

A	B	C	D	E	F	G	H
STRUCTURAL ABBREVIATIONS:							
ACI	AMERICAN CONCRETE INSTITUTE						
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION						
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS						
ARCH	ARCHITECTURAL						
B	BOTTOM						
BLDG	BUILDING						
BOTT	BOTTOM						
CL	CENTER LINE						
CFMRF	COLD FORM METAL ROOF FRAME						
CFMF	COLD FORM METAL FRAME						
CFS	COLD FORMED STEEL						
CIP	CAST-IN-PLACE						
CIPL	CAST-IN-PLACE LINTEL						
CJ	CONTROL JOINT						
CLR	CLEAR						
CMU	CONCRETE MASONRY UNIT						
COEFF	COEFFICIENT						
COL	COLUMN						
CONC	CONCRETE						
CONT	CONTINUOUS						
COORD	COORDINATE						
CSJ	CONSTRUCTION JOINT						
CTJ	CONTROL JOINT						
DIA	DIAMETER						
DIAG	DIAGONAL						
DIM	DIMENSION						
DWG	DRAWING						
DWL	DOWEL						
EA	EACH						
EF	EACH FACE						
ELEC	ELECTRICAL						
ELEV	ELEVATION						
EMBED	EMBEDMENT						
EQUIV	EQUIVALENT						
ETC	ET CETERA						
EW	EACH WAY						
EXP	EXPANSION						
EXT	EXTERIOR						
FTG	FOOTING						
GA	GAUGE						
HORIZ	HORIZONTAL						
HRS	HOURS						
IBC	INTERNATIONAL BUILDING CODE						
INFO	INFORMATION						
INT	INTERIOR						
Kg	KILOGRAM						
Km	KILOMETER						
kPa	KILOPASCAL						
L#	ANGLE (# INDICATES SIZE)						
LONG	LONGITUDINAL						
LLV	LONG LEG VERTICAL						
M	METER						
MAX	MAXIMUM						
MBM	METAL BUILDING MANUFACTURER						
MECH	MECHANICAL						
MFG	MANUFACTURER						
MID	MIDDLE						
MIN	MINIMUM						
MISC	MISCELLANEOUS						
MM	MILLIMETER						
MPa	MEGAPASCAL						
MTL	METAL						
MWFRS	MAIN WIND FORCE RESISTING SYSTEM						
N	NEWTON						
N	NORTH						
N/A	NOT APPLICABLE						
#	NUMBER SYMBOL FOR REBAR SIZE						
NTS	NOT TO SCALE						
O.C.	ON CENTER						
OPNG	OPENING						
PL or PL	PLATE						
PRE-ENG	PRE-ENGINEERED						
REINF	REINFORCED						
REQ'D	REQUIRED						
SIM	SIMILAR						
SPECS	SPECIFICATIONS						
STD	STANDARD						
STRUCT	STRUCTURAL						
T	TOP						
T/	TOP OF						
T/ELEV	TOP ELEVATION						
T&B	TOP AND BOTTOM						
THK	THICK						
TYP	TYPICAL						
SW	SHEAR WALL						
UFC	UNIFIED FACILITIES CRITERIA UNLESS OTHERWISE NOTED						
UON	UNLESS OTHERWISE NOTED						
VERT	VERTICAL						
W	WIDTH						
W/	WITH						

GENERAL NOTES

- THIS PROJECT HAS BEEN DESIGNED FOR THE WEIGHTS AND MATERIALS INDICATED ON THE SHEETS AND FOR THE LIVE LOADS INDICATED IN THE DESIGN DATA. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALLOWABLE CONSTRUCTION LOADS AND TO PROVIDE PROPER DESIGN AND CONSTRUCTION OF FALSEWORK, FORMWORK, STAGING, BRACING, SHEETING AND SHORING, ETC.
- COORDINATE THESE SHEETS WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND CIVIL SHEETS. ALL DIMENSIONS SHOWN ON THE SHEETS ARE MILLIMETERS UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL FLOOR AND ROOF OPENING SIZES AND LOCATIONS, EQUIPMENT PAD SIZES AND LOCATIONS, ANCHOR BOLT LAYOUTS, ETC WITH EQUIPMENT SELECTED. THE CONTRACTOR SHALL MAKE ANY REQUIRED MODIFICATIONS AT NO ADDITIONAL COST.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING SHEETS FOR SLEEVES, CURBS, INSERTS OR OPENINGS, ETC. NOT HEREIN INDICATED.
- SLAB OPENINGS SMALLER THAN 250mm DIA TO BE CORE DRILLED IN FIELD UON. SEE MECHANICAL, ELECTRICAL AND PLUMBING SHEETS FOR LOCATIONS OF THESE OPENINGS.
- WORK NOT INCLUDED ON THE SHEETS BUT IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES ELSEWHERE ON THE SHEETS SHALL BE REPEATED.
- IN CASE OF CONFLICT BETWEEN THE NOTES, DETAILS AND SPECIFICATIONS THE MOST RIGID REQUIREMENTS SHALL GOVERN. SEE ARCHITECTURAL SHEETS FOR LOCATIONS OF MASONRY AND DRYWALL NON-LOAD BEARING PARTITIONS. PROVIDE COMPRESSIBLE FIRESAFING AT TOP OF WALL AS REQUIRED BY ARCHITECTURAL SHEETS.
- COORDINATE FINISHED FLOOR DATUM ELEVATION 0.0m WITH THE CIVIL SHEETS.
- FOUNDATION NOTES
- THE GEOTECHNICAL ANALYSIS FOR THIS PROJECT IS THE RESPONSIBILITY OF THE CONTRACTOR AWARDED THE WORK. DESIGN VALUES USED IN THE STRUCTURAL ANALYSIS OF THE BUILDINGS HEREIN INDICATED HAVE BEEN ASSUMED AND SHALL BE CONFIRMED AND VERIFIED AS PART OF THE GEOTECHNICAL INVESTIGATION. VALUES WHICH DO NOT MEET THE REQUIREMENTS INDICATED ON THE BASIS OF DESIGN SHEET SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER FOR CONSIDERATION AND DETERMINATION ON THE NEXT APPROPRIATE COURSE OF ACTION.
- SEE THE SPECIFICATION FOR ADDITIONAL REQUIREMENTS TO THOSE OUTLINED IN THE GEOTECHNICAL INVESTIGATION FOR EXCAVATION AND PREPARATION OF THE FOUNDATION AND THE SLAB ON GRADE SUBGRADE INCLUDING COMPACTION PROCEDURES.
- EXCAVATIONS FOR FOOTINGS SHALL HAVE THE SIDES AND BOTTOMS TEMPORARILY LINED WITH 0.25mm POLYETHYLENE IF PLACEMENT OF CONCRETE DOES NOT OCCUR WITHIN 24 HRS OF THE EXCAVATION OF THE FOOTING.
- FOUNDATION CONDITIONS NOTED DURING CONSTRUCTION WHICH DIFFER FROM THOSE DESCRIBED IN THE GEOTECHNICAL REPORT SHALL BE REPORTED TO THE GENERAL CONTRACTOR BEFORE FURTHER CONSTRUCTION IS ATTEMPTED. SEE PROJECT SPECIFICATIONS.
- NO FOOTINGS OR SLABS SHALL BE POURED INTO OR AGAINST SUBGRADE CONTAINING FREE WATER, FROST, ICE OR LOOSE MATERIAL. FROST DEPTH ASSUMED TO BE 800MM
- ALL SLAB-ON-GRADE, TRENCH BOTTOMS AND OTHER ON-GRADE INTERIOR HORIZONTAL SURFACES SHALL BE PLACED OVER A 0.25mm VAPOR RETARDER OVER A 100mm #57 STONE WATER BARRIER PLACED ON SUBGRADE PROPERLY PREPARED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. (UON)
- SEE PLUMBING, ELECTRICAL & CIVIL SHEETS FOR REQUIRED UNDERSLAB UTILITIES.
- SEE ARCHITECTURAL SHEETS FOR ALL WATERPROOFING DETAILS AND MATERIALS.
- IF UNDERMINING OF FOOTINGS OCCURS, FILL VOIDS WITH 15MPa CONCRETE. DO NOT ATTEMPT TO REPLACE AND RECOMPACT SOIL.
- CONCRETE
- CONCRETE SHALL HAVE THE UNIT WEIGHT AND THE MINIMUM COMPRESSIVE STRENGTHS ($f'c$) AT 28 DAYS AS SHOWN IN THE CONCRETE MATERIALS SCHEDULE ON SHEET S3. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. ENTRAIN AIR TO PRODUCE TOTAL AIR CONTENT ACCORDING TO THE SPECIFICATIONS FOR CONCRETE EXPOSED TO FREEZING TEMPERATURES (EXTERIOR FOOTINGS, SLAB TURNDOWNS, EXTERIOR SLABS AND SLABS-ON-GRADE, EXTERIOR RETAINING WALLS, AND EXTERIOR GRADE BEAMS.)
- NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.
- MIXING, TRANSPORTING AND PLACING OF CONCRETE SHALL CONFORM TO ACI 301M-05.
- ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN CONCRETE INSTITUTE (ACI) 318M MANUAL (metric), "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", AND REQUIREMENTS OUTLINED IN THE CONTRACT SPECIFICATIONS. WHEN THERE IS A CONFLICT BETWEEN ACI AND THE SPECIFICATIONS, THE MORE STRINGENT SHALL GOVERN.
- CHAMFER ALL EXPOSED EXTERNAL CORNERS OF CONCRETE WITH 20mm x45 DEGREE CHAMFER UON.

- CONCRETE REINFORCEMENT BARS SHALL CONFORM TO ASTM A615M-96a, GRADE 420 MPa, REINFORCING BARS SHALL NOT BE TACK WELDED, WELDED, HEATED OR CUT, UNLESS INDICATED ON THE CONTRACT DOCUMENTS. ALL LAP SPLICES SHALL BE CLASS "B" UON.
- HORIZONTAL FOOTING AND HORIZONTAL WALL REINFORCEMENT SHALL BE CONTINUOUS AND SHALL HAVE 90 DEGREE BENDS AND EXTENSIONS, OR CORNER BARS OF EQUIVALENT SIZE LAPPED WITH A CLASS B TENSION SPLICE AT CORNERS AND INTERSECTIONS. TOP BAR CRITERIA SHALL APPLY IF 300mm OR MORE OF FRESH CONCRETE IS PLACED BELOW BAR.
- SLABS-ON-GRADE SHALL HAVE CONSTRUCTION JOINTS OR CRACK CONTROL JOINTS AS SHOWN ON THE DRAWINGS. CONSTRUCTION JOINTS CAN BE USED AT CONTROL JOINT LOCATIONS AT CONTRACTORS OPTION. SEE SLAB PLANS & JOINT DETAILS FOR ADDITIONAL INFORMATION. FOR AREAS NOT SHOWN ON DWGS, THE MAXIMUM SPACING OF CONSTRUCTION/ CRACK CONTROL JOINTS SHALL BE 4800mm
- SEE SPECIFICATIONS FOR ALL WATERPROOFING/DAMP-PROOFING REQUIREMENT.
- ALL CONCRETE REINFORCEMENT SHALL BE DETAILED, FABRICATED, LABELED, SUPPORTED, AND SPACED IN FORMS AND SECURED IN PLACE IN ACCORDANCE WITH THE PROCEDURES AND REQUIREMENTS OUTLINED IN THE LATEST EDITION OF THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318M, AND THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315M, LATEST EDITION.
- SHOP DRAWINGS SHOWING REINFORCING DETAILS, INCLUDING STEEL SIZES, SPACING AND PLACEMENT, SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION.
- ALL DOWELS SHALL MATCH SIZE AND NUMBER OF MAIN REINFORCING, UNLESS NOTED OTHERWISE ON THE SHEETS.
- ADDITIONAL BARS SHALL BE PROVIDED AROUND ALL FLOOR AND WALL OPENINGS AS SHOWN ON THE SHEETS.
- SEE ARCHITECTURAL SHEETS FOR TYPE AND LOCATION OF ALL FLOOR FINISHES.
- THE CONTRACTOR SHALL COORDINATE ADDITIONAL WALL/SLAB OPENINGS NOT SHOWN ON STRUCTURAL SHEETS. SEE MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL SHEETS.
- UNLESS NOTED OTHERWISE, ALL CURBS SHALL BE REINFORCED WITH AT LEAST (1)-#13 CONTINUOUS AND #13 AT 300mm O.C. DOWELS TO STRUCTURE BELOW.
- THE SUB-CONTRACTOR SHALL VERIFY ALL OPENINGS, PAD SIZES, AND ANCHOR BOLTS WITH EQUIPMENT SELECTED.
- FOR ALL WALLS & PIERS, PROVIDE DOWELS INTO FOOTING AT EACH VERT REINF BAR, UON DOWEL SIZE SHALL BE SAME AS VERT REINF.
- ALL DEFORMED BAR ANCHORS SHALL BE TRS NELSON DIVISION OR EQUAL 15mm DIA (UON) CONFORMING TO ASTM A-496M WITH A MINIMUM TENSILE STRENGTH OF 550 MPa. INSTALL ANCHORS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS BY AUTOMATIC END WELDING AS INDICATED ON THE DRAWINGS. NO UNAUTHORIZED OR FIELD WELDING SHALL BE MADE WITHOUT AUTHORIZATION FROM THE MANUFACTURER.
- ALL REINFORCING INDICATED TO BE WELDED SHALL BE IN ACCORDANCE WITH ASTM A706M. "LOW ALLOY STEEL DEFORMED BARS FOR CONCRETE REINFORCEMENT". ANY INSTALLATIONS USING MANUFACTURER'S EQUIPMENT SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE CONCRETE POUR STOPS OR FORMED AS REQUIRED FOR INSTALLATION OF ALL CONCRETE WORK.
- PROVIDE ADDITIONAL (2)-#13 x 600mm REINFORCING BARS IN SLAB-ON GRADE AT ALL RE-ENTRANT CORNERS. PLACE BARS AT MID-DEPTH OF SLAB WITH A CLEARANCE OF 50mm FROM CORNER UON.
- CONCRETE MASONRY
- MASONRY CONSTRUCTION AND MATERIALS SHALL CONFORM TO ALL REQUIREMENTS OF THESE CONTRACT DOCUMENTS AND THE PROJECT SPECIFICATIONS.
- THE SPECIFIED ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE MASONRY ($f'm$) ON THE NET AREA IS A MINIMUM OF 10.4 MPa.
- PROVIDE TWO #16 BARS CONTINUOUS IN ALL MASONRY LINTELS UON ON THE SHEETS. BOND BEAM REINFORCING SHALL BE CONTINUOUS AND SPACED AT A MAXIMUM OF 1200mm OC VERTICALLY. ALL BOND BEAMS SHALL BE A MINIMUM OF 200mm IN DEPTH WITH REINFORCING BEING CONTINUOUS AND HAVING STANDARD ACI HOOKS AT EACH END. PROVIDE STANDARD BAR SPLICES AS SPECIFIED.
- FOR WALL REINFORCING SEE "MIN CMU WALL REINFORCING" DETAILS ON SHEET S7. PROVIDE STANDARD BAR SPLICES AS SPECIFIED. ALL VERTICAL REINFORCEMENT EXTENDS FULL HEIGHT OF WALL.
- CMU CELLS THAT REQUIRE VERTICAL REINFORCING BARS AS INDICATED ON THE CONTRACT DRAWINGS AND/OR SPECS SHALL HAVE REINF BARS PLACED IN CENTERS OF CMU CELLS AND CONTINUOUSLY GROUTED UON.
- PROVIDE LADDER TYPE JOINT REINFORCEMENT AT 200 EXTERIOR, & 400 INTERIOR ON CENTER MAXIMUM, UON MINIMUM ROD SIZE USED SHALL BE 9 GA. DEFORMED WIRE AND CONFORM TO ASTM A82M, UON.

- PROVIDE CONTROL JOINTS AS INDICATED ON THE ARCHITECTURAL SHEETS.
- GROUT FOR MASONRY SHALL BE NORMAL WEIGHT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 25 MPa AT 28 DAYS. GROUT SHALL CONFORM TO ASTM C476. GROUT LIFTS SHALL NOT EXCEED 1400mm.
- USE MORTAR TYPE S CONFORMING TO ASTM C270M, SEE SPECIFICATIONS.
- CONCRETE MASONRY UNITS SHALL BE NORMAL WEIGHT AND CONFORM TO ASTM C90.
- ALL CMU CELLS, OPEN CAVITIES, AND AIR SPACES SHALL BE GROUTED TO STOP FRAGMENTS FROM MORTAR BLAST
- BOND BEAM REINFORCING SHALL BE DISCONTINUOUS AT CONTROL JOINTS (UON). MAXIMUM CONTROL JOINT SPACING SHALL BE AS INDICATED ON THE ARCHITECTURAL SHEETS.
- CONTRACTOR SHALL COORDINATE LOCATION OF ALL OPENINGS SEE ARCH, MECH, ELEC, AND PLUMBING SHEETS FOR SIZE AND LOCATION OF OPENINGS.
- MASONRY WALLS SHALL NOT BE BACK FILLED PRIOR TO THE MORTAR AND GROUT ATTAINING THEIR RESPECTIVE MAXIMUM DESIGN STRENGTHS PER SPECIFICATIONS.
- CFMRF - COLD FORM METAL ROOF FRAMING SYSTEM
- CFMRF SHALL BE DESIGNED BY CFMF MANUFACTURER'S ENGINEER FOR ALL LOADING PER CODE AND AS INDICATED ON THE SHEETS. FOR WIND LOADS, SEE THE DESIGN CRITERIA ON SHEET S2.
- SUBMIT VENDOR'S PUBLISHED LITERATURE, TEST DATA AND INSTALLATION INSTRUCTIONS FOR METAL STUD ASSEMBLY AND ACCESSORIES INCLUDING OTHER DATA AS MAY BE REQUIRED TO CERTIFY COMPLIANCE WITH PERFORMANCE REQUIREMENTS SPECIFIED HEREIN.
- SHOP DRAWINGS AND DESIGN ANALYSIS SHALL BE STAMPED AND APPROVED BY A LICENSED PROFESSIONAL ENGINEER.
- CONNECTIONS AND GAUGE SIZES ARE MINIMUM AND SHALL BE INCREASED AS NECESSARY TO PROVIDE A STRUCTURALLY ADEQUATE SYSTEM. KICKERS MAY BE ADDED TO REDUCE THE STUD HEIGHTS WHERE ACCEPTABLE AND COORDINATED WITH THE ARCHITECTURAL DRAWINGS.
- CRMRF SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
STUD/RAFTER/EAVE STRUT/BRACE/BLOCKING:
Fy = 344 MPa
GAUGE = 18
DEPTH = 152.3 mm
WIDTH = 34.8 mm
MOMENT OF INERTIA, Ix = 847x10³ mm⁴
SECTION MODULUS, Sx = 11.2x10³ mm³
TRACK:
Fy = 344 MPa
GAUGE = 16
DEPTH = 152.3 mm
WIDTH = 38 mm
MOMENT OF INERTIA, Ix = 1083x10³ mm⁴
SECTION MODULUS, Sx = 13.8x10³ mm³
PURLIN:
Fy = 393 MPa
GAUGE = 16
MOMENT OF INERTIA (TOP COMPRESSION), Ixt = 23.7x10³ mm⁴
MOMENT OF INERTIA (BOTT COMPRESSION), Ixb = 22.7x10³ mm⁴
SECTION MODULUS (TOP COMPRESSION), Sxt = 1.8x10³ mm³
SECTION MODULUS (BOTT COMPRESSION), Sxb = 1.7x10³ mm³
- SEISMIC LOADS (PER IBC 2006 & UFC 3-310-04)
- SEISMIC PARAMETERS - CAST-IN-PLACE CONCRETE STRUCTURES
- SEISMIC OCCUPANCY CATEGORY II
- SEISMIC IMPORTANCE FACTOR (I) 1.0
- SEISMIC SITE CLASS D
- Ss 1.28
- S1 0.51
- Sds 0.853
- Sd1 0.51
- SEISMIC DESIGN CATEGORY D
- SEISMIC RESISTING SYSTEM SPECIAL REINFORCED MASONRY SHEAR WALLS
- RESPONSE MODIFICATION FACTOR (R) 5.0
- RESPONSE COEFFICIENT (CS) 0.17
- SEISMIC ANALYTICAL PROCEDURE EQUIV LATERAL FORCE
- SEISMIC BASE SHEAR 209KN

STRUCTURAL DESIGN CRITERIA

ALL DESIGNS SHALL CONFORM TO THE PROVISIONS OF THE IBC 2006 AS APPLICABLE

1.0 DESIGN LOADS

1.1 DEAD LOADS

1.1.1 ROOF DEAD LOADS - CONCRETE FRAMING

	MAXIMUM GRAVITY LOAD	MINIMUM GRAVITY LOAD
CONC FLAT SLAB	4.80 KPa	
MECH/ELEC/PLUMBING	0.15 KPa	
MISC	0.05 KPa	
	5.00 KPa	

1.1.2 ROOF DEAD LOADS - CONVENTIONAL LIGHT FRAMING

	MAXIMUM GRAVITY LOAD	MINIMUM GRAVITY LOAD
LIGHT GAUGE FRAMING	0.20 KPa	0.15 KPa
INSULATION	0.10 KPa	0.05 KPa
METAL ROOFING	0.14 KPa	0.05 KPa
	0.44 KPa	0.25 KPa

1.2 LIVE LOADS (PER IBC 2006)

1.2.1 ROOF LIVE LOADS: ALL BUILDINGS

GREATER OF 1.0 KPa MINIMUM OR SNOW LOAD

1.2.2 ELEVATED FLOOR UNIFORM LIVE LOADS

OFFICE	2.40 KPa
CORRIDOR	4.80 KPa

1.2.3 SLAB-ON-GRADE LIVE LOADS

ALL BUILDINGS 4.80 KPa

1.3 SNOW LOADS (PER IBC 2006)

1.3.1 DESIGN PARAMETERS

GROUND SNOW LOAD (per UFC 3-310-01)	1.0 KPa
SNOW IMPORTANCE FACTOR	1.0
SNOW EXPOSURE FACTOR	1.0

1.4 SEISMIC LOADS (PER IBC 2006 & UFC 3-310-04)

1.4.1 SEISMIC PARAMETERS - CAST-IN-PLACE CONCRETE STRUCTURES

SEISMIC OCCUPANCY CATEGORY	II
SEISMIC IMPORTANCE FACTOR (I)	1.0
SEISMIC SITE CLASS	D
Ss	1.28
S1	0.51
Sds	0.853
Sd1	0.51
SEISMIC DESIGN CATEGORY	D
SEISMIC RESISTING SYSTEM	SPECIAL REINFORCED MASONRY SHEAR WALLS
RESPONSE MODIFICATION FACTOR (R)	5.0
RESPONSE COEFFICIENT (CS)	0.17
SEISMIC ANALYTICAL PROCEDURE	EQUIV LATERAL FORCE
SEISMIC BASE SHEAR	209KN



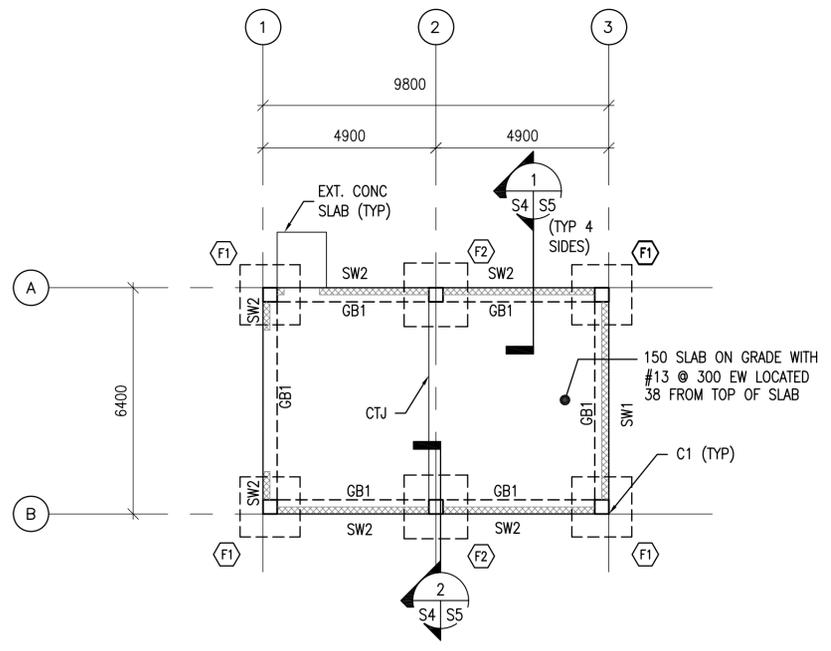
DATE	DESCRIPTION	SYMBOL

DESIGNED BY: KMP	DATE: 09-30-09
DWN BY: RCG	SUBMITTED BY: BAKER
CHK BY: CWW	FILE NO: ANPDS-001XXX
Michael Baker, Inc. A Unit of Michael Baker Corporation 1000 Business Park Moon Township, PA 15108 www.mbakercorp.com	

AFGHAN NATIONAL POLICE
STANDARD DESIGN
WAREHOUSE BUILDING

GENERAL NOTES & DESIGN CRITERIA

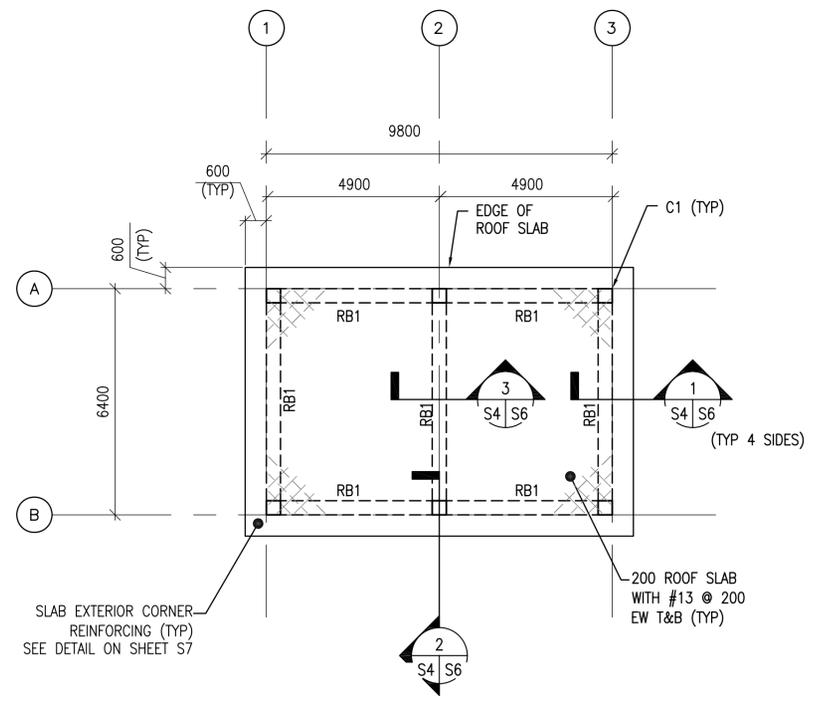
SHEET
REFERENCE
NUMBER:
S1



1
S4 | S4
FOUNDATION PLAN
SCALE: 1:100

FOUNDATION PLAN NOTES:

1. FINISH FIRST FLOOR ELEVATION SHALL BE (DATUM 0.0). ALL PLUS OR MINUS DIMENSIONS INDICATED ON PLAN OR REFERRED TO IN NOTES RELATE TO FINISH FIRST FLOOR ELEVATION.
2. TOP OF EXTERIOR FOOTINGS SHALL BE -950 UNLESS OTHERWISE INDICATED.
3. SPREAD FOOTINGS INDICATED BY F# ON PLAN. REFER TO SPREAD FOOTING SCHEDULE ON SHEET S2.
4. COLUMNS INDICATED THUS C# ON PLAN. REFER TO COLUMN SCHEDULE ON SHEET S2.
5. REFER TO DRAWINGS S1 TO S3 FOR STRUCTURAL NOTES AND BASIS OF DESIGN.
6. CTJ & CSJ INDICATES SLAB CONTROL OR CONSTRUCTION JOINTS. RESPECTIVELY, REFER TO SHEET S7 FOR DETAILS.
7. SEE CMU WALL REINFORCING SCHEDULE ON SHEET S3.
8. REFER TO ARCHITECTURAL SHEETS FOR MASONRY PARTITION TYPES.
9. SEE MECHANICAL AND ELECTRICAL SHEETS FOR CONCRETE PAD LOCATIONS, SIZES, AND THICKNESS NOT SHOWN. SEE SHEET S7 FOR DETAILS.



2
S4 | S4
ROOF FRAMING PLAN
SCALE: 1:100

PLAN NOTES:

1. TOP OF SLAB ELEVATION = 3600 UNLESS NOTED OTHERWISE
2. RB# DENOTES ROOF BEAM TYPE. SEE BEAM SCHEDULE ON SHEET S2.
3. REFER TO SHEETS S1 TO S3 FOR STRUCTURAL NOTES AND BASIS OF DESIGN.
4. COORD W/ ARCHITECTURAL SHEETS FOR COLD-FORMED STEEL OVERBUILT FRAMING ABOVE ROOF SLAB.
5. COLD-FORMED METAL OVERBUILT ROOF FRAMING NOT SHOWN FOR CLARITY. SEE OVERBUILT ROOF FRAMING DETAILS AND SECTIONS ON SHEET S6

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

0 2000 4000 6000
SCALE: 1: 100

US Army Corps of Engineers
Afghanistan Engineer District

SYMBOL	DESCRIPTION	DATE	APP

DESIGNED BY:	DATE:	09-30-09
DWN BY:	SUBMITTED BY:	BAKER
CHK BY:	FILE NO.:	ANFSDS-104XXX
CWW		

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AFGHAN NATIONAL POLICE
STANDARD DESIGN
WAREHOUSE BUILDING
FOUNDATION PLAN & ROOF PLANS

SHEET REFERENCE NUMBER:
S4

100% SUBMISSION

SYMBOL	DESCRIPTION	DATE	APP

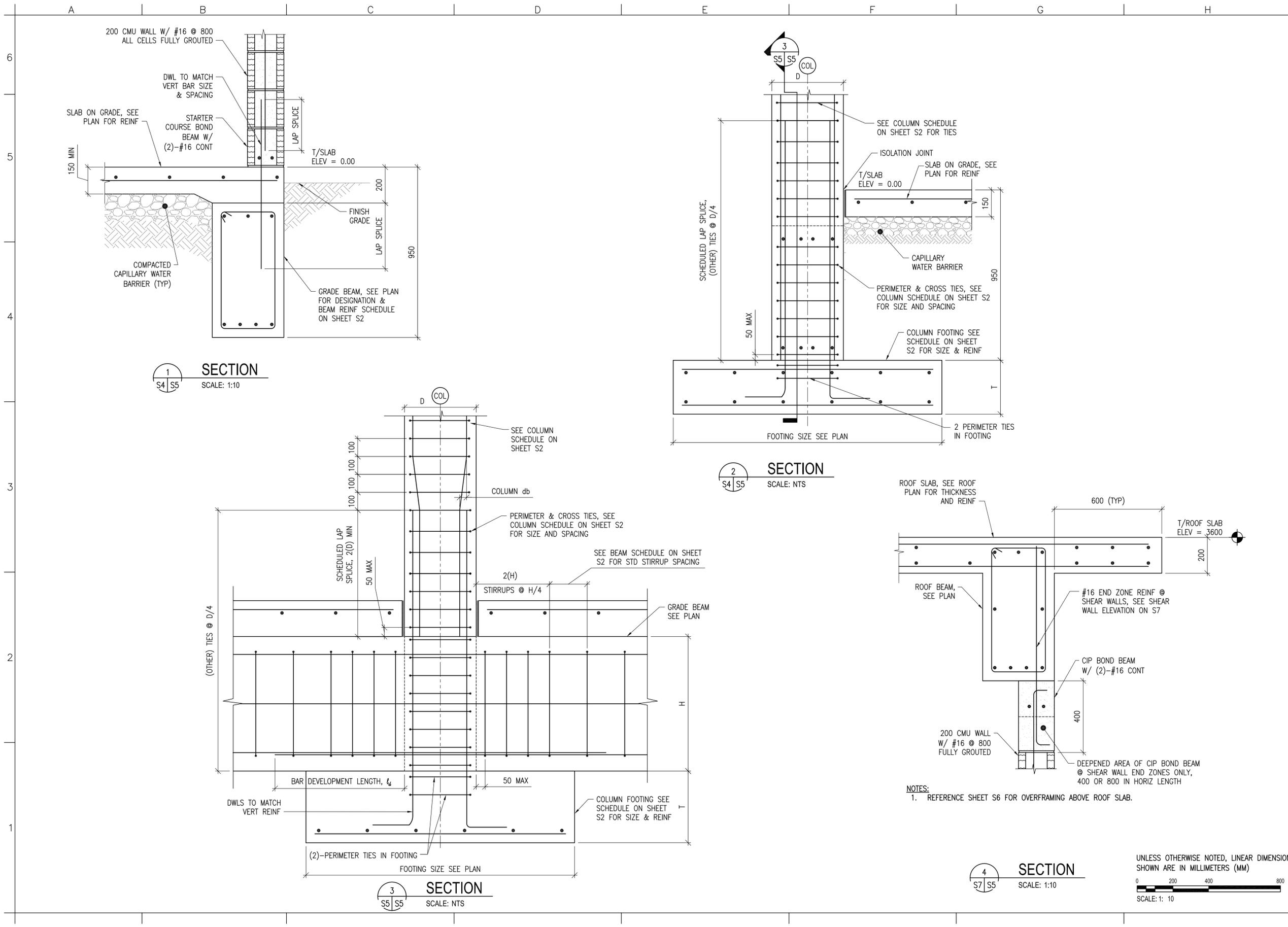
DESIGNED BY:	DATE:	09-30-09
DWN BY:	SUBMITTED BY:	BAKER
CHK BY:	FILE NO.:	ANFSDS-305XXX
CWW		

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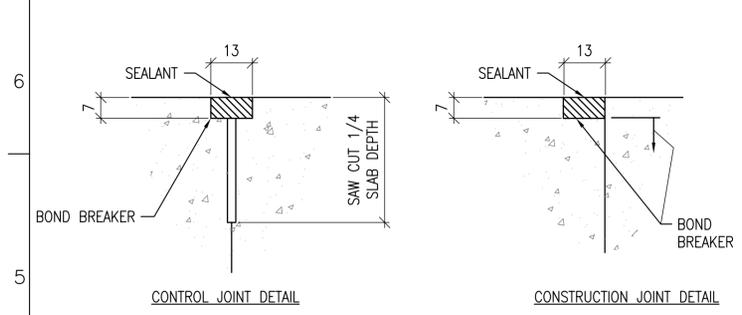
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FOUNDATION SECTIONS & DETAILS

SHEET REFERENCE NUMBER:
S5

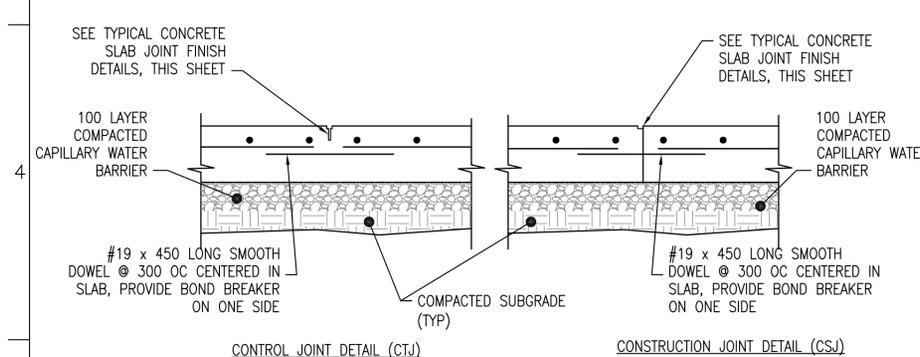
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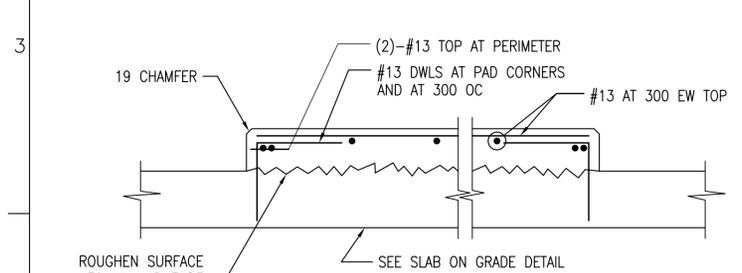
A B C D E F G H



TYPICAL CONCRETE SLAB JOINT FINISH DETAIL
SCALE: NTS

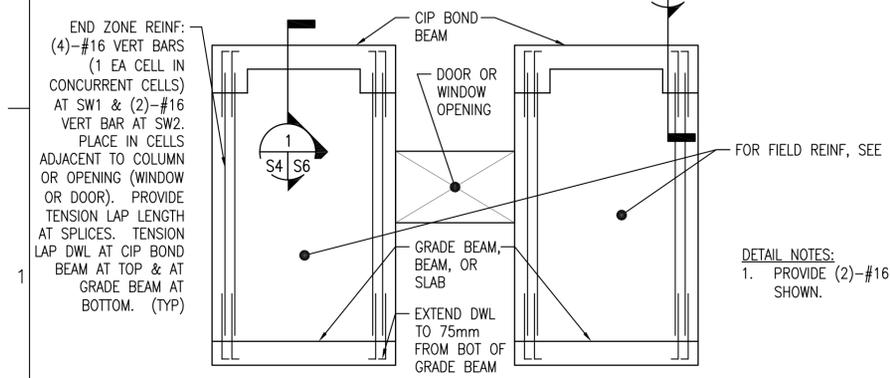


TYPICAL SLAB ON GRADE JOINT DETAILS
SCALE: NTS

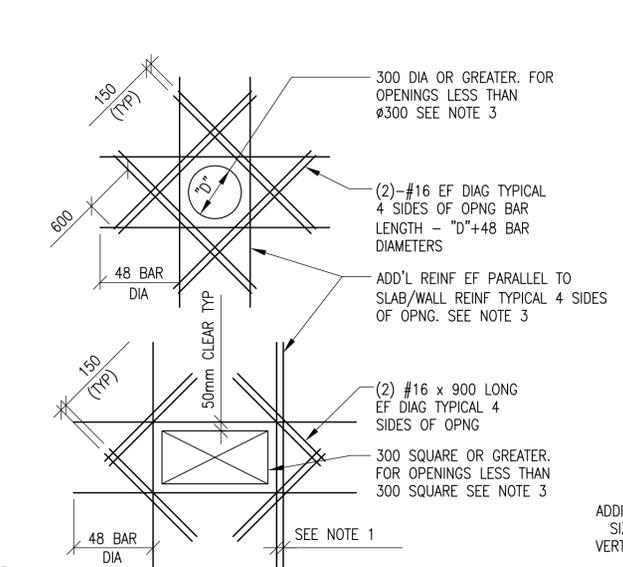


INTERIOR EQUIPMENT PAD DETAIL
SCALE: NTS

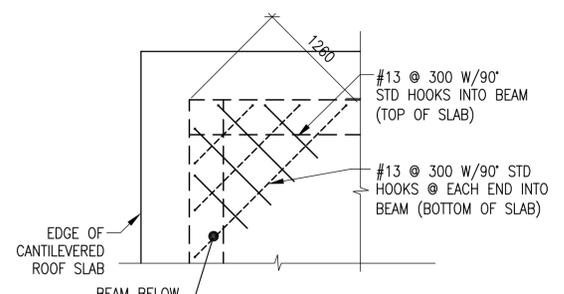
DETAIL NOTE:
1. COORDINATE EQUIPMENT PAD SIZE AND LOCATIONS W/ ELECTRICAL/MECHANICAL SHEETS AND EQUIPMENT MANUFACTURER.



SPECIAL REINFORCED MASONRY SHEAR WALL ELEVATION
SCALE: NTS



SLAB OPENINGS

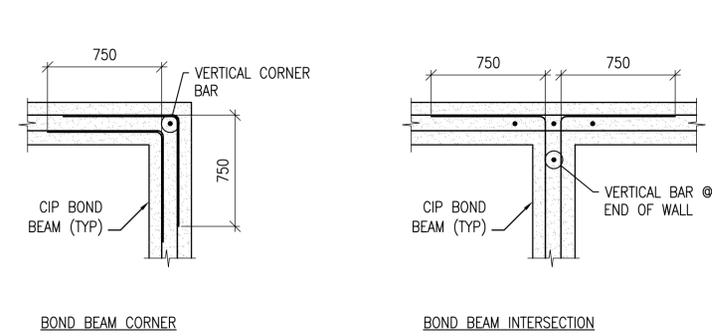


ELEVATED SLAB CORNERS

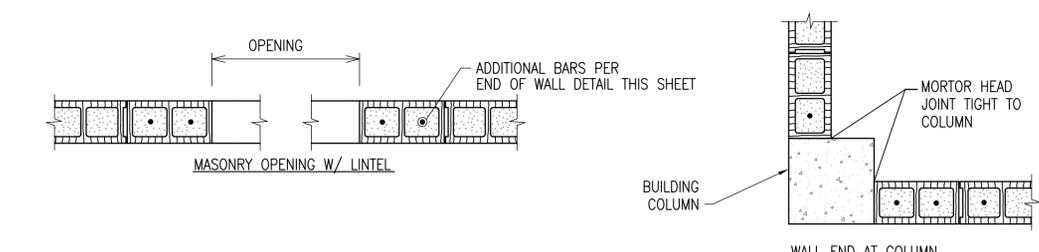
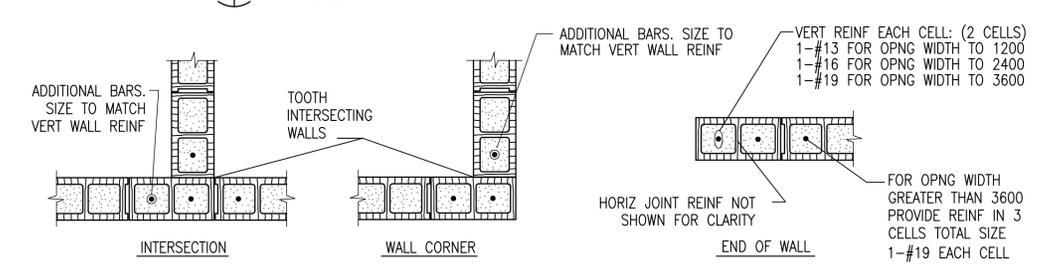
ADD'L REINFORCEMENT DETAILS
SCALE: NTS

DETAIL NOTES:
1. 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.
2. 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.
3. FOR OPENINGS WITH SIDES OR DIAMETERS LESS THAN 300 SPREAD THE SLAB/WALL REINFORCING TO CLEAR THE OPENING.

DETAIL NOTES:
1. PROVIDE (2)-#16 IN BOND BEAMS AT 1200 OC, NOT SHOWN.

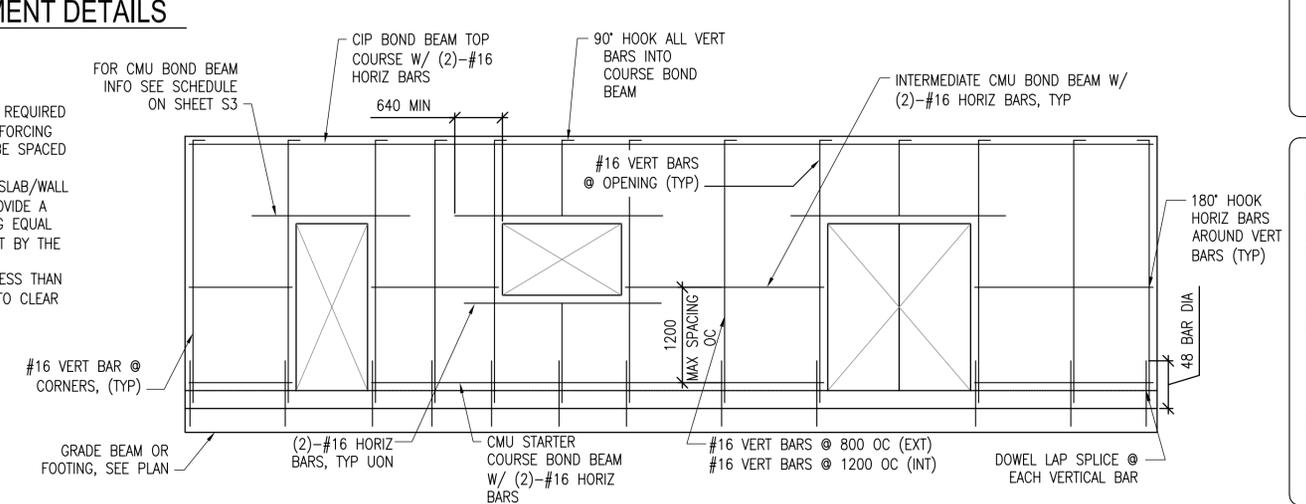


CIP BOND BEAM DETAILS
SCALE: NTS



TYPICAL CMU DETAILS
SCALE: NTS

NOTES:
1. OPENING WIDTH SHALL NOT EXCEED 3600 FOR THIS TYPE OF JAMB
2. ALL CMU CELLS TO BE FULLY GROUTED



MIN CMU WALL REINFORCING
SCALE: NTS

LINTEL NOTES:
CMU LINTEL REINFORCEMENT AS PER SCHEDULE ON SHEET S3

US Army Corps of Engineers
Afghanistan Engineer District

DATE	DESCRIPTION
APR	

DESIGNED BY: KMP	DATE: 09-30-09
DWN BY: RCG	SUBMITTED BY: BAKER
CHK BY: CWV	FILE NO: ANPSDS-507XXX

Michael Baker, Jr. Inc.
A Unit of Michael Baker Corporation
1000 Business Park
Moon Township, PA 15108
www.mbakercorp.com

AFGHAN NATIONAL POLICE
STANDARD DESIGN
WAREHOUSE BUILDING
TYPICAL DETAILS

SHEET REFERENCE NUMBER:
S7

100% SUBMISSION

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

A B C D E F G H

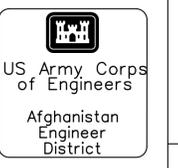
6
5
4
3
2
1

GENERAL NOTES:

1. REFER TO DRAWING #E0 FOR THE ELECTRICAL SYMBOLS LIST.
2. EXIT SIGNS SHALL BE WIRED AHEAD OF ANY LOCAL SWITCHING ON CIRCUITS.
3. REFER TO DRAWING #E3 FOR THE LIGHTING FIXTURE SCHEDULE.
4. REFER TO DRAWING #E2 FOR THE POWER RISER.
5. REFER TO DRAWING #E4 FOR PANEL SCHEDULES.
6. LIGHT FIXTURES INDICATED AS EMERGENCY SHALL BE PROVIDED WITH A BATTERY BACKUP BALLAST.
7. COORDINATE EXACT MOUNTING LOCATION OF DISCONNECTING MEANS FOR MECHANICAL AND PLUMBING EQUIPMENT IN THE FIELD.
8. FUSIBLE SAFETY SWITCHES THAT ARE NOT OTHERWISE IDENTIFIED SHALL BE 380V, 1P, 30A FUSED SAFETY SWITCHES WITH 20A FUSES.

NUMBERED NOTES:

- ① PANEL R1.



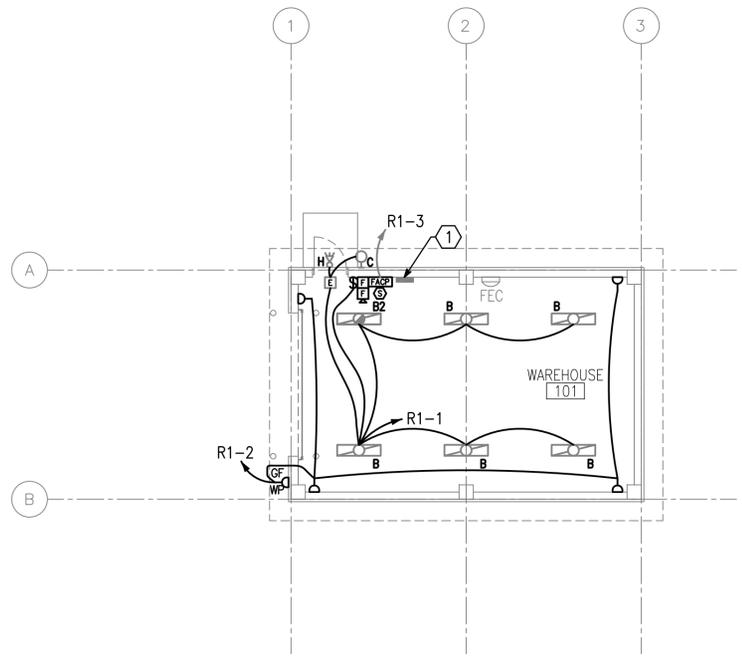
SYMBOL	DESCRIPTION	DATE

DESIGNED BY: JRG	DATE: 09-30-09
DWN BY: JRG	SUBMITTED BY: BAKER
CHK BY: JRG	FILE NO: ANPSDE-101XXX

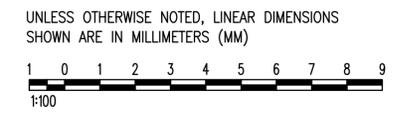
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 A Unit of Michael Baker Corporation
 1000 Business Park
 Moon Township, PA 15108
 www.mbakercorp.com

AFGHAN NATIONAL POLICE
 STANDARD DESIGN
 WAREHOUSE BUILDING
 LIGHTING AND POWER PLAN

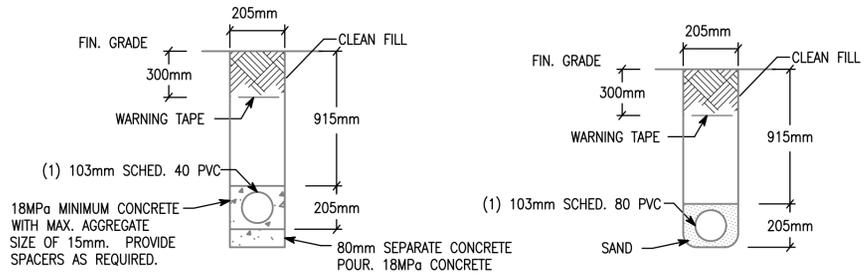
SHEET
 REFERENCE
 NUMBER:
E1



1
E1 | E1
LIGHTING AND POWER PLAN
 SCALE: 1:100

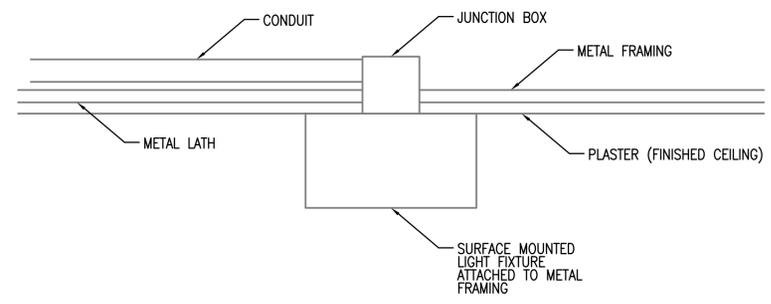


100% SUBMISSION

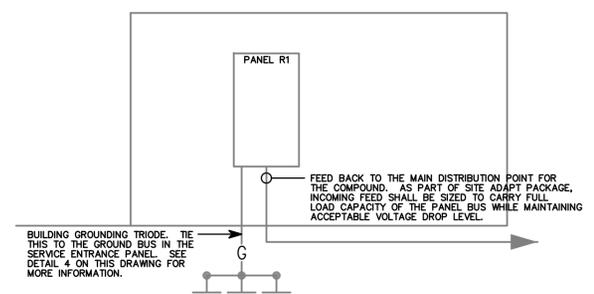


NOTE: PVC CONDUIT SHALL BE DIRECT BURIED SCHEDULE 80 FOR NO TRAFFIC AREAS AND CONCRETE-ENCASED SCHEDULE 40 FOR UNDER ROADWAYS OR TRAFFIC AREAS.

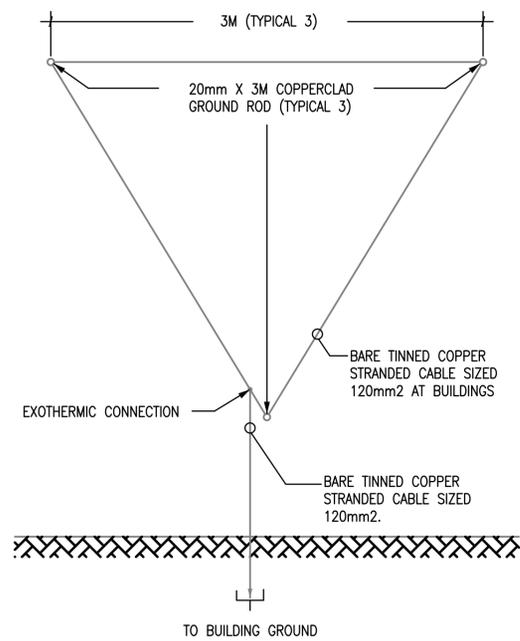
1 TYPICAL DUCT BANK DETAILS FOR CONDUIT IN SAND OR CONCRETE
 E2 | E2 SCALE: N.T.S.



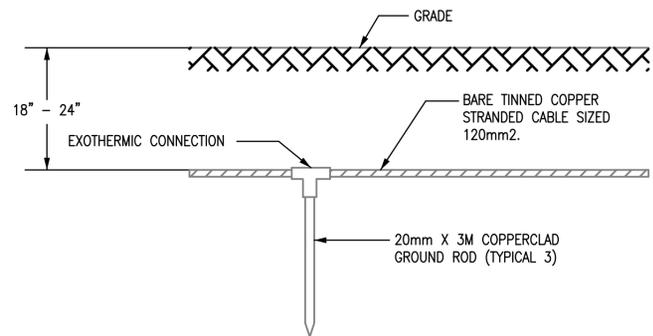
2 TYPICAL DETAIL FOR SURFACE MOUNTED LIGHT FIXTURES
 E2 | E2 SCALE: N.T.S.



3 WAREHOUSE RISER DIAGRAM
 E2 | E2 SCALE: N.T.S.



4 GROUND TRIPOD SYSTEM DETAIL - PLAN
 E2 | E2 SCALE: N.T.S.



5 GROUND TRIPOD SYSTEM DETAIL - ELEVATION
 E2 | E2 SCALE: N.T.S.

US Army Corps of Engineers
 Afghanistan Engineer District

SYMBOL	DESCRIPTION	DATE	APP

DESIGNED BY: JRG	DATE: 09-30-09
DWN BY: JRG	SUBMITTED BY: JRG
CHK BY: JRG	FILE NO: ANP586102XXX
Michael Baker, Jr. Inc. A Unit of Michael Baker Corporation 1000 Business Park Moon Township, PA 15108 www.mbakercorp.com	

AFGHAN NATIONAL POLICE
 STANDARD DESIGN
 WAREHOUSE BUILDING
 DETAILS

SHEET REFERENCE NUMBER:
E2

100% SUBMISSION

AFGHAN NATIONAL ARMY

STANDARD BUILDING DESIGN

08 RMTC STORAGE / WAREHOUSE, LARGE

100% FINAL DESIGN SUBMITTAL



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

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- S-401 BUILDING SECTIONS
- S-402 ENLARGED ELEVATED SLAB PLAN
- S-501 FOUNDATION SECTIONS
- S-502 FRAMING SECTIONS
- S-503 BEAM & COLUMN DETAILS
- S-504 BEAM & COLUMN DETAILS
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- E-101 ELECTRICAL LIGHTING PLAN
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- E-103 ELECTRICAL LIGHTNING PROTECTION
- E-501 ELECTRICAL DETAILS
- E-502 ELECTRICAL DETAILS
- E-601 ELECTRICAL LIGHT FIXTURE SCHEDULE
- E-602 ELECTRICAL PANEL SCHEDULES

Rev.	0
Date	2/23/10
Design file no.	
Drawing code	
File name	ANASTOR08-001
Plot date	03/03/10
Plot scale	X/1
Designed by	KWP/AMY
Drawn by	RCC
Checked by	CWW
Reviewed by	LHM
Submitted by	BAKER

U.S. ARMY CORPS OF ENGINEERS
 AFGHANISTAN ENGINEER DISTRICT
 APO AE 96338
 Michael Baker Jr., Inc
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 www.mbakercorp.com

Sheet reference number:
G-001

D

C

B

A

STRUCTURAL ABBREVIATIONS:

Table of structural abbreviations including ACI, AISC, AISI, ASTM, ARCH, BLDG, BOTT, etc., with their corresponding full names.

GENERAL NOTES:

- 1.0 THIS PROJECT HAS BEEN DESIGNED FOR THE WEIGHTS AND MATERIALS INDICATED ON THE SHEETS AND FOR THE LIVE LOADS INDICATED IN THE DESIGN DATA. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALLOWABLE CONSTRUCTION LOADS AND TO PROVIDE PROPER DESIGN AND CONSTRUCTION OF FALSEWORK, FORMWORK, STAGING, BRACING, SHEETING AND SHORING, ETC.

CONCRETE

- 3.1 CONCRETE SHALL HAVE THE UNIT WEIGHT OF 2400 kg/m³ AND A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 28 MPa AT 28 DAYS. ALL CONCRETE SHALL HAVE A WATER-CEMENT RATIO OF 0.45. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. ENTRAIN AIR TO PRODUCE TOTAL AIR CONTENT ACCORDING TO THE SPECIFICATIONS FOR CONCRETE EXPOSED TO FREEZING TEMPERATURES (EXTERIOR FOOTINGS, SLAB TURNDOWNS, EXTERIOR SLABS AND SLABS-ON-GRADE, EXTERIOR RETAINING WALLS, AND EXTERIOR GRADE BEAMS.)

CONCRETE MASONRY

- 4.1 MASONRY CONSTRUCTION SHALL CONFORM TO SPECIFICATION FOR MASONRY STRUCTURES (ACI 530.1) UON.
- 4.2 STRENGTH OF MASONRY MATERIALS SHALL BE AS FOLLOWS: a. CONCRETE MASONRY UNITS SHALL BE NORMAL WEIGHT, GRADE N, TYPE 1, CONFORMING TO ASTM C-90 AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 10.4 MPa ON THE NET AREA.

STRUCTURAL DESIGN CRITERIA

- 6.1 ALL DESIGNS SHALL CONFORM TO THE PROVISIONS OF THE IBC 2006 AND UFC AS APPLICABLE.
- 6.2 DESIGN LOADS (PER IBC 2006 & UFC 3-310-01) 6.2.1 DEAD LOADS (PER IBC 2006 & UFC 3-310-01) MECH/ELEC/PLUMBING MISCELLANEOUS COLD-FORMED FRAMING INSULATION METAL ROOF PANEL



Table with columns for Description, Mark, Date, and Appr. for design criteria items.

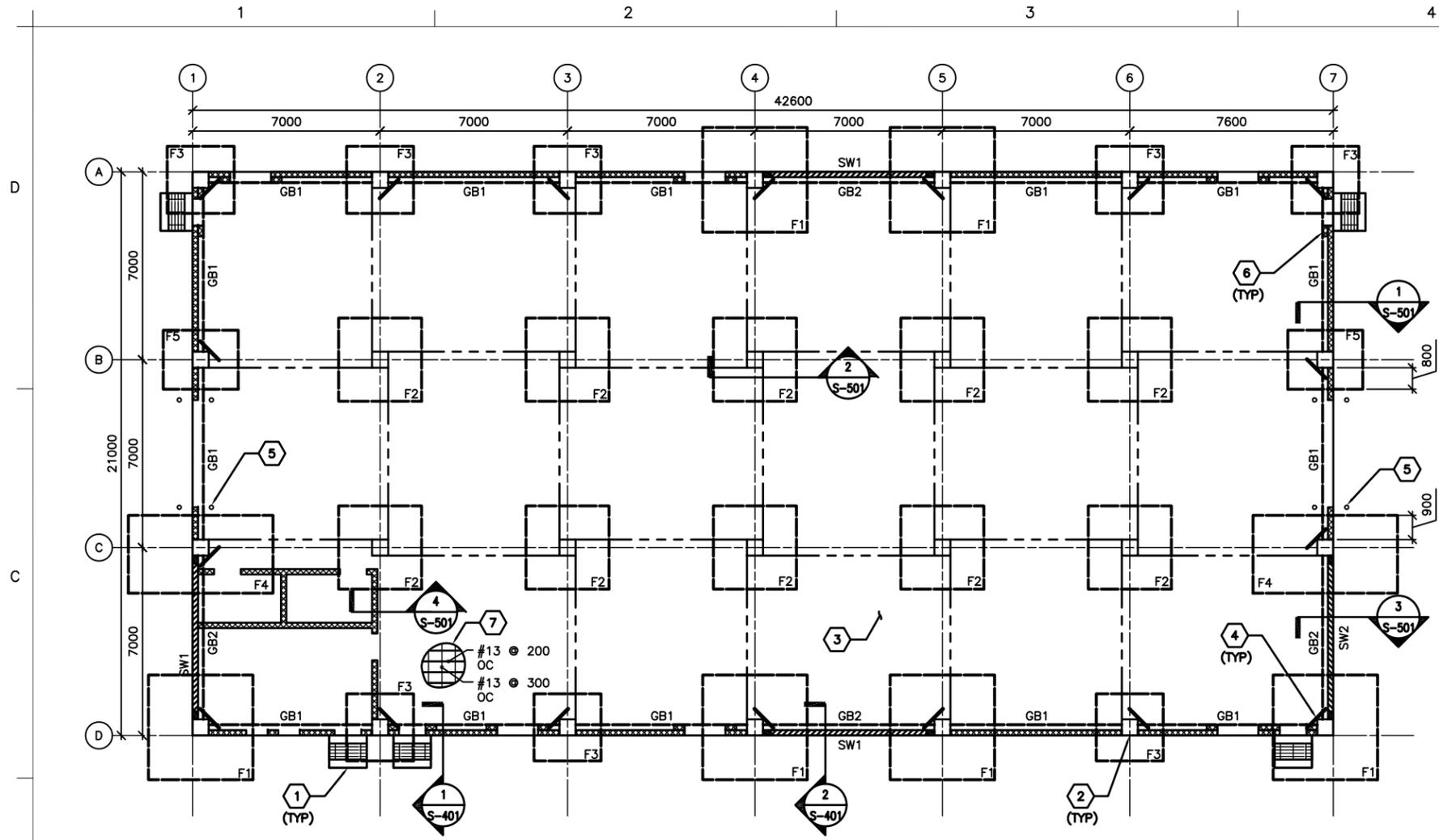
Administrative information including Date (2/23/10), Design file no., Drawing code, File name (ANSI08-001), and Project name (030310).

Project information including U.S. Army Corps of Engineers, Afghanistan Engineer District, and Michael Baker Corp. details.

Sheet reference number: S-001

APPROVED: A/E DESIGNER OF RECORD SEAL:

GENERAL NOTES & DESIGN CRITERIA



1 FOUNDATION/SLAB PLAN
S-101 SCALE: 1:100

FOUNDATION/SLAB PLAN NOTES:

1. REFER TO SHEET S-001 FOR STRUCTURAL NOTES AND DESIGN CRITERIA.
2. 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.
3. SLAB-ON-GRADE IS 150 WITH #13 @ 300 OC EW LOCATED 38 FROM T/SLAB.
4. TOP OF EXTERIOR FOOTINGS SHALL BE -950 UNLESS OTHERWISE INDICATED.
5. TOP OF INTERIOR FOOTINGS WITHOUT GRADE BEAM ABOVE SHALL BE -600.
6. COLUMN FOOTINGS INDICATED THUS F# ON PLAN. REFER TO COLUMN FOOTING SCHEDULE ON SHEET S-601.
7. REFER TO COLUMN SCHEDULE ON SHEET S-601.
8. GRADE BEAM INDICATED THUS GB# ON PLAN, REFER TO BEAM SCHEDULE ON SHEET S-601.
9. SHEARWALL INDICATED THUS SW# ON PLAN, REFER TO SHEARWALL SCHEDULE ON SHEET S-601.
10. SEE TYP EXTERIOR AND INTERIOR CMU WALL REINF DETAILS ON SHEET S-701.
11. SEE MECHANICAL AND ELECTRICAL SHEETS FOR CONCRETE PAD LOCATIONS, SIZES, AND THICKNESS NOT SHOWN. SEE SHEET S-701 FOR DETAILS.
12. THICKENED SLAB UNDER CMU WALLS NOT SHOWN FOR CLARITY.

FOUNDATION/SLAB PLAN KEY NOTES: (X)

1. CONC PAD (ENTRANCE) - SEE ARCH DWGS FOR INFORMATION
2. REINF CONC COLUMN
3. REINF CONC SLAB-ON-GRADE
4. (2)-#13 @ RE-ENTRANT CORNERS - SEE S-701 FOR INFORMATION
5. BOLLARD - SEE SECTION 8/S-502
6. WALL STIFFENER EACH SIDE OF PEDESTRIAN DOOR WHERE NO BOTTOM OF SLAB EXIST AT ELEVATION 3000.
7. SPACE #13 LONGITUDINAL SLAB REINF @ 200 OC BETWEEN COLUMN LINES 1 & 3 FROM C TO D

FOUNDATION/SLAB PLAN LEGEND:

- REINF CONC SHEAR WALL
- REINF CMU WALL
- CONTROL JOINT



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

APPROVED:

A/E DESIGNER OF RECORD
SEAL:

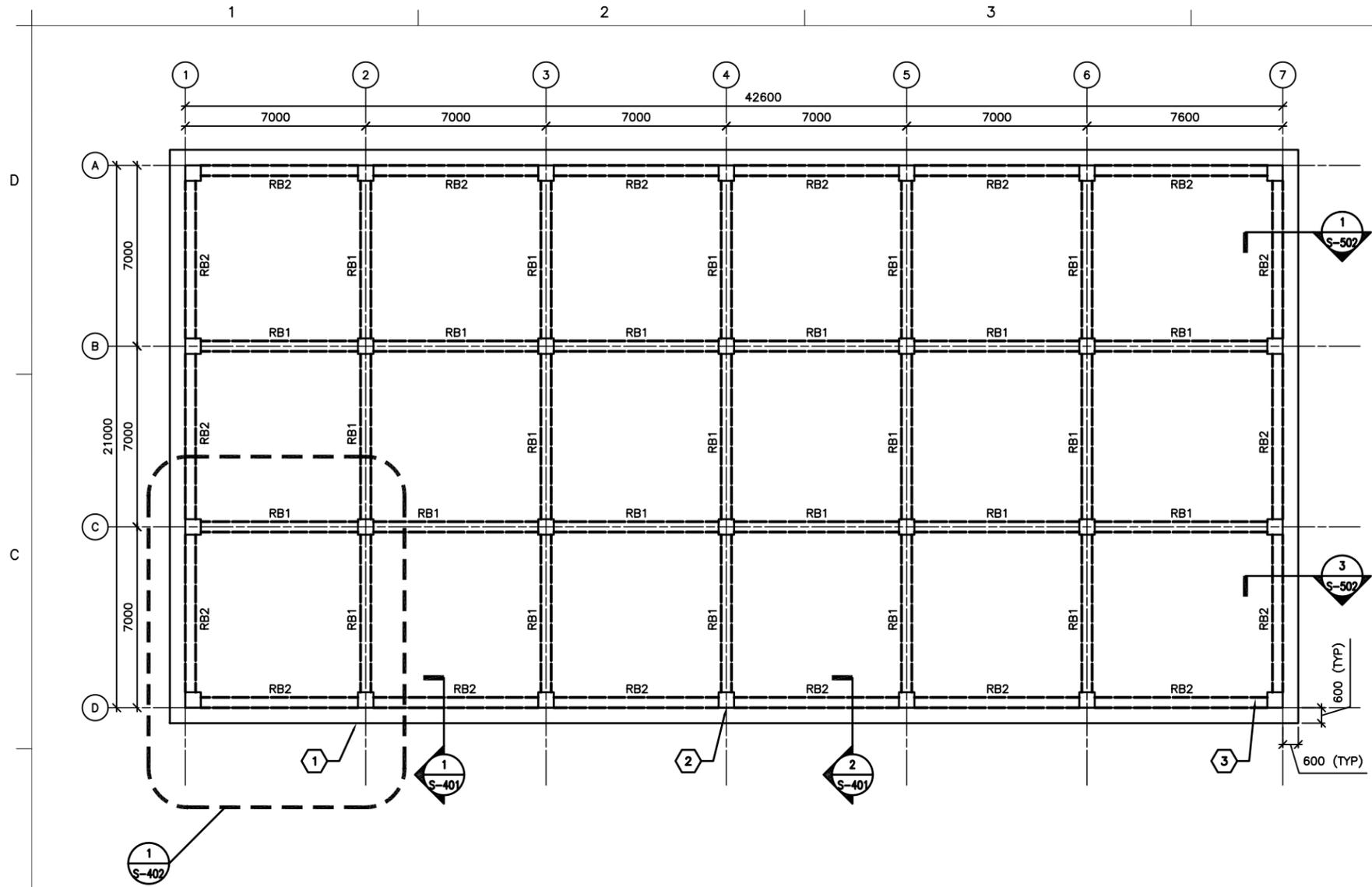


Rev.	Date	Description	Mark	Appr.	Date
0	2/23/10				

Designed by: KWP/MNY	Checked by: RCC	Reviewed by: LHM	Submitted by: BAKER
Date: 2/23/10	Design file no.:	Drawing code: ANS1008-01	File name: ANS1008-01
Drawn by: CWV	Reviewed by: LHM	Submitted by: BAKER	Print date: 03/01/10
U.S. ARMY CORPS OF ENGINEERS AFGHANISTAN ENGINEER DISTRICT APO AE 96338	Michael Baker Corp., Inc. A unit of Michael Baker Corporation 100 Alameda Drive Folsom, CA 95630 www.mbakercorp.com		

STANDARD DESIGN
VARIOUS PROJECTS
VARIOUS LOCATIONS, AFGHANISTAN
RMTC STORAGE
FOUNDATION/SLAB PLAN

Sheet reference number:
S-101



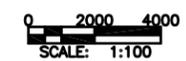
1 ROOF FRAMING PLAN
SCALE: 1:100

ROOF FRAMING PLAN NOTES:

1. REFER TO SHEETS S-001 FOR STRUCTURAL NOTES AND DESIGN CRITERIA.
2. TOP OF SLAB ELEVATION = 5600 UNLESS NOTED OTHERWISE.
3. ROOF SLAB IS 250 WITH #16 @ 300 OC EW T&B.
4. ROOF BEAM INDICATED BY RB# ON PLAN. REFER TO BEAM SCHEDULE ON SHEET S-601.
5. COORDINATE WITH ARCHITECTURAL SHEETS FOR COLD-FORMED STEEL OVERBUILD FRAMING ABOVE ROOF SLAB.
6. COLD-FORMED METAL OVERBUILD ROOF FRAMING NOT SHOWN FOR CLARITY. SEE OVERBUILD ROOF FRAMING DETAILS AND SECTIONS ON SHEET S-702.
7. CMU PARTITION WALLS (BELOW ROOF SLAB) NOT SHOWN FOR CLARITY.
8. OVERHANG AREAS OF ROOF SLAB CONTAIN ROOF VENT PENETRATIONS. REFERENCE ARCHITECTURAL DRAWINGS FOR INFORMATION.

ROOF FRAMING PLAN KEY NOTES: (X)

1. CONC ROOF SLAB (BELOW ROOF OVERBUILD)
2. REINF CONC COLUMN (BELOW CONC ROOF SLAB)



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

APPROVED:

A/E DESIGNER OF RECORD
SEAL:



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

Designed by: KWP/MMY	Checked by: RCC	Reviewed by: LHM	Submitted by: BAKER
Date: 2/23/10	Design file no.:	Drawing code:	File name: ANASTORP-102
Drawn by: CWV			Plot date: 6/30/10
			Plot scale: X01

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AFGHANISTAN ENGINEER DISTRICT
APO AE 96338

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STANDARD DESIGN
VARIOUS PROJECTS
VARIOUS LOCATIONS, AFGHANISTAN

RMITC STORAGE

ROOF FRAMING PLAN

Sheet reference number:
S-102

1

2

3

4

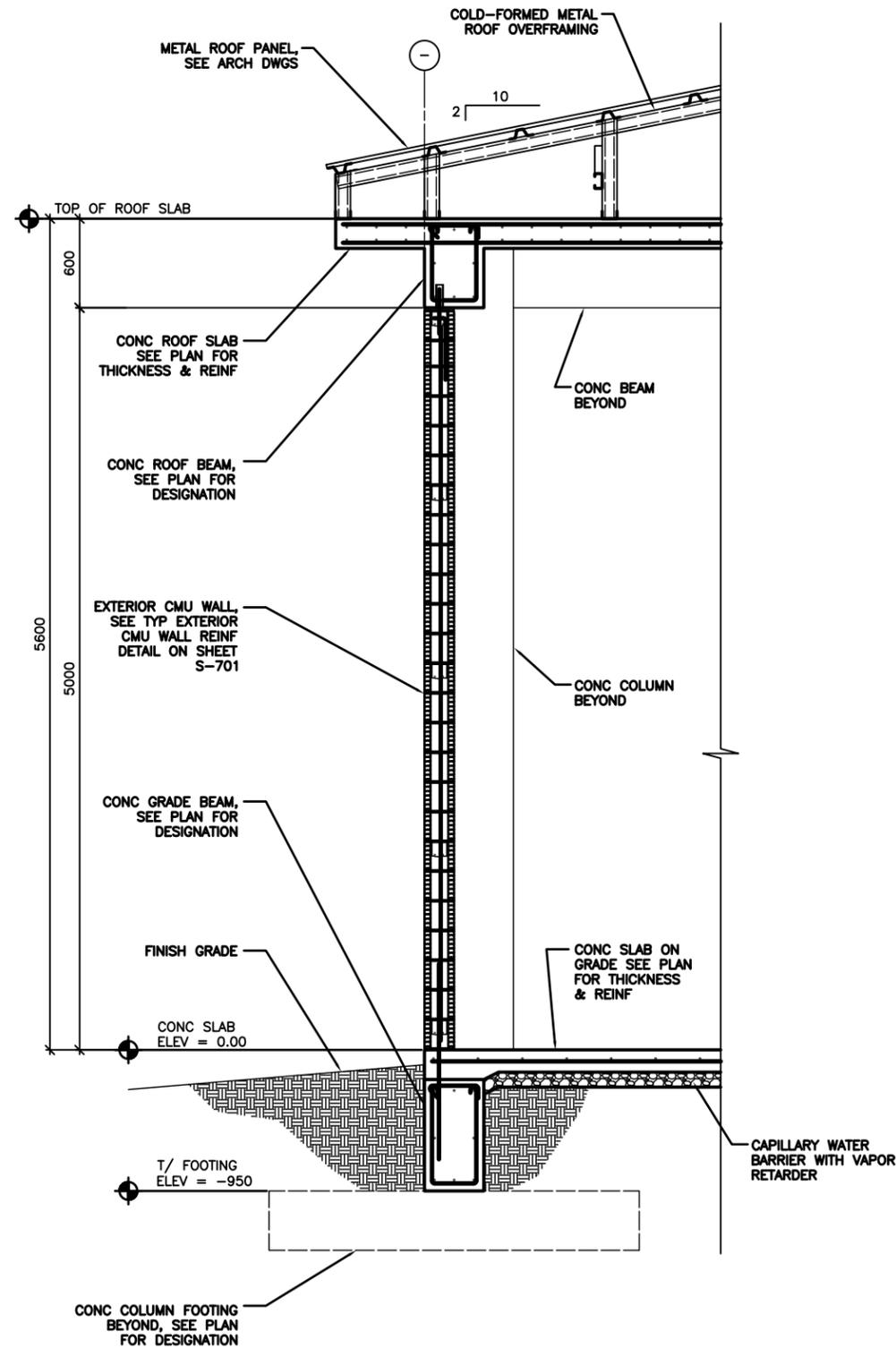
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C

B

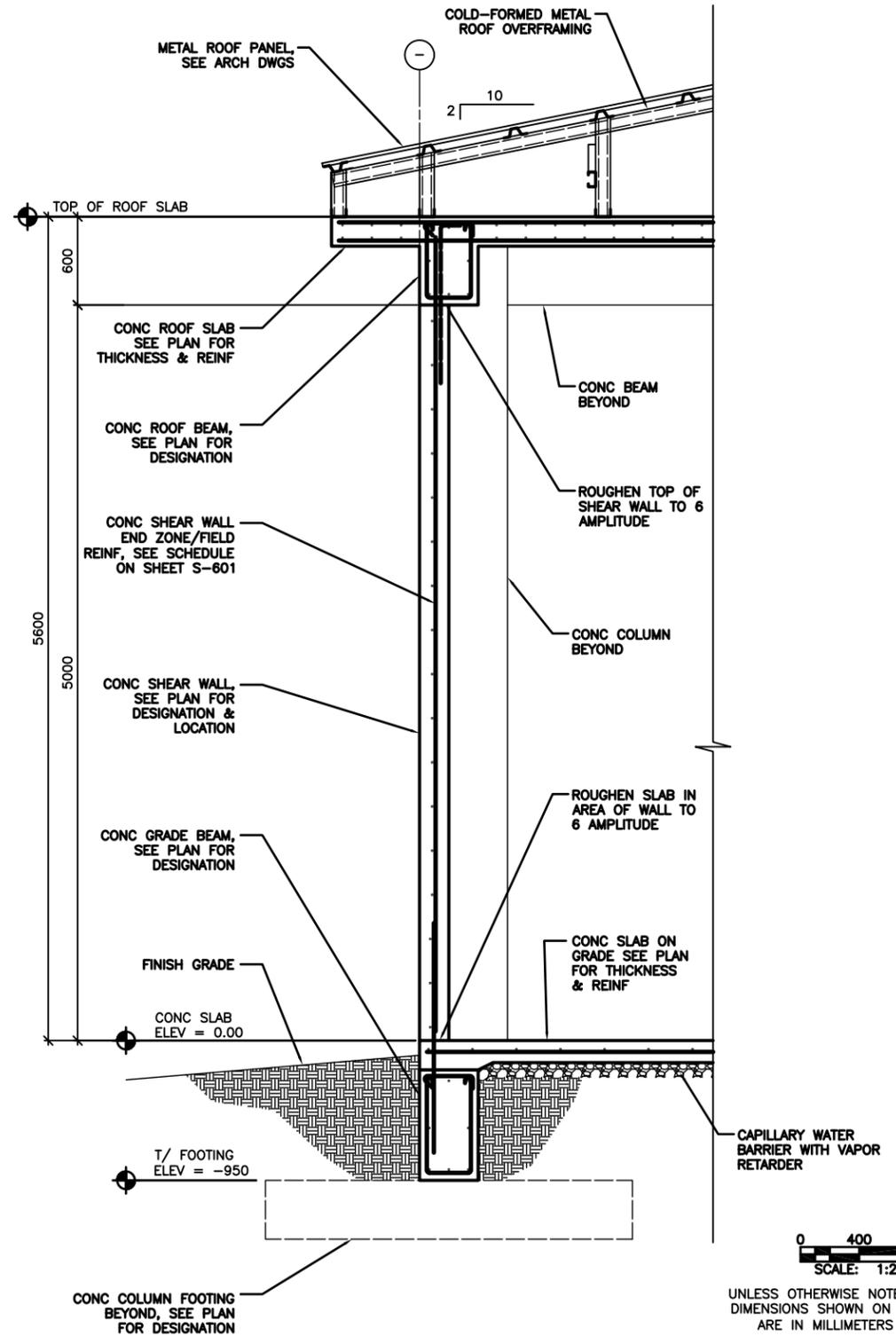
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1 1
S-101 S-102

TYPICAL WALL SECTION AT EXTERIOR MASONRY WALL

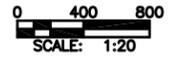
SCALE: 1:20



2 2
S-101 S-102

TYPICAL WALL SECTION AT CONCRETE SHEAR WALL

SCALE: 1:20



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

APPROVED: _____
 A/E DESIGNER OF RECORD
 SEAL: _____



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

Designed by: KMP/MMY	Checked by: CWV	Reviewed by: LHM	Submitted by: BAKER
Date: 2/23/10	Design file no.	Drawing code:	File name: ANASTORIS-401
U.S. ARMY CORPS OF ENGINEERS AFGHANISTAN ENGINEER DISTRICT APO AE 96338	Michael Baker, Jr., Inc. A unit of Michael Baker Corporation 100 Alameda Drive Alameda, CA 94501 www.mbakercorp.com	Prot date: 03/30/10	Prot scale: XX

STANDARD DESIGN PROJECTS
 VARIOUS LOCATIONS, AFGHANISTAN
 RMTC STORAGE
 BUILDING SECTIONS

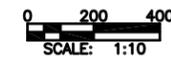
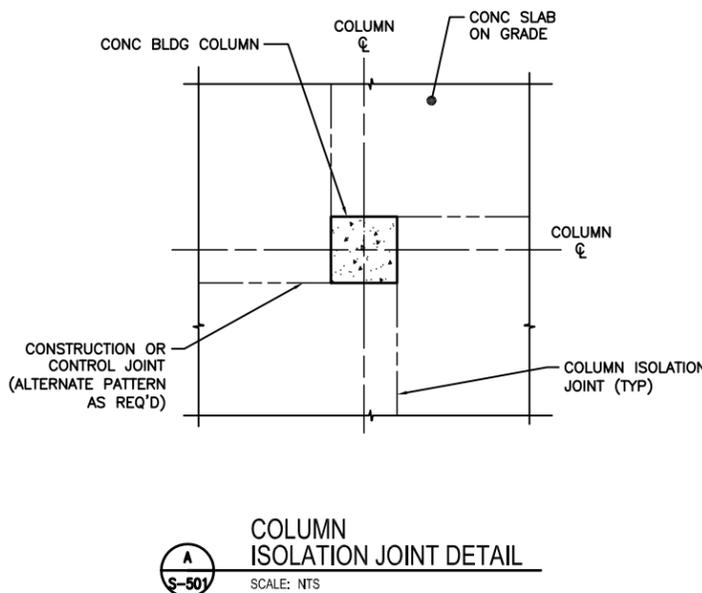
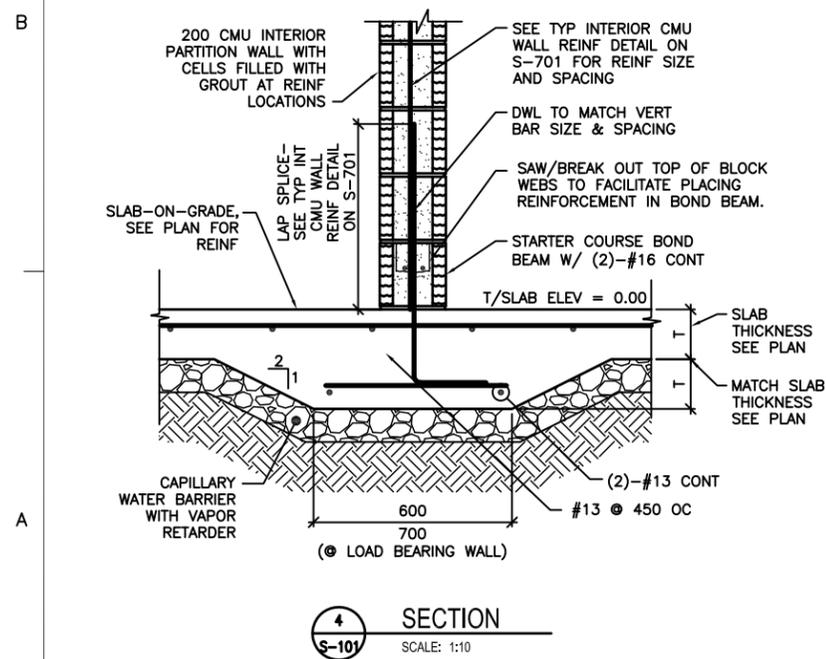
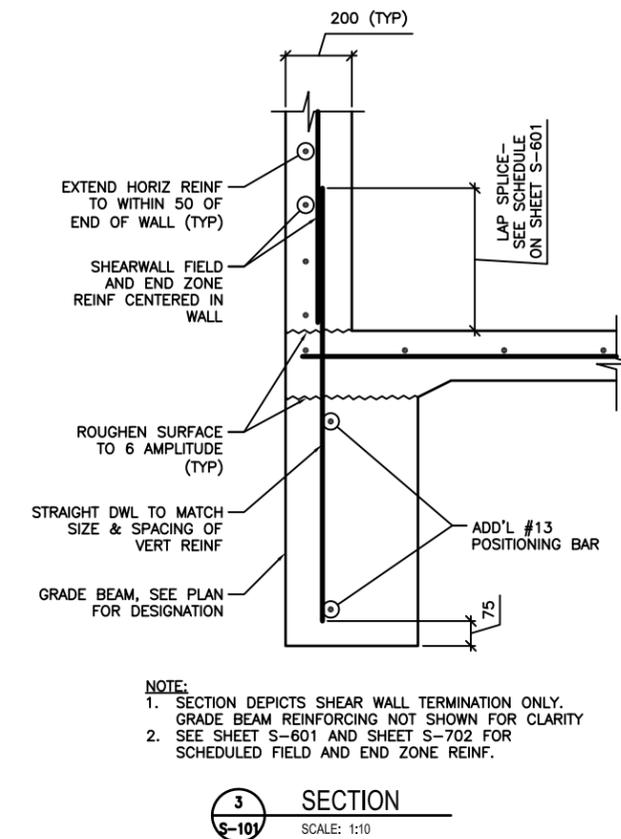
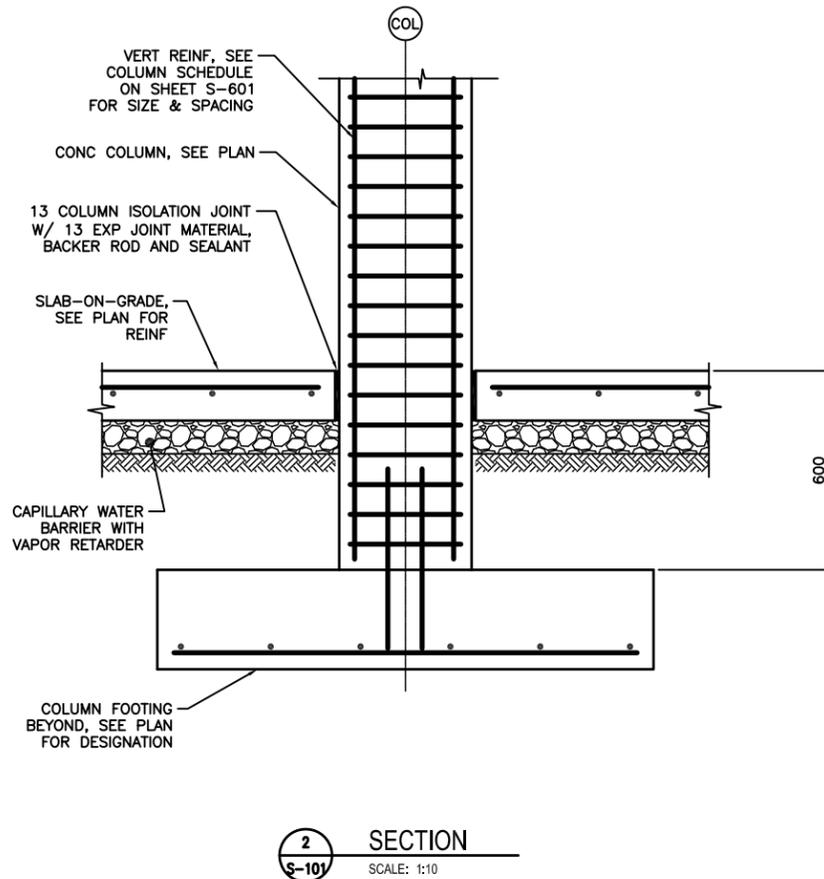
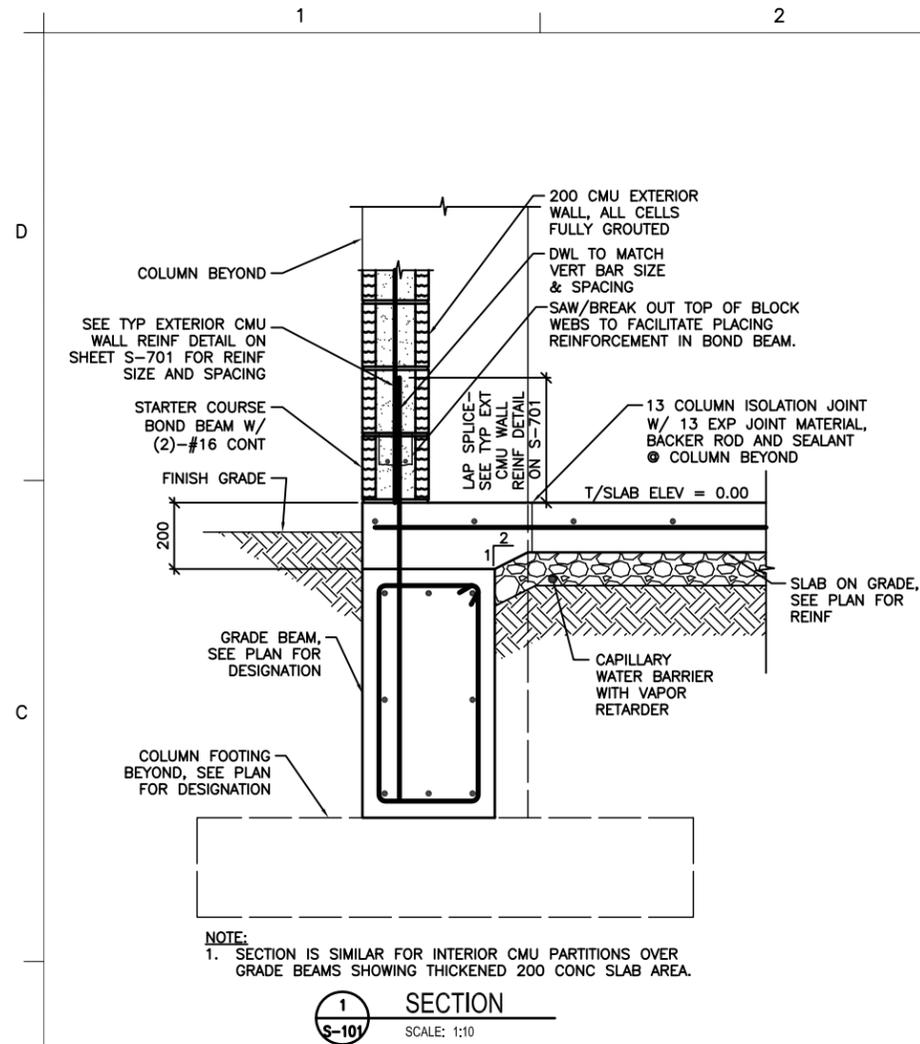
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S-401

Rev.	Date	Description	Mark
0	2/23/10		

Designed by: KWP/MMY	Date: 2/23/10	Drawing code: AWSTOR-S-501
Drawn by: RCC	Design file no.: CWW	File name: AWSTOR-S-501
Checked by: LHM	Reviewed by: LHM	Plot date: 03/09/10
Submitted by: BAKER	Plot scale: X01	

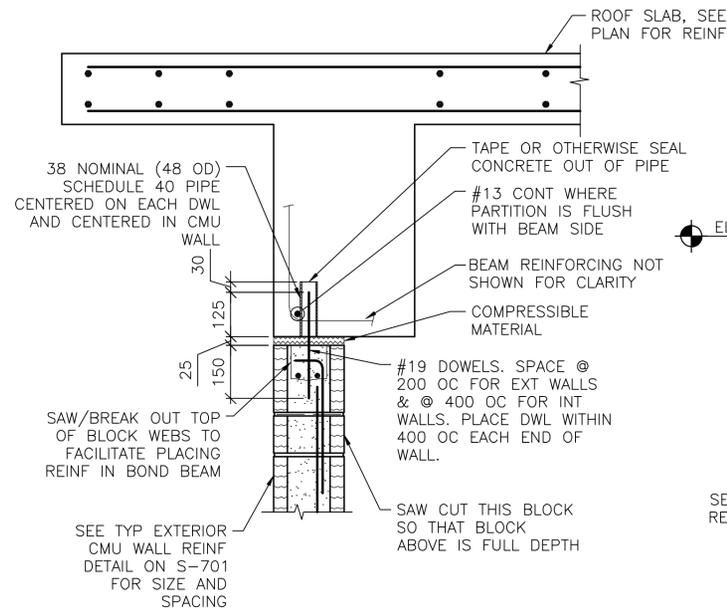
U.S. ARMY CORPS OF ENGINEERS AFGHANISTAN ENGINEER DISTRICT APO AE 96338 Michael Baker Corp., Inc. A unit of Michael Baker Corporation 100 Arapahoe Drive Fort Collins, CO 80504 www.mbakercorp.com	STANDARD DESIGN VARIOUS PROJECTS VARIOUS LOCATIONS, AFGHANISTAN RMTIC STORAGE FOUNDATION SECTIONS
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Sheet reference number:
S-501



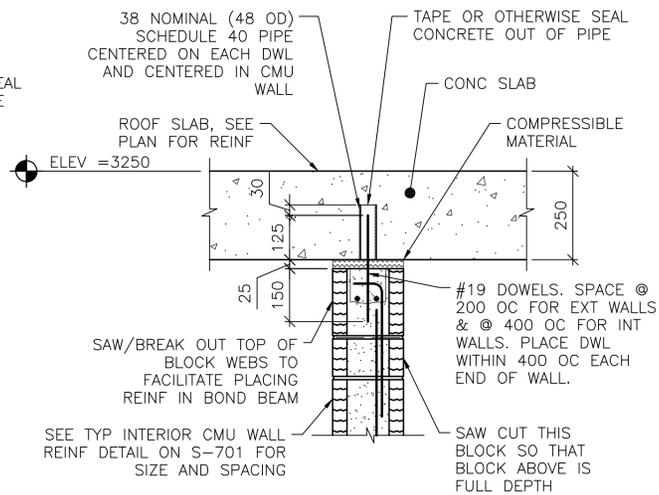
UNLESS OTHERWISE NOTED, LINEAR DIMENSIONS SHOWN ON DRAWINGS ARE IN MILLIMETERS (mm)

APPROVED:
 A/E DESIGNER OF RECORD
 SEAL:



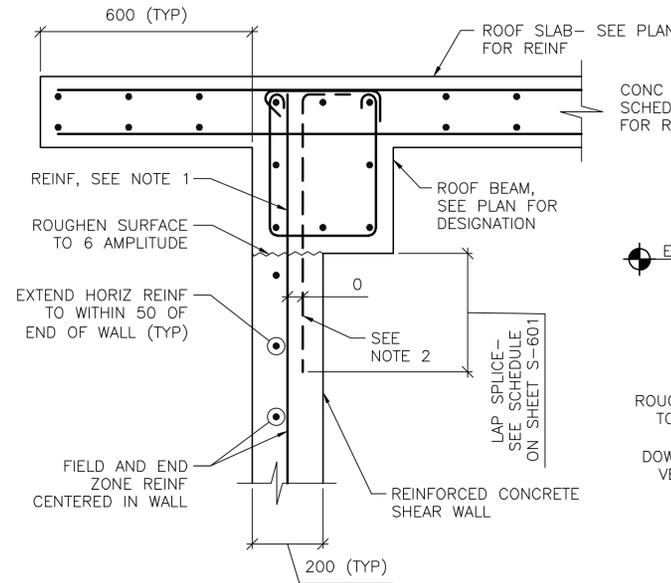
NOTES:
1. EXTEND DOWEL REINF TO 25 CLEAR FROM TOP OF CMU WALL.

1 SECTION
S-102 SCALE: 1:10



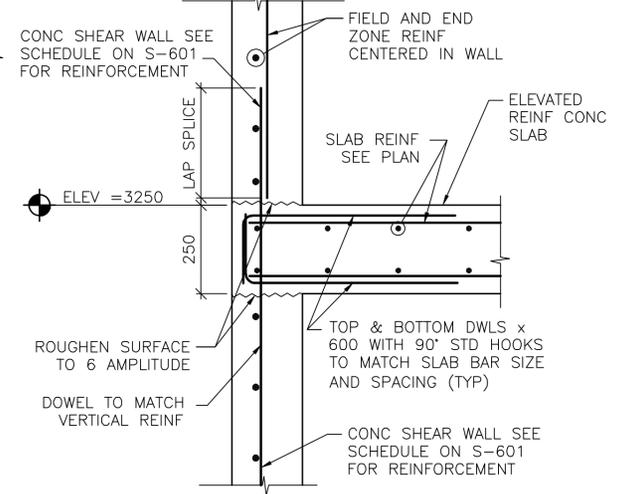
NOTES:
1. EXTEND DOWEL REINF TO 25 CLEAR FROM TOP OF CMU WALL.
2. SLAB REINF NOT SHOWN FOR CLARITY.

2 SECTION
S-402 SCALE: 1:10

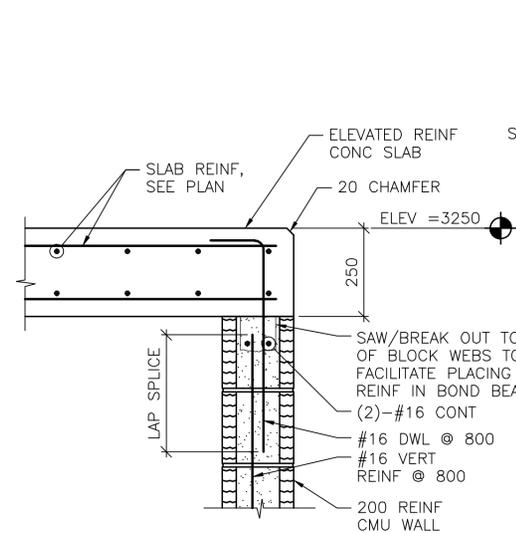


NOTES:
1. TERMINATE "FIELD" VERT REINF & END ZONE REINF @ 50 CLEAR FROM TOP OF ROOF SLAB.
2. WHERE END ZONE REINFORCING CANNOT BE DEVELOPED IN BEAM DEPTH, PROVIDE HOOKED DWLS SAME SIZE & SPACING. PROVIDE TENSION LAP BELOW ROOF BEAM.
3. SEE SHEET S-601 AND SHEET S-702 FOR SCHEDULED FIELD AND END ZONE REINF.

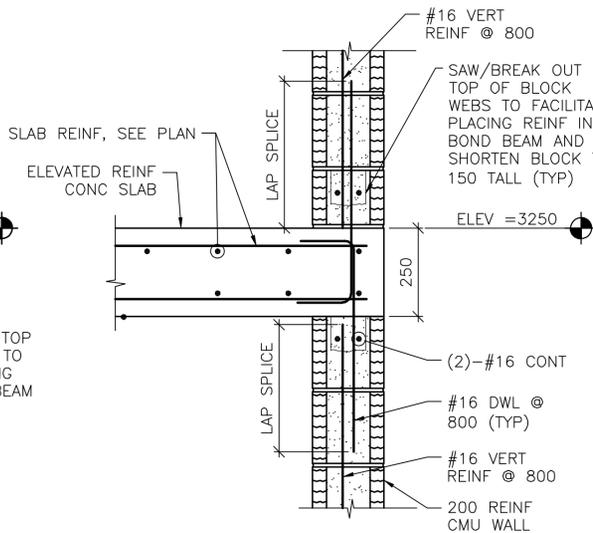
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S-102 SCALE: 1:10



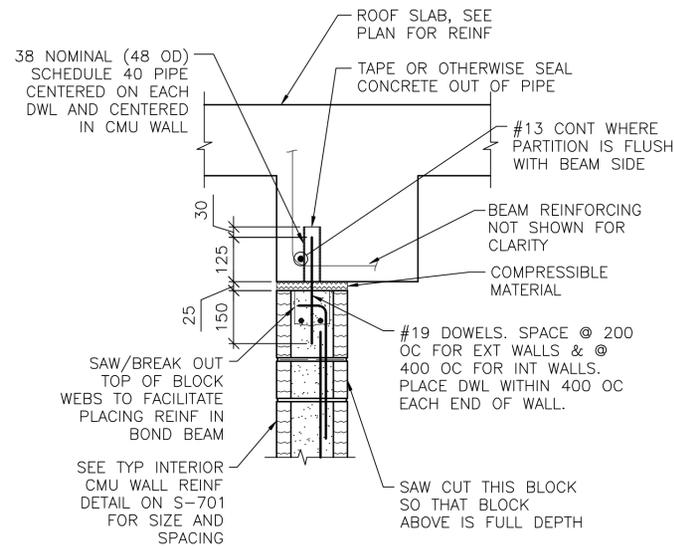
4 SECTION
S-402 SCALE: 1:10



5 SECTION
S-402 SCALE: 1:10

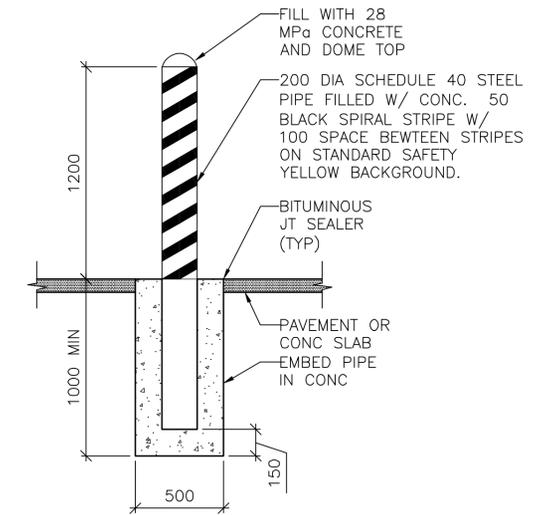


6 SECTION
S-402 SCALE: 1:10

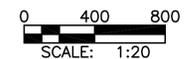


NOTES:
1. EXTEND DOWEL REINF TO 25 CLEAR FROM TOP OF CMU WALL.
2. PARTITION WALL MAY BE CENTERED UNDER THE BEAM OR FLUSH AS SHOWN. SEE PLAN FOR LOCATION.
3. SLAB REINF NOT SHOWN FOR CLARITY.

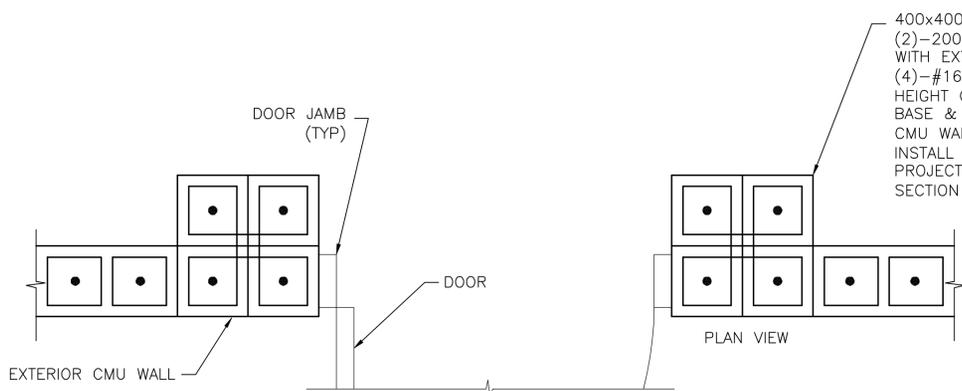
7 SECTION
S-102 SCALE: 1:10



8 SECTION AT BOLLARD
S-101 SCALE: 1:20



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



9 DETAIL
S-101 SCALE: 1:10



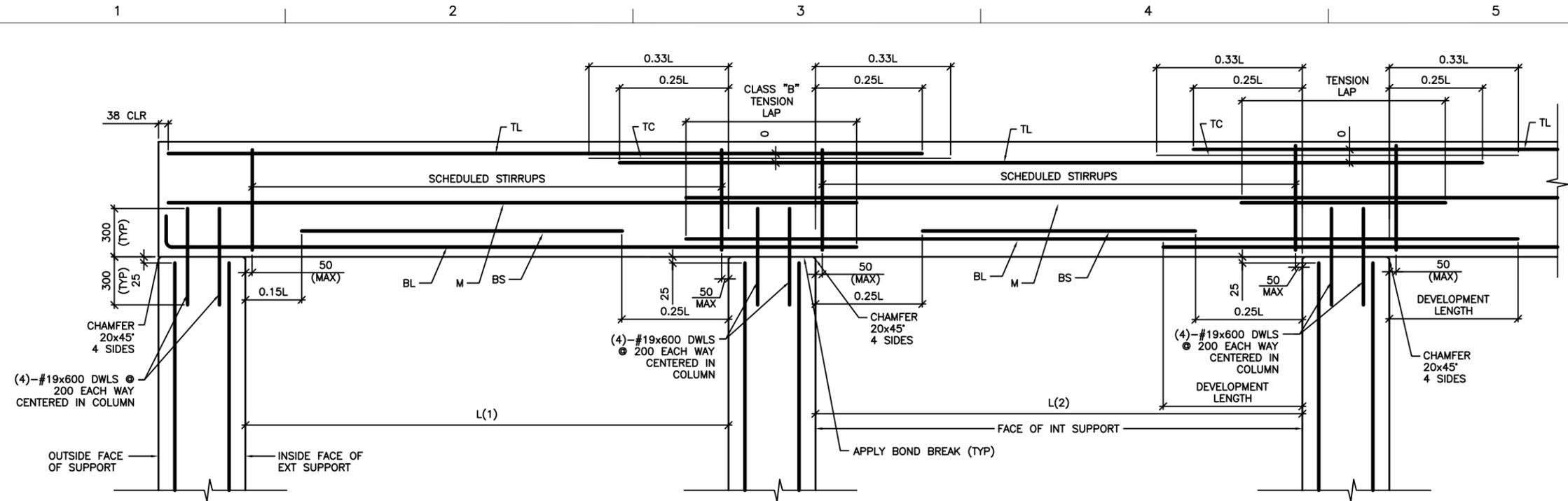
Rev.	Date	By	Description
1	9/7/10	CWW	APPROVED FOR CONSTRUCTION

Designed by:	KMP/MMY	Checked by:	CWW
Dwn by:	RCG	Reviewed by:	LHM
Submitted by:	BAKER	File name:	ANASTORS-502C
		Plot date:	9/10/10
		Plot scale:	XX

AFGHAN NATIONAL ARMY REGIONAL MILITARY TRAINING CENTER STANDARD DESIGN	RWTC STORAGE	FRAMING SECTIONS
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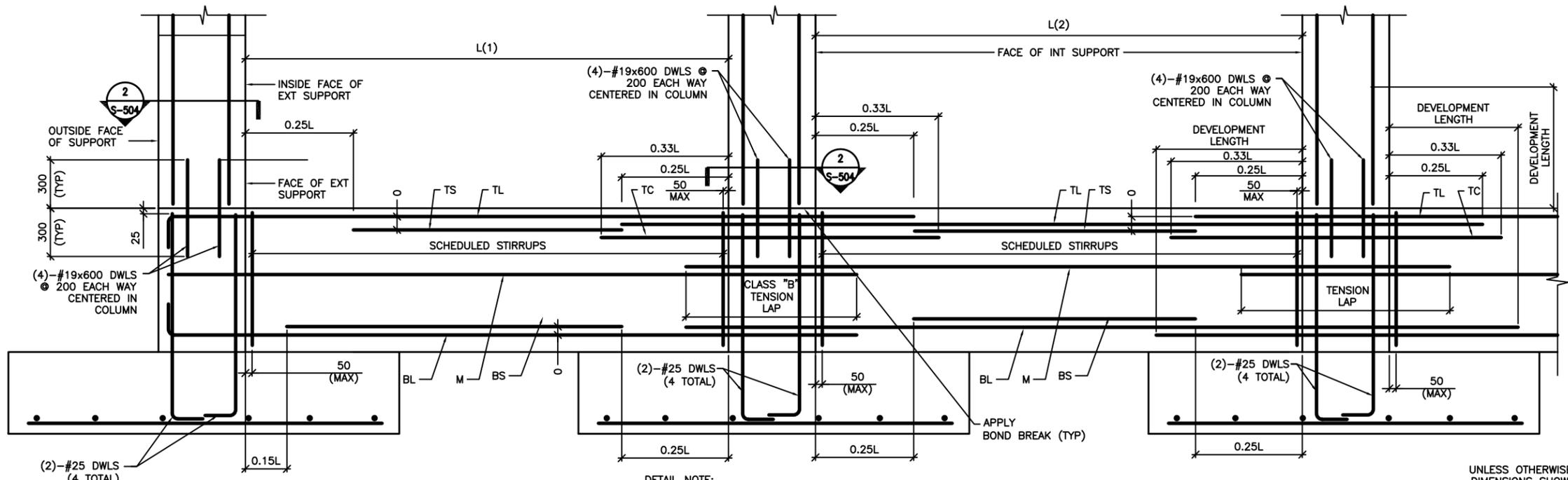
APPROVED: *Chris M...*
A/E DESIGNER OF RECORD
SEAL:

Sheet reference number: S-502



DETAIL NOTE:
 1. WORK THIS DETAIL WITH BEAM SCHEDULE ON SHEET S-601.
 2. L=GREATEST OF ADJACENT SPANS L(1) OR L(2)
 3. ONLY COLUMN CORNER BARS ARE SHOWN

1
S-503
ROOF BEAM REINFORCING DETAIL
 SCALE: NTS



DETAIL NOTE:
 1. WORK THIS DETAIL WITH BEAM SCHEDULE ON SHEET S-601.
 2. L=GREATEST OF ADJACENT SPANS L(1) OR L(2)
 3. ONLY COLUMN CORNER BARS ARE SHOWN.

2
S-503
GRADE BEAM REINFORCING DETAIL
 SCALE: NTS

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

APPROVED:

 A/E DESIGNER OF RECORD
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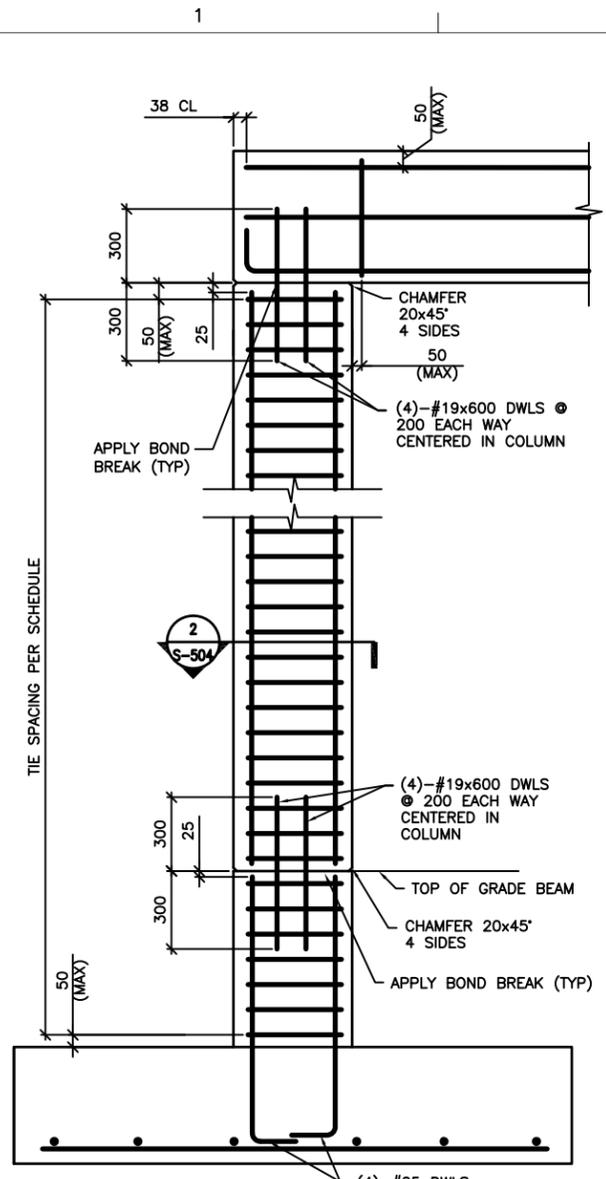


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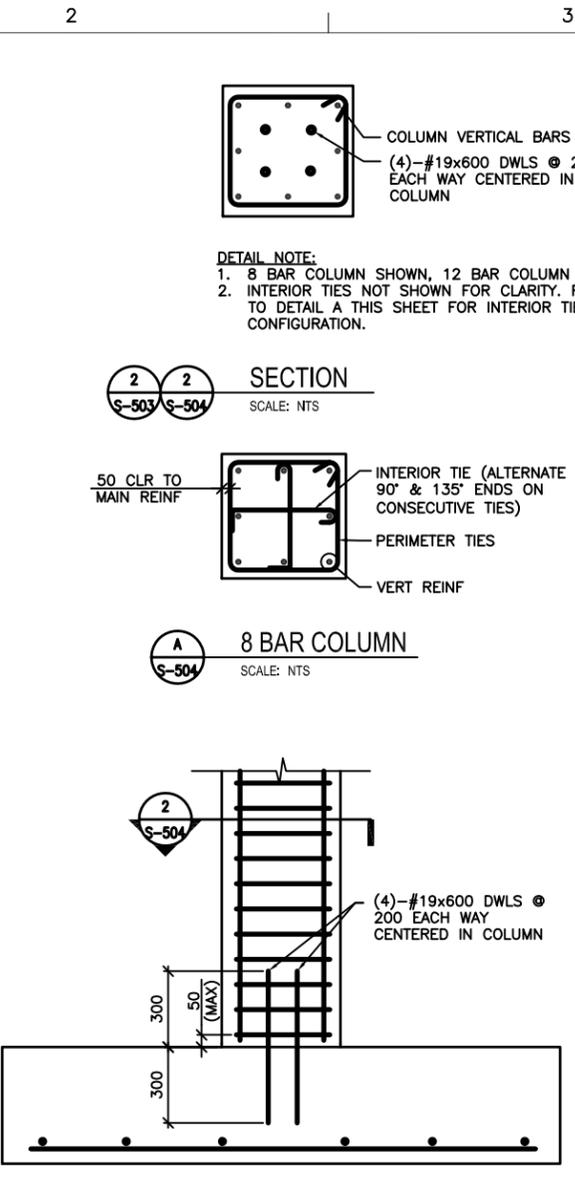
Rev. 0	Date 2/23/10	Design file no.
Designed by KWP/AMMY	Drawn by RCC	Checked by CWV
Reviewed by LHM	Submitted by BAKER	
U.S. ARMY CORPS OF ENGINEERS AFGHANISTAN ENGINEER DISTRICT APO AE 96338		
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STANDARD DESIGN PROJECTS
 VARIOUS LOCATIONS, AFGHANISTAN
 RMTC STORAGE
 BEAM & COLUMN DETAILS

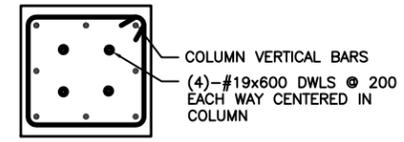
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S-503



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

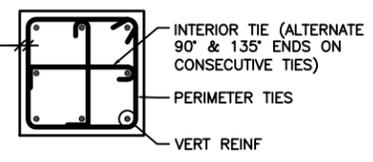


1 1-STORY COLUMN REINF DETAILS
SCALE: NTS (WITHOUT GRADE BEAM)

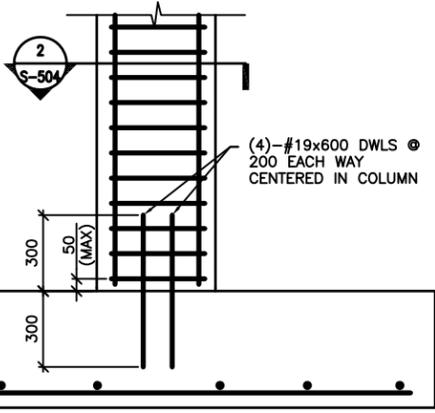


DETAIL NOTE:
1. 8 BAR COLUMN SHOWN, 12 BAR COLUMN SIMILAR
2. INTERIOR TIES NOT SHOWN FOR CLARITY. REFER TO DETAIL A THIS SHEET FOR INTERIOR TIE CONFIGURATION.

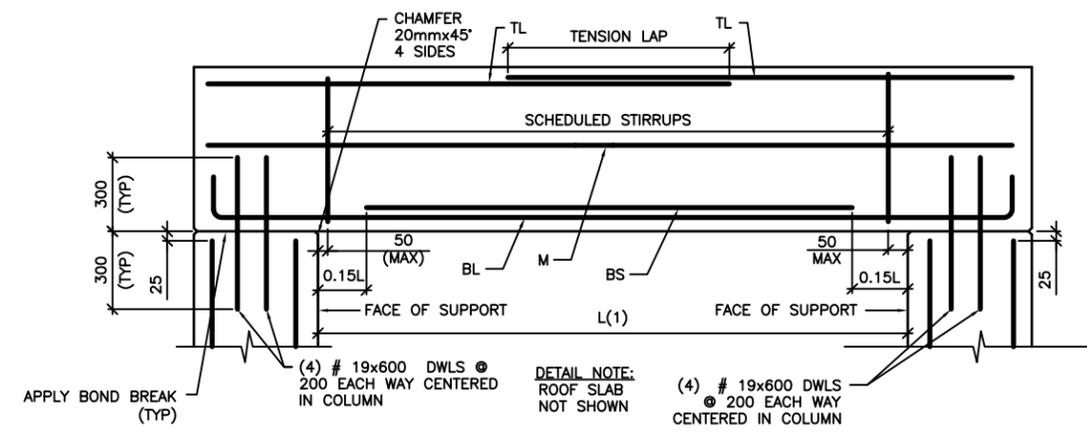
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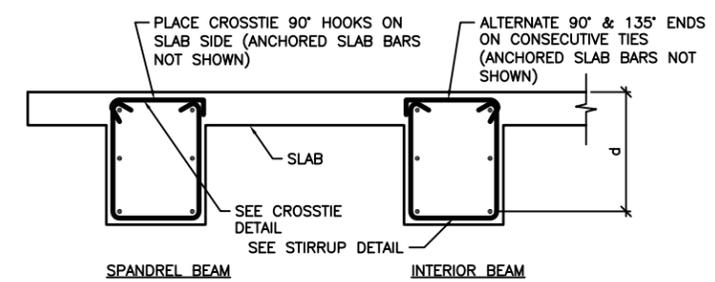
A 8 BAR COLUMN
SCALE: NTS



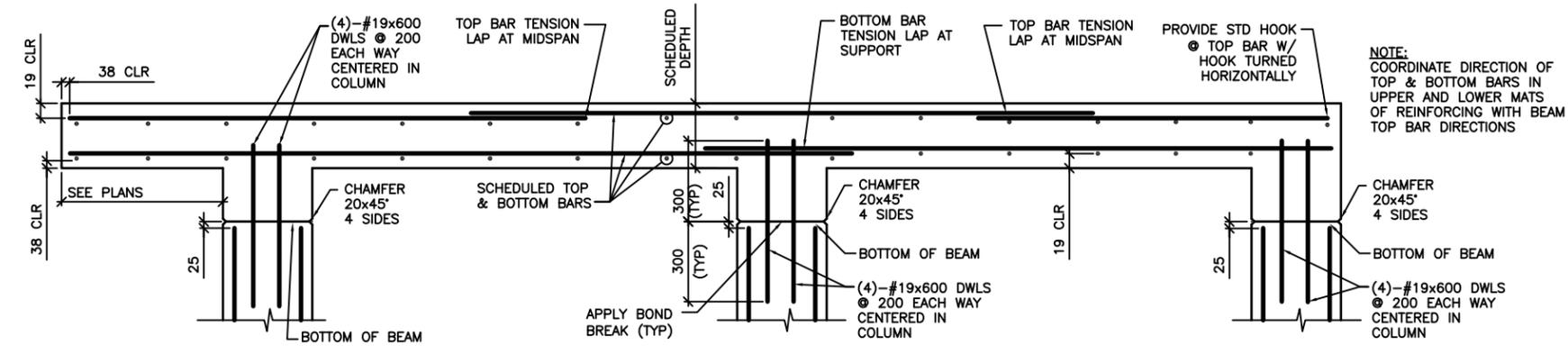
2 SECTION
SCALE: NTS



3 SINGLE SPAN ROOF BEAM REINFORCING DETAIL
SCALE: NTS



B BEAM REINFORCEMENT DETAILS
SCALE: NTS



4 FRAMED SLAB REINFORCING DETAIL
SCALE: NTS

NOTE:
COORDINATE DIRECTION OF TOP & BOTTOM BARS IN UPPER AND LOWER MATS OF REINFORCING WITH BEAM TOP BAR DIRECTIONS

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

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A/E DESIGNER OF RECORD
SEAL:



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

Designed by: KMP/AMM	Checked by: CWV	Submitted by: BAKER
Drawn by: RCG	Reviewed by: LHM	
Date: 2/23/10	Design file no. APO AE 96338	
File name: ANAST08-504	Plot date: 03/09/10	Plot scale: X01

STANDARD DESIGN VARIOUS PROJECTS VARIOUS LOCATIONS, AFGHANISTAN
RMTG STORAGE
BEAM & COLUMN DETAILS

Sheet reference number:
S-504

CONCRETE REINFORCEMENT TENSION DEVELOPMENT/LAP SPLICE SCHEDULE

f'c = 28 MPa					
BAR SIZES	LAP CLASS	UNCOATED BARS			
		TOP BARS		OTHER BARS	
#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/m³) 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)	#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	3900	3900	400	(9)-#25 EW BOTT	-----
F2	3100	3100	300	(8)-#22 EW BOTT	-----
F3	2500	2500	250	(6)-#19 EW BOTT	-----
F4	5400	2900	450	(12)-#22 SHORT BOTT (12)-#25 LONG BOTT	-----
F5	2800	2200	250	(7)-#16 SHORT BOTT (7)-#19 LONG BOTT	-----

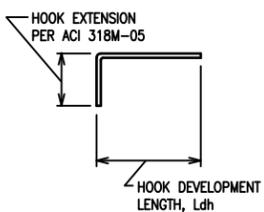
CONCRETE SHEAR WALL SCHEDULE

MARK	TYPE	WALL LENGTH (L) (mm)	WALL REINFORCEMENT		REMARKS
			END ZONE	FIELD	
SW1	C	6400	(5)-#19 @ 225mm OC	#13 @ 300mm OC	-----
SW2	C	6100	(5)-#19 @ 225mm 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)

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



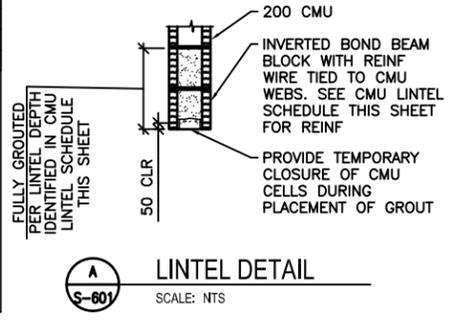
NOTES:

- 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 14 MPa AT 28 DAYS.
 - CONTRACTOR SHALL SUBMIT FOR APPROVAL SHOP DRAWINGS AND SCHEDULES SHOWING SIZE, SPAN, REINFORCEMENT, DETAILS, LOCATIONS, ETC.



BEAM SCHEDULE

MARK	BEAM SIZE (mm)		BEAM REINFORCING						STIRRUPS			REMARKS
	DEPTH	WIDTH	BL	BS	TL	TS	TC	M	SIZE	TYPE	SPACING	
GRADE BEAMS												
GB1	750	400	(2)-#22	(1)-#22	(2)-#19	---	---	---	#13	S3 +T9	d/2	---
GB2	750	400	(2)-#25	(2)-#25	(2)-#25	---	---	---	#13	S3 +T9	d/2	---
ROOF BEAMS												
RB1	600	400	(2)-#22	(1)-#22	(2)-#19	---	---	---	#13	S3+T9	d/2	---
RB2	600	400	(2)-#22	(1)-#22	(2)-#22	---	---	---	#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) TC AT BEAM COLUMN INTERSECTION WHERE REQ'D.

COLUMN SCHEDULE

DESCRIPTION	TYP UON	---	---	---
COLUMN MARK				
TYPE	8-BAR	---	---	---
DIMENSIONS	600mm SQ	---	---	---
VERTICAL REINFORCEMENT	(8)-#25	---	---	---
TIES	#13 @ d/2	---	---	---
TOP OF ROOF ELEVATION	5600mm	---	---	---
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.

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

APPROVED:

A/E DESIGNER OF RECORD
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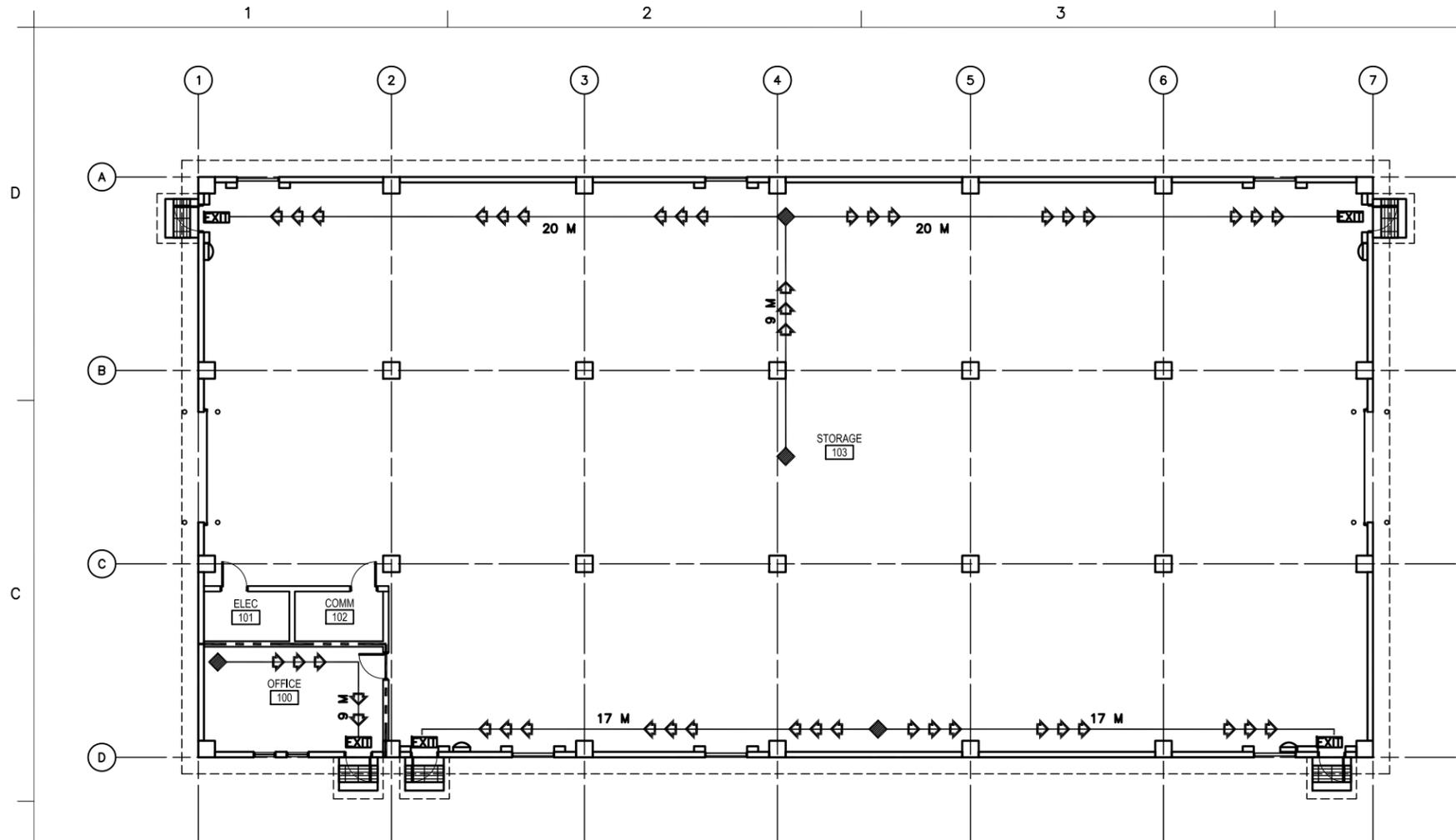
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Checked by: RCC
Drawn by: CWV
Reviewed by: LHM
Submitted by: BAKER

U.S. ARMY CORPS OF ENGINEERS
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STANDARD DESIGN
VARIOUS PROJECTS
VARIOUS LOCATIONS, AFGHANISTAN
RMT/C STORAGE
SCHEDULES

Sheet reference number:
S-601



1
A-001
LIFE SAFETY PLAN
SCALE: 1:100

- LEGEND:**
- ➡ ➡ ➡ DENOTES PATHS OF EXIT TRAVEL
 - EXIT DENOTES DOOR AS AN EMERGENCY EXIT
 - ◆ DENOTES STARTING POINT FOR TRAVEL DISTANCE
 - ☺ DENOTES FIRE EXTINGUISHER LOCATIONS
 - (1) HOUR RATED WALL
 - - - (2) HOUR RATED WALL
 - - - - (3) HOUR RATED WALL

CODE ANALYSIS:

1. **REFERENCES:**
2006 INTERNATIONAL BUILDING CODE (2006 IBC)
2006 LIFE SAFETY CODE (2006 NFPA 101)
2. **IBC OCCUPANCY CLASSIFICATION:**
GROUP S-1
(STORAGE, ORDINARY HAZARD NFPA 101 6.1.13.1 & 6.2.2 AND CHAPTER 42)
3. **TYPE OF CONSTRUCTION (IBC):** TYPE II-B (UNPROTECTED/NONSPRINKLERED)
4. **IBC TABLE 503: ALLOWABLE HEIGHT AND BUILDING AREAS:**
GROUP S-1
ALLOWABLE AREA: 1625 SM
ALLOWABLE HEIGHT: 2 STORIES (16 M)

GROUP S-1
PROPOSED AREA: 895 SM
PROPOSED HEIGHT: 1 STORY (<16 M)
5. **IBC TABLE 601 & 602: FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS FOR TYPE II-B**

BUILDING ELEMENT	RATING (HOUR)	REFERENCE
STRUCTURAL FRAME (COLUMNS, GIRDERS & TRUSSES)	0	TABLE 601
BEARING WALLS EXTERIOR	0	TABLE 601
BEARING WALLS INTERIOR	0	TABLE 601
NONBEARING WALLS & PARTITIONS INTERIOR	0	TABLE 601
FLOOR CONSTRUCTION	0	TABLE 601
ROOF CONSTRUCTION	0	TABLE 601
EXTERIOR WALL	0	TABLE 602
6. **IBC TABLE 803.5 - INTERIOR WALL AND CEILING FINISH REQUIREMENTS FOR S-1 OCCUPANCY/NONSPRINKLERED**

GROUP	EXIT ENCLOSURES AND EXIT PASSAGEWAY	CORRIDORS	ROOMS AND ENCLOSED SPACES
S	A	A	B
7. **NFPA 101 TABLE 7.3.1.2 - OCCUPANT LOAD**
STORAGE = N/A
NFPA 101 42.1.7: USE THE PROBABLE POPULATION: 5
8. **NFPA 101 TABLE 7.3.3.1 - EGRESS CAPACITY**
STORAGE = 5 MM PER OCCUPANT

REQUIRED: 25 MM (5 OCCUPANTS x 5 MM PER OCCUPANT)
PROPOSED EGRESS CAPACITY: 4500 MM: (5) 900 MM DOORS
9. **NFPA 101 PARAGRAPH 42.2.6 AND TABLE 42.2.6 - EXIT ACCESS TRAVEL DISTANCE**
REQUIRED: 61 METERS
PROPOSED: 20 METERS
10. **NFPA 101 PARAGRAPH 42.3.6 - CORRIDORS**
CORRIDORS ARE NOT REQUIRED AS DOORS EXIT DIRECTLY TO OUTSIDE
11. **NFPA 101 PARAGRAPH 42.2.4.1 AND 7.4.1.1 - MINIMUM NUMBER OF EXITS**
REQUIRED: 1 MINIMUM
PROPOSED: 4 EXIT
12. **NFPA 101, TABLE 6.1.14.4.1 - REQUIRED SEPARATION OF OCCUPANCIES**
BUSINESS TO ORDINARY HAZARD STORAGE
REQUIRED: 2 HOUR
PROVIDED: 2 HOUR
13. **NFPA 101, TABLE 8.3.4.2 - OPENING PROTECTIVE**
REQUIRED: 90 MINUTE DOOR IN 2 HOUR FIRE BARRIER
PROVIDED: 90 MINUTE DOOR IN 2 HOUR FIRE BARRIER



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0	2/23/10	Design file no.	
		Drawing code:	
		File name: ANS10R-A-001	
		Plot date: 6/30/10	
		Plot scale: X01	

Designed by: KFC	Checked by: EBB	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 Alameda Drive Ft. Belknap, VA 24108 www.mbakercorp.com		

STANDARD DESIGN
VARIOUS PROJECTS
VARIOUS LOCATIONS, AFGHANISTAN
RMTC STORAGE
LIFE SAFETY PLAN

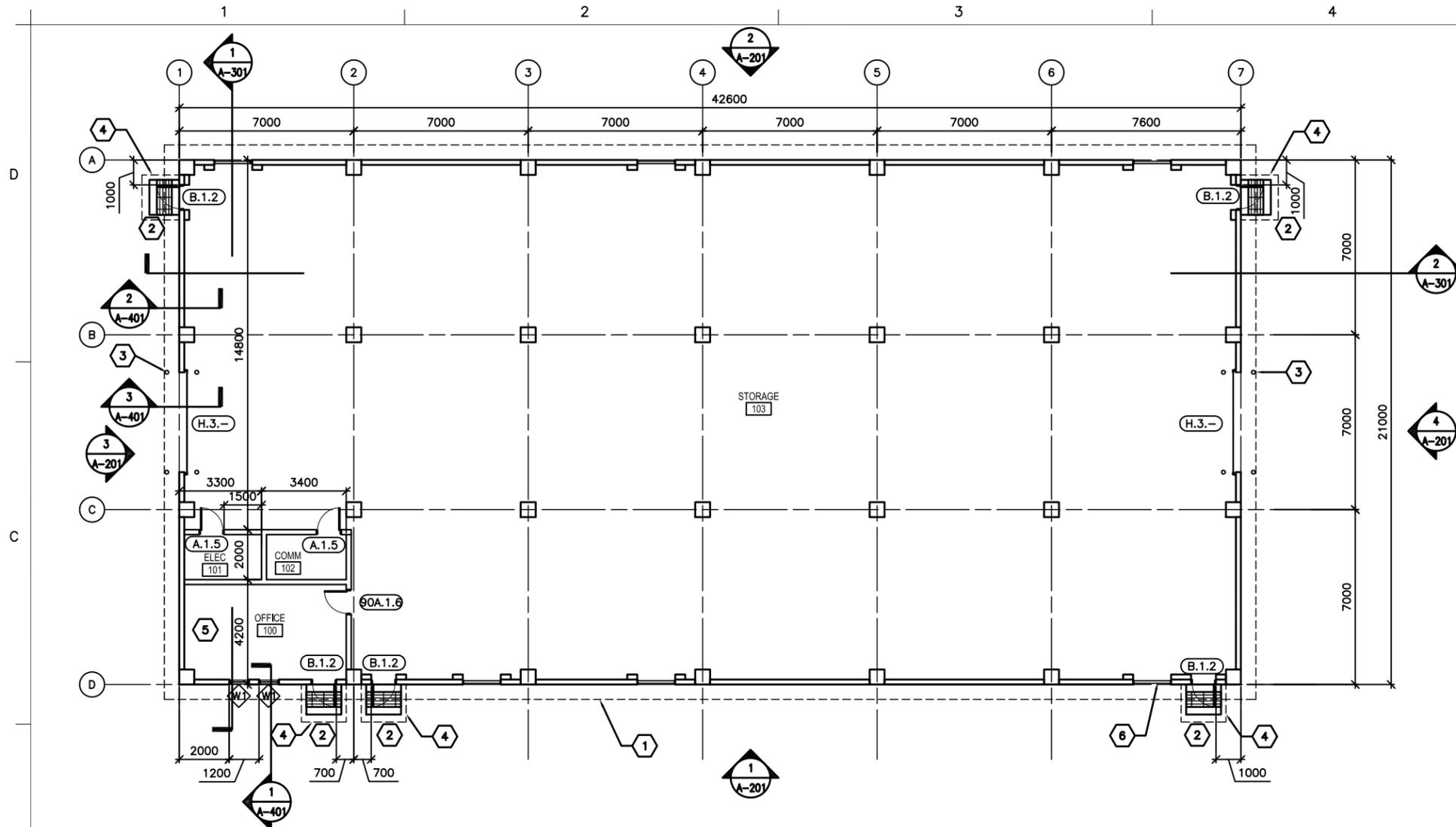
APPROVED:

A/E DESIGNER OF RECORD
SEAL:

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

0 2000 4000
SCALE: 1:100

Sheet
reference
number:
A-001



1 FLOOR PLAN
SCALE: 1:100

GENERAL NOTES:

- A. DIMENSIONS ARE SHOWN TO OUTER EDGE OF EXTERIOR STRUCTURAL COLUMNS, STRUCTURAL COLUMN GRID, EDGE OF INTERIOR PARTITIONS, EDGE OF WINDOW OPENINGS, AND TO HINGE SIDE OF DOOR FRAME OPENINGS.
- B. HINGE SIDE OF OPENINGS FOR DOORS AND FRAMES SHALL BE LOCATED 200 MM FROM THE ADJACENT WALL OR COLUMN, UNLESS NOTED OTHERWISE.
- C. INTERIOR PARTITIONS SHALL BE 200 MM CMU. SEE STRUCTURAL DRAWINGS FOR LOCATION OF CONCRETE SHEAR WALLS.
- D. COSMETIC REPAIR OF MINOR DEFECTS: REPAIR OR FILL MORTAR JOINTS AND MINOR DEFECTS, INCLUDING BUT NOT LIMITED TO SPALLS, IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND PRIOR TO COATING APPLICATION. SURFACES TO BE PAINTED SHALL BE CLEAN AND FREE OF FOREIGN MATTER BEFORE APPLICATION OF PAINT. CLEANING SHALL BE SCHEDULED SO THAT DUST AND OTHER CONTAMINANTS WILL NOT FALL ON NEWLY PAINTED SURFACES.
- E. CONCRETE, PLASTER AND MASONRY SURFACES SHALL BE ALLOWED TO CURE FOR AT LEAST 30 DAYS BEFORE PAINTING. CONCRETE SLABS-ON-GRADE SHALL BE ALLOWED TO CURE 90 DAYS BEFORE STAINING OR SEALING.
- F. DO NOT USE PAINT MATERIALS CONTAINING LEAD CONTENT IN EXCESS OF 0.009 PERCENT OF THE WEIGHT OF THE TOTAL NONVOLATILE CONTENT OF THE PAINT OR THE WEIGHT OF THE DRIED PAINT FILM.
- G. DO NOT USE ANY ASBESTOS CONTAINING MATERIALS (ACM) IN PROJECT. ACM IS DEFINED AS 1% OR MORE BY VOLUME.
- H. DO NOT USE PAINT MATERIALS CONTAINING MERCURIAL FUNGICIDES.
- I. FACTORY PRIMED METAL DOORS AND FRAMES SHALL RECEIVE TWO COATS OF PAINT.
- J. FILL REMAINING SPACE AT PENETRATIONS IN FIRE-RATED FLOORS, PARTITIONS AND CEILINGS WITH APPROPRIATE FIRESTOPPING MATERIALS.
- K. ALL CEILING FINISHES SHALL BE PAINTED STRUCTURE, UNLESS OTHERWISE NOTED.
- L. ALL WALL FINISHES SHALL BE PAINTED STRUCTURE, UNLESS OTHERWISE NOTED.
- M. ALL FLOOR FINISHES SHALL BE EPOXY SEALED CONCRETE.

KEY NOTES:

- 1. LINE OF ROOF OVERHANG ABOVE.
- 2. CONCRETE STOOP WITH GRATE - SEE DETAIL 1/A-503.
- 3. BOLLARD - SEE STRUCTURAL DRAWINGS FOR TYPICAL DETAIL.
- 4. CANOPY - SEE DETAIL 2/A-504.
- 5. OFFICE WALLS & CEILING TO BE PAINTED PLASTER.
- 6. LOUVER - SEE SHEET M-101.

LEGEND:

- XXX DOOR FRAME AND HARDWARE TYPE, SEE SHEET A-601
- A WINDOW TYPE, SEE SHEET A-601
- X KEY NOTE

ABBREVIATIONS:

COMM	COMMUNICATIONS	JAN	JANITOR
ELEC	ELECTRICAL	CLOS	CLOSET
MECH	MECHANICAL		

APPROVED:

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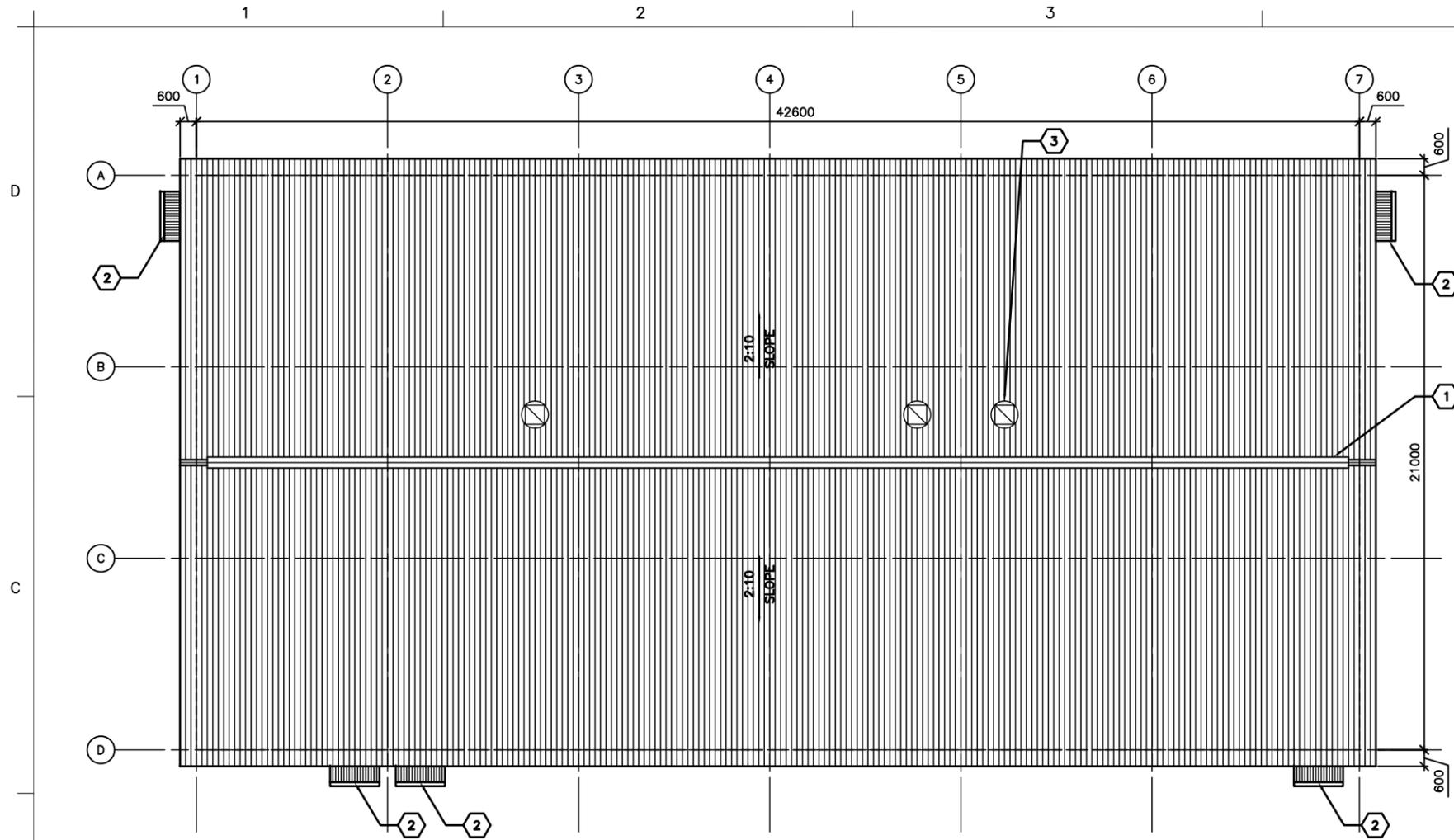
Appr.	Date	Description

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Date:	2/23/10
Design file no.:	
Drawing code:	
File name:	ANASTOR-01
Plot date:	6/30/10
Plot scale:	X
Submitted by:	BAKER
Checked by:	NLU
Drawn by:	NLU
Designed by:	KPC
U.S. Army Corps of Engineers	
Afghanistan Engineer District	
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STANDARD DESIGN
VARIOUS PROJECTS
VARIOUS LOCATIONS, AFGHANISTAN
RMTC STORAGE
FLOOR PLAN

Sheet reference number:
A-101





1
A-102
ROOF PLAN
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. UNLESS OTHERWISE NOTED, NOTES, DETAILS OR FEATURES INDICATED FOR ONE CONDITION SHALL BE APPLICABLE FOR ALL ALIKE AND SIMILAR CONDITIONS.
- C. STOCKPILING OF MATERIALS, EQUIPMENT AND ANY OTHER ITEMS ON THE ROOF IS PROHIBITED.
- D. ROOFS SHALL BE CORRUGATED METAL ROOF PANELS ON COLD-FORMED METAL FRAMING ON CONCRETE SLAB.



Rev.	Date	Description
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		Drawing code
		File name: ANASTORA-02
		Plot date: 6/30/10
		Plot scale: X2

KEY NOTES:

- 1. CONTINUOUS METAL RIDGE VENT SEE DETAIL 4/A-501.
- 2. CANOPY - SEE DETAIL 2/A-504.
- 3. EXHAUST FAN - SEE SHEET M-101.

Designed by: KFC	Checked by: EJB	Reviewed by: LHM	Submitted by: BAKER
Date: 2/23/10	Design file no.:	Drawing code:	File name: ANASTORA-02
U.S. ARMY CORPS OF ENGINEERS AFGHANISTAN ENGINEER DISTRICT APO AE 96338			
Michael Baker Jr., Inc. A unit of Michael Baker Corporation 100 Alameda Drive Ft. Belknap, VA 24108 www.mbakercorp.com			

STANDARD DESIGN
VARIOUS PROJECTS
VARIOUS LOCATIONS, AFGHANISTAN
RMTC STORAGE
ROOF PLAN

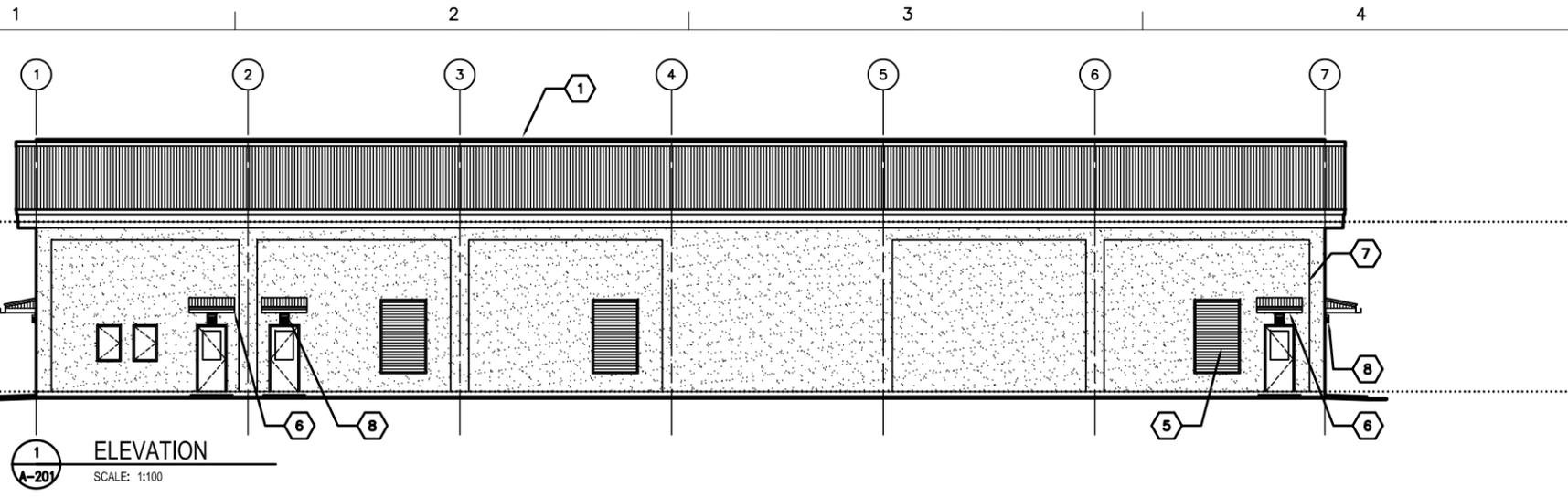
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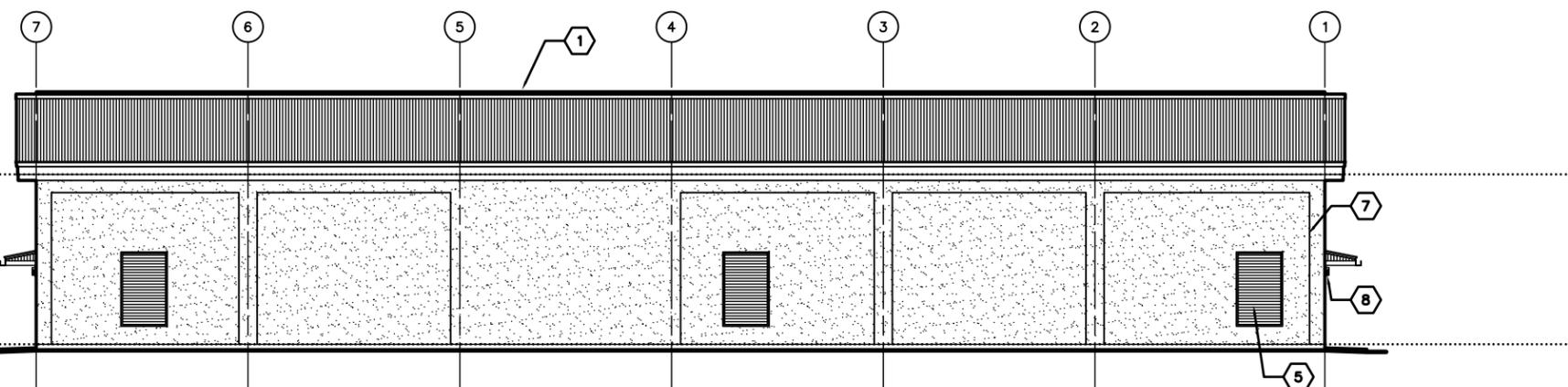
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LINEAR DIMENSIONS SHOWN
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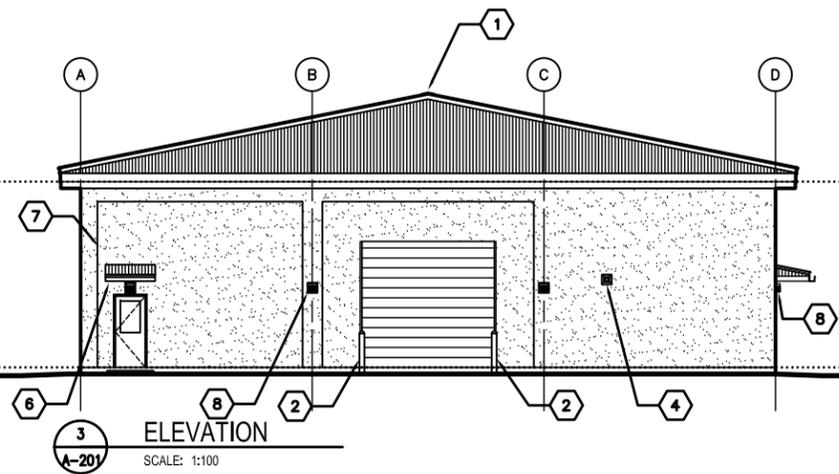
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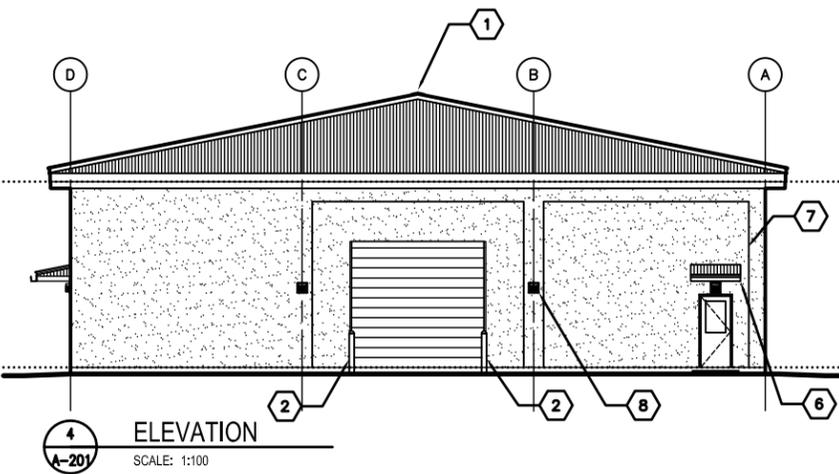
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ELEVATION
A-201
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2
ELEVATION
A-201
SCALE: 1:100



3
ELEVATION
A-201
SCALE: 1:100



4
ELEVATION
A-201
SCALE: 1:100

GENERAL NOTES:

- A. COORDINATE SIZE AND LOCATION OF OPENINGS FOR MECHANICAL ITEMS WITH MECHANICAL DRAWINGS.
- B. PROVIDE STRUCTURAL LINTELS AS REQUIRED - SEE STRUCTURAL DRAWINGS
- C. ALL EXTERIOR WALL FINISHES SHALL BE STUCCO OVER CMU AND CONCRETE SUBSTRATES. PROVIDE CONTROL JOINTS IN STUCCO WALL FINISH.
- D. ROOF 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. BOLLARD - SEE STRUCTURAL DRAWINGS FOR TYPICAL DETAIL
- 3. NOT USED.
- 4. EXHAUST FAN, LOCATE TOP OF WALL PENETRATION 2800 MM ABOVE FINISHED FLOOR - SEE MECHANICAL DRAWINGS.
- 5. LOUVER 600 AFF - SEE SHEET M-101.
- 6. CANOPY - SEE DETAIL 1/A-504.
- 7. STUCCO CONTROL JOINT - SEE DETAIL 2A/A-501.
- 8. EXTERIOR LIGHT FIXTURE - SEE EXTERIOR



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Designed by KFC	Checked by EJB	Drawn by NLJ	Reviewed by LHM	Submitted by BAKER
Date 2/23/10	Design file no.	Drawing code	File name ANASTOR-A-201	Plot date 6/30/10
U.S. ARMY CORPS OF ENGINEERS AFGHANISTAN ENGINEER DISTRICT APO AE 96338				
Michael Baker Jr., Inc A unit of Michael Baker Corporation Arling Business Park 100 Arling Drive Arling, VA 22108 www.mbakercorp.com				

STANDARD DESIGN
VARIOUS PROJECTS
VARIOUS LOCATIONS, AFGHANISTAN
RMTC STORAGE
ELEVATIONS

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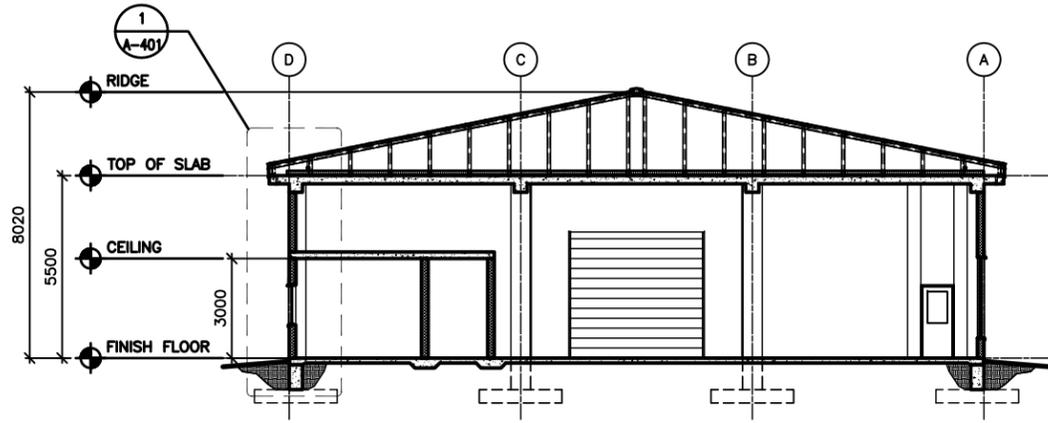
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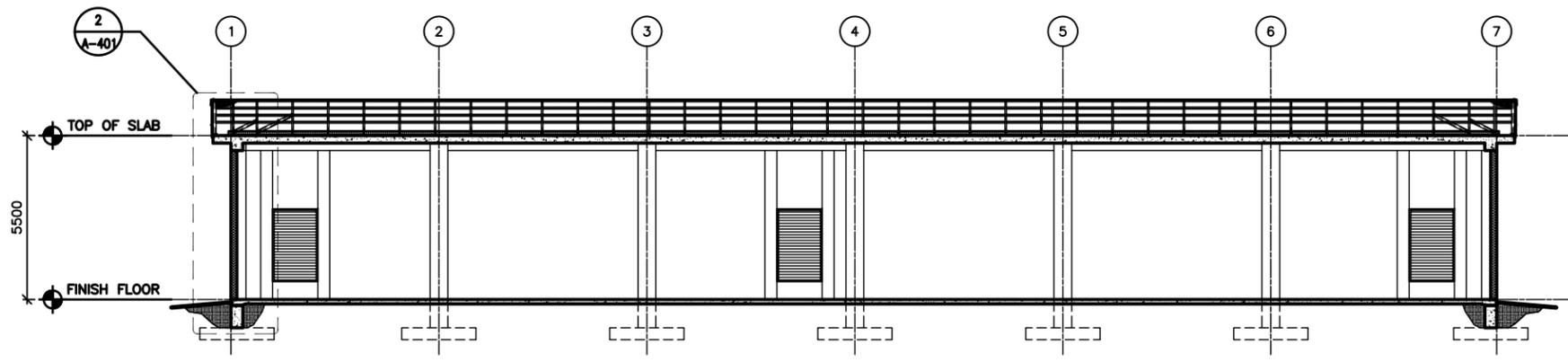
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1 BUILDING SECTION
A-301 SCALE: 1:100

C

B



2 BUILDING SECTION
A-301 SCALE: 1:100

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Designed by: KFC	Checked by: EJB	Drawn by: NLJ	Reviewed by: LHM	Submitted by: BAKER
Date: 2/23/10	Design file no.:	Drawing code:	File name: ANASTORA-301	Plot date: 6/30/10
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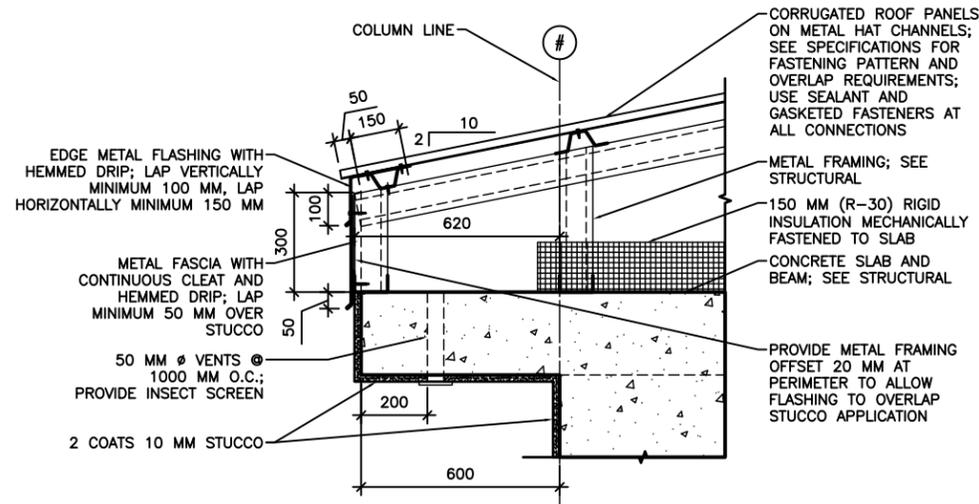
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VARIOUS PROJECTS
VARIOUS LOCATIONS, AFGHANISTAN
RMTC STORAGE
BUILDING SECTIONS

APPROVED:

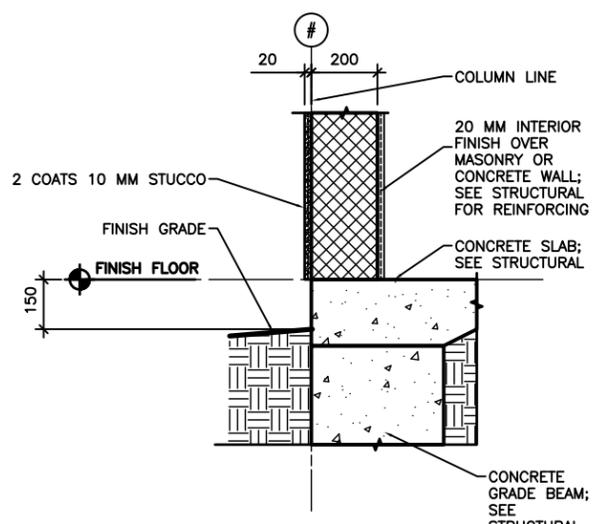
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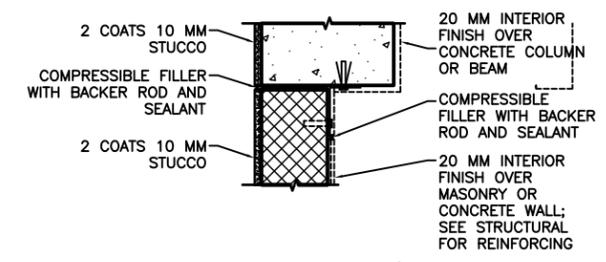
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reference
number:
A-301



1 EAVE DETAIL
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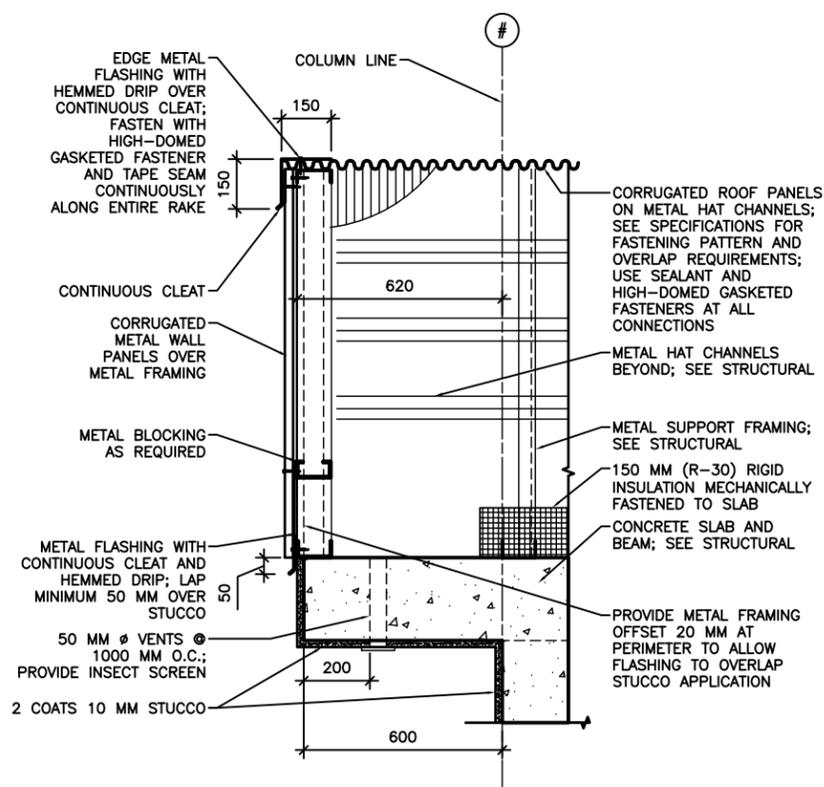


2 STUCCO BASE DETAIL
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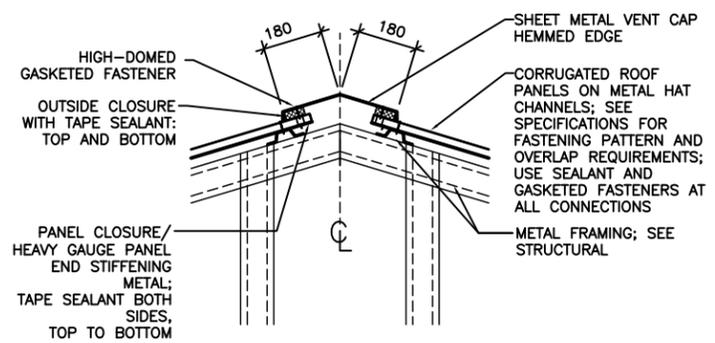


NOTE: DETAIL TYPICAL AT ALL WALL/COLUMN AND WALL/BEAM LOCATIONS, SEE ALTERNATE BRACING DETAIL BELOW 2B/A-501.

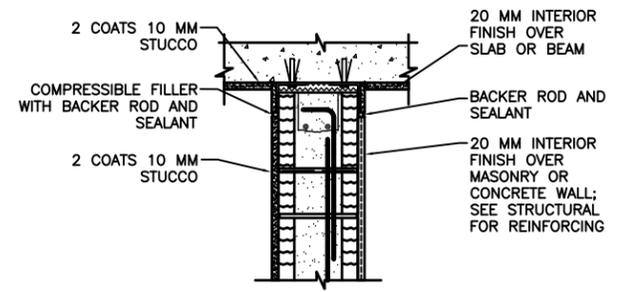
2A STUCCO JOINT DETAIL
 SCALE: 1:10



3 RAKE/EAVE DETAIL
 SCALE: 1:10



4 RIDGE VENT DETAIL
 SCALE: 1:10



2B ALTERNATE BRACING DETAIL
 SCALE: 1:10

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



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Designed by: KFC	Checked by: EBB	Drawn by: NLJ	Reviewed by: LHM	Submitted by: BAKER
Date: 2/23/10	Design file no.:	Drawing code:	File name: ANASTORA-501	Plot date: 6/30/10
U.S. ARMY CORPS OF ENGINEERS AFGHANISTAN ENGINEER DISTRICT APO AE 96338 Michael Baker Corp., Inc. A unit of Michael Baker Corporation 100 Arapahoe Drive Denver, CO 80202 www.mbakercorp.com				

STANDARD DESIGN
 VARIOUS PROJECTS
 VARIOUS LOCATIONS, AFGHANISTAN
 RMTC STORAGE
 EXTERIOR
 DETAILS

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A-501



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Designed by KPC	Checked by EBB	Drawn by LHM	Submitted by BAKER
Date 2/23/10	Design file no. 	Drawing code 	File name ANASTORA-502

STANDARD DESIGN
VARIOUS PROJECTS
VARIOUS LOCATIONS, AFGHANISTAN

RMTG STORAGE

HEAD, JAMB & SILL
DETAILS

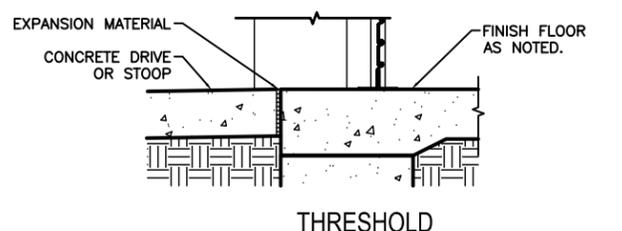
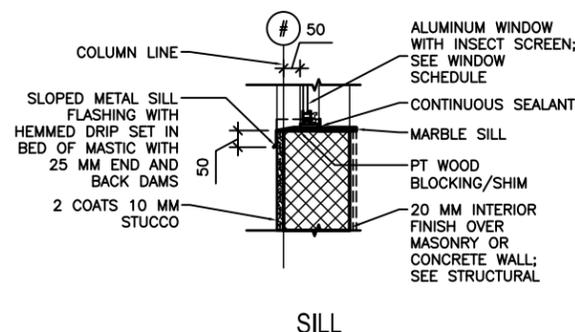
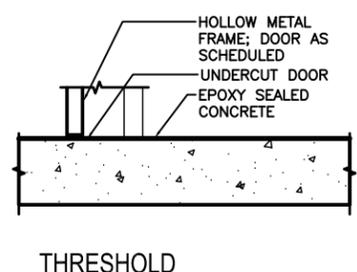
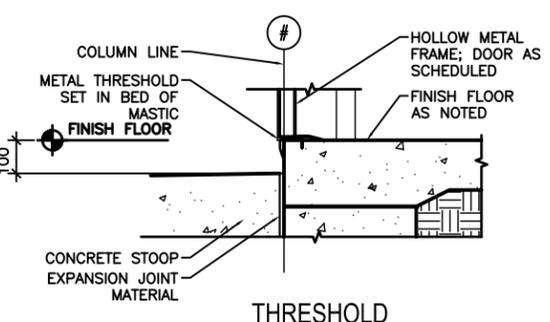
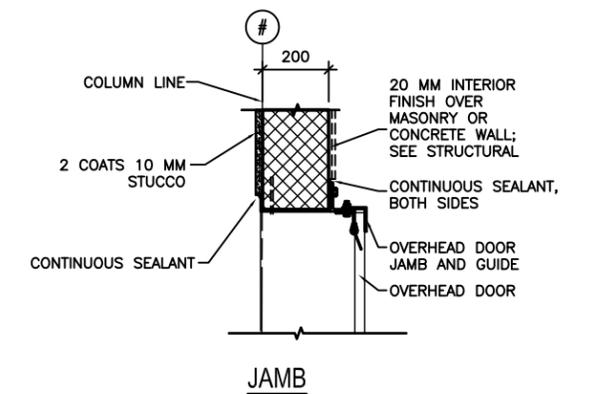
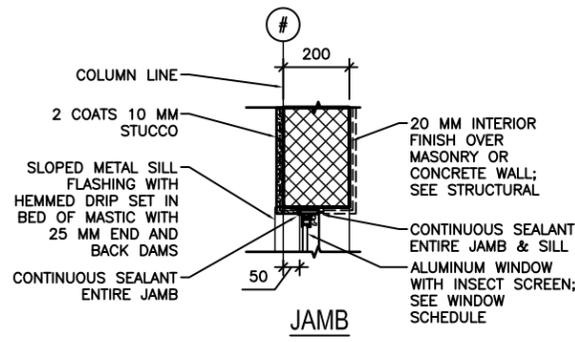
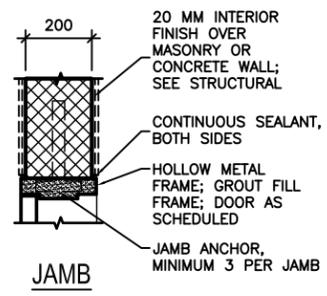
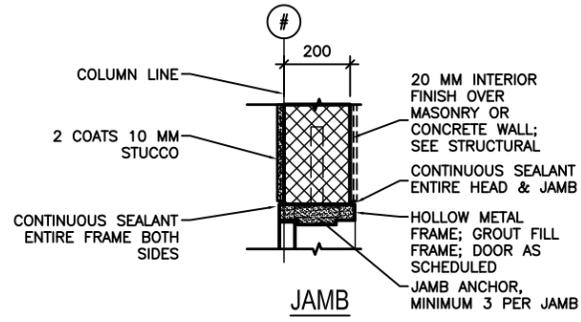
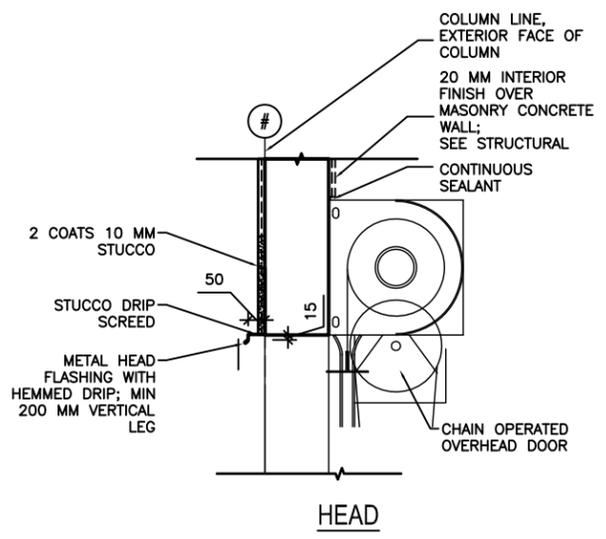
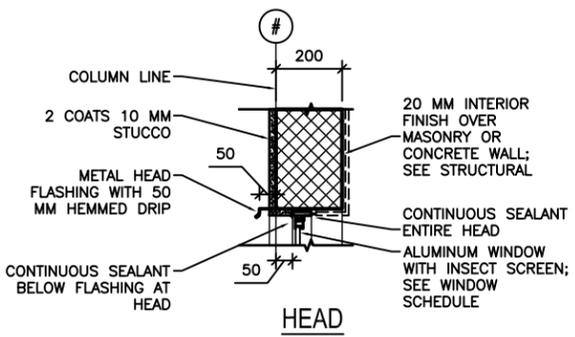
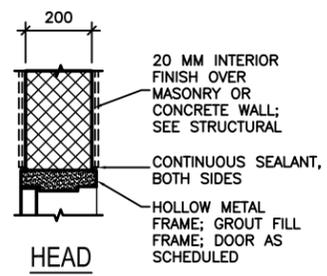
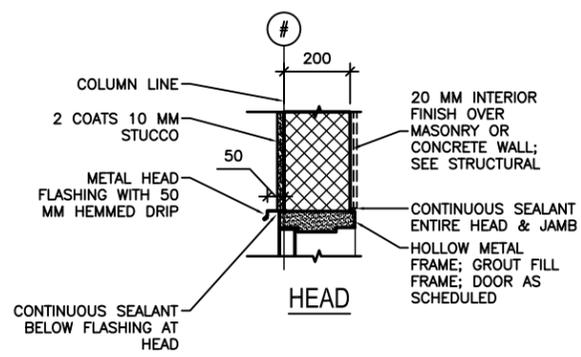
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D

C

B

A



1 EXTERIOR DOOR DETAILS
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2 INTERIOR DOOR DETAILS
SCALE: 1:10

3 EXTERIOR WINDOW DETAILS
SCALE: 1:10

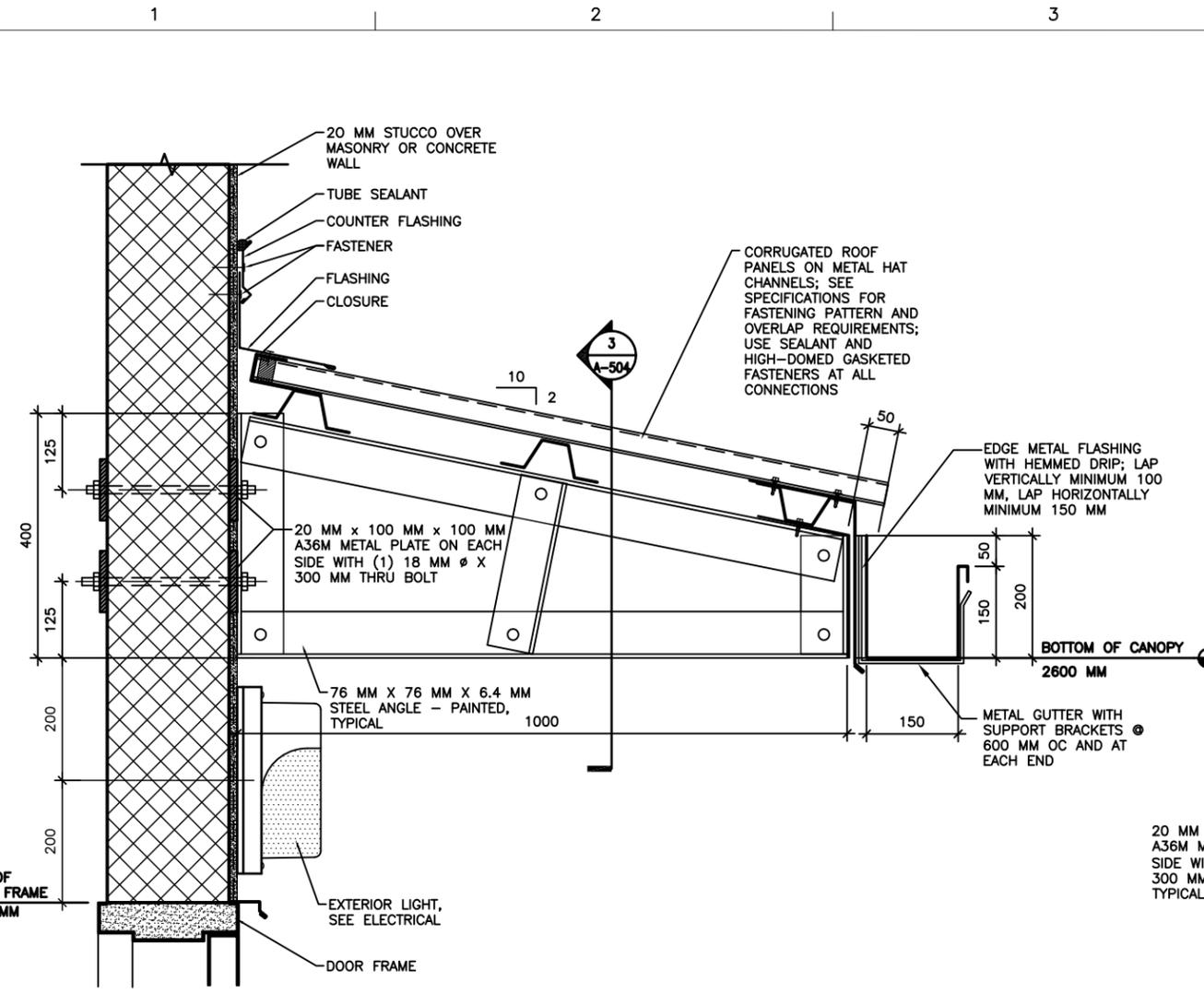
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LINEAR DIMENSIONS SHOWN
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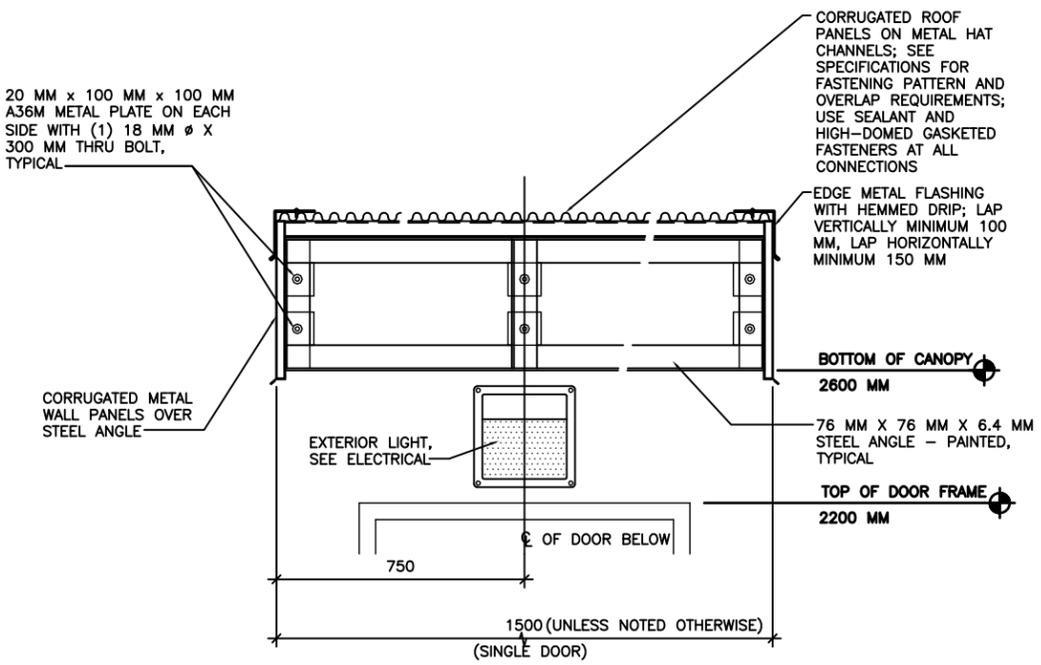
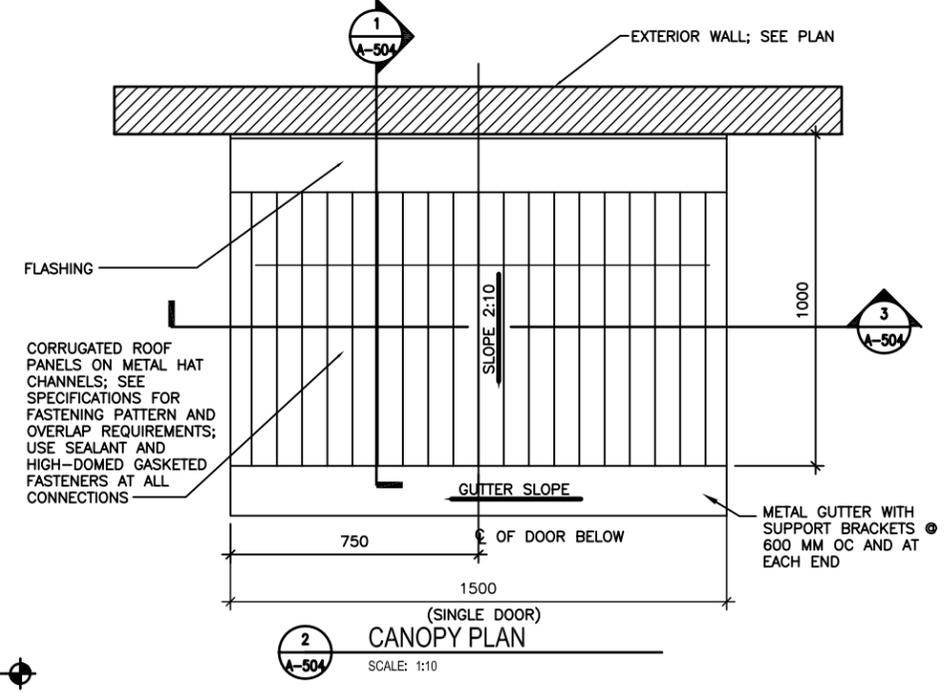


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1 CANOPY CONNECTION DETAILS
SCALE: 1:5



3 CANOPY CONNECTION DETAILS
SCALE: 1:10

SHEET NOTES:
1. SEE A-101 FOR FLOOR PLANS AND CANOPY LOCATIONS.

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A/E DESIGNER OF RECORD
SEAL:

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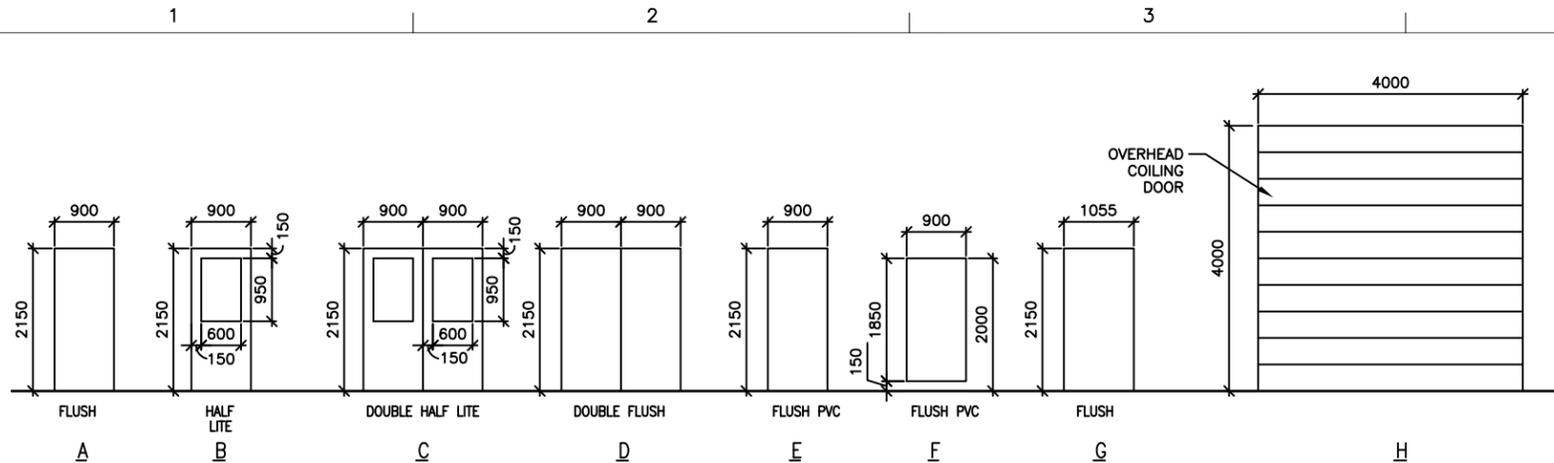


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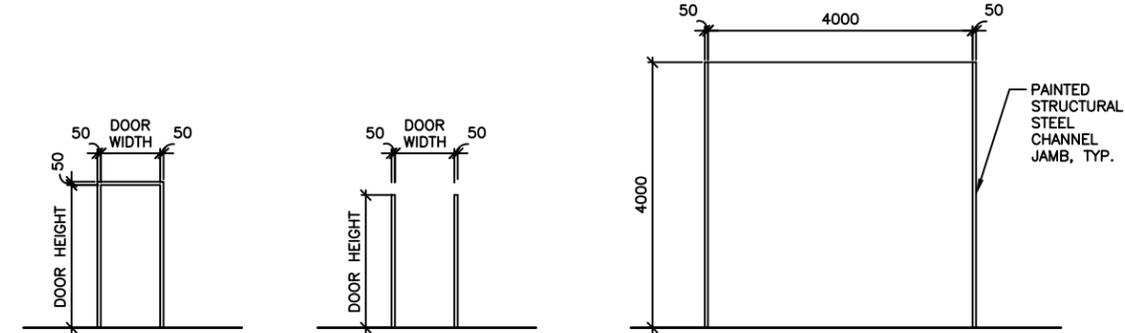
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U.S. ARMY CORPS OF ENGINEERS AFGHANISTAN ENGINEER DISTRICT APO AE 96338 Michael Baker, Jr., Inc. A unit of Michael Baker Corporation Alaska Business Park 100 Alaska Drive, Anchorage, AK 99508 www.mbakercorp.com				

STANDARD DESIGN VARIOUS PROJECTS VARIOUS LOCATIONS, AFGHANISTAN
RMTC STORAGE
CANOPY DETAILS

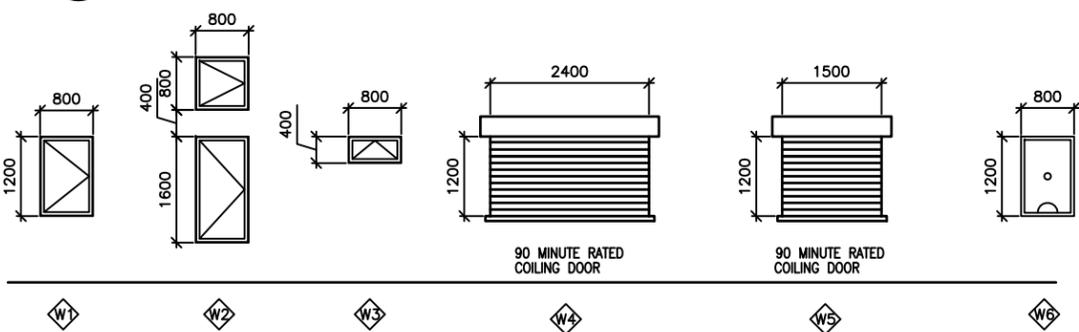
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1 DOOR TYPES
A-601 SCALE: 1:50



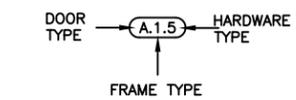
2 FRAME TYPES
A-601 SCALE: 1:50



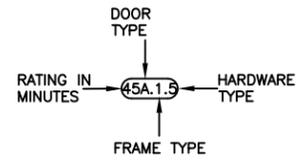
3 WINDOW TYPES
A-601 SCALE: 1:50

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.



4 DOOR TAG
A-601 SCALE: NTS



5 RATED DOOR TAG
A-601 SCALE: NTS

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.

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.

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.

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



Rev.	Date	Description
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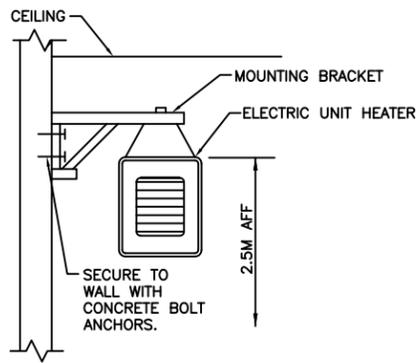
Designed by: KFC	Checked by: EBB	Drawn by: NJL	File name: ANASTOR-A601
U.S. ARMY CORPS OF ENGINEERS AFGHANISTAN ENGINEER DISTRICT APO AE 96338	Michael Baker Jr., Inc. A unit of Michael Baker Corporation 100 Arapahoe Drive Suite 15108 www.mbakercorp.com	Submitted by: BAKER	Plot date: 03/09/10 Plot scale: X01

STANDARD DESIGN VARIOUS PROJECTS VARIOUS LOCATIONS, AFGHANISTAN	RMTC STORAGE	WINDOW AND DOOR SCHEDULES
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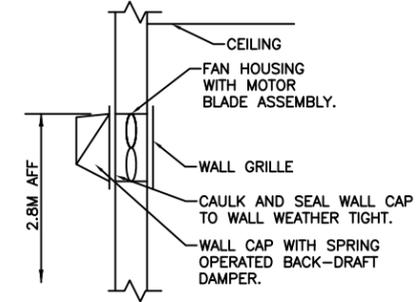
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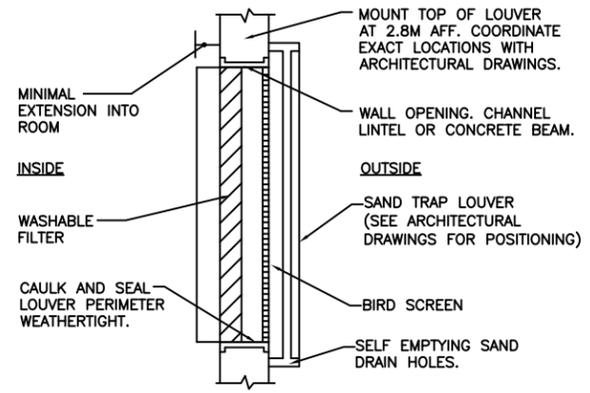
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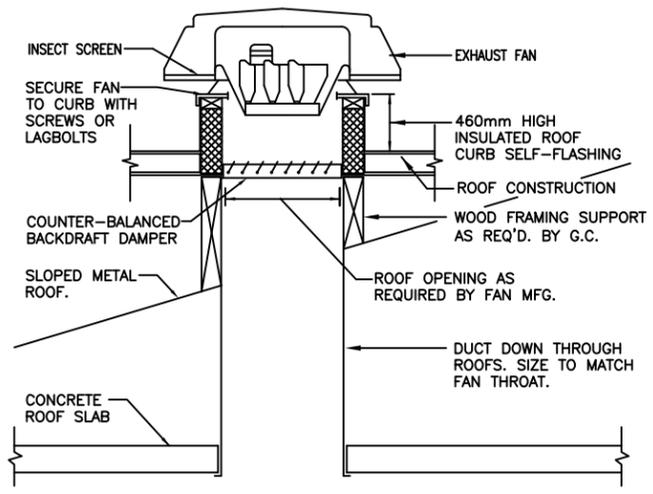
1 ELECTRIC UNIT HEATER MOUNTING DETAIL
M-101/N.T.S.



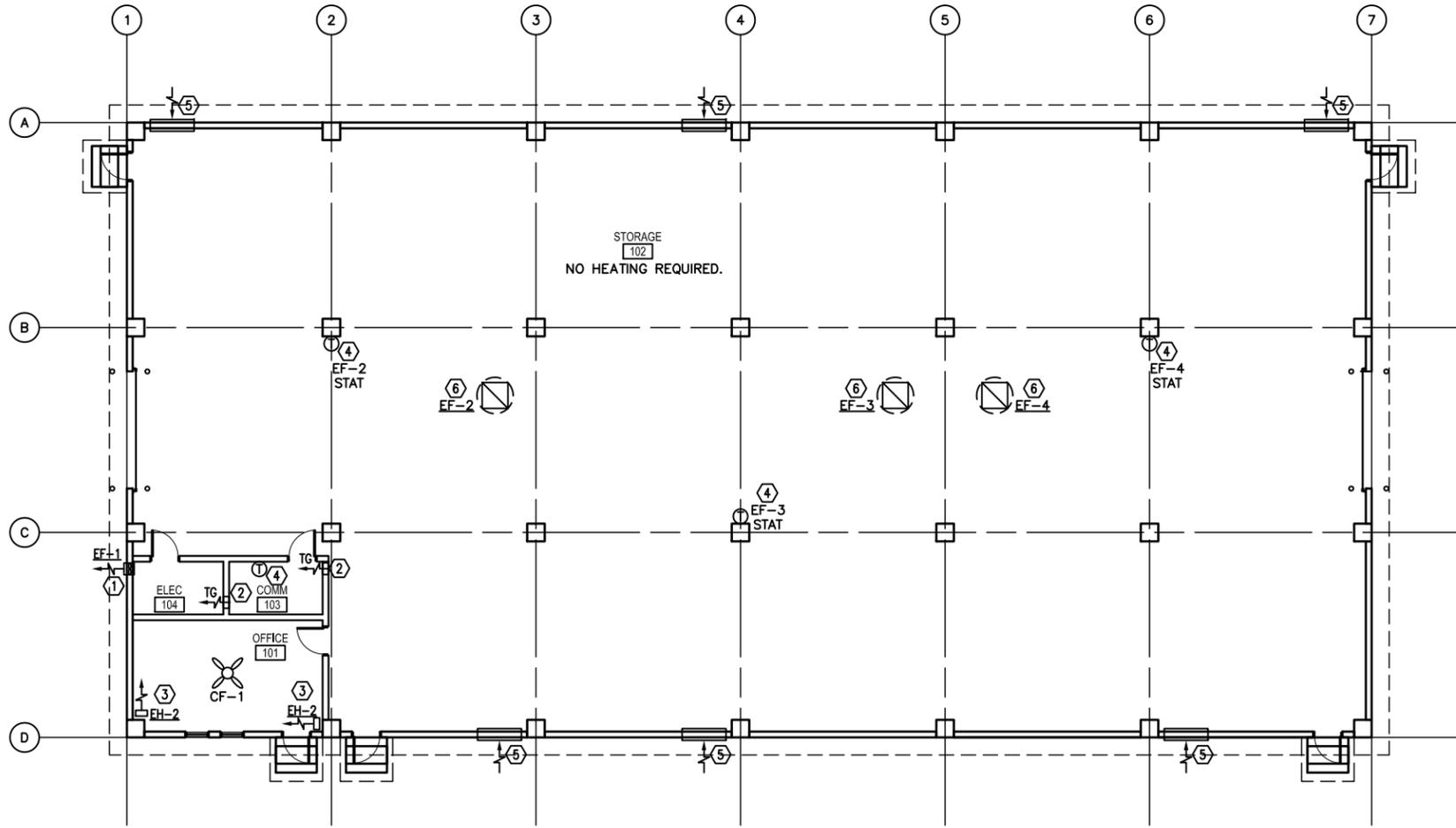
2 WALL EXHAUST FAN DETAIL
M-101/N.T.S.



3 FILTERED SAND TRAP LOUVER
M-101/N.T.S.



4 ROOF MOUNTED EXHAUST FAN
M-101/N.T.S.



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

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:

- (X) KEY NOTE
- (.050) AIR VOLUME IN CUBIC METERS PER SECOND (CMS)
- VOLUME DAMPER
- (T) THERMOSTAT WITH LOCKING COVER
- UC DOOR UNDERCUT
- TG TRANSFER GRILLE

ABBREVIATIONS:

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

KEY NOTE:

- WALL EXHAUST FAN WITH SPRING OPERATED BACK-DRAFT DAMPER.
- 200x150 (8x6) TRANSFER GRILLE. MOUNT GRILLE 800mm BELOW CEILING. COORDINATE LOCATION IN FIELD WITH EC.
- UNIT HEATER SECURED FROM WALL. SEE DETAIL THIS SHEET.
- THERMOSTAT MOUNTED 2M (6.5') AFF, STAT SHALL BE INTERLOCKED WITH CORRESPONDING EXHAUST FAN, SET FAN TO ENERGIZE ON RISE IN TEMPERATURE ABOVE 30°C (86°F).
- (2) 1.5x1.2 (60x48) INTAKE LOUVERS 1 STACKED ON TOP OF THE OTHER. SEE ARCHITECTURAL ELEVATIONS FOR EXACT LOCATIONS HOLD BOTTOM LOUVER 600mm AFF. PROVIDE WEATHER PROOF LOUVERS W/ 50mm (2") WASHABLE FILTER AND SAND TRAP. SEE DETAIL 3 THIS SHEET.
- ROOF MOUNTED EXHAUST FAN ON FACTORY CURB. EXTEND DUCT DOWN THROUGH CONCRETE ROOF SLAB. DUCT SIZE SHALL MATCH FAN THROAT.

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

- NOTES:
- UNIT HEATERS SHALL HAVE TAMPER PROOF INTEGRAL STATS.
 - COORDINATE LOCATION AND ORIENTATION IN FIELD.

NO.	TYPE	FAN CMS	DRIVE	HP	SP mmH2O	ELECTRICAL DATA	SWITCH
EF-1	WALL	0.045	DIRECT	FRACT	13	220/1/50	W/ STAT
EF-2	ROOF	3.300	DIRECT	3	9.5	220/1/50	W/ STAT
EF-3	ROOF	3.300	DIRECT	3	9.5	220/1/50	W/ STAT
EF-4	ROOF	3.300	DIRECT	3	9.5	220/1/50	W/ STAT

- NOTE:
- FANS SHALL HAVE SPRING OPERATED BACK DRAFT DAMPER.

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

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

APPROVED:

A/E DESIGNER OF RECORD
SEAL:

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



Date	Appr.	Description

Date: 02/23/10
 Design file no.:
 Drawing code:
 File name: ANASTOIA-101
 Plot date: 03/02/10
 Plot scale: 1:100

Designed by: RVL
 Drawn by: JUN
 Checked by: CJM
 Reviewed by: MRS
 Submitted by: BAKER

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STANDARD DESIGN
 VARIOUS PROJECTS
 VARIOUS LOCATIONS, AFGHANISTAN
 RMTC STORAGE
 HVAC - FLOOR PLAN,
 SCHEDULES AND DETAILS

Sheet
 reference
 number:
M-101

GENERAL NOTES:

1. REFER TO DRAWING #E-001 FOR THE ELECTRICAL SYMBOLS LIST.
2. REFER TO DRAWING #E-501 FOR THE POWER RISER.
3. REFER TO DRAWING #E-602 FOR PANEL SCHEDULES.
4. COORDINATE EXACT MOUNTING LOCATION OF DISCONNECTING MEANS FOR MECHANICAL AND PLUMBING EQUIPMENT IN THE FIELD.
5. FUSIBLE SAFETY SWITCHES THAT ARE NOT OTHERWISE IDENTIFIED SHALL BE 380V, 1P, 30A FUSED SAFETY SWITCHES WITH 20A FUSES.

NUMBERED NOTES:

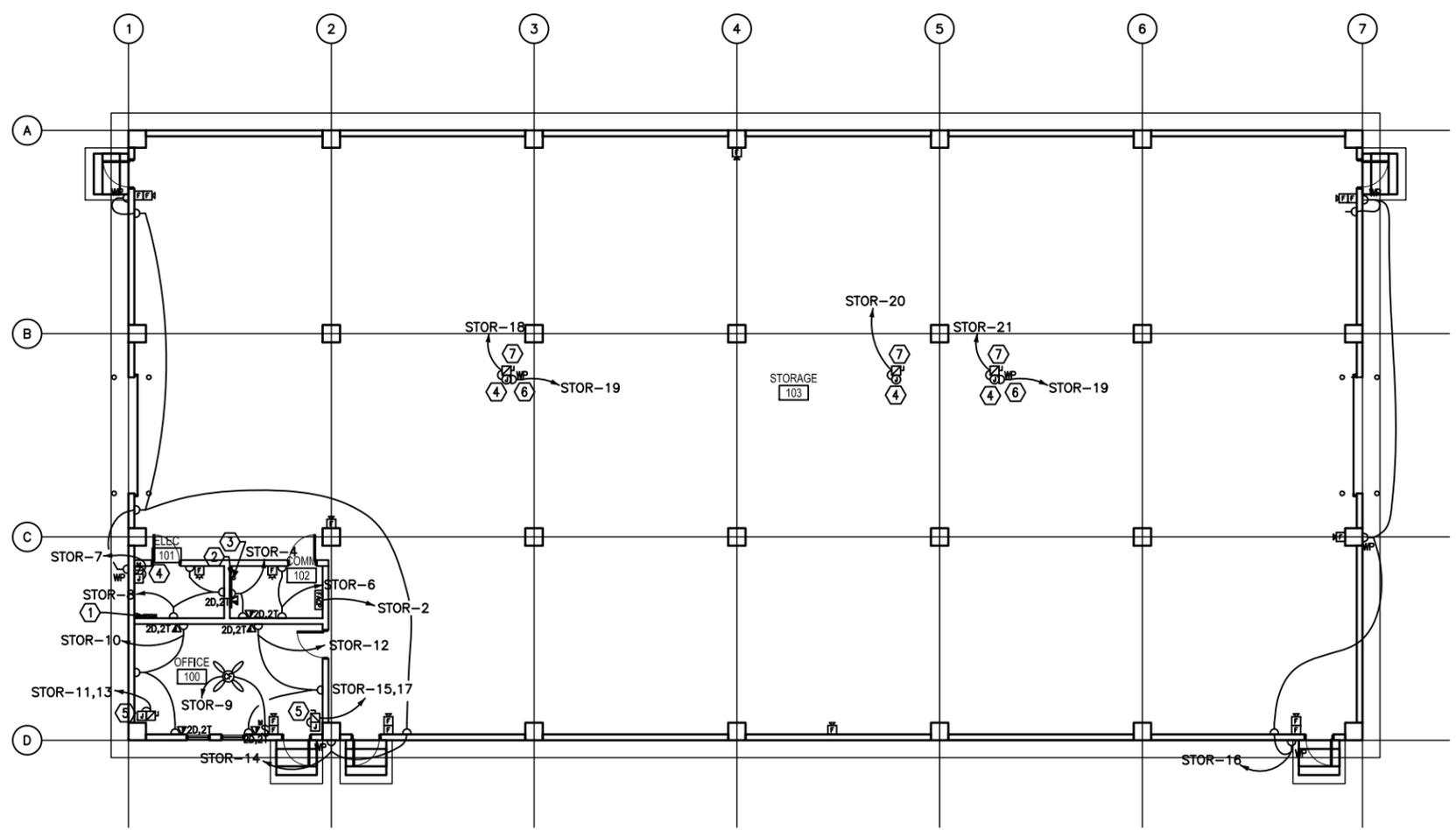
- ① PANEL STOR.
- ② PROVIDE A 1200mm X 2400mm SHEET OF PLYWOOD PAINTED WITH FIRE RESISTANT PAINT FOR MOUNTING TELECOMMUNICATIONS EQUIPMENT.
- ③ PROVIDE CONDUIT STUB UP IN THE ROOM FOR INCOMING TELECOMMUNICATIONS SERVICES FROM THE CENTRAL COMMUNICATIONS SYSTEM IN THE GARRISON.
- ④ PROVIDE POWER CONNECTION TO EXHAUST FANS. SEE DRAWINGS #M-101 AND #E-602 FOR MORE INFORMATION.
- ⑤ PROVIDE POWER CONNECTION TO ELECTRIC UNIT HEATER #2. SEE DRAWINGS #M-101 AND #E-602 FOR MORE INFORMATION.
- ⑥ CONTRACTOR SHALL PROVIDE WEATHER PROOF RECEPTACLE AT 18" ABOVE FINISHED ROOF MOUNTED TO MECHANICAL EQUIPMENT HOUSING. RECEPTACLE SHALL BE WITHIN 7M OF ALL ROOFTOP EQUIPMENT.
- ⑦ PROVIDE 220V, 1P, 30A FUSED SAFETY SWITCH WITH 30A FUSES.



Rev	Date	Description	Appr.	Date

Designed by: KJR	Checked by: JRG	Date: 2/23/10	Rev: 0
Drawn by: EUB	Reviewed by: JRG	Design file no.	Drawing code:
Submitted by: BAKER	File name: 100	Prot site:	Prot code:

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**RMTC STORAGE
FLOOR PLAN - POWER & SYSTEMS**
SCALE: 1:100

APPROVED:

A/E DESIGNER OF RECORD
SEAL:



STANDARD DESIGN
VARIOUS PROJECTS
VARIOUS LOCATIONS, AFGHANISTAN
RMTC STORAGE
ELECTRICAL POWER AND SYSTEMS PLAN

Sheet
reference
number:
E-102

STRUCTURAL DESIGN CRITERIA

ALL DESIGNS SHALL CONFORM TO THE PROVISIONS OF THE IBC 2006 AS APPLICABLE.

1.0 DESIGN LOADS

1.1 DEAD LOADS

1.1.1 ROOF DEAD LOADS

	MAXIMUM GRAVITY LOAD	MINIMUM GRAVITY LOAD
MISC	0.05 KPa	0.00 KPa
	0.05 KPa	0.00 KPa

1.1.2 ROOF DEAD LOADS – CONCRETE FRAMING

	MAXIMUM GRAVITY LOAD
CONC FLAT SLAB	6.00 KPa
MISC	0.05 KPa
	6.05 KPa

1.2 LIVE LOADS (PER IBC 2006)

1.2.1 ROOF LIVE LOADS: ALL BUILDINGS

GREATER OF 1.0 KPa MINIMUM OR SNOW LOAD

1.2.2 SLAB-ON-GRADE LIVE LOADS

LIVE LOAD 12.0 KPa

1.3 SNOW LOADS (PER IBC 2006)

1.3.1 DESIGN PARAMETERS

GROUND SNOW LOAD (per UFC 3-310-01) PER LOCAL CONDITION
 SNOW IMPORTANCE FACTOR 1.0 KPa
 SNOW EXPOSURE FACTOR 1.0 KPa

1.4 SEISMIC LOADS (PER IBC 2006 & UFC 3-310-04)

1.4.1 SEISMIC PARAMETERS – LOAD BEARING MASONRY

SEISMIC OCCUPANCY CATEGORY II
 SEISMIC IMPORTANCE FACTOR (I) 1.0
 SEISMIC SITE CLASS D
 Ss 1.280
 S1 0.510
 Sds 0.853
 Sd1 0.510
 SEISMIC DESIGN CATEGORY D
 SEISMIC RESISTING SYSTEM BEARING WALL SYSTEM
 SPECIAL REINF SHEAR WALLS
 RESPONSE MODIFICATION FACTOR (R) 5.0
 RESPONSE COEFFICIENT (Cs) 0.170
 SEISMIC ANALYTICAL PROCEDURE EQUIV LATERAL FORCE
 SEISMIC BASE SHEAR 284.7kN

1.5 WIND LOADS (PER IBC 2006)

1.5.1 DESIGN PARAMETERS

BASIC WIND SPEED 137 Km/h
 WIND IMPORTANCE FACTOR 1.0
 WIND EXPOSURE CATEGORY D
 DIRECTIONALITY COEFFICIENT (Kd) 0.85
 TOPOGRAPHIC FACTOR (Kzt) 1.0

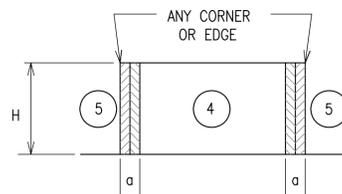
1.5.2 DESIGN WIND PRESSURE – MAIN WINDFORCE RESISTING SYSTEM

LOCATION	CORNER ZONE WIDTH "a"	MEAN ROOF HEIGHT "h"	WINDWARD WALL (@ MEAN ROOF HEIGHT)	LEEWARD WALL (@ MEAN ROOF HEIGHT)	ROOF
FIELD ZONE	N/A	3790mm	508 N/m ²	286 N/m ²	867 N/m ²
CORNER ZONE	900mm	3790mm	776 N/m ²	421 N/m ²	-1340 N/m ²

a = 10% OF LEAST HORIZONTAL DIMENSION OR 0.4h, WHICHEVER IS SMALLER, BUT NOT LESS THAN EITHER 4% OF LEAST HORIZONTAL DIMENSION OR 0.9M.
 h = MEAN ROOF HEIGHT, IN METERS, EXCEPT THAT EAVE HEIGHT SHALL BE USED FOR ANGLE GREATER THAN 10'.

1.5.3 DESIGN WIND PRESSURE – WALL COMPONENTS AND CLADDING

EXTERIOR WALL SYSTEMS & THEIR ATTACHMENTS TO THE PRIMARY STRUCTURE SHALL BE DESIGNED FOR THE PRESSURES SHOWN IN THE DIAGRAM BELOW:



LOCATION	WINDWARD PRESSURE N/m ² (inward)		LEEWARD PRESSURE N/m ² (outward)		a
	④	⑤	④	⑤	
MAIN BUILDING					(mm)
AREA = 1 m ²	909	909	-986	-1216	900
AREA = 2 m ²	867	867	-948	-1134.8	900
AREA = 5 m ²	804	804	-885	-1010	900
AREA = 10 m ²	804	804	-885	-1010	900

NOTES:

- DESIGN WIND PRESSURES ABOVE REPRESENT THE NET PRESSURE (SUM OF INTERNAL AND EXTERNAL PRESSURE) APPLIED NORMAL TO ALL SURFACES.
- LINEAR INTERPOLATION BETWEEN VALUES OF TRIBUTARY AREA IS PERMISSIBLE.
- PLUS AND MINUS SIGNS SIGNIFY PRESSURE TOWARD AND AWAY FROM THE EXTERIOR SURFACE, RESPECTIVELY.

CMU LINTEL SCHEDULE

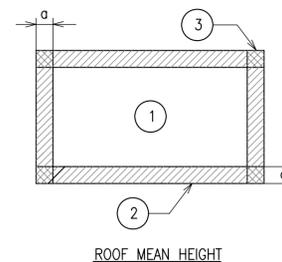
OPENING TYPE OR SIZE, BEAM LOCATION OR TYPE	MAX SPAN (mm)	BEAM DEPTH (mm)	MAIN REINFORCING			SHEAR REINF STIRRUPS
			TOP	BOTTOM	OTHER	
INT WALL OPENING, NON-BEARING	1800	400	(2)-#13			----
INT WALL OPENING, NON-BEARING	900	200	(2)-#13			----

- STRUCTURAL DRAWINGS 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 200mm DEEP CMU LINTEL PROVIDE 400mm BEARING EA END FOR 400mm DEEP CMU LINTEL.
- FOR HEAD DETAILS REFER TO ARCHITECTURAL SHEETS.
- REINFORCING SHALL BE ASTM A615M, GRADE 420. CONCRETE FOR CAST-IN-PLACE BEAMS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 28 MPa AT 28 DAYS.
- CONTRACTOR SHALL SUBMIT FOR APPROVAL SHOP DRAWINGS AND SCHEDULES SHOWING SIZE, DETAILS, LOCATIONS, ETC FOR ALL CAST-IN-PLACE BEAMS IN CMU WALLS.

1.5 WIND LOADS (CON'T)

1.5.4 DESIGN WIND PRESSURE – ROOF COMPONENTS AND CLADDING

ROOF COMPONENTS & THEIR ATTACHMENTS SHALL BE DESIGNED FOR THE PRESSURES SHOWN IN THE ADJACENT DIAGRAM & TABLE BELOW:



LOCATION	GROSS UPLIFT PRESSURE N/m ² (upward)			a
	①	②	③	
MAIN BUILDING				(mm)
AREA = 1 m ²	-838	-1460	-1460	900
AREA = 2 m ²	-838	-1460	-1460	900
AREA = 5 m ²	-838	-1460	-1460	900
AREA = 10 m ²	-838	-1460	-1460	900

NOTES:

- DESIGN WIND PRESSURES ABOVE REPRESENT THE NET PRESSURE (SUM OF INTERNAL AND EXTERNAL PRESSURE) APPLIED NORMAL TO ALL SURFACES.
- LINEAR INTERPOLATION BETWEEN VALUES OF TRIBUTARY AREA IS PERMISSIBLE.
- PLUS AND MINUS SIGNS SIGNIFY PRESSURE TOWARD AND AWAY FROM THE EXTERIOR SURFACE, RESPECTIVELY.

2.0 FOUNDATION DESIGN CRITERIA (TO BE CONFIRMED BY THE CONTRACTOR)

THE GEOTECHNICAL ANALYSIS FOR THIS PROJECT IS THE RESPONSIBILITY OF THE CONTRACTOR AWARDED THE WORK. DESIGN VALUES USED IN THE STRUCTURAL ANALYSIS OF THE BUILDINGS HEREIN INDICATED HAVE BEEN ASSUMED AND SHALL BE CONFIRMED AND VERIFIED AS PART OF THE GEOTECHNICAL INVESTIGATION. VALUES WHICH DO NOT MEET THE REQUIREMENTS INDICATED BELOW SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER FOR CONSIDERATION AND DETERMINATION ON THE NEXT APPROPRIATE COURSE OF ACTION.

2.1.1 SOIL DESIGN PARAMETERS

NET ALLOWABLE SOIL BEARING CAPACITY 96.0 KPa
 UNIT WEIGHT OF SOIL (moist) 1800 Kg/m³
 COEFF ACTIVE EARTH PRESSURE (Kpa) 0.30
 COEFF PASSIVE EARTH PRESSURE (Kpp) 3.33
 COEFF AT-REST EARTH PRESSURE (Kpr) .55
 COEFF OF SOIL FRICTION .35
 SUBGRADE MODULUS 4120 g/m³
 MINIMUM BEARING DEPTH BELOW GRADE 800mm
 SEISMIC SITE CLASS (based on in-situ soil) D

CONCRETE COVER SCHEDULE

MINIMUM CONCRETE COVER PROTECTION FOR REINFORCEMENT BARS SHALL BE AS FOLLOWS: (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.

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 (NO EXPOSURE TO WEATHER) FROM TOP	20
SLABS-ON-GRADE (EXPOSURE 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
PROVIDE STANDARD BAR CHAIRS AND SPACERS AS REQUIRED TO MAINTAIN CONCRETE PROTECTION SPECIFIED.	

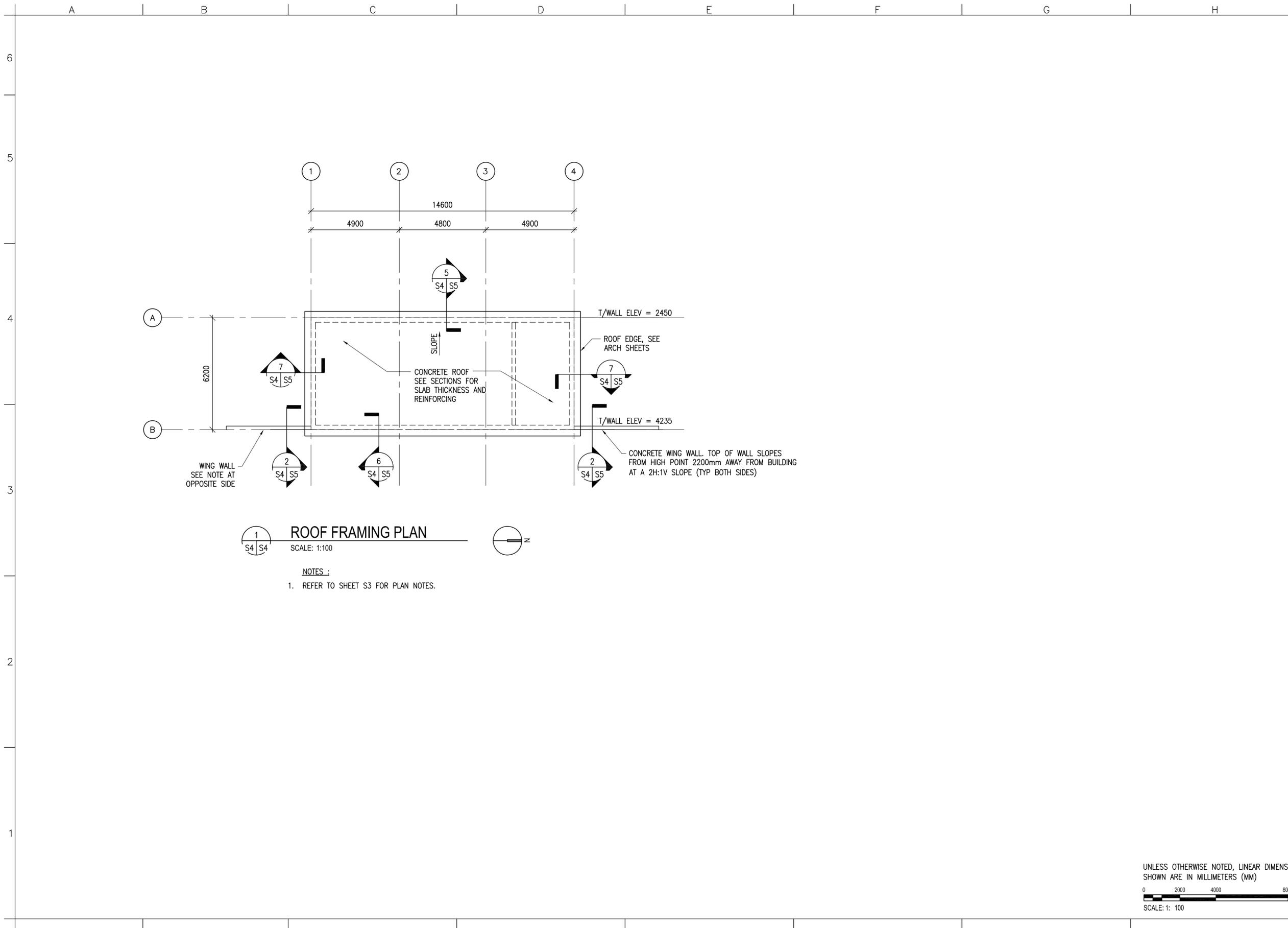
US Army Corps of Engineers
 Afghanistan Engineer District

DATE	DESCRIPTION	SYMBOL

DESIGNED BY: DATE: 09-30-09
 GDH
 SUBMITTED BY: BAKER
 MDB
 FILE NO.: ANPSUS-002XXX
 CWV
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AFGHAN NATIONAL POLICE
 STANDARD DESIGN
 SECURE STORAGE
 DESIGN CRITERIA

SHEET REFERENCE NUMBER:
S2



1
S4 S4

ROOF FRAMING PLAN
SCALE: 1:100

NOTES :
1. REFER TO SHEET S3 FOR PLAN NOTES.


US Army Corps
of Engineers
Afghanistan
Engineer
District

SYMBOL	DESCRIPTION	DATE

DESIGNED BY: GDH	DATE: 09-30-09
DWN BY: MDB	SUBMITTED BY: BAKER
CHK BY: CWV	FILE NO: ANFSDS-104XXX

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AFGHAN NATIONAL POLICE
STANDARD DESIGN
SECURE STORAGE
ROOF FRAMING PLAN

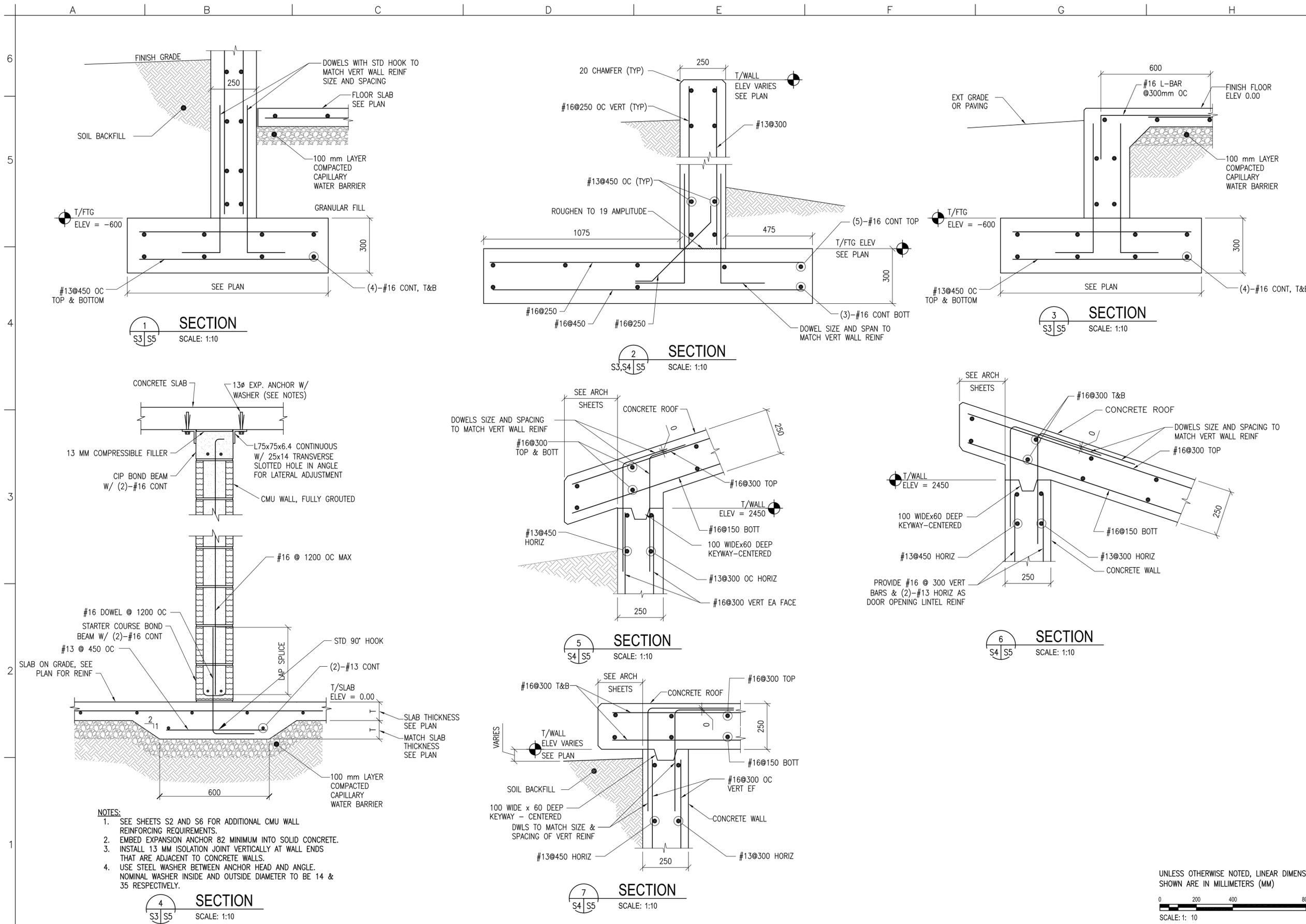
SHEET
REFERENCE
NUMBER:
S4

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



SCALE: 1: 100

100% SUBMISSION



- NOTES:**
- SEE SHEETS S2 AND S6 FOR ADDITIONAL CMU WALL REINFORCING REQUIREMENTS.
 - EMBED EXPANSION ANCHOR 82 MINIMUM INTO SOLID CONCRETE.
 - INSTALL 13 MM ISOLATION JOINT VERTICALLY AT WALL ENDS THAT ARE ADJACENT TO CONCRETE WALLS.
 - USE STEEL WASHER BETWEEN ANCHOR HEAD AND ANGLE. NOMINAL WASHER INSIDE AND OUTSIDE DIAMETER TO BE 14 & 35 RESPECTIVELY.

US Army Corps of Engineers
Afghanistan Engineer District

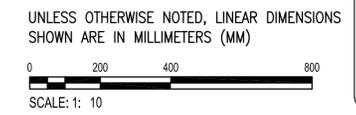
DATE	DESCRIPTION	SYMBOL

DESIGNED BY:	DATE:	09-30-09
GDH	SUBMITTED BY:	BAKER
MDB	CHK BY:	CWW
FILE NO.:	ANFSDS-305XXX	

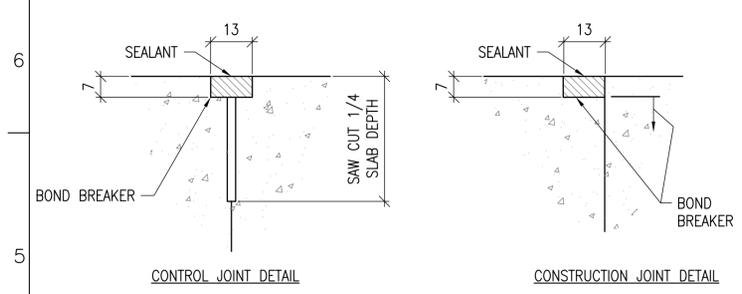
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AFGHAN NATIONAL POLICE
STANDARD DESIGN
SECURE STORAGE
SECTIONS
GENERAL NOTES

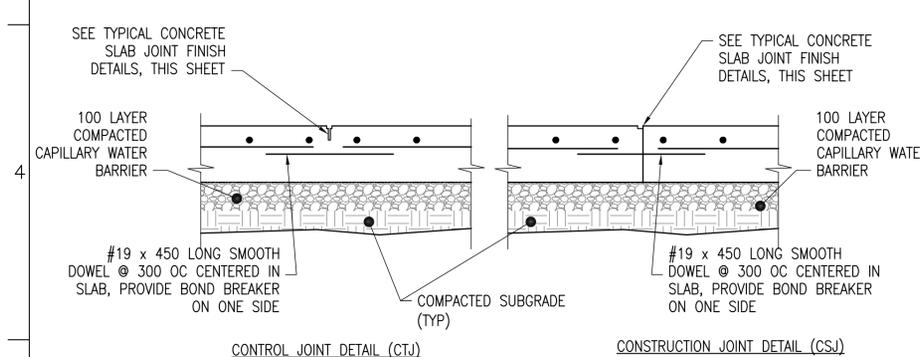
SHEET REFERENCE NUMBER:
S5



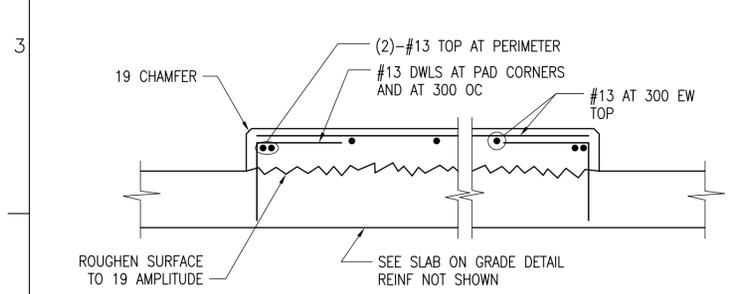
100% SUBMISSION



TYPICAL CONCRETE SLAB JOINT FINISH DETAIL
 SCALE: NTS

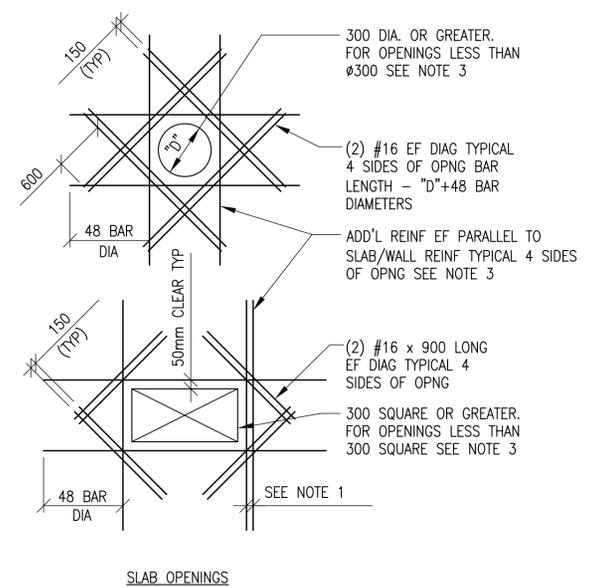


TYPICAL SLAB ON GRADE JOINT DETAILS
 SCALE: NTS



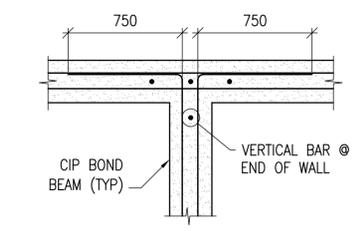
INTERIOR EQUIPMENT PAD DETAIL
 SCALE: NTS

DETAIL NOTE:
 1. COORDINATE EQUIPMENT PAD SIZE AND LOCATIONS W/ ELECTRICAL/MECHANICAL SHEETS AND EQUIPMENT MANUFACTURER.

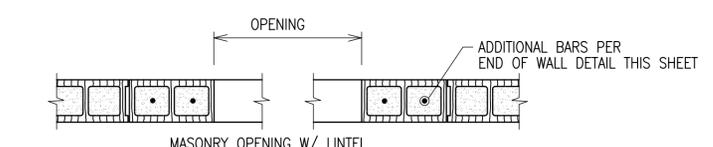
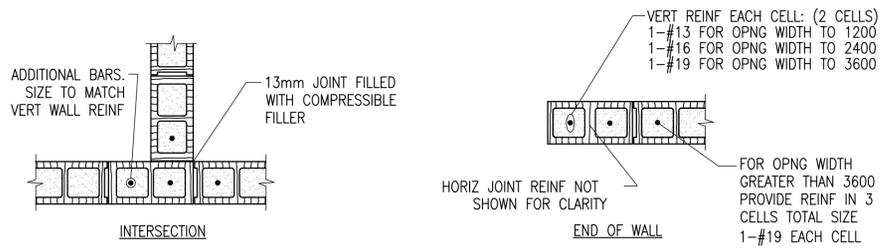


ADD'L REINFORCEMENT DETAILS
 SCALE: NTS

- 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 #15 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.

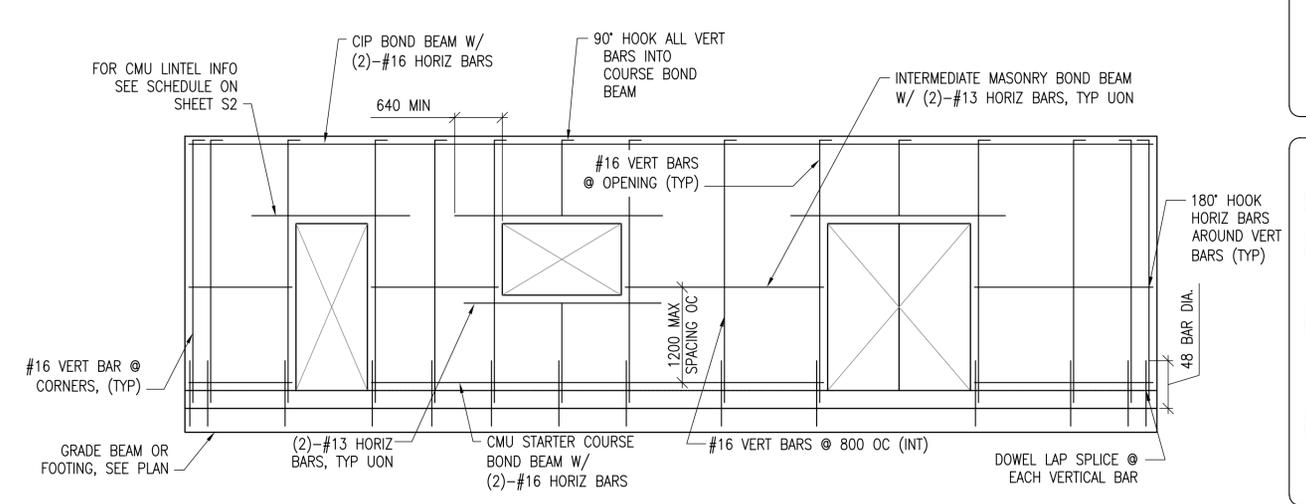


BOND BEAM INTERSECTION
CIP BOND BEAM DETAIL
 SCALE: NTS



- NOTES:**
- OPENING WIDTH SHALL NOT EXCEED 3600 FOR THIS TYPE OF JAMB
 - ALL CMU CELLS FULLY GROUTED

TYPICAL CMU DETAILS
 SCALE: NTS



MIN CMU WALL REINFORCING
 SCALE: NTS

LINTEL NOTES:
 CMU LINTEL REINFORCEMENT AS PER SCHEDULE ON SHEET S2

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

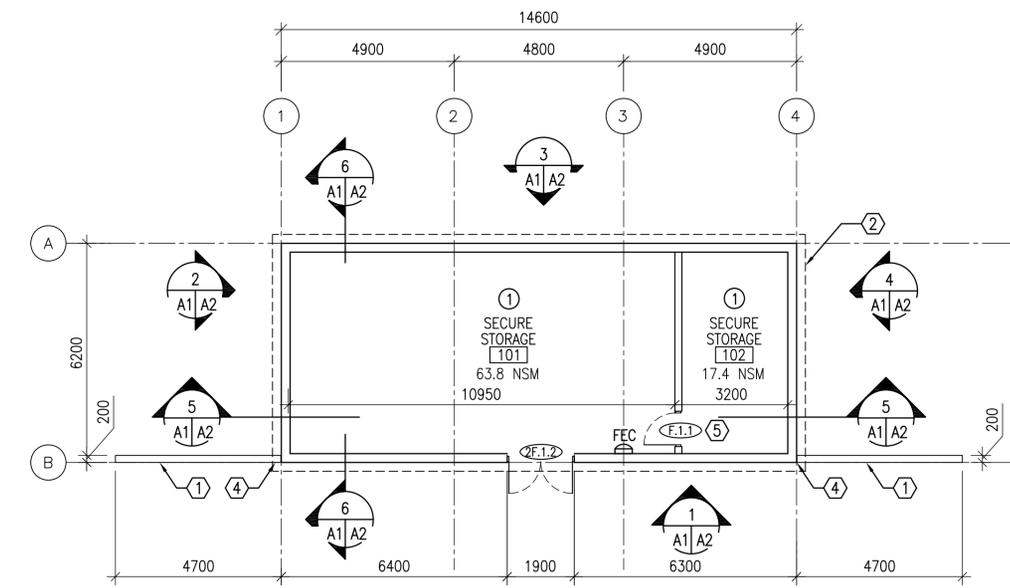
DATE	DESCRIPTION	SYMBOL
APR		

DESIGNED BY: GDH	DATE: 09-30-09
DWN BY: RCG	SUBMITTED BY: BAKER
CHK BY: CWV	FILE NO: ANPSDS-506XXX

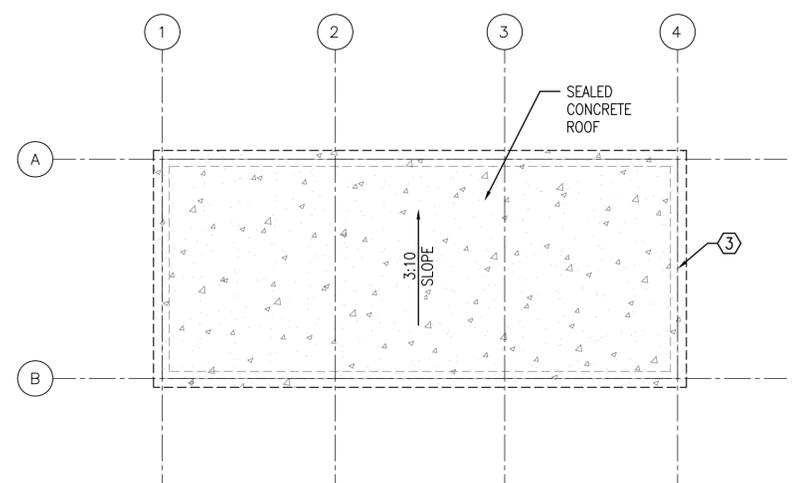
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AFGHAN NATIONAL POLICE
 STANDARD DESIGN
 SECURE STORAGE
 TYPICAL DETAILS

SHEET REFERENCE NUMBER:
S6



1 FLOOR PLAN
SCALE: 1:100
90.5 GSM



2 ROOF PLAN
SCALE: 1:100

GENERAL NOTES:

- A. INTERIOR PARTITION SHALL BE 200 MM CMU UNLESS NOTED OTHERWISE.
- B. OPENINGS FOR DOORS SHALL BE LOCATED 200 MM FROM THE ADJACENT WALL UNLESS NOTED OTHERWISE.
- C. SURFACES TO BE PAINTED SHALL BE CLEAN AND FREE OF FOREIGN MATTER BEFORE APPLICATION OF PAINT. CLEANING SHALL BE SCHEDULED SO THAT DUST AND OTHER CONTAMINANTS WILL NOT FALL ON WET, NEWLY PAINTED SURFACES.
- D. CONCRETE AND INTERIOR MASONRY SURFACES GROUTED SOLID SHALL BE ALLOWED TO DRY AT LEAST 30 DAYS BEFORE PAINTING EXCEPT CONCRETE SLAB ON GRADE WHICH SHALL BE ALLOWED TO CURE 90 DAYS BEFORE PAINTING.
- E. PAINTS CONTAINING LEAD IN EXCESS OF 0.06 PERCENT BY WEIGHT OF THE TOTAL NONVOLATILE CONTENT SHALL NOT BE USED.
- F. MERCURIAL FUNGICIDES SHALL NOT BE USED IN OIL-BASE PAINT.
- G. REMOVE LOOSE DIRT AND CLEAN SURFACES BEFORE PAINTING. APPLY PAINT TO INTERIOR STRUCTURAL RIGID FRAMINGS AND CEILINGS AND TEST FOR ADHESION. PRIMER COAT FOR MASONRY. INITIAL FIRST COAT WITH AN ACRYLIC LATEX PAINT FOR EXTERIOR SURFACES AND A SECOND COAT WITH A WATER REPELLENT ACRYLIC LATEX PAINT.
- H. METAL DOORS AND FRAMES SHALL RECEIVE A PRIMER COAT PLUS TWO COATS OF PAINT.
- I. DIMENSIONS ARE TO STRUCTURAL COLUMN GRID, EDGE OF WINDOW OPENINGS, AND TO HINGE SIDE OF DOOR OPENINGS.

KEY NOTES:

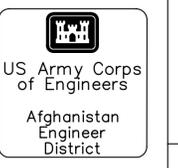
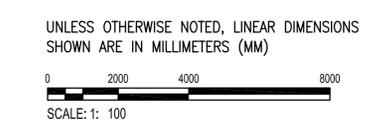
- 1. CONCRETE WING WALL
- 2. LINE OF ROOF OVERHANG ABOVE
- 3. LINE OF BUILDING WALL BELOW
- 4. EXPANSION JOINT BETWEEN BUILDING WALL AND WING WALLS.
- 5. PROVIDE UNDERCUT INTERIOR DOOR BETWEEN ROOMS 101 AND 102. RE: MECHANICAL

LEGEND:

- (F.1.4) DOOR TYPE, SEE SHEET A3
- (X) KEY NOTE
- FEC FIRE EXTINGUISHER CABINET
- (1) ROOM FINISH TYPE DESIGNATION

ROOM FINISHES:

- 1. WALLS: PAINTED PLASTER,
FLOOR: SEALED CONCRETE
CEILING: PAINTED PLASTER APPLIED TO STRUCTURE



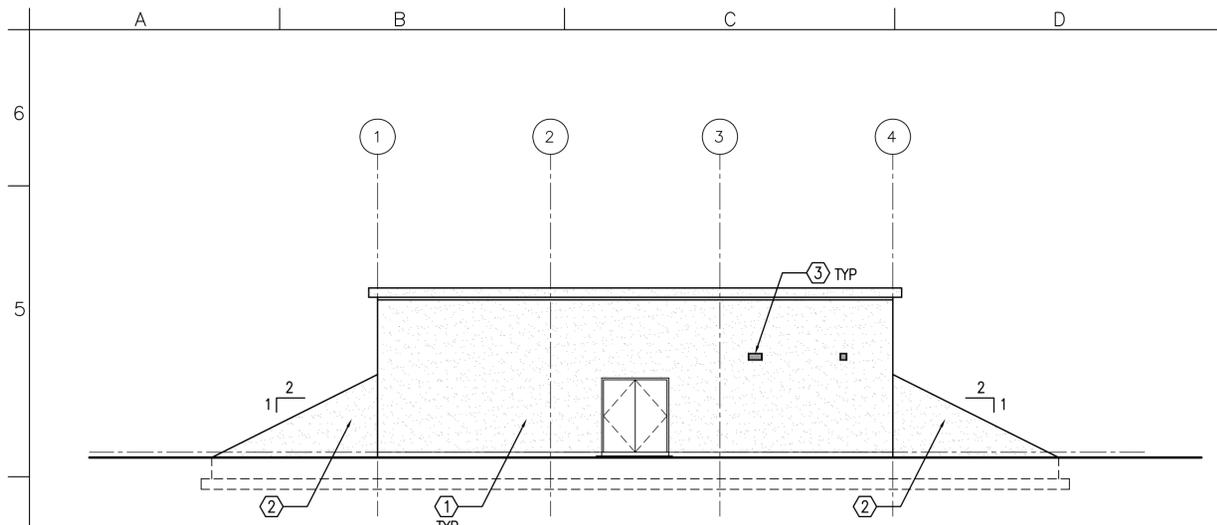
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DESIGNED BY: BAKER	DATE: 09-30-09
DWN BY: JEB	SUBMITTED BY: BAKER
CHK BY: NLJ	FILE NO: ANPSDA-101XXX
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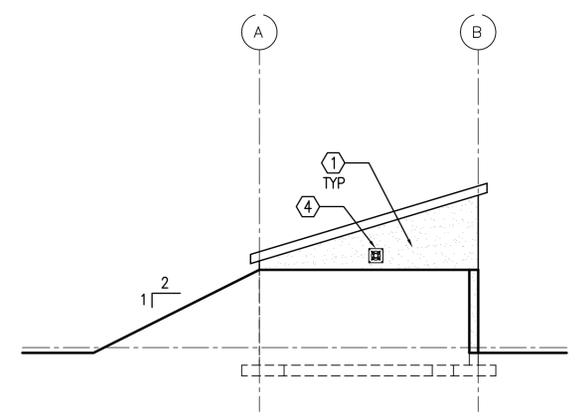
AFGHAN NATIONAL POLICE
STANDARD DESIGN
SECURE STORAGE
FLOOR AND ROOF PLANS

SHEET REFERENCE NUMBER:
A1

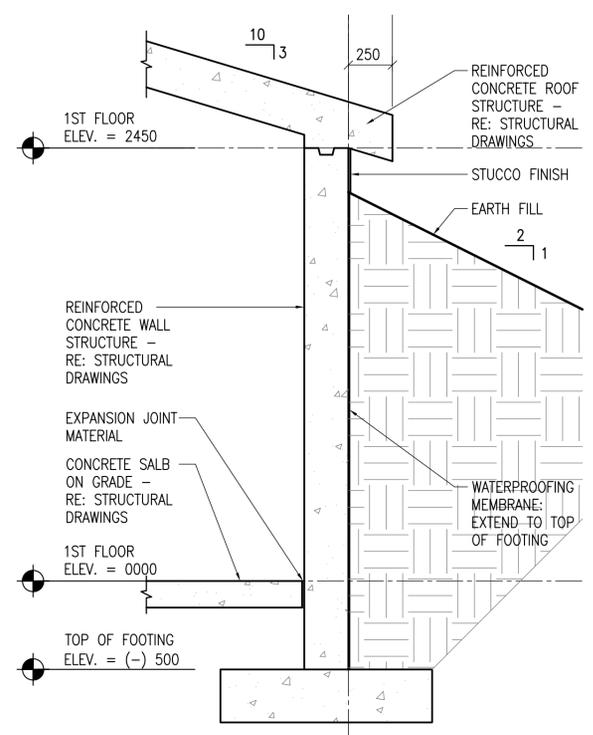
100% SUBMISSION



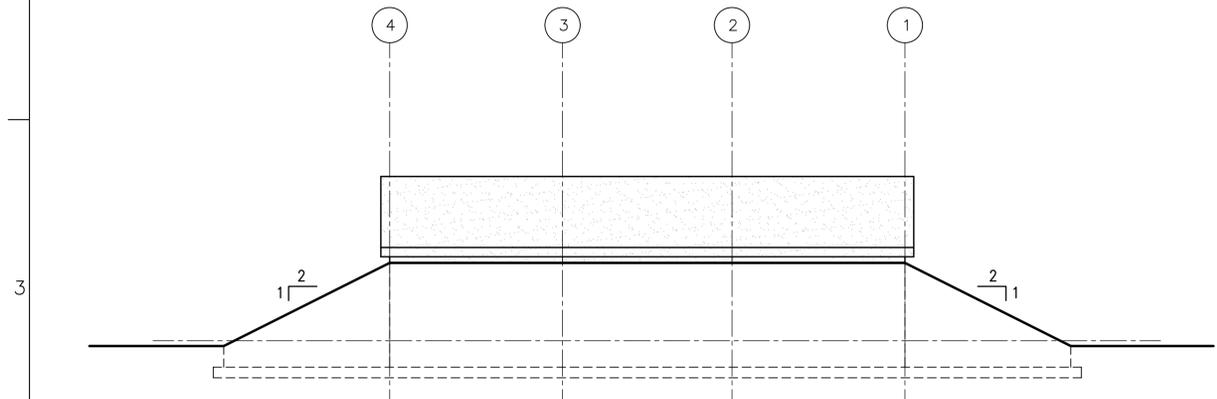
1 EAST ELEVATION
SCALE: 1:100



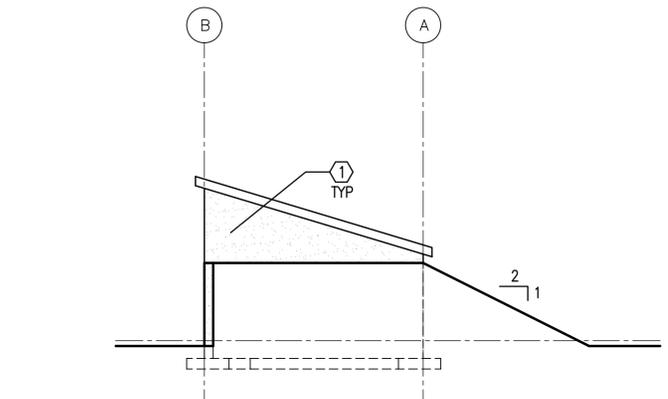
2 SOUTH ELEVATION
SCALE: 1:100



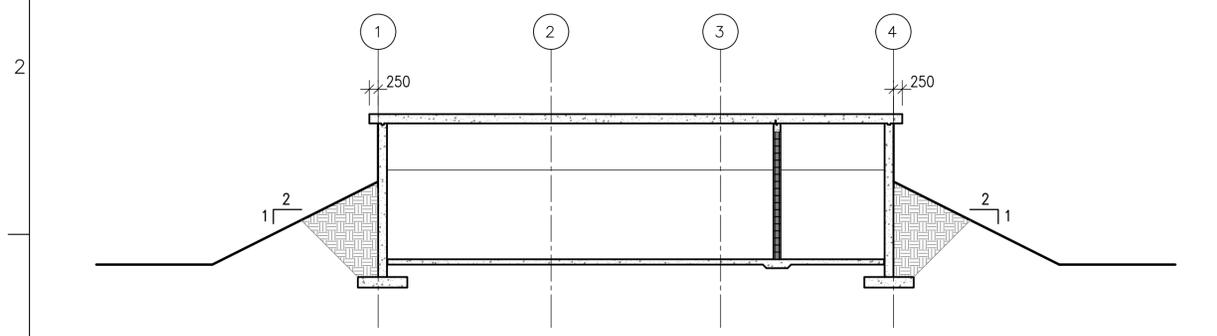
7 WALL SECTION
SCALE: 1:20



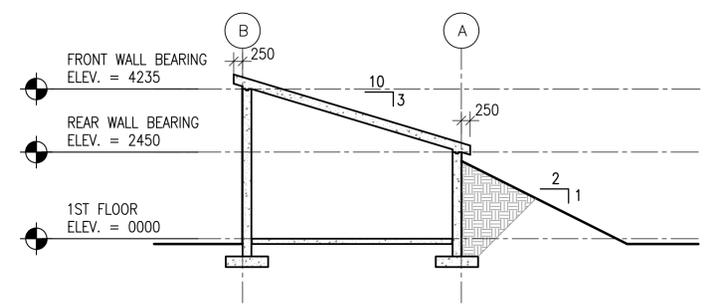
3 WEST ELEVATION
SCALE: 1:100



4 NORTH ELEVATION
SCALE: 1:100



5 LONGITUDINAL BUILDING SECTION
SCALE: 1:100

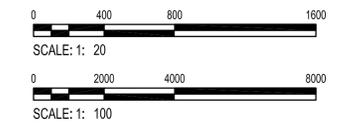


6 TRANSVERSE BUILDING SECTION
SCALE: 1:100

KEY NOTES:

1. STUCCO ON CONCRETE WALLS
2. STUCCO ON CONCRETE WING WALLS
3. LOUVER - RE: MECHANICAL
4. EXHAUST FAN - RE: MECHANICAL

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



DATE	DESCRIPTION	SYMBOL

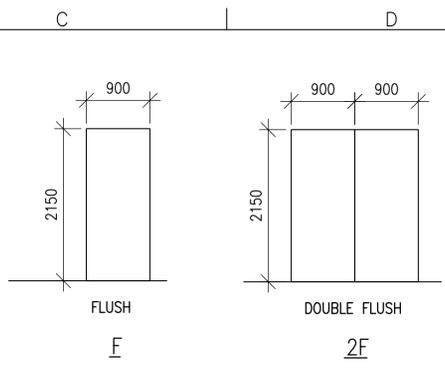
DESIGNED BY: BAKER	DATE: 09-30-09
DWN BY: JEB	SUBMITTED BY: BAKER
CHK BY: NLJ	FILE NO: ANPSDA-102XXX

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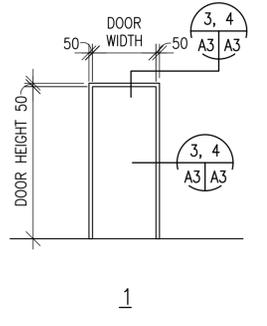
AFGHAN NATIONAL POLICE
STANDARD DESIGN
SECURE STORAGE
EXTERIOR ELEVATIONS,
BUILDING SECTIONS & WALL SECTION

SHEET REFERENCE NUMBER:
A2

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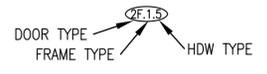
1 DOOR TYPES
A3 | A3 SCALE: 1:50



2 FRAME TYPES
A3 | A3 SCALE: 1:50

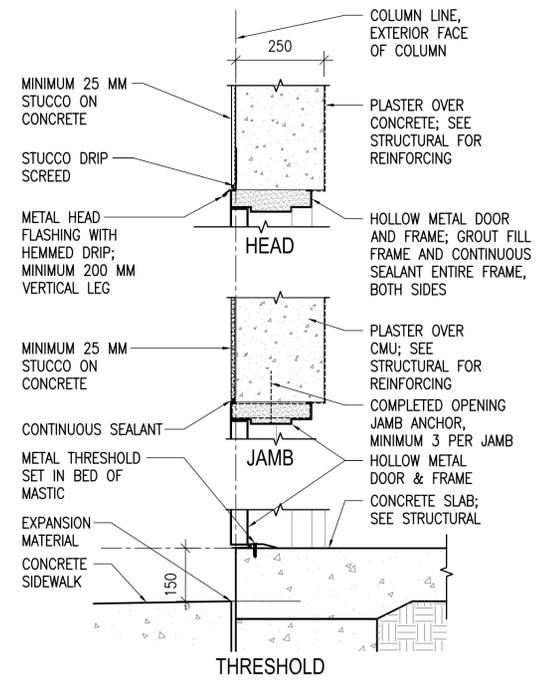
DOOR TYPES NOTES:

1. INTERIOR AND EXTERIOR METAL DOORS AND FRAME COLORS SHALL MATCH ADJACENT WALL COLORS AS SELECTED BY THE CONTRACTING OFFICER.
2. HARDWARE SHALL BE HEAVY DUTY, COMMERCIAL GRADE, STAINLESS STEEL WITH A MATTE FINISH.
3. FRAMES, EXCEPT FIRE-RATED FRAMES, SHALL BE MOUNTED AND ADJUSTED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. FRAMES SHALL BE FASTENED WITH MINIMUM OF THREE FASTENING POINTS PER SIDE AT REGULAR INTERVALS.
4. DIMENSIONS SHOWN ON DOOR SCHEDULE ARE BASED UPON MODULAR MASONRY (OR ROUGH OPENING), HEIGHT OF 2200mm 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.

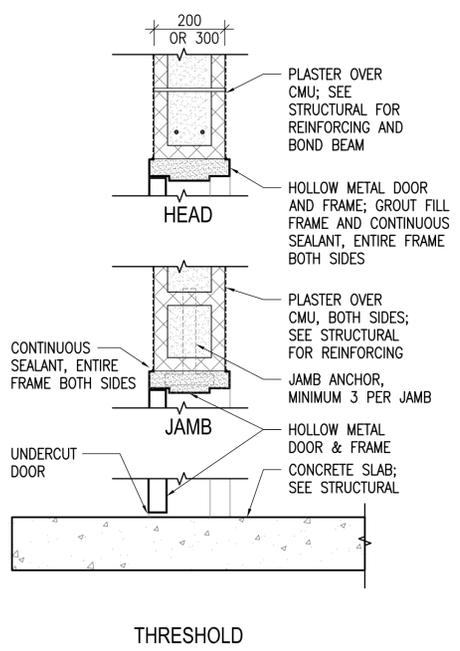


HARDWARE TYPES:

- HW-1 1-1/2 PR HINGES
 1 EA LOCKSET W/LEVERS. GRADE 1, F93
 1 EA CYLINDER, GRADE 1
 1 EA HEAVY DUTY HASP, WELDED TO EXTERIOR FACE
 1 EA THRESHOLD J32130
- HW-2 3 PR HINGES
 1 EA LOCKSET W/LEVERS. GRADE 1, F93
 1 EA CYLINDER, GRADE 1
 1 EA HEAVY DUTY HASP WELDED TO EXTERIOR FACE
 2 EA FLSUH BOLTS
 1 EA REMOVEABLE ASTRAGAL
 1 EA THRESHOLD J32130

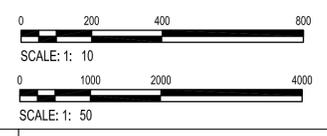


3 EXTERIOR DOOR DETAILS
A3 | A3 SCALE: 1:10



4 INTERIOR DOOR DETAILS
A3 | A3 SCALE: 1:10

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



US Army Corps of Engineers
Afghanistan Engineer District

SYMBOL	DESCRIPTION	DATE

DESIGNED BY: BAKER	DATE: 09-30-09
DWN BY: AR	SUBMITTED BY: BAKER
CHK BY: KRC	FILE NO: ANPSDA-303XXX

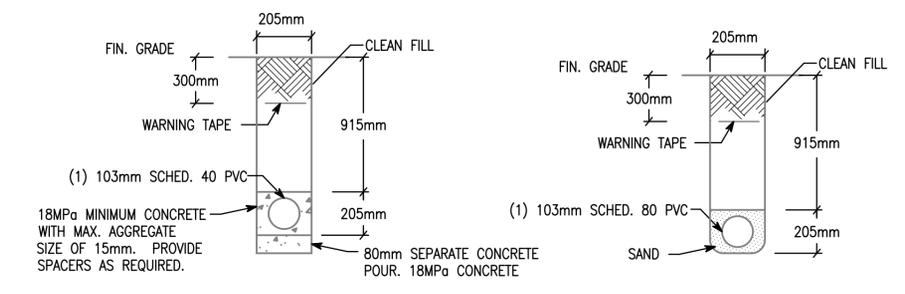
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STANDARD DESIGN
SECURE STORAGE

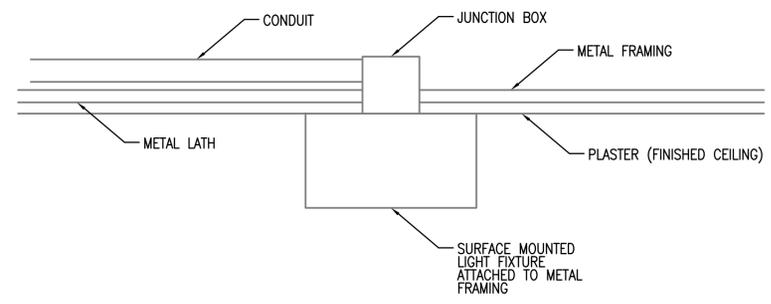
DOOR & WINDOW TYPES & DETAILS

SHEET REFERENCE NUMBER:
A3

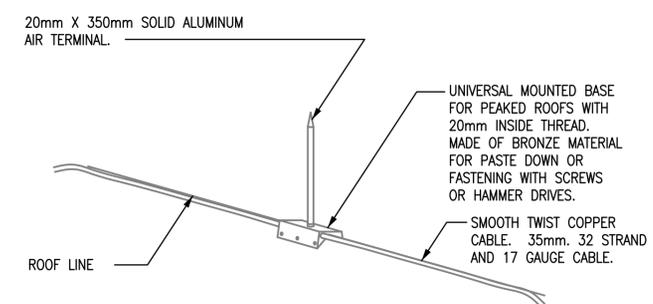
100% SUBMISSION



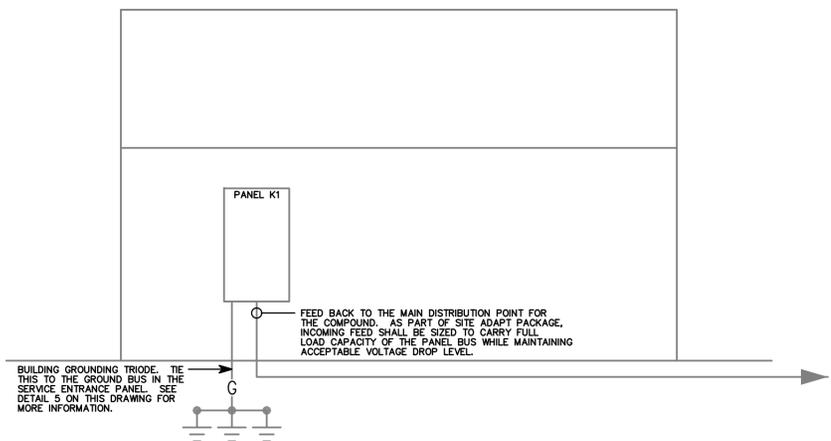
1
E2 E2
TYPICAL DUCT BANK DETAILS FOR CONDUIT IN SAND OR CONCRETE
SCALE: N.T.S.



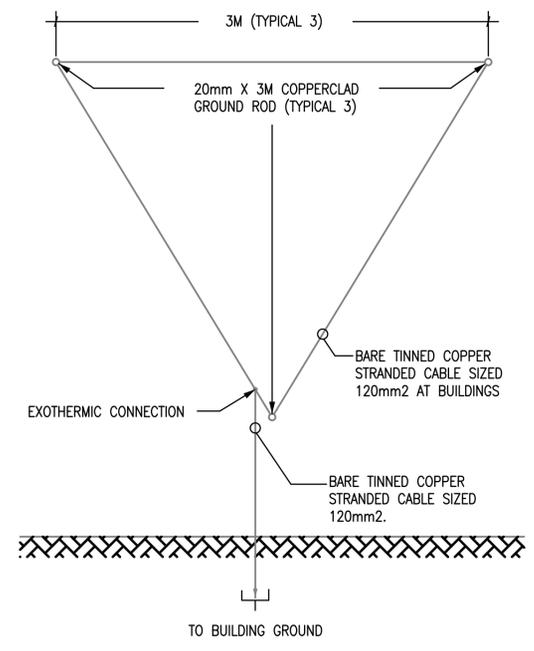
2
E2 E2
TYPICAL DETAIL FOR SURFACE MOUNTED LIGHT FIXTURES
SCALE: N.T.S.



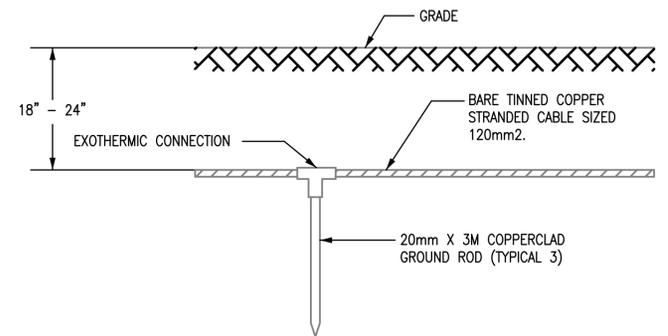
3
E2 E2
LIGHTNING PROTECTION AIR TERMINAL DETAIL
SCALE: N.T.S.



4
E2 E2
B.1 RISER DIAGRAM
SCALE: N.T.S.



5
E2 E2
GROUND TRIPOD SYSTEM DETAIL - PLAN
SCALE: N.T.S.



6
E2 E2
GROUND TRIPOD SYSTEM DETAIL - ELEVATION
SCALE: N.T.S.

US Army Corps of Engineers
Afghanistan Engineer District

NO.	DATE	DESCRIPTION	SYMBOL

DESIGNED BY:	JRG	DATE:	09-30-09
DWN BY:	JRG	SUBMITTED BY:	BAKER
CHK BY:	JRG	FILE NO.:	ANPSDE-502XXX

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AFGHAN NATIONAL POLICE
STANDARD DESIGN
SECURE STORAGE
DETAILS

SHEET REFERENCE NUMBER:
E2

100% SUBMISSION

