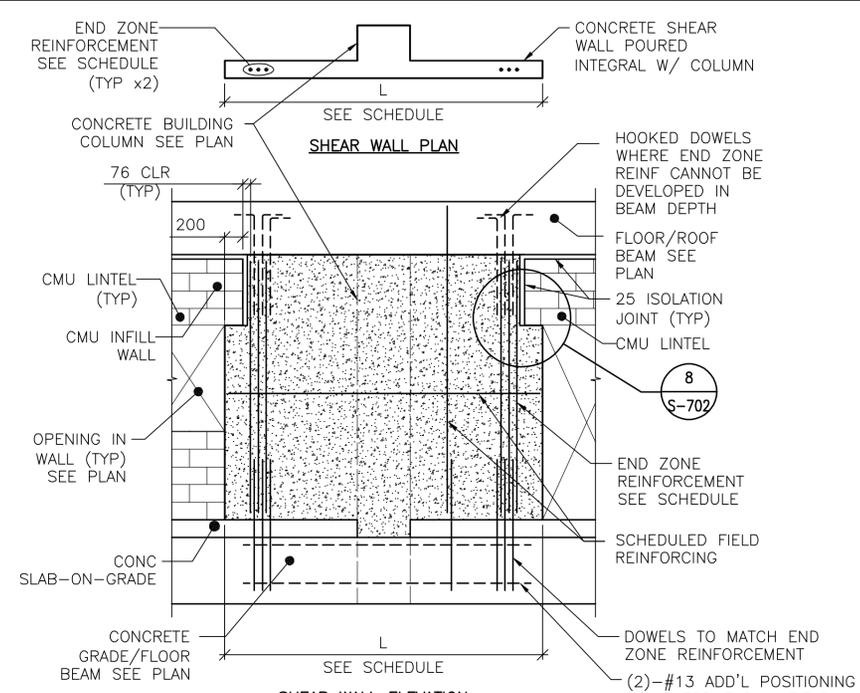
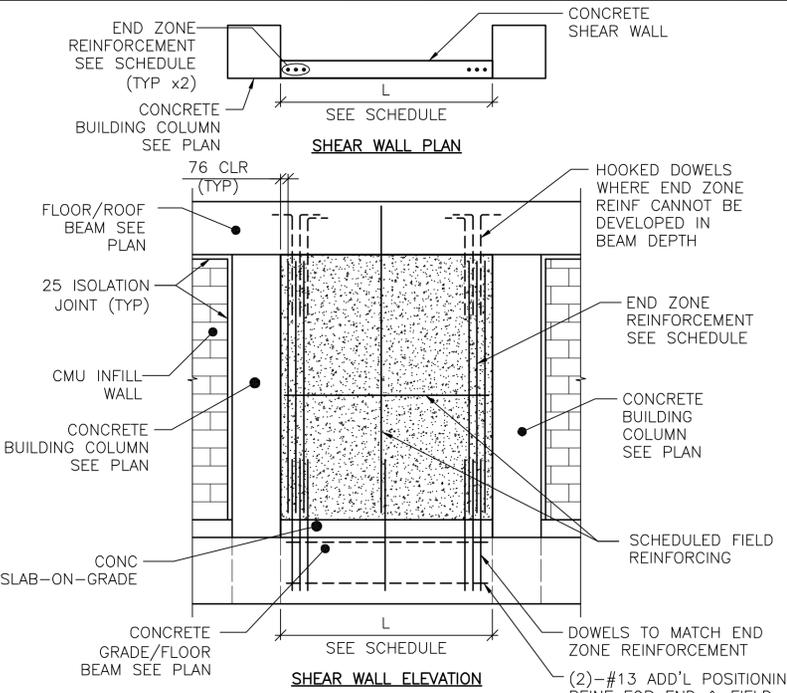
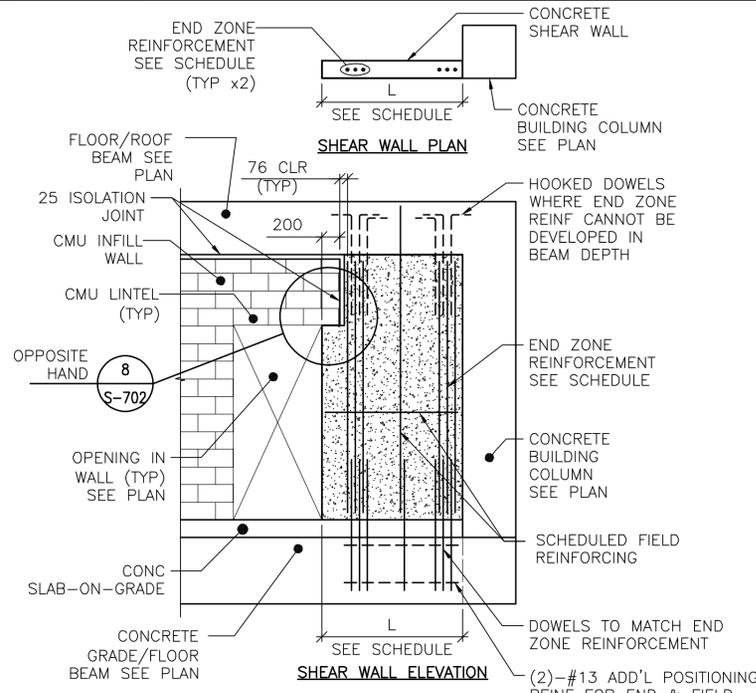


Date	Rev.	Description	Mark
	0		

Designed by: KMP/AMMY	Reviewed by: LHM	Submitted by: BAKER
Dwn by: RCG	File name: ANAB00S-701.D	
Drawn by: CWV	Plot date: 2/22/10	
Checked by: LHM	Plot scale: XX	

AFGHAN NATIONAL ARMY REGIONAL MILITARY TRAINING CENTER  
SENIOR BOQ BARRACKS  
TYPICAL DETAILS

Sheet reference number:  
**S-701**



- DETAIL NOTES:**
1. FIELD REINFORCEMENT IN SHEAR WALL NOT COMPLETELY SHOWN FOR CLARITY.
  2. FIELD REINFORCEMENT CENTERED IN WALL.
  3. MINIMUM CONC CLEAR DISTANCE FOR END ZONE REINF = 76
  4. SEE CONC SHEAR WALL SCHEDULE ON SHEET S-601
  5. SEE ARCH DWGS FOR ISOLATION JOINT INFORMATION

- DETAIL NOTES:**
1. FIELD REINFORCEMENT IN SHEAR WALL NOT COMPLETELY SHOWN FOR CLARITY.
  2. FIELD REINFORCEMENT CENTERED IN WALL.
  3. MINIMUM CONC CLEAR DISTANCE FOR END ZONE REINF = 76
  4. SEE CONC SHEAR WALL SCHEDULE ON SHEET S-601
  5. SEE ARCH DWGS FOR ISOLATION JOINT INFORMATION

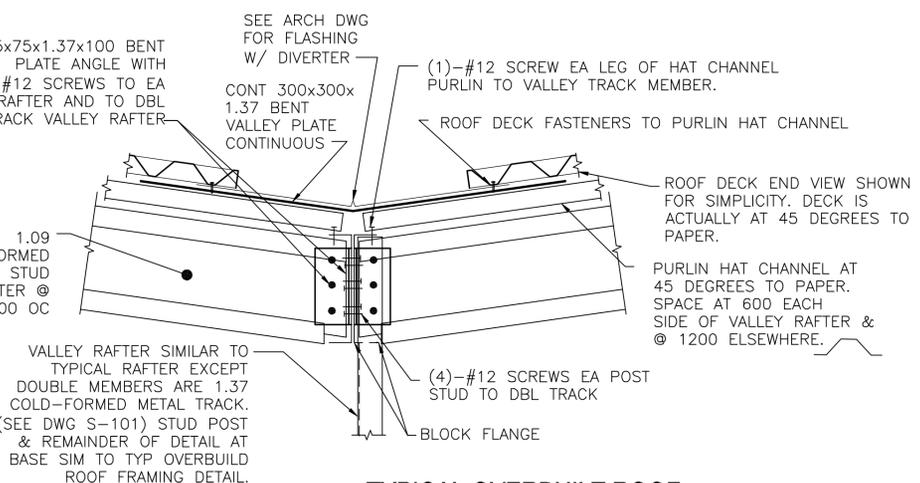
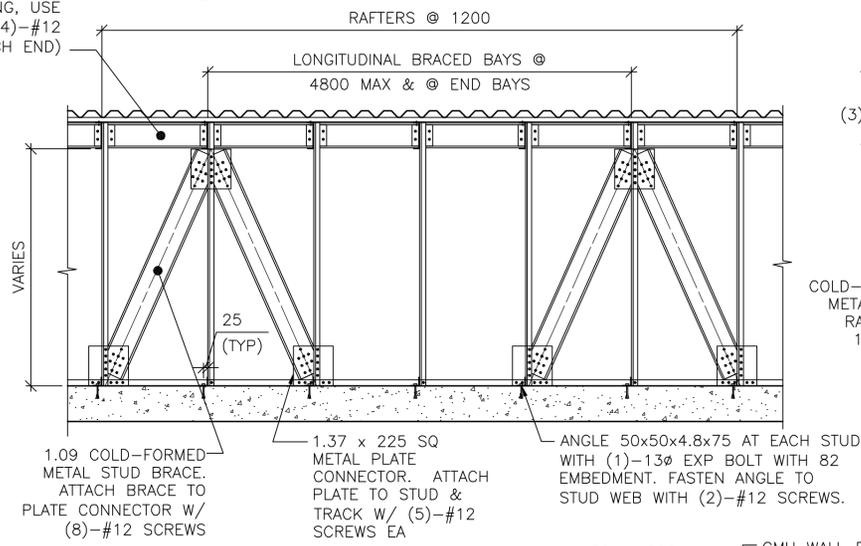
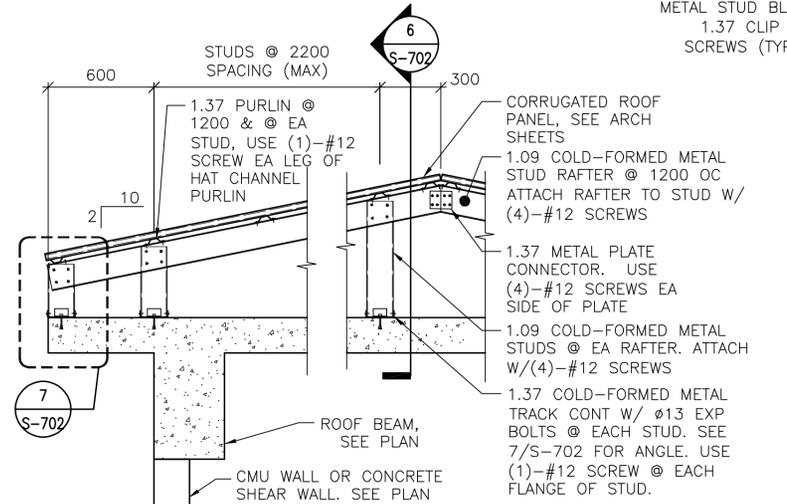
- DETAIL NOTES:**
1. FIELD REINFORCEMENT IN SHEAR WALL NOT COMPLETELY SHOWN FOR CLARITY.
  2. FIELD REINFORCEMENT CENTERED IN WALL.
  3. MINIMUM CONC CLEAR DISTANCE FOR END ZONE REINF = 76
  4. SEE CONC SHEAR WALL SCHEDULE ON SHEET S-601
  5. SEE ARCH DWGS FOR ISOLATION JOINT INFORMATION

**TYPE "B" SHEAR WALL DETAIL**  
SCALE: NTS

**TYPE "C" SHEAR WALL DETAIL**  
SCALE: NTS

**TYPE "D" SHEAR WALL DETAIL**  
SCALE: NTS

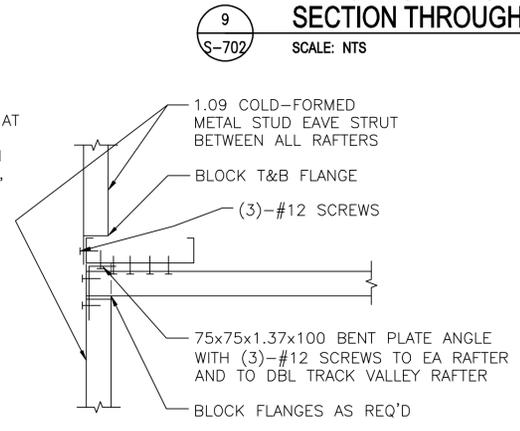
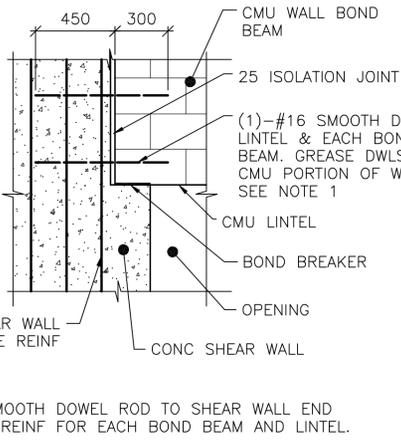
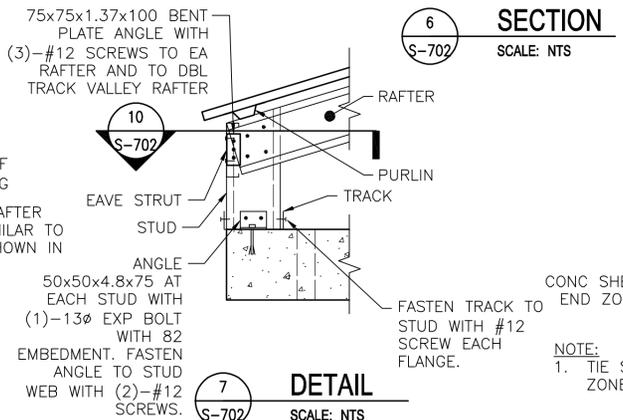
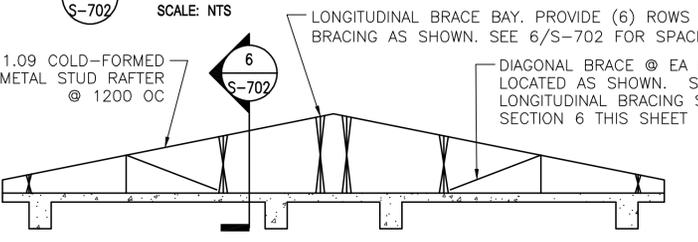
CONT. 1.09 COLD-FORMED METAL STUD BLOCKING, USE 1.37 CLIP W/ (4)-#12 SCREWS (TYP EACH END)



- DETAIL NOTES:**
1. ALL GABLE END VERTICAL STUDS SHALL BE ORIENTED 90° TO INTERIOR STUDS & SPACED @ 600 OC. GABLE END RAFTER SHALL BE 1.37 METAL TRACK SPANNING CONTINUOUSLY OVER GABLE END STUDS. INSET GIRTS AT GABLE END SHALL BE 1.09 COLD-FORMED METAL STUDS @ 1200 OC ATTACHED VIA 1.37 THICKNESS CLIP ANGLE W/ (2) #12 SCREWS EA LEG.
  2. ALL INTERIOR, NON-GABLE END VERTICAL STUDS GREATER THAN 2400 IN LENGTH SHALL BE BACK-TO-BACK W/ #12 SCREWS @ 200 OC STAGGERED.

**TYPICAL OVERBUILT ROOF FRAMING DETAIL**  
SCALE: NTS

**TYPICAL OVERBUILT ROOF SECTION THROUGH VALLEY**  
SCALE: NTS



**TYPICAL ROOF BRACE LAYOUT**  
SCALE: NTS

**DETAIL**  
SCALE: NTS

**SECTION**  
SCALE: NTS

**SECTION**  
SCALE: NTS

UNLESS OTHERWISE NOTED, LINEAR DIMENSIONS SHOWN ARE IN MILLIMETERS (mm)

APPROVED:  
*Chin W. ...*  
A/E DESIGNER OF RECORD



Rev.	Date	Description	Mark	Date	Appr.

Designed by:	KMP/AMMY	Checked by:	RCG	Reviewed by:	LHM	Submitted by:	BAKER
Date:	2/23/10	Design file no.:		Drawing code:	ANABOSS-702DT	File name:	ANABOSS-702DT
U.S. Army Corps of Engineers	AFGHANISTAN ENGINEER DISTRICT	AFPO AE 96338	Michael Baker Corp.	100 Ardsley Drive, PA, 15108	www.mbakercorp.com	Plot scale:	1:1

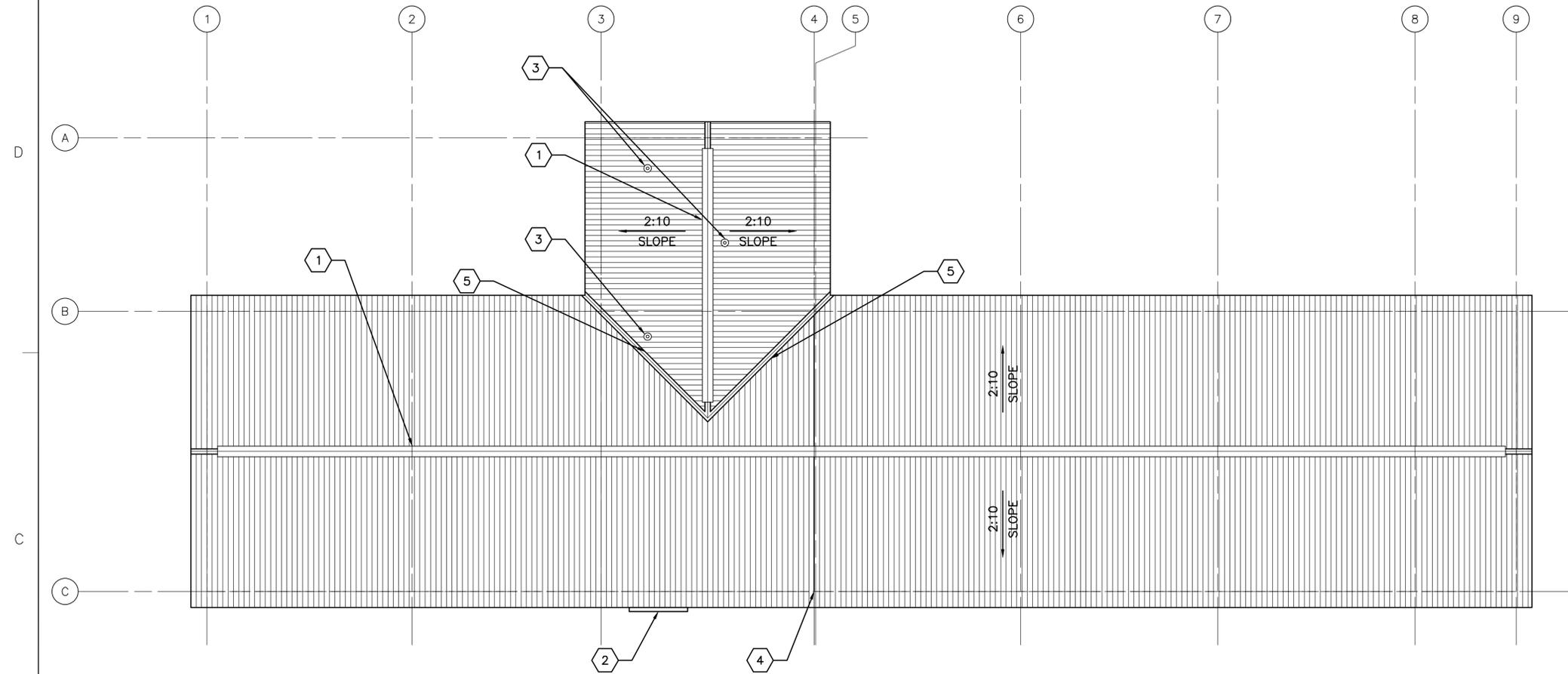
AFGHAN NATIONAL ARMY  
REGIONAL MILITARY TRAINING CENTER  
STANDARD DESIGN  
SENIOR BOQ BARRACKS  
TYPICAL DETAILS

Sheet reference number:  
**S-702**





1 2 3 4 5



Rev.	Date	Description
0		

1 ROOF PLAN  
A-102 SCALE: 1:100

**GENERAL NOTES:**

- A. THE APPROXIMATE LOCATION OF ROOF DEVICES AND PENETRATIONS ARE SHOWN ON THE ROOF PLAN FOR INFORMATION ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UNDERSTANDING THE ACTUAL LOCATION OF THESE AND ALL OTHER ITEMS PRIOR TO BEGINNING CONSTRUCTION. COORDINATE ALL ROOF PENETRATIONS WITH STRUCTURAL, MECHANICAL AND PLUMBING WORK.
- B. PLUMBING VENT PENETRATIONS SHALL TERMINATE 300 MM MINIMUM ABOVE THE ROOF.
- C. UNLESS OTHERWISE NOTED, NOTES, DETAILS OR FEATURES INDICATED FOR ONE CONDITION SHALL BE APPLICABLE FOR ALL ALIKE AND SIMILAR CONDITIONS.
- D. STOCKPILING OF MATERIALS, EQUIPMENT AND ANY OTHER ITEMS ON THE ROOF IS PROHIBITED.
- E. ROOFS SHALL BE CORRUGATED METAL ROOF PANELS ON COLD-FORMED METAL FRAMING ON CONCRETE SLAB.

**KEY NOTES:**

- 1. CONTINUOUS METAL RIDGE VENT SEE DETAIL 4/A-501.
- 2. METAL GUTTER, CENTER ON DOOR, 2300 MM - SEE DETAIL 1A/A-501.
- 3. PLUMBING VENT - SEE DETAIL 5/A-501.
- 4. ROOF EXPANSION JOINT - SEE DETAIL 4A/A-501.
- 5. VALLEY - SEE DETAIL 6/A-501

Designed by: KRC	Checked by: NLJ	Date: 2/23/10	Rev: 0
Dwn by: EBB	Reviewed by: LHM	Design file no.:	File name: ANABOOSA-102RP
Submitted by: BAKER		Drawing code:	Plot date: 2/23/2010
U.S. ARMY CORPS OF ENGINEERS AFGHANISTAN ENGINEER DISTRICT APO AE 96338		Plot scale: x:1	
Michael Baker Corp., Inc. A unit of Michael Baker Corporation 100 Ardsley Drive, PA 15108 www.mbakercorp.com			

LINEAR DIMENSIONS SHOWN ARE IN MILLIMETERS (MM), UNLESS OTHERWISE NOTED

APPROVED:  
*X. R. Clif*  
A/E DESIGNER OF RECORD



AFGHAN NATIONAL ARMY REGIONAL MILITARY TRAINING CENTER  
SENIOR BOQ BARRACKS  
ROOF PLAN

Sheet reference number:  
A-102





1

2

3

4

5



US ARMY CORPS OF ENGINEERS  
AFGHANISTAN ENGINEER DISTRICT

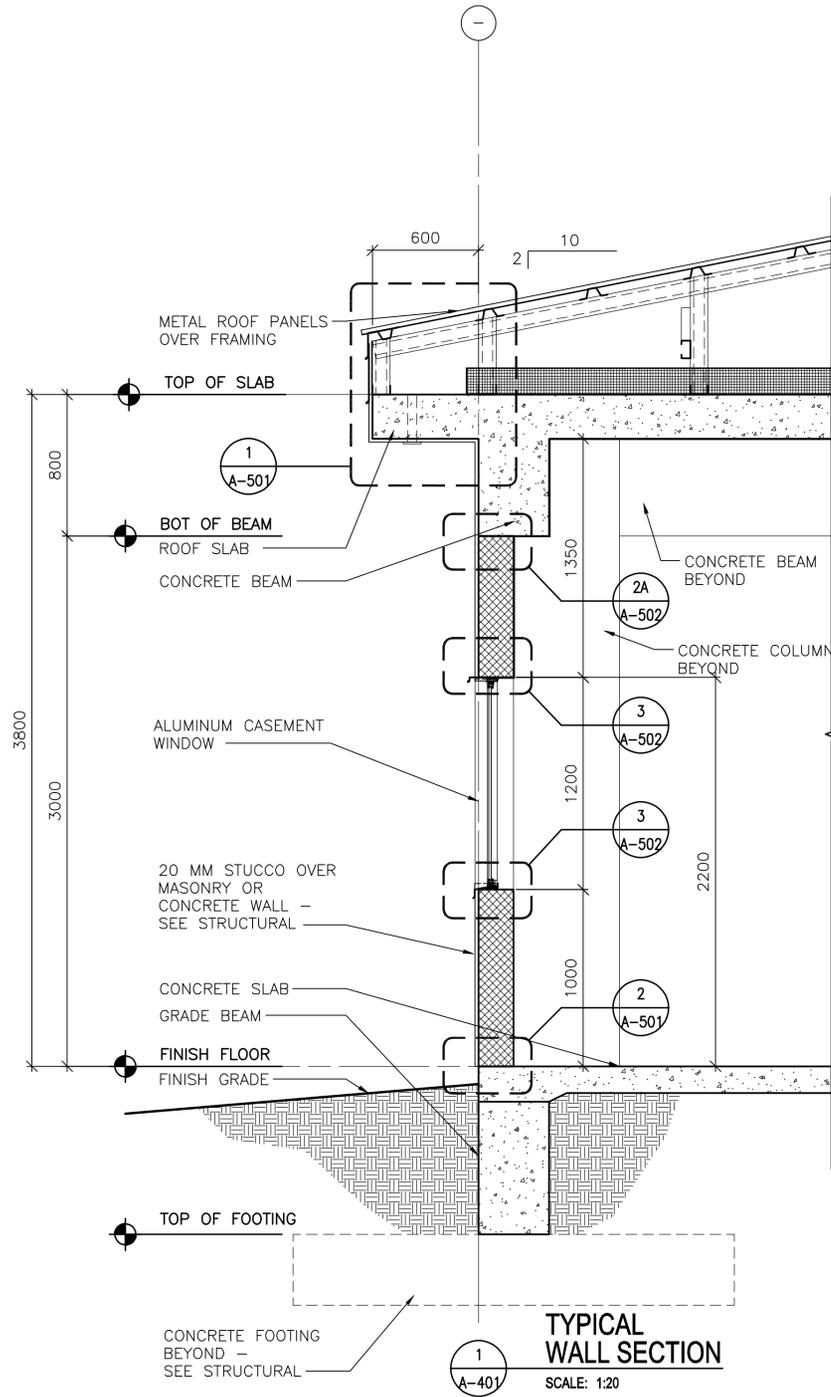
Rev.	Date	Description	Appr.	Date
0				

Designed by:	KRC	Checked by:	NLJ
Dwn by:	EBB	Reviewed by:	LHM
Submitted by:	BAKER	Drawing code:	ANABOOSA-401WS
		File name:	ANABOOSA-401WS
		Plot date:	22/2/2010
		Plot scale:	1:20

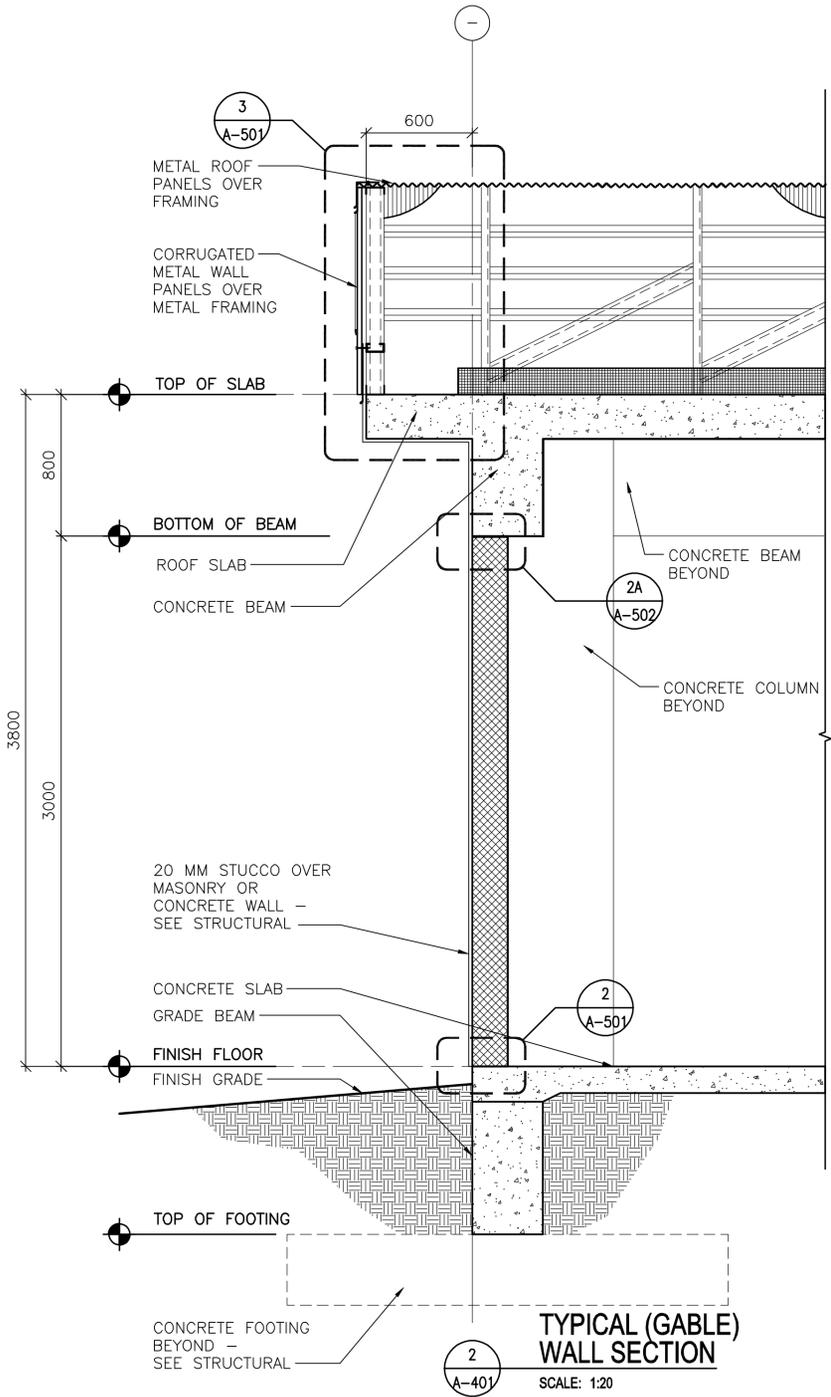
U.S. ARMY CORPS OF ENGINEERS  
AFGHANISTAN ENGINEER DISTRICT  
APO AE 96338  
Michael Baker Jr., Inc.  
A Unit of Michael Baker Corporation  
100 Ardsley Drive, PA 15108  
www.mbakercorp.com

AFGHAN NATIONAL ARMY  
REGIONAL MILITARY TRAINING CENTER  
STANDARD DESIGN  
SENIOR BOQ BARRACKS  
WALL SECTIONS

Sheet reference number:  
**A-401**



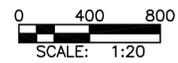
**TYPICAL WALL SECTION**  
SCALE: 1:20



**TYPICAL (GABLE) WALL SECTION**  
SCALE: 1:20

LINEAR DIMENSIONS SHOWN ARE IN MILLIMETERS (MM), UNLESS OTHERWISE NOTED

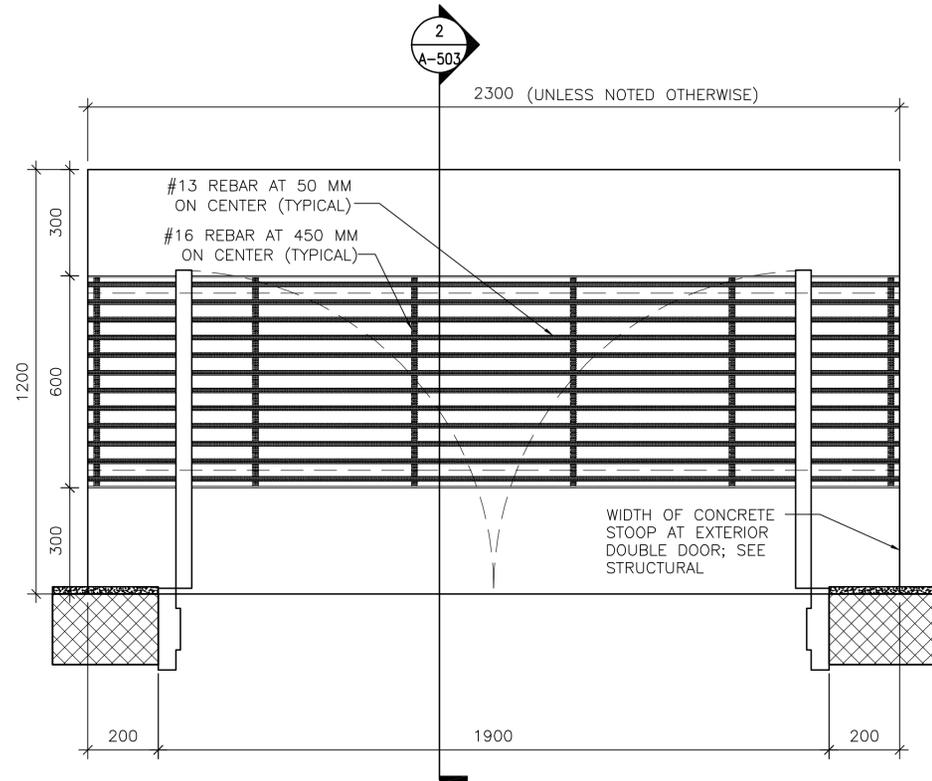
APPROVED:  
*K. R. Chafin*  
A/E DESIGNER OF RECORD



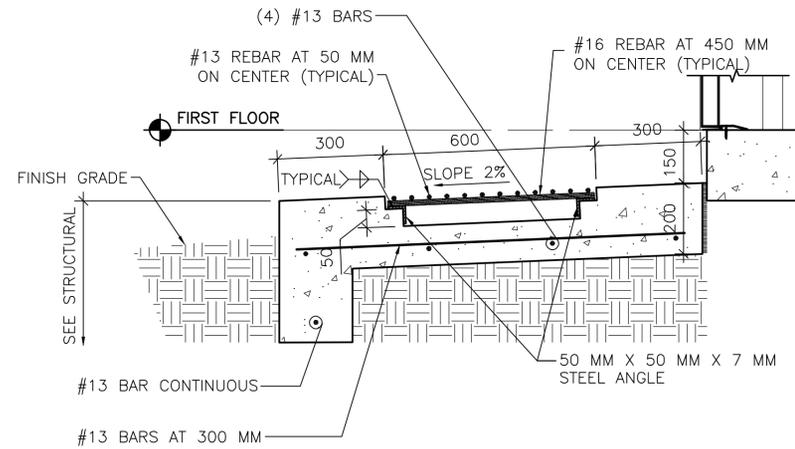




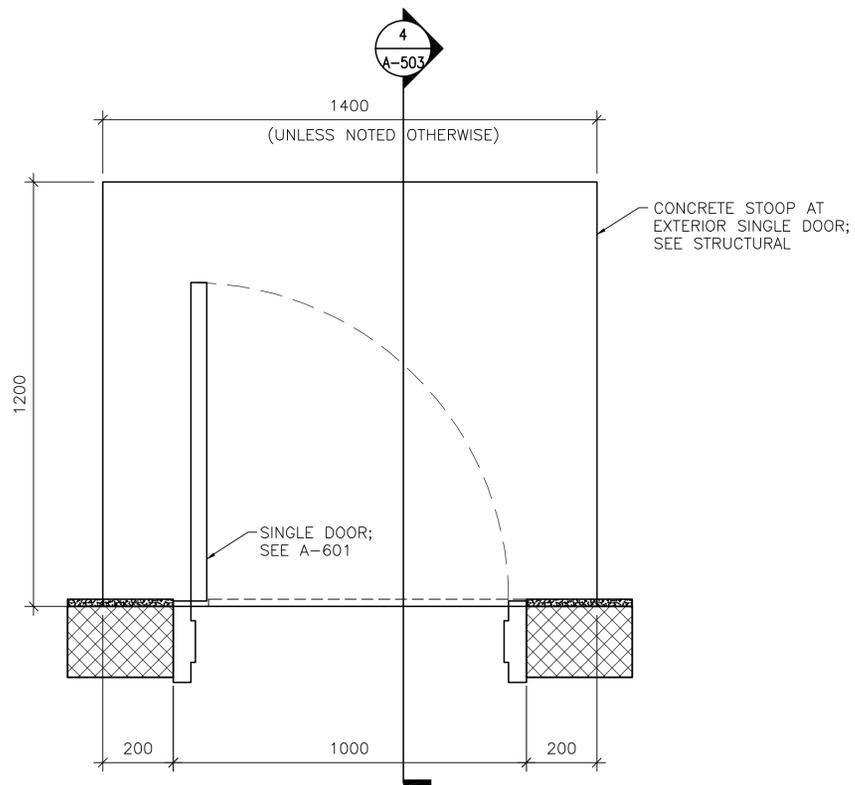




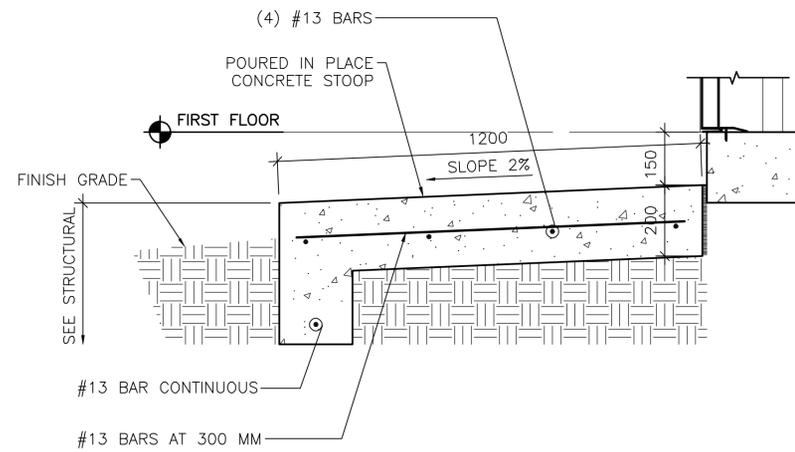
1 DOOR STOOP PLAN (WITH GRATE)  
A-503 SCALE: 1:10



2 DOOR STOOP DETAIL  
A-503 SCALE: 1:10



3 DOOR STOOP PLAN (WITHOUT GRATE)  
A-503 SCALE: 1:10



4 DOOR STOOP DETAIL  
A-503 SCALE: 1:10

LINEAR DIMENSIONS SHOWN  
ARE IN MILLIMETERS (MM),  
UNLESS OTHERWISE NOTED

0 200 400  
SCALE: 1:10

APPROVED:  
*X. R. Chafin*  
A/E DESIGNER OF RECORD  
SEAL:



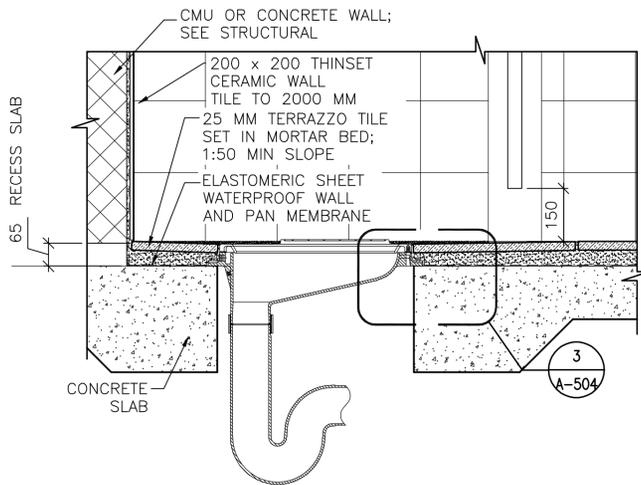
US ARMY CORPS  
OF ENGINEERS  
AFGHANISTAN  
ENGINEER DISTRICT

Rev.	Date	Description
0	2/23/10	Design file no.
		Mark
		Appr.
		Date
		Description

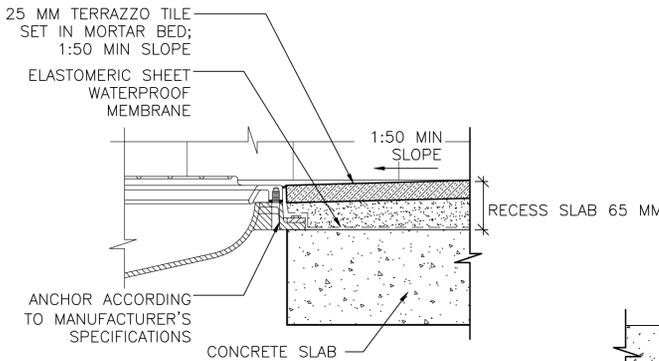
Designed by:	KRC	Cal'd by:	NLJ
Dwn by:	EBB	Reviewed by:	LHM
Submitted by:	BAKER	File name:	ANABOOSA-0307
		Plot date:	2/23/2010
		Plot scale:	1:10

U.S. ARMY CORPS OF ENGINEERS AFGHANISTAN ENGINEER DISTRICT APO AE 96338 Michael Baker, Inc. A unit of Michael Baker Corporation 100 Ardsley Drive, PA 15108 www.mbakercorp.com
AFGHAN NATIONAL ARMY REGIONAL MILITARY TRAINING CENTER STANDARD DESIGN SENIOR BOQ BARRACKS STOOP DETAILS

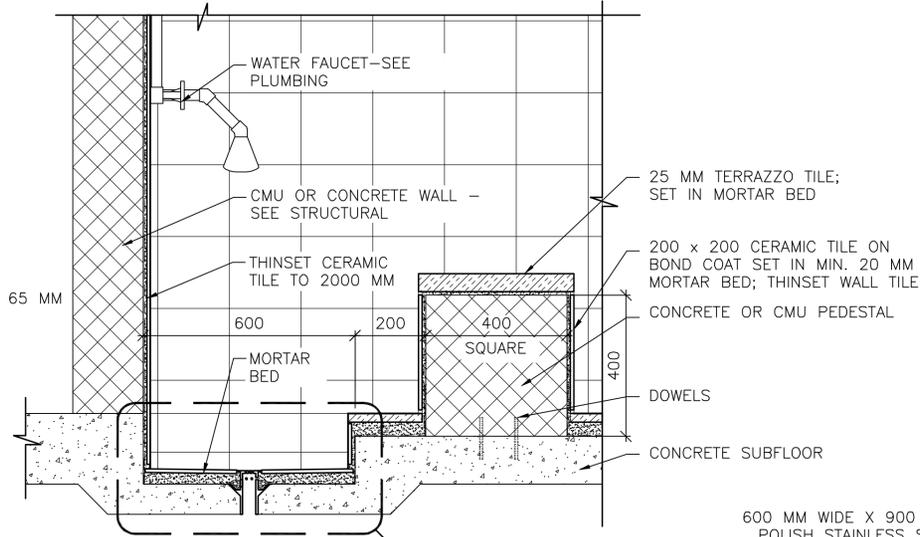
Sheet  
reference  
number:  
A-503



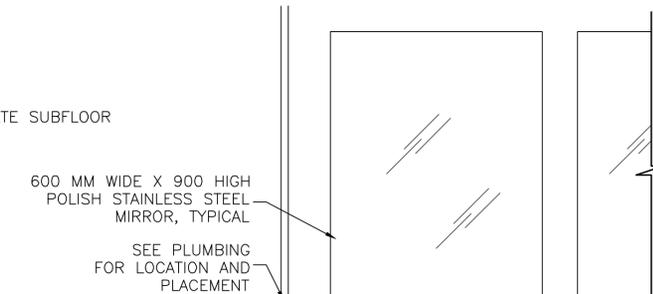
**1 LATRINE DETAIL**  
A-504 SCALE: 1:10



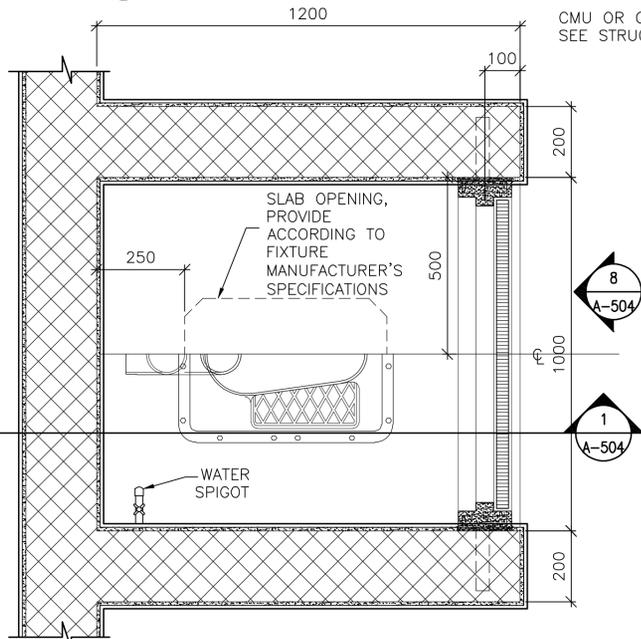
**3 MOUNTING DETAIL**  
A-504 SCALE: 1:5



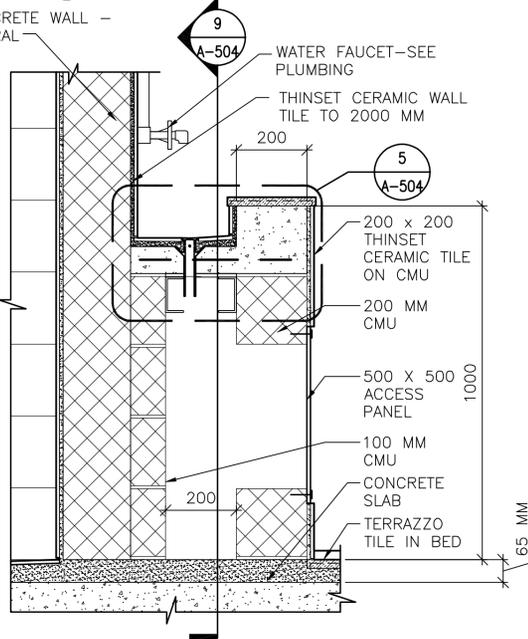
**7 ABLUTION DETAIL**  
A-504 SCALE: 1:10



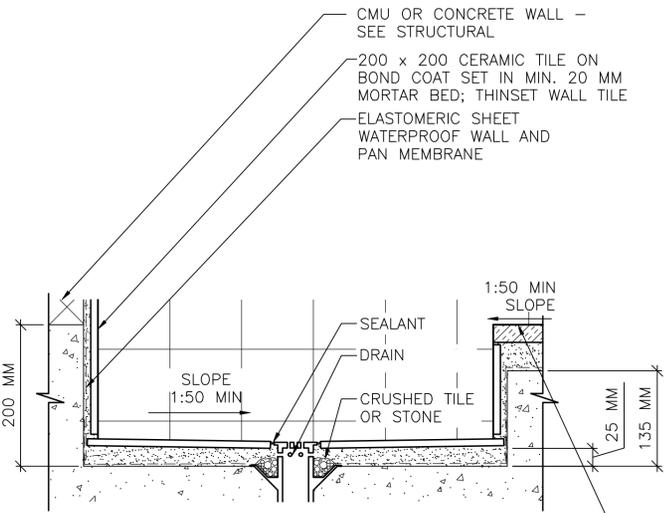
**9 LAVATORY SECTION**  
A-504 SCALE: 1:10



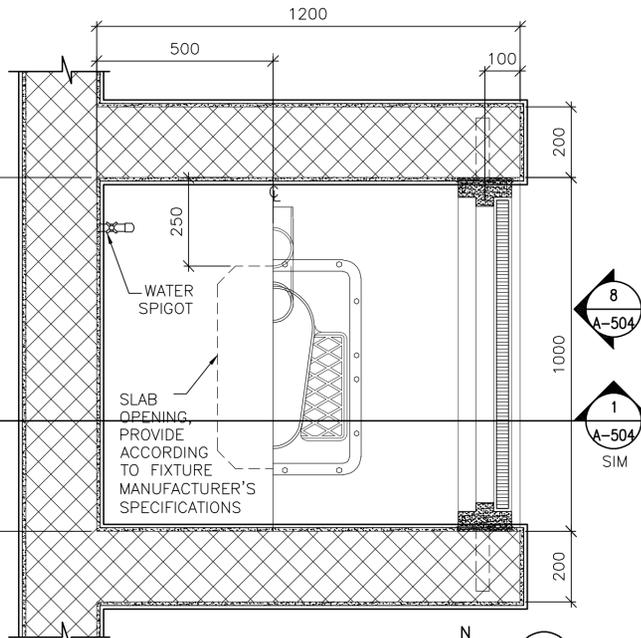
**2 TOILET DETAIL**  
A-504 SCALE: 1:10



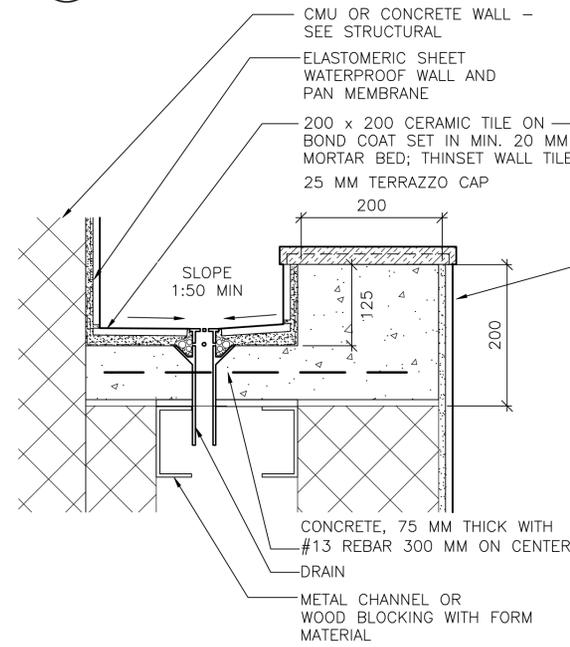
**4 LAVATORY SECTION**  
A-504 SCALE: 1:10



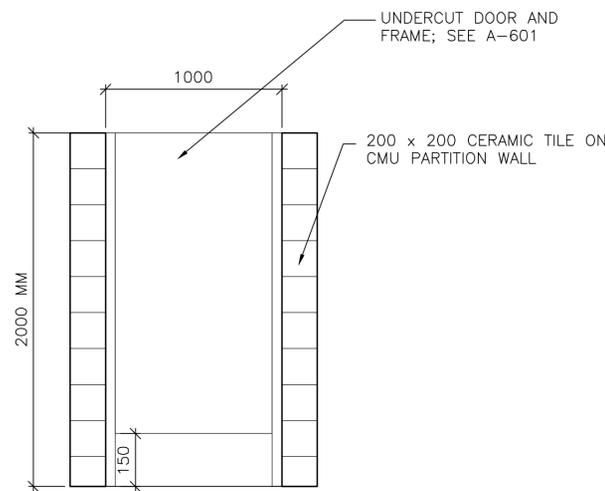
**6 RECESSED TROUGH**  
A-504 SCALE: 1:5



**2A TOILET DETAIL**  
A-504 SCALE: 1:10

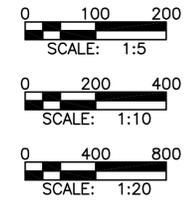


**5 LAVATORY DETAIL**  
A-504 SCALE: 1:5

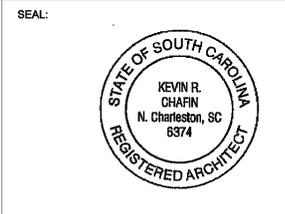


**8 TOILET PARTITION DOOR ELEVATION**  
A-504 SCALE: 1:20

LINEAR DIMENSIONS SHOWN ARE IN MILLIMETERS (MM), UNLESS OTHERWISE NOTED



APPROVED: *[Signature]*  
A/E DESIGNER OF RECORD



Rev.	Date	Description	Mark	Appr.	Date

Designed by: KRC  
Dwn by: EBB  
Reviewed by: LHM  
Submitted by: BAKER

Date: 2/23/10  
Design file no.:  
Drawing code: ANM00SA-0407  
File name: ANM00SA-0407  
Plot date: 2/23/10  
Plot scale: 1:1

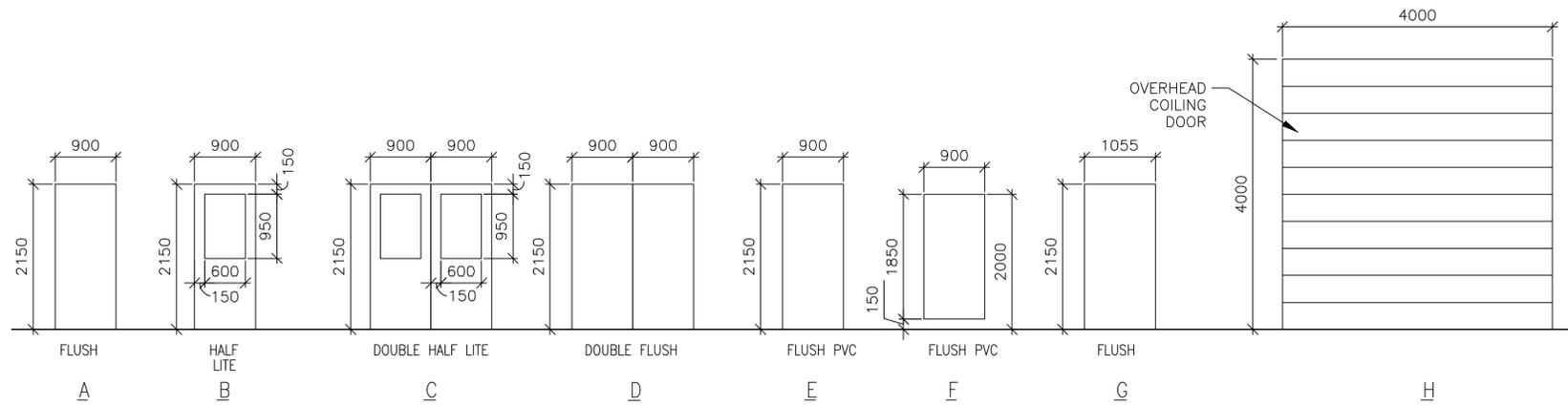
AFGHAN NATIONAL ARMY  
REGIONAL MILITARY TRAINING CENTER  
STANDARD DESIGN

SENIOR BOQ BARRACKS  
TOILET, LAVATORY & ABLUTION  
DETAILS

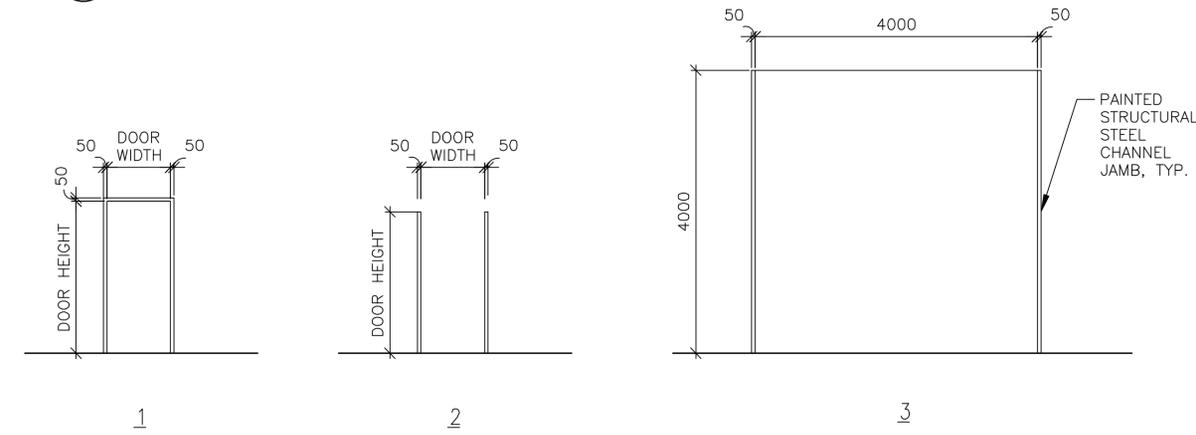
Sheet reference number:  
**A-504**



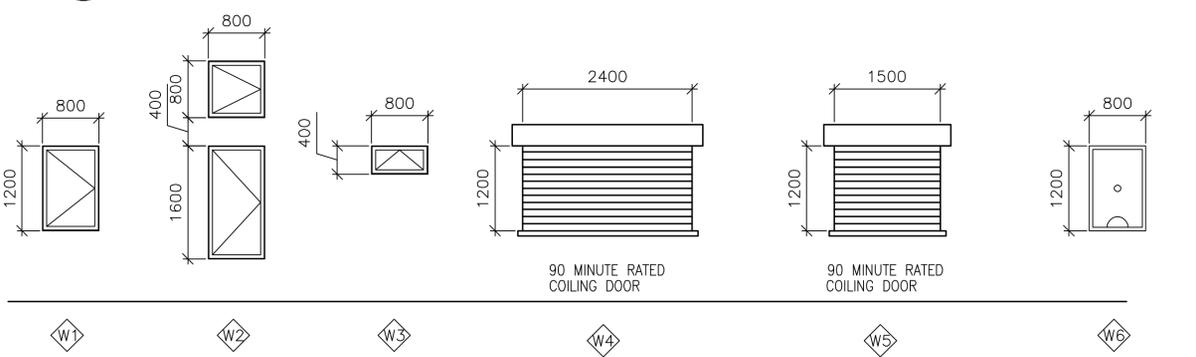




1 DOOR TYPES  
SCALE: 1:50



2 FRAME TYPES  
SCALE: 1:50



3 WINDOW TYPES  
SCALE: 1:50

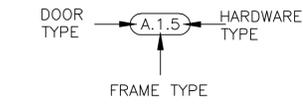
**WINDOW TYPE NOTES:**

1. ALL EXTERIOR WINDOWS SHALL BE ALUMINUM WITH INSECT SCREENS. WINDOWS SHALL BE COMMERCIAL GRADE.
2. ALL EXTERIOR WINDOWS SHALL BE OPERABLE.

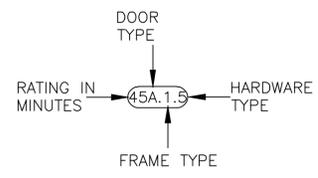
**DOOR TAG NOTES:**

1. THE DOOR TAG INDICATES THE DOOR TYPE, FRAME TYPE AND HARDWARE SET FOR EACH DOOR.
2. THE DOOR TAG FOR RATED DOORS INCLUDES THE RATING OF THE DOOR IN MINUTES.

4 DOOR TAG  
SCALE: NTS



5 RATED DOOR TAG  
SCALE: NTS



**EXTERIOR DOOR HARDWARE TYPES:**

- HW-1 1-1/2 PR HINGES, A5112 114 X 114  
1 EA RIM EXIT DEVICE, TYPE 1  
1 EA CYLINDER, E09221A, GRADE 1  
1 EA OVERHEAD CLOSER, C02061, LOW RESISTANCE  
1 EA THRESHOLD, J32130  
3 EA DOOR SILENCERS, L03011
- HW-2 1-1/2 PR HINGES, A5112 114 X 114  
1 EA LOCKSET, F13 ENTRY LOCK W/LEVER HANDLES, GRADE 1  
1 EA OVERHEAD CLOSER, C02061, LOW RESISTANCE  
1 EA THRESHOLD, J32130  
3 EA DOOR SILENCERS, L03011
- HW-3 3 PR HINGES, A5112 114 X 114  
2 EA RIM EXIT DEVICE, TYPE 1  
2 EA CYLINDER, GRADE 1  
2 EA OVERHEAD CLOSER, C02061, LOW RESISTANCE  
1 EA DOOR COORDINATOR, TYPE 21  
1 EA ASTRAGAL  
1 EA THRESHOLD, J32130  
2 EA DOOR SILENCERS, L03011
- HW-4 3 PR HINGES, A5112 114 X 114  
1 EA LOCKSET W/LEVER HANDLES, GRADE 1, F13  
1 EA OVERHEAD CLOSER, C02061, LOW RESISTANCE  
2 EA MAGNETIC HOLDER PIN, ATTACHED TO DOOR LEAF  
2 EA MAGNETIC HOLDER RECEIVER, ATTACHED TO STOOP  
2 EA LEVER EXTENSION FLUSH BOLTS, L04081  
1 EA ASTRAGAL  
1 EA THRESHOLD, J32130  
2 EA DOOR SILENCERS, L03011

**DOOR AND HARDWARE NOTES:**

1. INTERIOR AND EXTERIOR METAL DOORS AND FRAME COLORS SHALL MATCH ADJACENT WALL COLORS AS SELECTED BY THE CONTRACTING OFFICER.
2. FRAMES, EXCEPT FIRE-RATED FRAMES, SHALL BE MOUNTED AND ADJUSTED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. FRAMES SHALL BE FASTENED WITH MINIMUM OF THREE ANCHORS PER JAMB AT EQUAL INTERVALS.
3. DIMENSIONS SHOWN ON DOOR TYPES DETAIL ARE BASED UPON MODULAR MASONRY (OR ROUGH OPENING), HEIGHT OF 2200 MM FOR STANDARD PERSONNEL DOORS. CONTRACTOR SHALL COORDINATE WITH DOOR SUPPLIER TO ENSURE THAT DIMENSIONS OF DOORS AND FRAMES PROVIDED ARE COMPATIBLE WITH DOOR OPENING DIMENSIONS.
4. HARDWARE SHALL BE HEAVY DUTY, COMMERCIAL GRADE, STAINLESS STEEL WITH A SATIN OR BRUSHED FINISH.
5. HARDWARE TYPES INCLUDE BUILDERS HARDWARE MANUFACTURERS ASSOCIATION (BMHA) NUMBER.
6. DOORS IN 2 HOUR RATED PARTITIONS SHALL BE 1.5 HOUR (90 MINUTE) RATED DOORS IN ACCORDANCE WITH NFPA 101, TABLE 8.3.4.2.
7. DOORS AT STAIR ENCLOSURES SHALL BE 1 HOUR (60 MINUTE) RATED AT 1 HOUR WALL IN ACCORDANCE WITH NFPA 101, TABLE 8.3.4.2.
8. DOORS IN 1 HOUR RATED WALLS SHALL BE 3/4 HOUR (45 MINUTE) RATED DOORS IN ACCORDANCE WITH NFPA 101, TABLE 8.3.4.2.
9. DOORS IN 1 HOUR RATED CORRIDOR WALLS SHALL BE 1/3 HOUR (20 MINUTE) IN ACCORDANCE WITH NFPA 101, TABLE 8.3.4.2.
10. PROVIDE DOOR STOPS TO PROTECT WALLS ON LOCATIONS WHERE DOOR SWING WILL STRIKE WALL.

**INTERIOR DOOR HARDWARE TYPES:**

- HW-5 1-1/2 PR HINGES, A8133 114 X 114  
1 EA LOCKSET W/LEVER HANDLES, F08, GRADE 1  
1 EA WALL STOP, L02101 OR L02161  
3 EA DOOR SILENCERS, L03011
- HW-6 1-1/2 PR HINGES, A8112 114 X 114  
1 EA LOCKSET W/LEVER HANDLES, F08, GRADE 1  
1 EA WALL STOP, L02101 OR L02161  
1 EA OVERHEAD CLOSER, C02061, LOW RESISTANCE  
3 EA DOOR SILENCERS, L03011
- HW-7 1-1/2 PR HINGES, A8133  
1 EA LOCKSET W/LEVER HANDLES, F13 GRADE 1  
1 EA WALL STOP, L02101 OR L02161  
2 EA MOP PLATE, J103  
3 EA DOOR SILENCERS, L03011
- HW-8 1-1/2 PR HINGES, A8112  
1 EA LOCKSET W/LEVER HANDLES, F13 GRADE 1  
1 EA WALL STOP, L02101 OR L02161  
2 EA MOP PLATE, J103  
1 EA OVERHEAD CLOSER, C02061, LOW RESISTANCE  
3 EA DOOR SILENCERS, L03011
- HW-9 1-1/2 PR HINGES, A5112 114 X 114  
1 EA RIM EXIT DEVICE, TYPE 1  
1 EA CYLINDER, E09221A, GRADE 1  
1 EA OVERHEAD CLOSER, C02061, LOW RESISTANCE  
3 EA DOOR SILENCERS, L03011
- HW-10 3 PR HINGES, A5112 114 X 114  
1 EA LOCKSET W/LEVER HANDLES, GRADE 1, F13  
2 EA LEVER EXTENSION FLUSH BOLTS, L04081  
1 EA ASTRAGAL  
2 EA DOOR SILENCERS, L03011
- HW-11 1-1/2 PR HINGES, A8112 114 X 114  
1 EA LOCKSET W/LEVER HANDLES, F13, GRADE 1  
1 EA WALL STOP, L02101 OR L02161  
1 EA OVERHEAD CLOSER, C02061, LOW RESISTANCE  
3 EA DOOR SILENCERS, L03011  
1 EA ROBE HOOK
- HW-12 1-1/2 PR HINGES, A8133  
1 EA LATCHSET W/LEVER HANDLES, F76 GRADE 1  
1 EA WALL STOP, L02101 OR L02161  
2 EA MOP PLATE, J103  
3 EA DOOR SILENCERS, L03011  
1 EA ROBE HOOK
- HW-13 3 PR HINGES, A5112 114 X 114  
1 EA LOCKSET W/LEVER HANDLES, GRADE 1, F13  
1 EA OVERHEAD CLOSER, C02061, LOW RESISTANCE  
2 EA LEVER EXTENSION FLUSH BOLTS, L04081  
1 EA ASTRAGAL  
2 EA DOOR SILENCERS, L03011
- HW-14 3 PR HINGES, A5112 114 X 114  
2 EA RIM EXIT DEVICE, TYPE 1  
2 EA CYLINDER, GRADE 1  
2 EA OVERHEAD CLOSER, C02061, LOW RESISTANCE  
1 EA DOOR COORDINATOR, TYPE 21  
1 EA ASTRAGAL  
2 EA DOOR SILENCERS, L03011

THIS SHEET IS STANDARD AND IS INCLUSIVE OF ALL THE DOOR/WINDOW/HARDWARE TYPES FOR THE ENTIRE RMTc CONTRACT. NOT ALL DOOR/WINDOW/HARDWARE TYPES ARE USED FOR ANY PARTICULAR BUILDING DESIGN. CONTRACTOR SHALL REFER TO THE FLOOR PLAN FOR THE TYPES BEING USED.



Rev.	Date	Description	Mark	Appr.	Date

Designed by: KRC  
Dwn by: EBB  
Reviewed by: LHM  
Submitted by: BAKER

Date: 2/23/10  
Design file no.:  
Drawing code: ANA005A-0103  
File name: ANA005A-0103  
Plot date: 2/23/10  
Plot scale: xx

U.S. ARMY CORPS OF ENGINEERS  
AFGHANISTAN ENGINEER DISTRICT  
APO AE 96338  
Michael Baker Corp.  
A Unit of Michael Baker Corporation  
Alside Business Park  
100 Alside Drive, PA, 15108  
www.mbakercorp.com

AFGHAN NATIONAL ARMY  
REGIONAL MILITARY TRAINING CENTER  
STANDARD DESIGN

SENIOR BOQ BARRACKS

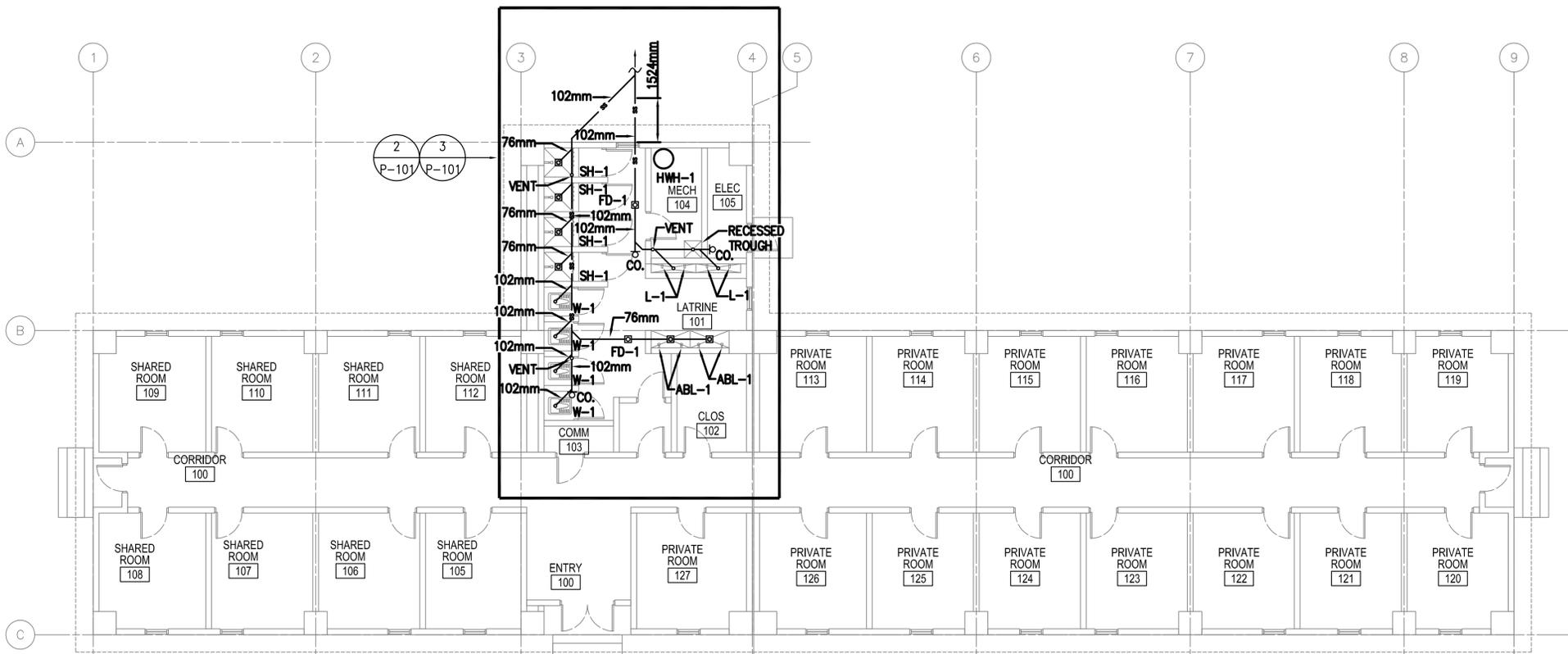
WINDOW AND DOOR SCHEDULES

APPROVED: *X. P. Cliff*  
A/E DESIGNER OF RECORD

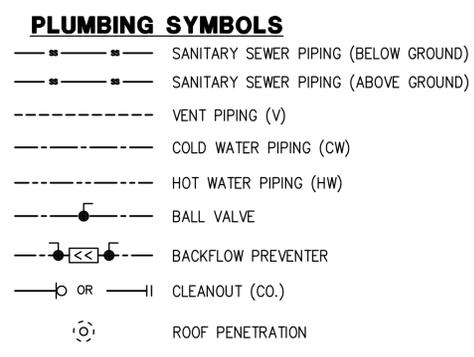
SEAL:  
STATE OF SOUTH CAROLINA  
KEVIN R. CHAFIN  
N. Charleston, SC  
6374  
REGISTERED ARCHITECT

Sheet reference number:  
A-601

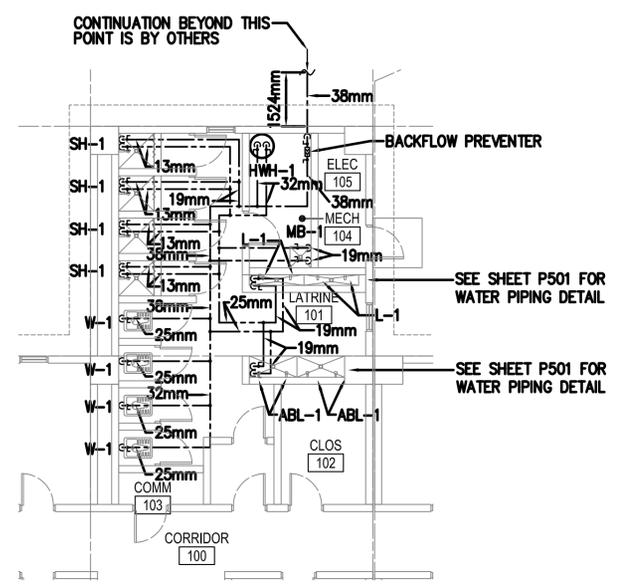
1 2 3 4 5



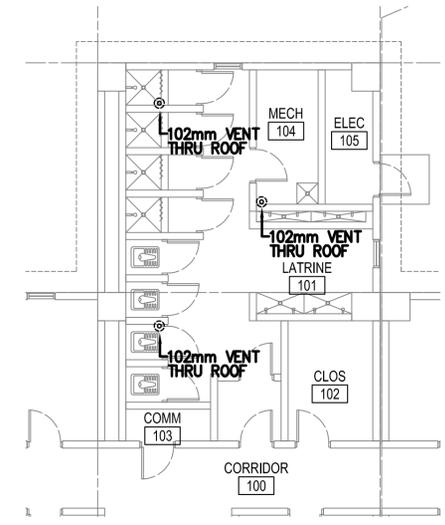
1  
P-101  
SENIOR BOQ BARRACKS  
FLOOR PLAN - PLUMBING (SANITARY)  
SCALE: 1:100



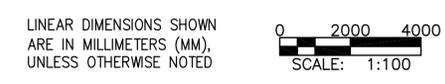
- FLOOR PLAN NOTES:**
- DO NOT SCALE DRAWINGS — ALL DIMENSIONS AND CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR AT THE SITE.
  - ALL WORK PERFORMED ON THIS BUILDING SHALL BE IN COMPLIANCE WITH ALL PERTINENT CODES, RULES, ORDINANCES AND REGULATIONS OF THE GOVERNING AUTHORITIES.
  - ALL WORK PERFORMED UNDER AND IN CONNECTION WITH THESE DRAWINGS AND SPECIFICATIONS SHALL BE IN STRICT COMPLIANCE WITH THE LATEST SAFETY AND HEALTH STANDARDS.
  - REPORT ANY DISCREPANCIES FOUND IN THE PLUMBING DRAWINGS AND/OR IN THE SPECIFICATIONS DURING THE BIDDING PROCESS FOR CLARIFICATION BY THE ENGINEER.
  - ALL EASTERN STYLE WATER CLOSETS IN THIS FACILITY ARE TO HAVE THE FIXTURE DESIGNATION OF W-1. EACH FIXTURE SHALL HAVE A 25mm (1 INCH) COLD WATER LINE EXTENDED TO IT AND THEN BE REDUCED TO 13mm (1/2 INCH) FOR A FINAL CONNECTION TO THE FLUSH TANK AND A 102mm (4) INCH SANITARY CONNECTION.
  - ALL LAV FIXTURES IN THIS FACILITY ARE TO HAVE THE FIXTURE DESIGNATION OF L-1. EACH FIXTURE SHALL HAVE A 13mm (1/2 INCH) COLD WATER, 13mm (1/2 INCH) HOT WATER CONNECTION AND A 76mm (3 INCH) SANITARY CONNECTION.
  - ALL ABLUTION FIXTURES IN THIS FACILITY ARE TO HAVE THE FIXTURE DESIGNATION OF ABL-1. EACH FIXTURE SHALL HAVE A 13mm (1/2 INCH) COLD WATER, 13mm (1/2 INCH) HOT WATER CONNECTION AND A 76mm (3 INCH) SANITARY CONNECTION.
  - REFER TO SHEET P501, P502, AND P503 FOR DETAILS AND SYMBOLS.
  - ALL WATER, SANITARY AND VENT LINES TO BE EXPOSED. RUN LINES TIGHT TO CEILING AND WALL.



2  
P-101  
PARTIAL SENIOR BOQ BARRACKS  
FLOOR PLAN - PLUMBING (HOT AND COLD WATER)  
SCALE: 1:100



3  
P-101  
PARTIAL SENIOR BOQ BARRACKS  
FLOOR PLAN - PLUMBING (VENT PIPING)  
SCALE: 1:100



Rev.	Date	Description	Mark	Appr.

Designed by: RMH	Clk by: CUM	Drawing code: ANABOQSR-1000	File name: ANABOQSR-1000
Date: 02/23/10	Design file no.:	Reviewed by: BAKER	Plot date: 02/23/10
U.S. ARMY CORPS OF ENGINEERS AFGHANISTAN ENGINEER DISTRICT		Michael Baker, Jr., Inc. A Unit of Michael Baker Corporation Arside Business Park Moon Township, PA 15108 www.mbakercorp.com	

AFGHAN NATIONAL ARMY REGIONAL MILITARY TRAINING CENTER STANDARD DESIGN	SENIOR BOQ BARRACKS FLOOR PLAN - PLUMBING
--	--

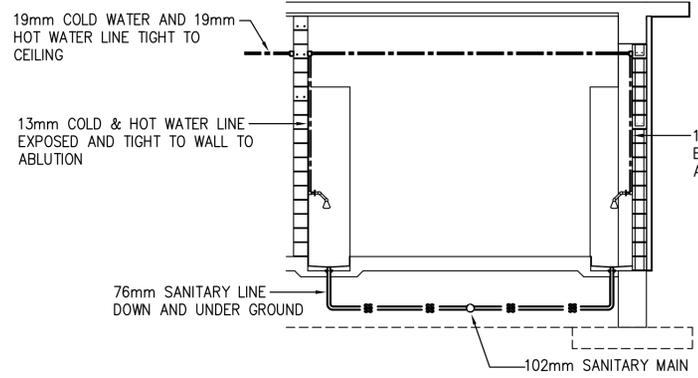
APPROVED:

---

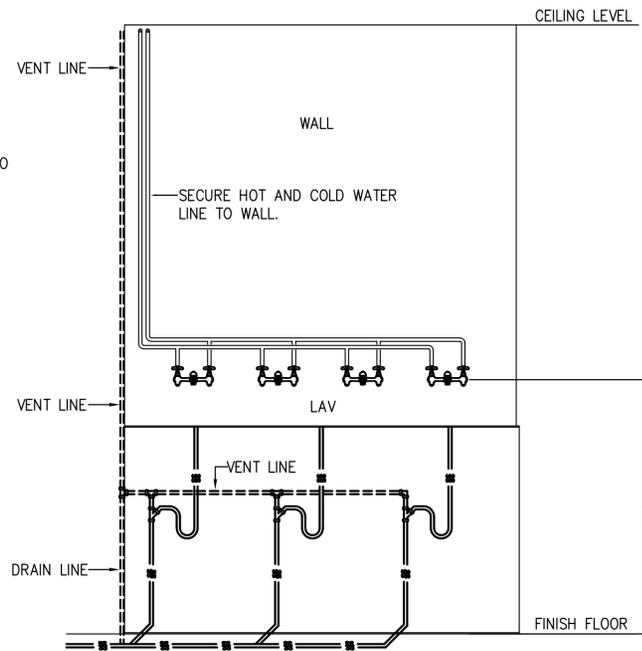
A/E DESIGNER OF RECORD

SEAL:

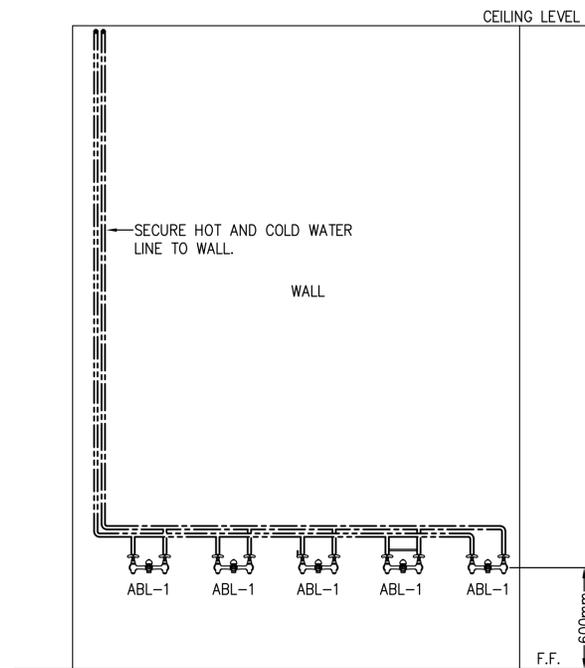
Sheet reference number:  
P-101



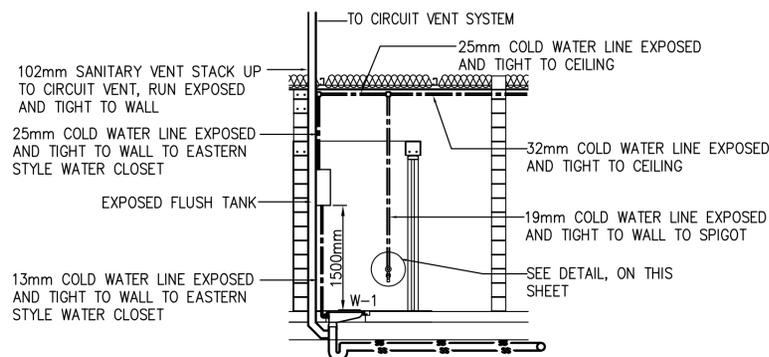
**TYPICAL ABLUTION SANITARY & WATER INSTALLATION SCHEMATIC**  
SCALE: N.T.S.



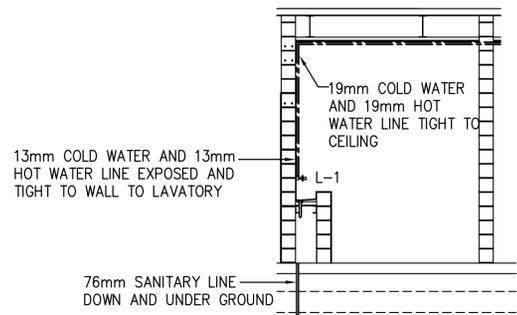
**LAVATORY ELEVATION PLAN - PLUMBING**  
SCALE: N.T.S.



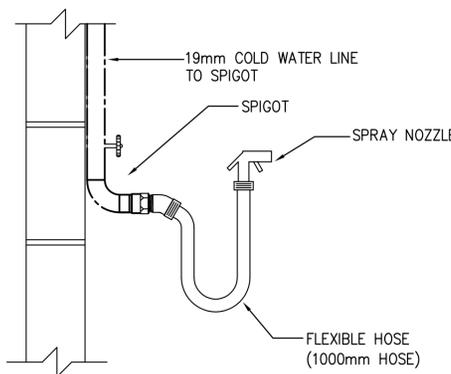
**TYPICAL ABLUTION ELEVATION PLUMBING PLAN - WATER INSTALLATION SCHEMATIC**  
SCALE: N.T.S.



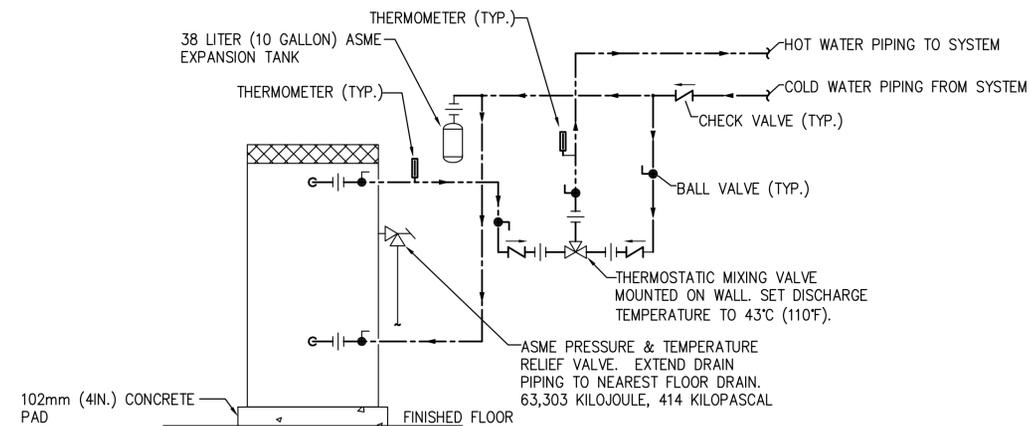
**TYPICAL EASTERN STYLE WATER CLOSET SANITARY & WATER INSTALLATION SCHEMATIC**  
SCALE: N.T.S.



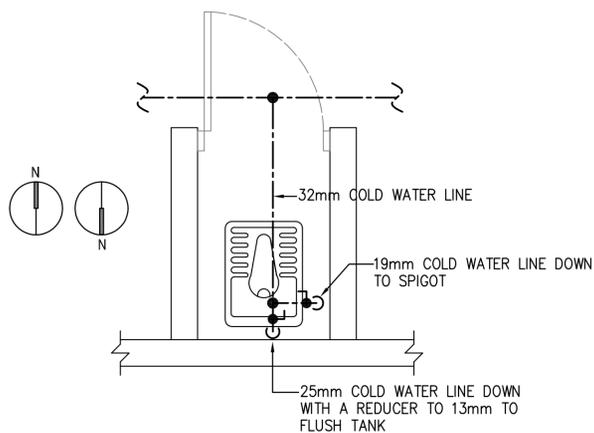
**TYPICAL LAVATORY SANITARY & WATER INSTALLATION SCHEMATIC**  
SCALE: N.T.S.



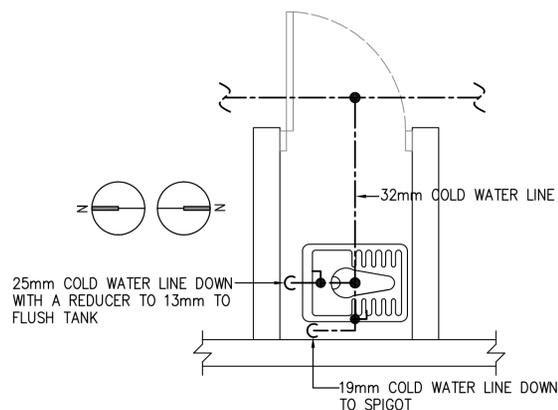
**TYPICAL DETAIL - SPIGOT, FLEXIBLE HOSE, AND SPRAY NOZZLE**  
SCALE: N.T.S.



**ELECTRIC WATER HEATER PIPING SCHEMATIC**  
SCALE: N.T.S.



**TYPICAL EASTERN STYLE WATER CLOSET WITH SPIGOT WATER PIPING DETAIL**  
SCALE: N.T.S.

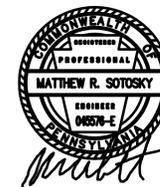


**TYPICAL EASTERN STYLE WATER CLOSET WITH SPIGOT WATER PIPING DETAIL**  
SCALE: N.T.S.

**GENERAL PLUMBING NOTES:**

1. ALL SANITARY PIPING SHALL BE BELOW FLOOR, AND ALL WATER, AND VENT PIPING SHALL BE TIGHT TO CEILING, UNLESS OTHERWISE NOTED.
2. PLUMBING CONTRACTOR SHALL COORDINATE PLUMBING WORK WITH THE WORK OF ALL OTHER TRADES. VERIFY THE LOCATIONS OF ALL UTILITIES AT THE SITE PRIOR TO THE START OF ANY PLUMBING WORK.
3. COORDINATE ALL ACCESS PANEL LOCATIONS WITH THE ARCHITECT AND GENERAL CONTRACTOR.
4. ALL SANITARY PIPING BELOW SLAB SHALL BE A MINIMUM OF 51mm, UNLESS OTHERWISE NOTED OR AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
5. ALL SANITARY BRANCH LINES SHALL BE SLOPED AT 6mm PER 305mm, AND ALL MAIN LINES SHALL BE SLOPED AT 3mm PER 305mm, UNLESS OTHERWISE NOTED OR AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH ALL UTILITY AUTHORITIES FOR INSTALLATION REQUIREMENTS, REGULATIONS, FEES, PERMITS, AND APPROVALS BEFORE THE START OF CONSTRUCTION.
7. THE CONTRACTOR SHALL ROUGH-IN AND CONNECT ALL EQUIPMENT REQUIRING WATER, WASTE, AND/OR VENT WHETHER OR NOT FURNISHED UNDER THIS CONTRACT. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL ALL NECESSARY PIPE, FITTINGS, VALVES, TRAPS, ETC., REQUIRED FOR A COMPLETE INSTALLATION, LEAVING SAME READY FOR SERVICE.

APPROVED:  
A/E DESIGNER OF RECORD  
SEAL:



Rev.	Date	Description	Appr.	Date
0	02/23/10	Design file no.		
		Drawing code:		
		File name: ANAB02SR-501xxx		
		Plot date: 02/23/10		
		Plot scale: 1:100		

Designed by:	RMH
Drawn by:	RMH
Reviewed by:	CJM
Submitted by:	MRS

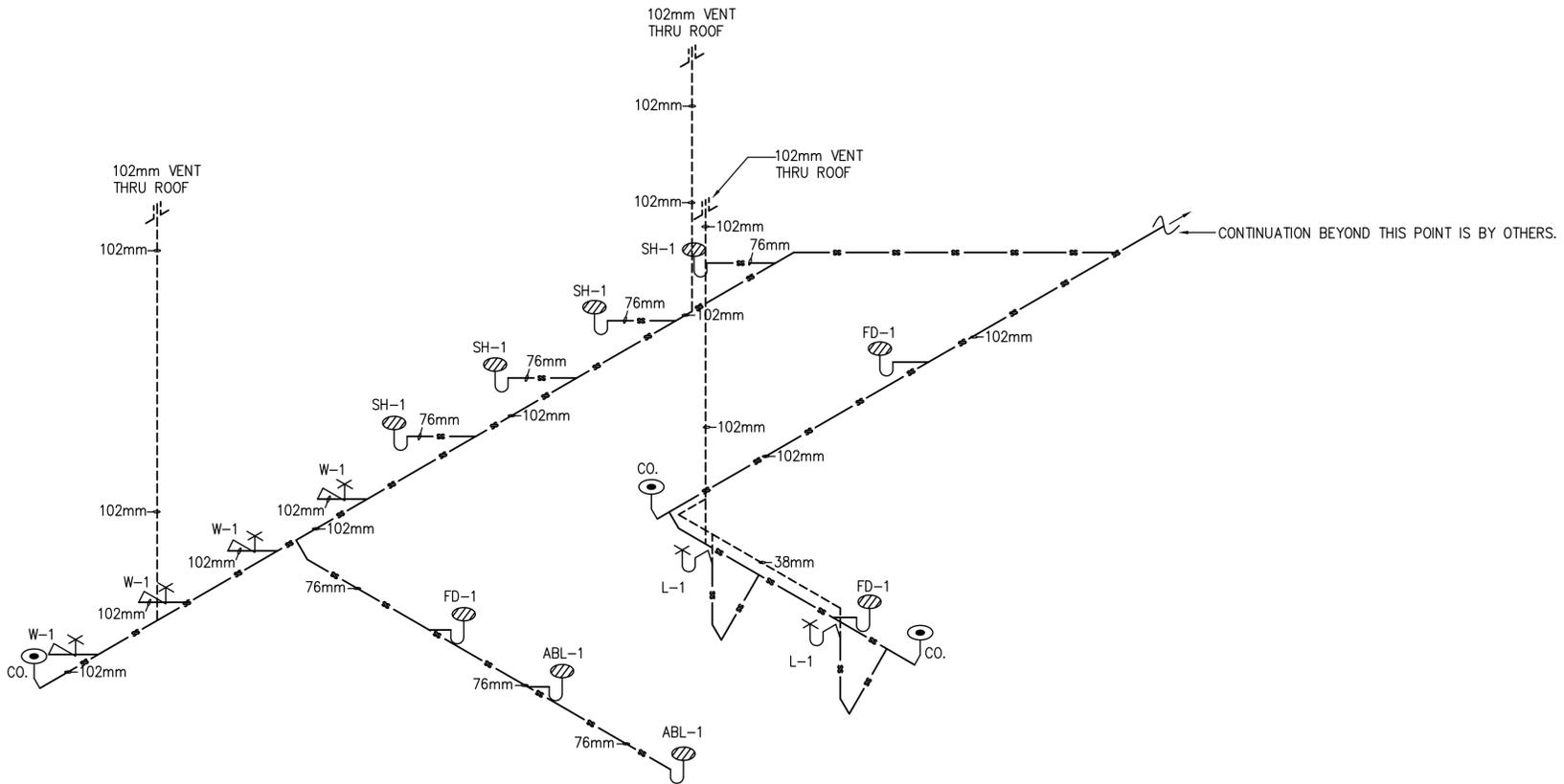
U.S. ARMY CORPS OF ENGINEERS  
AFGHANISTAN ENGINEER DISTRICT  
APO AE 96338  
Michael Baker, Jr., Inc.  
A unit of Michael Baker Corporation  
Arlide Business Park  
Moon Township, PA 15108  
www.mbakercorp.com

AFGHAN NATIONAL ARMY  
REGIONAL MILITARY TRAINING CENTER  
STANDARD DESIGN  
SENIOR BOQ BARRACKS  
PLUMBING DETAILS

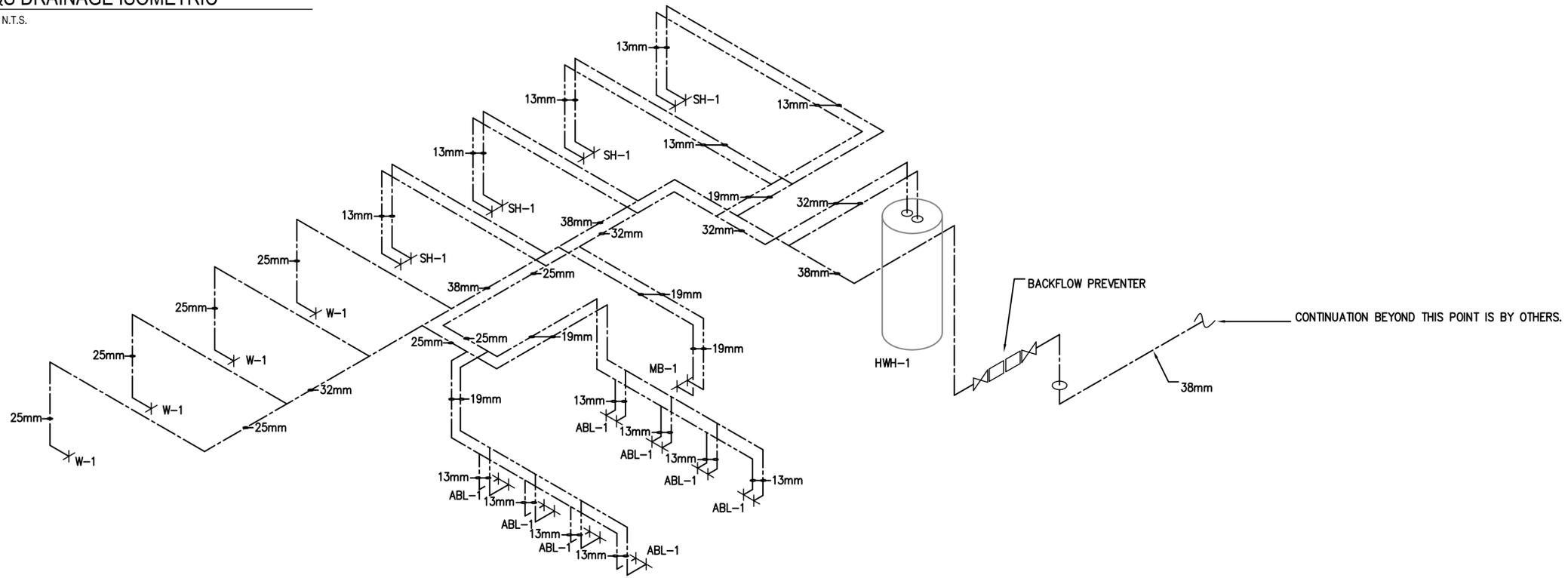
Sheet reference number:  
P-501







1  
P-901 BOQS DRAINAGE ISOMETRIC  
SCALE: N.T.S.



2  
P-901 BOQS HOT AND COLD WATER ISOMETRIC  
SCALE: N.T.S.

- PLUMBING SYMBOLS**
- ■ — ■ — SANITARY SEWER PIPING (BELOW GROUND)
  - ■ — ■ — SANITARY SEWER PIPING (ABOVE GROUND)
  - - - - - VENT PIPING (V)
  - — — — COLD WATER PIPING (CW)
  - — — — HOT WATER PIPING (HW)
  - ● — BALL VALVE
  - ◻ — BACKFLOW PREVENTER
  - ⊕ OR — ⊥ CLEANOUT (CO.)
  - ⊙ ROOF PENETRATION



US ARMY CORPS OF ENGINEERS  
AFGHANISTAN ENGINEER DISTRICT

Rev.	Date	Description	Appr.	Date
0	02/23/10			

Designed by: RMH	Checked by: CJM	Reviewed by: BAKER
U.S. ARMY CORPS OF ENGINEERS AFGHANISTAN ENGINEER DISTRICT APO AE 96338	Michael Baker, Jr., Inc. A unit of Michael Baker Corporation Arlside Business Park Moon Township, PA 15108 www.mbakercorp.com	File name: ANABOQSR-01000 Plot date: 02/23/2010 Plot scale: N.T.S.

AFGHAN NATIONAL ARMY  
REGIONAL MILITARY TRAINING CENTER  
STANDARD DESIGN  
SENIOR BOQ BARRACKS  
PLUMBING ISOMETRICS

APPROVED:

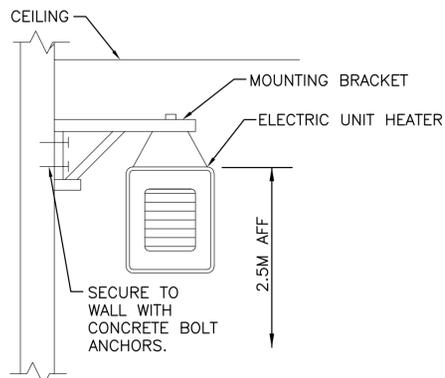
---

A/E DESIGNER OF RECORD

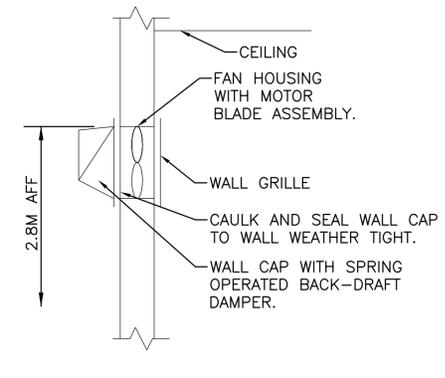
SEAL:

*Matthew R. Sotosky*

Sheet reference number:  
P-901



2 ELECTRIC UNIT HEATER MOUNTING DETAIL  
M-101 N.T.S.



3 WALL EXHAUST FAN DETAIL  
M-101 N.T.S.

EXHAUST FAN SCHEDULE							
NO.	TYPE	FAN CMS	DRIVE	HP	SP mmH2O	ELECTRICAL DATA	SWITCH
EF-1	WALL	0.330	DIRECT	1/6	13	220/1/50	⊙ WALL
EF-2	WALL	0.035	DIRECT	FRACT	13	220/1/50	⊙ WALL
EF-3	WALL	0.035	DIRECT	FRACT	13	220/1/50	W/ STAT

NOTES:  
1. FANS SHALL HAVE LOW LEAKAGE GRAVITY LOUVER.

MAKE UP AIR HEATERS							
NO.	BLOWER CMS	FUSE	KW	MIN. TEMP RISE °C	SP mmH2O	ELECTRICAL DATA	CONTROL
MUA-1	0.284	60	10	20	13	220/1/50	REMOTE

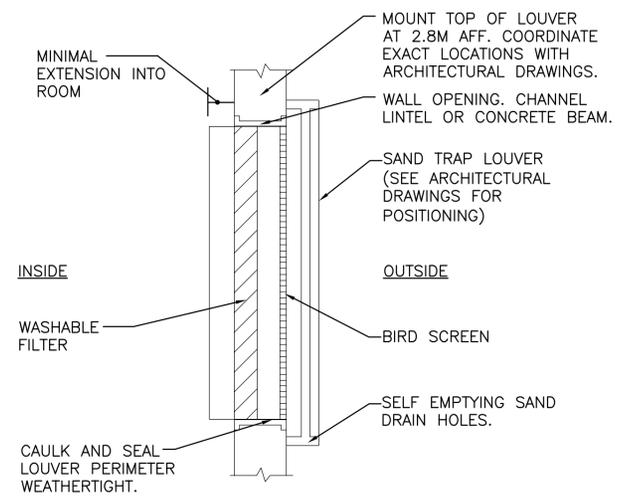
NOTES:  
1. PROVIDE REMOTE MOUNTED THERMOSTAT WITH LOCKING COVER.  
2. INTERLOCK BLOWER OPERATION WITH EXHAUST FANS EF-1 & STAT.  
3. PROVIDE AIR SENSING SWITCH FOR HEATING OPERATION.

ELECTRIC UNIT HEATER SCHEDULE					
NO.	CMS	KW	F.A.T. °C	ELECT. CHAR.	MOUNTING
EH-2	0.200	2.6	38	380/1/50	WALL HUNG

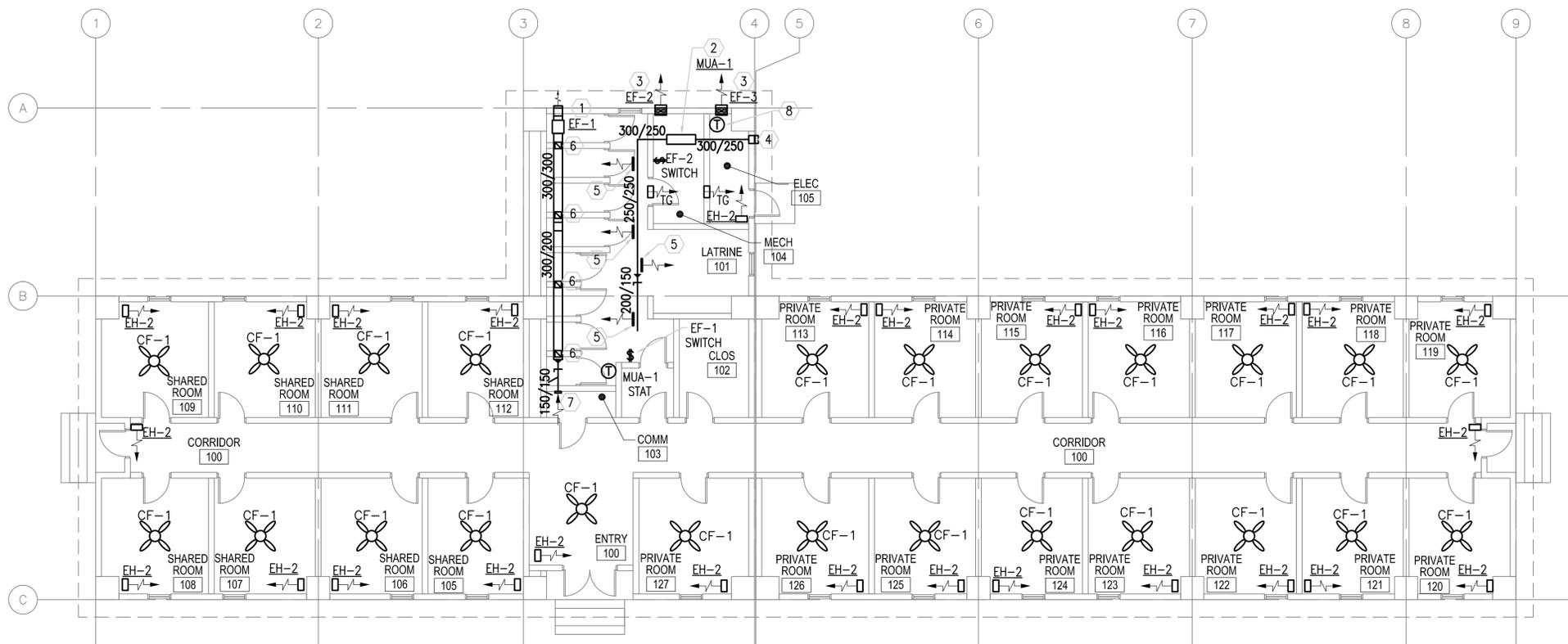
NOTES:  
1. UNIT HEATERS SHALL HAVE TAMPER PROOF INTEGRAL STATS.  
2. FINAL ELECTRICAL CONNECTIONS BY EC.

CEILING FAN					
NO.	BLADE SIZE		VOLTAGE	SWITCH	REMARKS
	mm	IN			
CF-1	1320	52	220/1/50	⊙ WALL	3 SPEED REVERSIBLE MOTOR

NOTES:  
1. INSTALL FANS 2.5M AFF.  
2. PROVIDE WITH OUT LIGHT FIXTURE.  
3. PROVIDE WITH REMOTE MOUNTED ON-OFF SWITCH SHOWN ON ELECTRICAL DRAWINGS.



4 FILTERED SAND TRAP LOUVER  
M-101 N.T.S.



1 FLOOR PLAN - HVAC  
M-101 SCALE: 1:100

LINEAR DIMENSIONS SHOWN ARE IN MILLIMETERS (MM), UNLESS OTHERWISE NOTED  
SCALE: 1:100

GENERAL NOTES:

- DO NOT SCALE DRAWINGS - ALL DIMENSIONS AND CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR AT THE SITE.
- ALL WORK PERFORMED ON THIS BUILDING SHALL BE IN COMPLIANCE WITH ALL PERTINENT CODES, RULES, ORDINANCES AND REGULATIONS OF THE GOVERNING AUTHORITIES.
- ALL WORK PERFORMED UNDER AND IN CONNECTION WITH THESE DRAWINGS AND SPECIFICATIONS SHALL BE IN STRICT COMPLIANCE WITH THE LATEST SAFETY AND HEALTH STANDARDS.

SYMBOLS:

- ⊙ KEY NOTE
- (0.050) AIR VOLUME IN CUBIC METERS PER SECOND (CMS)
- UC DOOR UNDERCUT
- TG 200x400 (8x16) TRANSFER GRILLE
- \$ SINGLE POLE SWITCH - 20A RATED

ABBREVIATIONS:

- AFF ABOVE FINISH FLOOR
- CF CEILING FANS
- CMS CUBIC METERS PER SECOND
- EC ELECTRICAL CONTRACTOR
- STATS THERMOSTATS

KEY NOTE:

- INLINE EXHAUST FAN DUCTED TO WALL CAP WITH LOW LEAKAGE GRAVITY BACK-DRAFT DAMPER. SECURE FAN TO STRUCTURE ABOVE AND INTERLOCK WITH MAKE UP AIR HEATER.
- ELECTRIC MAKE UP AIR HEATER SECURED TO STRUCTURE ABOVE. BLOWER SHALL BE SET TO ENERGIZE WITH EXHAUST FAN EF-1 & STAT, HEAT SHALL BE CONTROLLED BY STAT.
- WALL EXHAUST FAN WITH LOW SPRING OPERATED BACK-DRAFT DAMPER. SEE DETAIL 3 THIS SHEET.
- 600X600 (24X24) INTAKE LOUVER FOR MAKE UP AIR UNIT. PROVIDE WEATHER PROOF LOUVER WITH 50mm (2") WASHABLE FILTER AND SAND TRAP.
- 200x150 (8x6) ALUMINUM DUCT MOUNTED SUPPLY GRILLE WITH ADJUSTABLE OPPOSED BLADE DAMPERS. BALANCE EACH GRILLE TO 0.070 CMS.
- 150x150 (6x6) ALUMINUM DUCT MOUNTED EXHAUST GRILLE WITH ADJUSTABLE OPPOSED BLADE DAMPERS. BALANCE EACH GRILLE TO 0.075 CMS.
- 150x150 (6x6) ALUMINUM WALL MOUNTED EXHAUST GRILLE WITH ADJUSTABLE OPPOSED BLADE DAMPERS. BALANCE GRILLE TO 0.030 CMS.
- THERMOSTAT MOUNTED AS HIGH AS POSSIBLE. INTERLOCK STAT WITH CORRESPONDING EXHAUST FAN, SET FAN TO ENERGIZE ON RISE IN TEMPERATURE ABOVE 25°C (77°F).



Rev.	Date	Description	Mark	Appr.
0	02/23/10	Design file no.		

Designed by: RML  
Dwn by: JLN  
U.S. ARMY CORPS OF ENGINEERS  
AFGHANISTAN ENGINEER DISTRICT  
APO AE 96338

Calcd by: CUM  
Reviewed by: MRS  
Submitted by: BAKER

File name: ANAB03SH-HVAC  
Plot date: 02/23/10  
Plot scale: 1:100

AFGHAN NATIONAL ARMY  
REGIONAL MILITARY TRAINING CENTER  
STANDARD DESIGN

SENIOR BOQ BARRACKS  
HVAC - FLOOR PLAN,  
SCHEDULES AND DETAILS

APPROVED:

A/E DESIGNER OF RECORD

SEAL:

Sheet reference number: M-101



**GENERAL NOTES:**

1. REFER TO DRAWING #E-001 FOR THE ELECTRICAL SYMBOLS LIST.
2. EXIT SIGNS SHALL BE WIRED AHEAD OF ANY LOCAL SWITCHING ON CIRCUITS. SEE WIRING DIAGRAM DETAIL 8, DRAWING #E-501.
3. REFER TO DRAWING #E-400 FOR THE LIGHTING FIXTURE SCHEDULE.
4. REFER TO DRAWING #E-500 FOR THE POWER RISER.
5. REFER TO DRAWING #E-600 FOR PANEL SCHEDULES.
6. LIGHT FIXTURES INDICATED AS EMERGENCY SHALL BE PROVIDED WITH A BATTERY BACKUP BALLAST. SEE WIRING DIAGRAM DETAIL 7, DRAWING #E-501.



Rev.	Date	Description
0	2/23/10	

Designed by: <b>RAJ</b>	Date: <b>2/23/10</b>	Rev: <b>0</b>
Drawn by: <b>BUB</b>	Design file no.:	
Reviewed by: <b>JRG</b>	Drawing code:	
Submitted by: <b>BAKER</b>	File name: Plot date:	

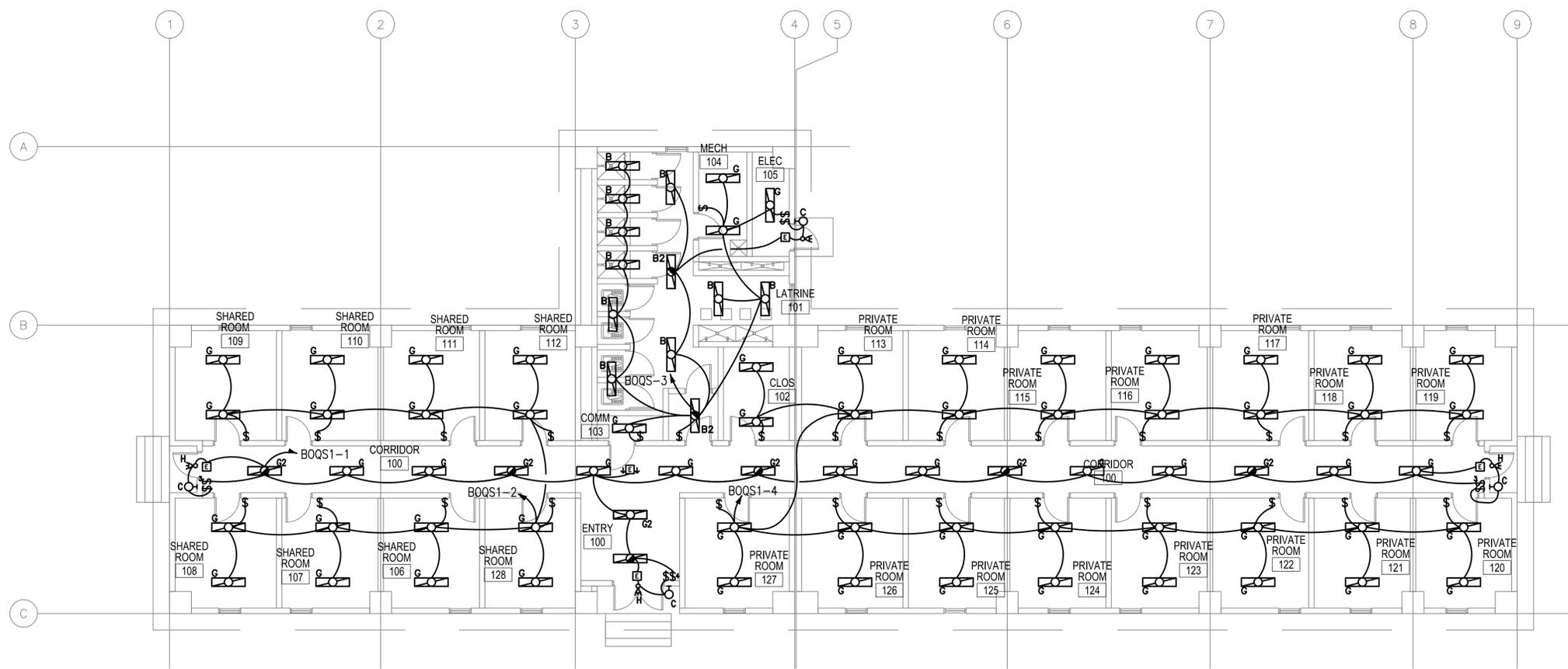
U.S. ARMY CORPS OF ENGINEERS  
AFGHANISTAN ENGINEER DISTRICT  
APO AE 96338

Michael Baker, Jr., Inc.  
A Unit of Michael Baker Corporation  
Arlside Business Park  
Moon Township, PA 15108  
www.mbakercorp.com

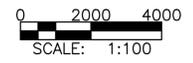
AFGHAN NATIONAL ARMY  
REGIONAL MILITARY TRAINING CENTER  
STANDARD DESIGN

SENIOR BOQ BARRACKS  
ELECTRICAL LIGHTING PLAN

Sheet reference number:  
**E-101**



**1**  
SENIOR BOQ BARRACKS-  
LIGHTING PLAN  
SCALE: 1:100



APPROVED:

---

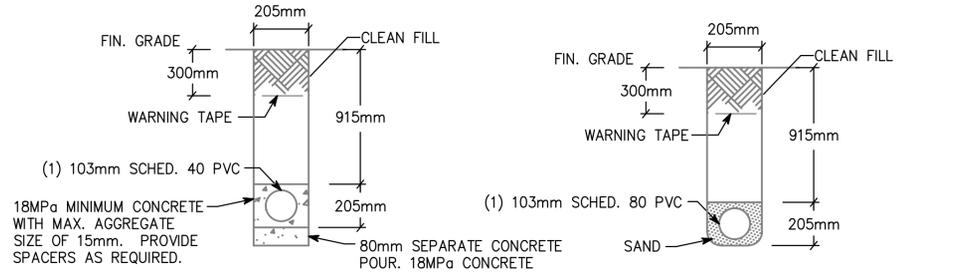
A/E DESIGNER OF RECORD

SEAL:

COMMONWEALTH OF PENNSYLVANIA  
REGISTERED PROFESSIONAL ENGINEER  
JOSEPH R. GAUS  
1/23/10  
PE-074251

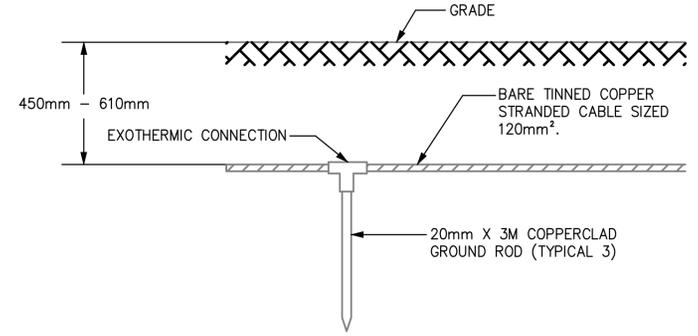




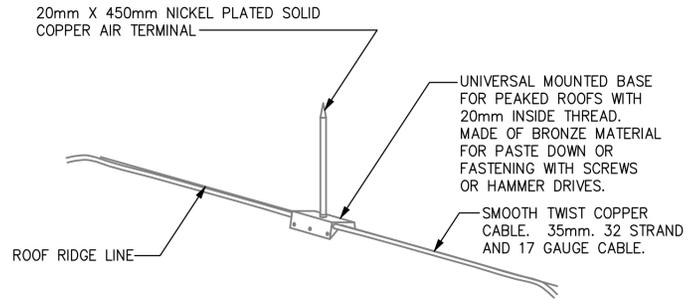


NOTE: PVC CONDUIT SHALL BE DIRECT BURIED SCHEDULE 80 FOR NO TRAFFIC AREAS AND CONCRETE-ENCASED SCHEDULE 40 FOR UNDER ROADWAYS OR TRAFFIC AREAS.

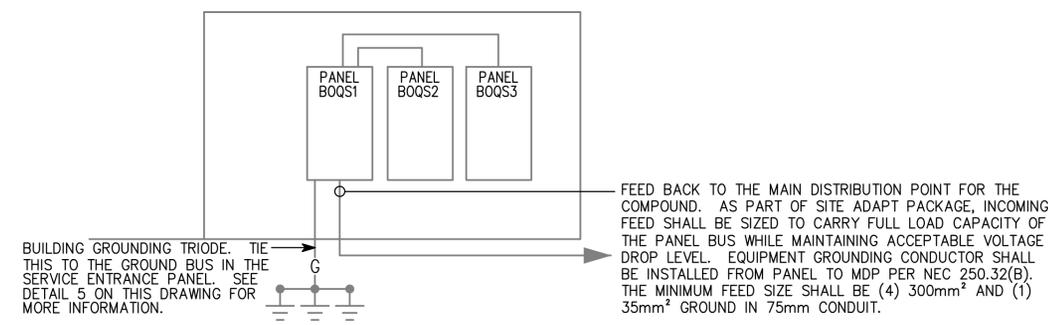
**1 TYPICAL DUCT BANK DETAILS FOR CONDUIT IN SAND OR CONCRETE**  
SCALE: N.T.S.



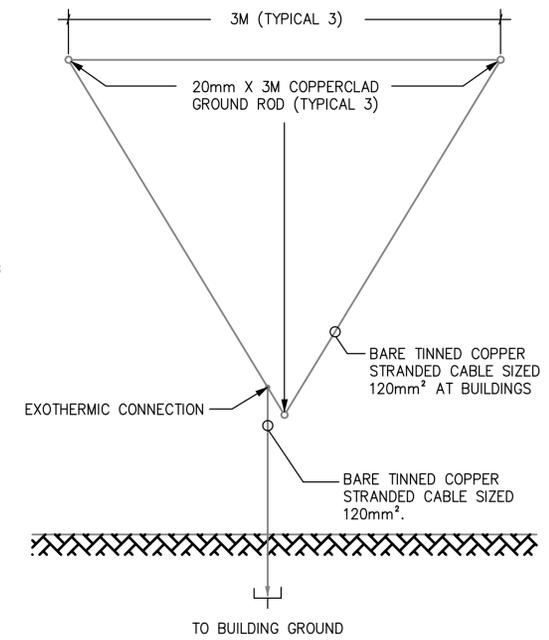
**2 GROUND TRIPOD SYSTEM DETAIL - ELEVATION**  
SCALE: N.T.S.



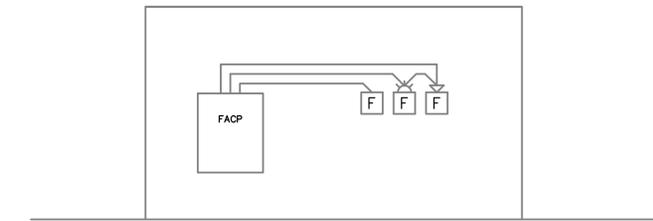
**3 LIGHTNING PROTECTION AIR TERMINAL DETAIL**  
SCALE: N.T.S.



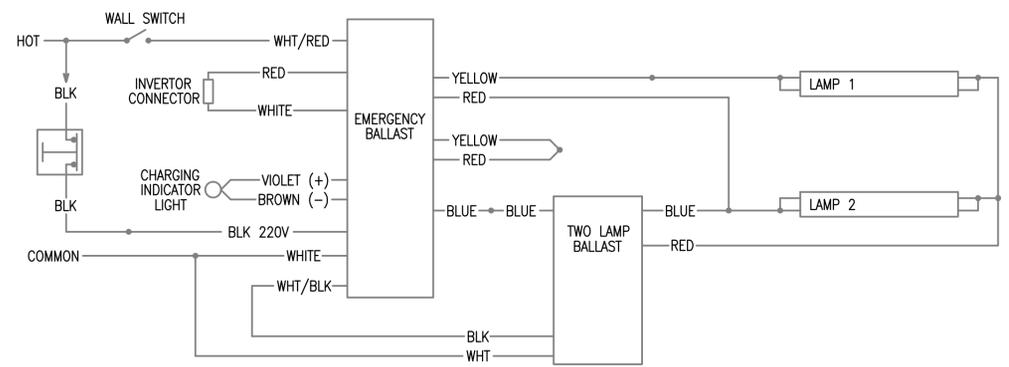
**4 BOQS RISER DIAGRAM**  
SCALE: N.T.S.



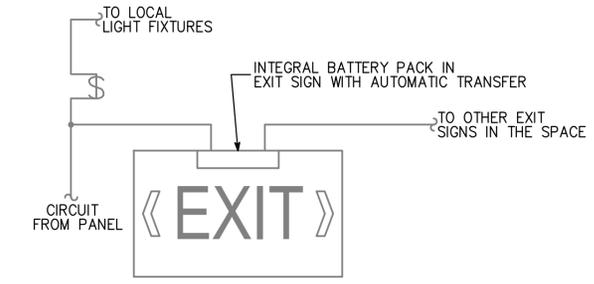
**5 GROUND TRIPOD SYSTEM DETAIL - PLAN**  
SCALE: N.T.S.



**6 TYPICAL ONE STORY FIRE ALARM RISER**  
SCALE: N.T.S.



**7 EMERGENCY FIXTURE WIRING DIAGRAM**  
SCALE: N.T.S.



**8 EXIT SIGN WIRING DIAGRAM**  
SCALE: N.T.S.

APPROVED:

A/E DESIGNER OF RECORD

SEAL:

Rev.	Date	Description
0	2/23/10	Design file no.
		Drawing code:
		File name:
		Plot date:
		Plot scale:

Designed by:	Checked by:	Reviewed by:	Submitted by:
RAJ	JRG	JRG	BAKER

U.S. ARMY CORPS OF ENGINEERS  
AFGHANISTAN ENGINEER DISTRICT  
APO AE 96338

Michael Baker, Jr., Inc.  
A unit of Michael Baker Corporation  
Arlide Business Park  
Moon Township, PA 15108  
www.mbakercorp.com

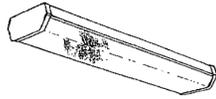
AFGHAN NATIONAL ARMY  
REGIONAL MILITARY TRAINING CENTER  
STANDARD DESIGN

SENIOR BOQ BARRACKS  
ELECTRICAL DETAILS

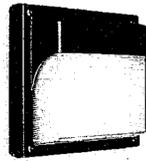
Sheet reference number:  
**E-501**



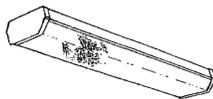
FIXTURE MARK 'B'



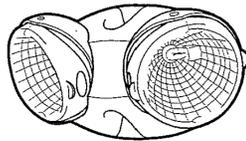
FIXTURE MARK 'C'



FIXTURE MARK 'G'



FIXTURE MARK 'H'



FIXTURE MARK 'E'



# LIGHT FIXTURE SCHEDULE

FIXTURE MARK	STYLE NUMBER AND TYPE	NUMBER AND TYPE OF LAMPS	VOLTAGE	MOUNTING	NOTES
B	WET LOCATION WRAP AROUND SURFACE/PENDANT MOUNTED FLUORESCENT FIXTURE WITH PRISMATIC ACRYLIC LENS AND ELECTRONIC BALLAST	(2) 32W 3500K	220V - 1ϕ 50HZ	SURFACE MOUNTED	FURNISHED WITH ELECTRONIC BALLAST, VIRGIN ACRYLIC WRAP AROUND LENS.
B2	SAME AS FIXTURE 'B' WITH EMERGENCY BALLAST	(2) 32W 3500K	220V - 1ϕ 50HZ	SURFACE MOUNTED	FURNISHED WITH ELECTRONIC BALLAST, VIRGIN ACRYLIC WRAP AROUND LENS. EMERGENCY BALLAST WITH SELF TEST SWITCH.
C	INCANDESCENT ONE PIECE W/ APPROVED LENS STABILIZED HIGH IMPACT POLY CARBONATE.	(1) A19 - 100W INCANDESCENT	220V - 1ϕ 50HZ	WALL MOUNTED ABOVE EXTERIOR DOORS	
G	WRAP AROUND SURFACE/PENDANT MOUNTED FLUORESCENT FIXTURE WITH PRISMATIC ACRYLIC LENS AND ELECTRONIC BALLAST	(2) 32W 3500K	220V - 1ϕ 50HZ	SURFACE MOUNTED	FURNISHED WITH ELECTRONIC BALLAST, VIRGIN ACRYLIC WRAP AROUND LENS.
G2	SAME AS FIXTURE 'G' WITH EMERGENCY BALLAST	(2) 32W 3500K	220V - 1ϕ 50HZ	SURFACE MOUNTED	FURNISHED WITH ELECTRONIC BALLAST, VIRGIN ACRYLIC WRAP AROUND LENS. EMERGENCY BALLAST WITH SELF TEST SWITCH.
H	REMOTE HEAD EXTERIOR LIGHT HEAD POWERED FROM EXIT SIGN BATTERY- 12V DOUBLE HEAD CORROSION RESISTANT WITH UL34 WEATHERPROOF CONSTRUCTION	(2) 12W/12V HALOGEN LAMP	12V - 1ϕ 50HZ	EXTERIOR WALL MOUNTED AT TOP OF DOOR HEIGHT	
E	UNIVERSAL MOUNT ENGINEER GRADE THERMOPLASTIC HOUSING EXIT SIGN WITH LED LAMPS, RED LETTERS 6" IN HEIGHT WITH ARROWS AS INDICATED, WITH 12V CADMIUM BATTERY WITH REMOTE HEAD CAPABILITY	LED LAMPS	220V - 1ϕ 50HZ	UNIVERSAL MOUNTING	



Rev.	Date	Description	Mark	Appr.	Date
0	2/23/10				

Designed by: RAJ	Checked by: JRG	Date: 2/23/10	Rev: 0
Dwn by: BJB	Reviewed by: JRG	Design file no.	Drawing code:
Submitted by: BAKER	File name: BAKER	Plot date:	Plot scale:

U.S. ARMY CORPS OF ENGINEERS  
AFGHANISTAN ENGINEER DISTRICT  
APO AE 96338

Michael Baker, Jr., Inc.  
A unit of Michael Baker Corporation  
Arlside Business Park  
Moon Township, PA 15108  
www.mbakercorp.com

AFGHAN NATIONAL ARMY  
REGIONAL MILITARY TRAINING CENTER  
STANDARD DESIGN

SENIOR BOQ BARRACKS  
ELECTRICAL LIGHT FIXTURE SCHEDULE

APPROVED:

---

A/E DESIGNER OF RECORD

SEAL:

Sheet reference number:  
E-601

