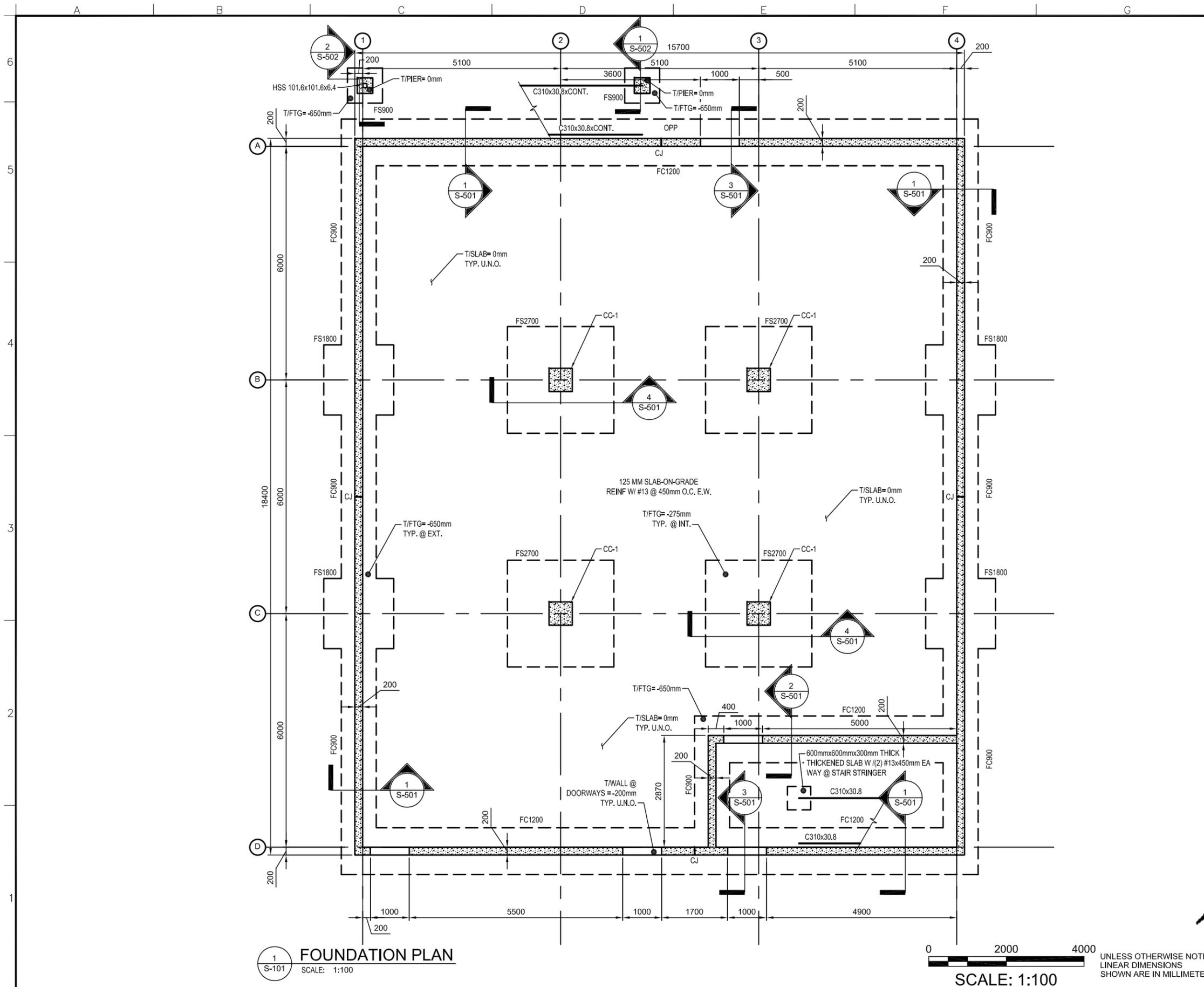


APPENDIX A2- Design Drawing for **451st Air Expeditionary Wing Information Facility**

12/14/2011 9:55 AM

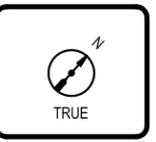


1 FOUNDATION PLAN
 S-101 SCALE: 1:100



PLAN NOTES

1. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.
2. SEE SHEET S-601 FOR FOOTING SCHEDULE.
3. SEE SHEET S-501 FOR FOOTING DETAILS.
4. SEE DETAILS 17, 18, & 19 / S-501 FOR SLAB JOINT LAYOUT, SLAB CONSTRUCTION JOINTS, AND SLAB CONTROL JOINTS, RESPECTIVELY.
5. SEE CIVIL SHEETS FOR ELEVATION DATUM
6. SEE GENERAL NOTES FOR CONC. WALL REINF. TYP.
7. CJ INDICATES CONTROL JOINT IN WALLS SEE DETAIL 9/S-502.



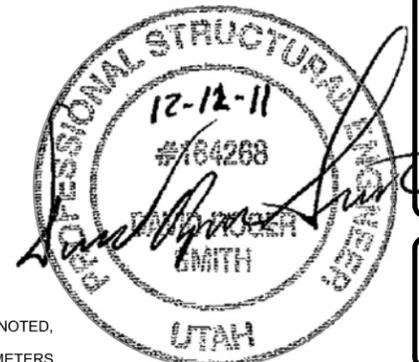
NO.	DATE	DESCRIPTION

DESIGNED BY: DRS
 CHECKED BY: REM
 DATE: 09 DEC 2011
 SUBMITTED BY: BAKER
 FILE NO.: AF133AS-101PNDWG

Michael Baker Corp.
 15000 Baker Corporation
 Ardara Business Park, 100 Ardara Drive
 Moon Township, PA 15108
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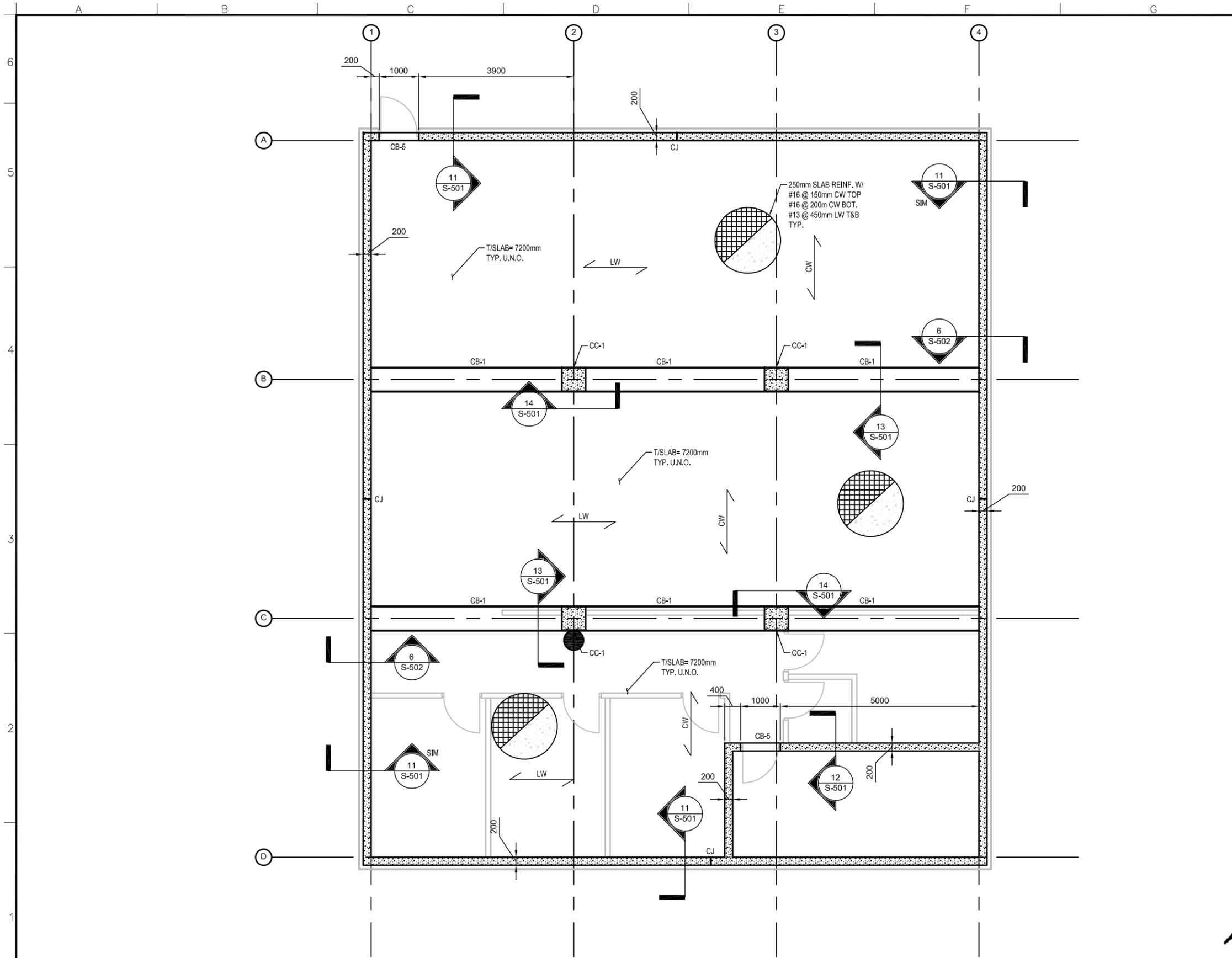
US Army Corps of Engineers
 Middle East District

UMMC P-341 PROGRAM
 451 AEW INTELLIGENCE FACILITY
 KANDAHAR AIR FIELD, AFGHANISTAN
 FOUNDATION PLAN



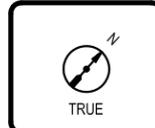
SHEET REFERENCE NUMBER:
 J
 S-101

12/14/2011 9:55 AM



PLAN NOTES

1. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.
2. SEE SHEET S-601 FOR CONCRETE BEAM AND COLUMN SCHEDULES.
3. SEE SHEET S-501 FOR ROOF FRAMING DETAILS.
4. SEE DETAIL 10/S-501 FOR FLOOR AND/OR ROOF PENETRATIONS.
5. SEE DETAIL 15/S-501 FOR WALL PENETRATIONS.
6. SEE GENERAL NOTES FOR CONC. WALL REINF. TYP.
7. CJ INDICATES CONTROL JOINT IN WALLS SEE DETAIL 9/S-502.
8. SEE 1/S-003 FOR SCHEMATIC ROOF OVERBUILD LAYOUT.



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DESIGNED BY: DRS
 CHECKED BY: REM
 DATE: 09 DEC 2011
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 FILE NO.: AF133AS-103P/NDWG

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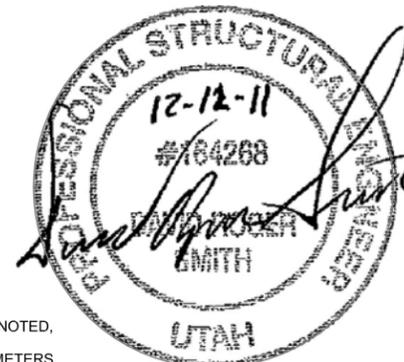
US Army Corps of Engineers
 Middle East District

1
S-103
ROOF FRAMING PLAN
SCALE: 1:100



UNLESS OTHERWISE NOTED,
 LINEAR DIMENSIONS
 SHOWN ARE IN MILLIMETERS.

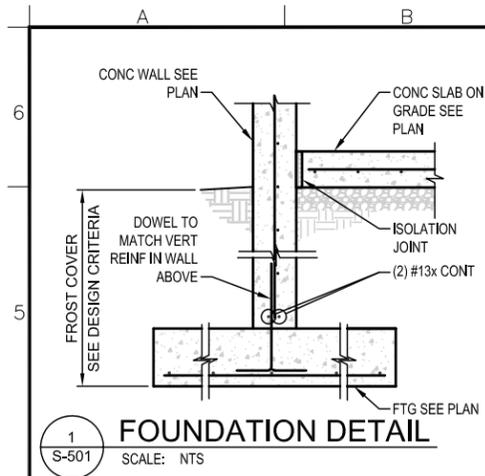
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 451 AEW INTELLIGENCE FACILITY
 KANDAHAR AIR FIELD, AFGHANISTAN
 ROOF FRAMING PLAN

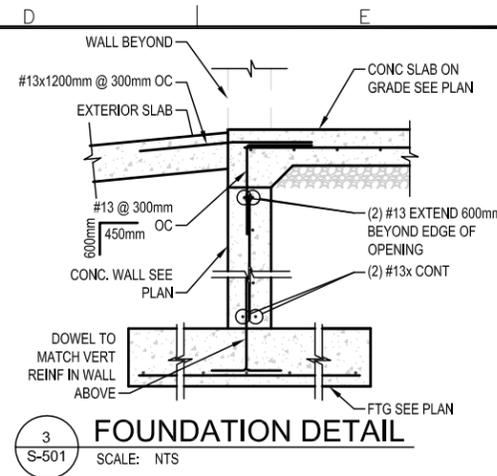
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J
S-103

12/14/2011 9:55 AM

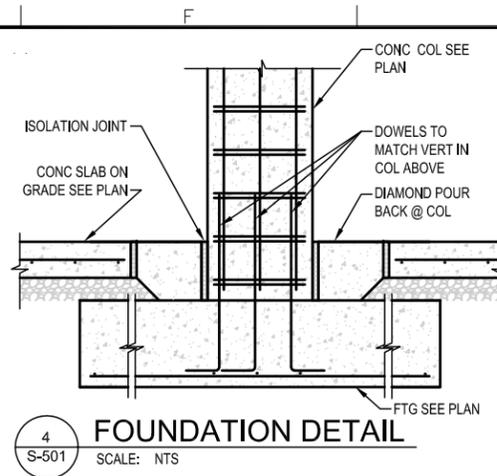


1 FOUNDATION DETAIL
S-501 SCALE: NTS

2 NOT USED
S-501 SCALE: NTS

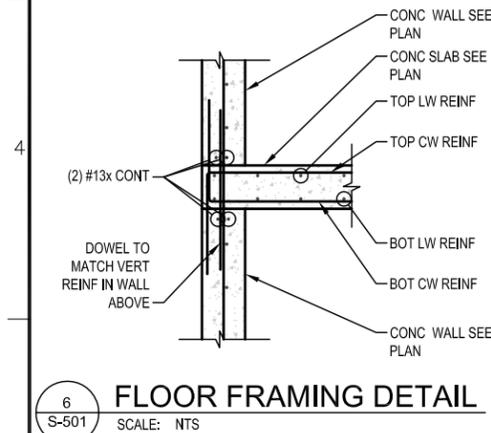


3 FOUNDATION DETAIL
S-501 SCALE: NTS



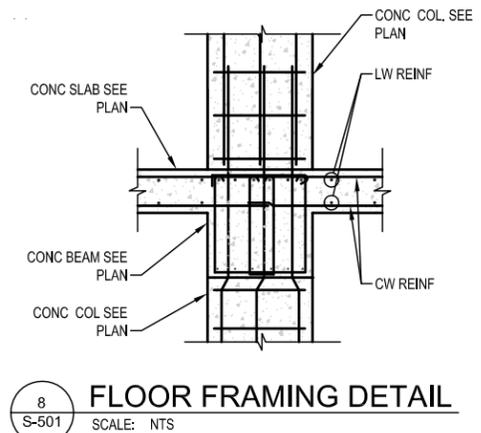
4 FOUNDATION DETAIL
S-501 SCALE: NTS

5 NOT USED
S-501 SCALE: NTS

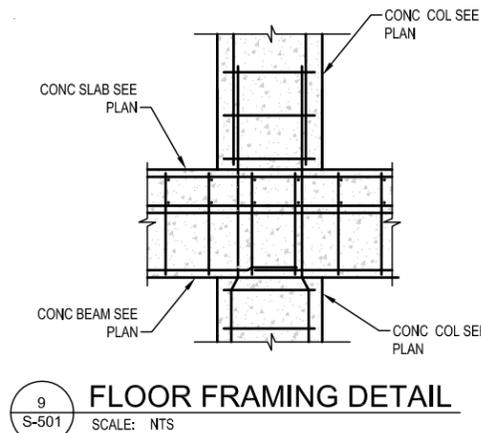


6 FLOOR FRAMING DETAIL
S-501 SCALE: NTS

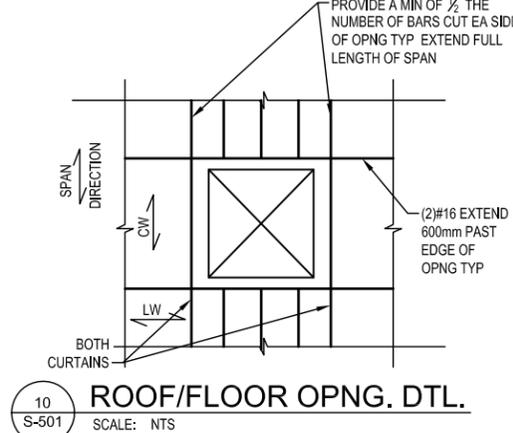
7 NOT USED
S-501 SCALE: NTS



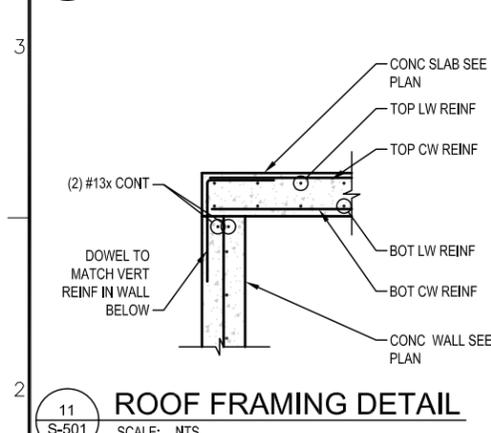
8 FLOOR FRAMING DETAIL
S-501 SCALE: NTS



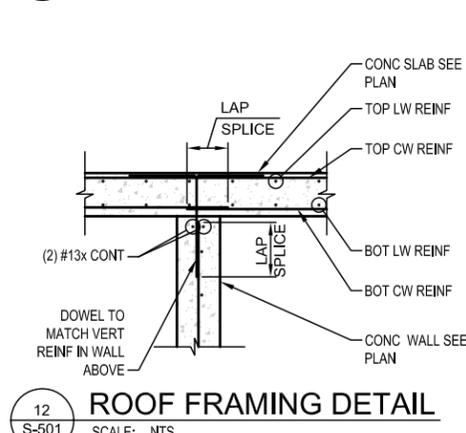
9 FLOOR FRAMING DETAIL
S-501 SCALE: NTS



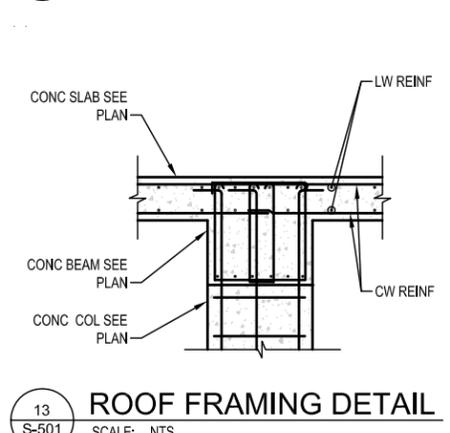
10 ROOF/FLOOR OPNG. DTL.
S-501 SCALE: NTS



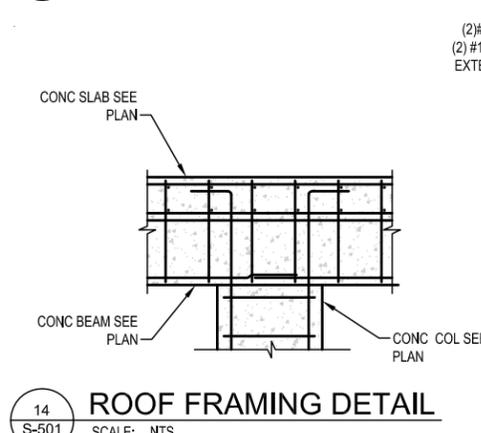
11 ROOF FRAMING DETAIL
S-501 SCALE: NTS



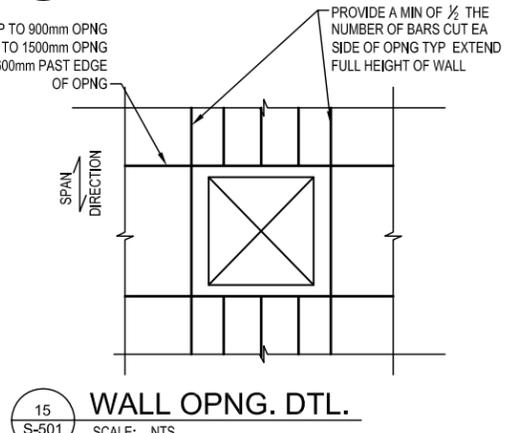
12 ROOF FRAMING DETAIL
S-501 SCALE: NTS



13 ROOF FRAMING DETAIL
S-501 SCALE: NTS

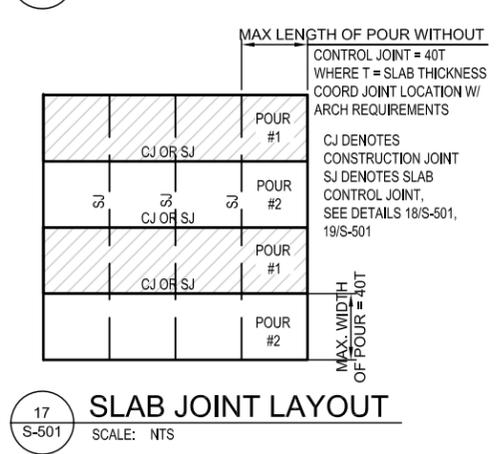


14 ROOF FRAMING DETAIL
S-501 SCALE: NTS

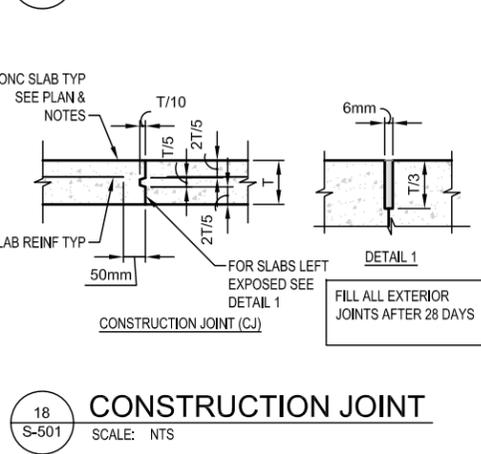


15 WALL OPNG. DTL.
S-501 SCALE: NTS

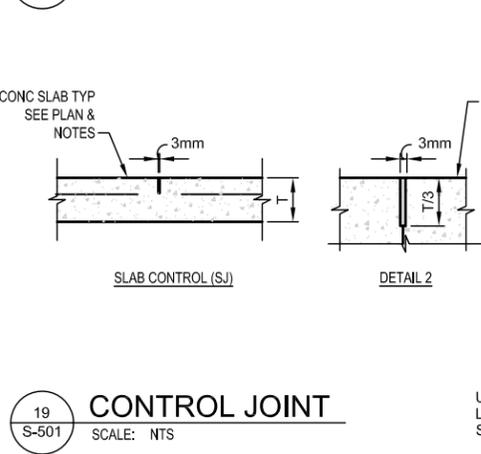
16 NOT USED
S-501 SCALE: NTS



17 SLAB JOINT LAYOUT
S-501 SCALE: NTS

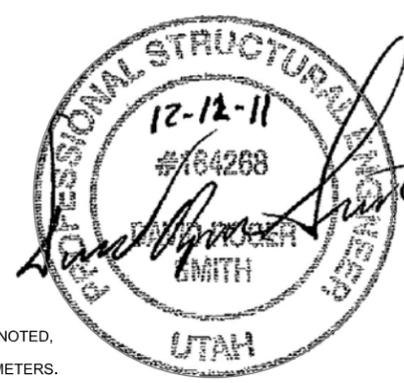


18 CONSTRUCTION JOINT
S-501 SCALE: NTS



19 CONTROL JOINT
S-501 SCALE: NTS

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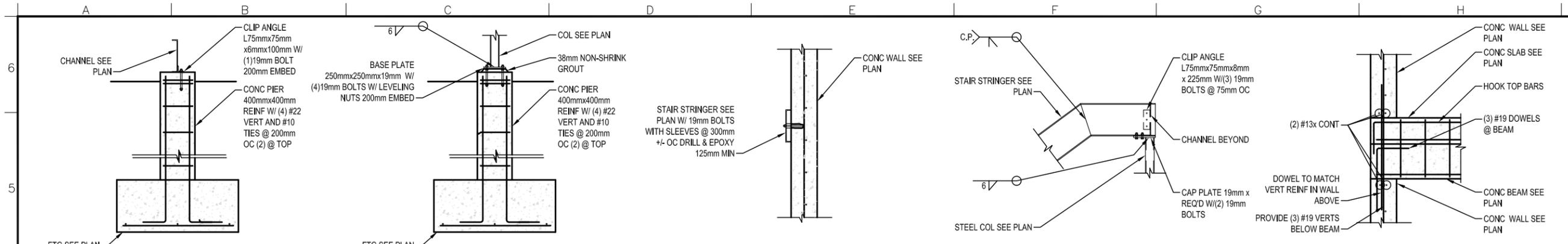
NO.	DATE	DESCRIPTION

NO.	DATE	DESCRIPTION

DESIGNED BY:	DATE:	09 DEC 2011
DRS	SUBMITTED BY:	BAKER
DWN BY:	REM	GDF
CHK BY:	FILE NO.:	AF133AS-501.DWG

UMMC P-341 PROGRAM
451 AEW INTELLIGENCE FACILITY
KANDAHAR AIR FIELD, AFGHANISTAN
STRUCTURAL DETAILS

SHEET REFERENCE NUMBER:
J
S-501



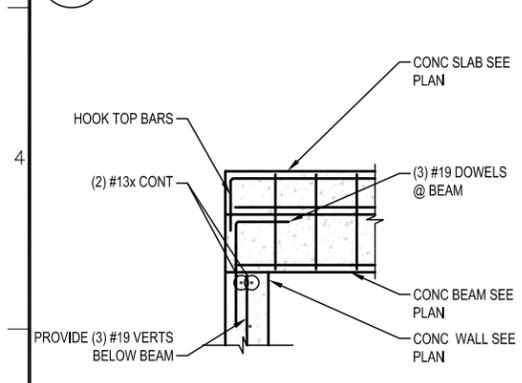
1 STAIR FTG. DETAIL
SCALE: NTS

2 STAIR FTG. DETAIL
SCALE: NTS

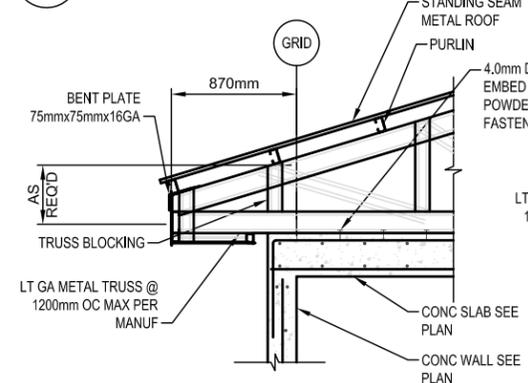
3 STAIR STRINGER DETAIL
SCALE: NTS

4 STAIR STRINGER DETAIL
SCALE: NTS

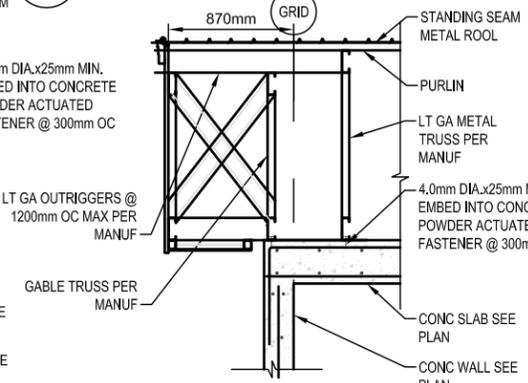
5 FLOOR FRAMING DETAIL
SCALE: NTS



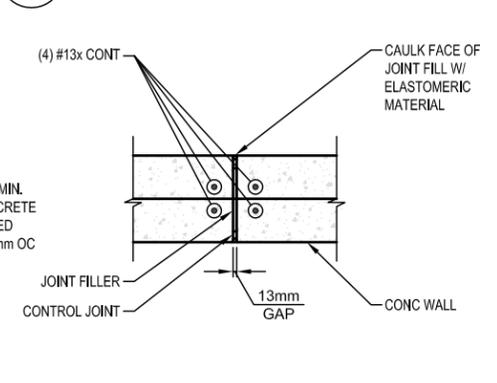
6 ROOF FRAMING DETAIL
SCALE: NTS



7 ROOF FRAMING DETAIL
SCALE: NTS



8 ROOF FRAMING DETAIL
SCALE: NTS



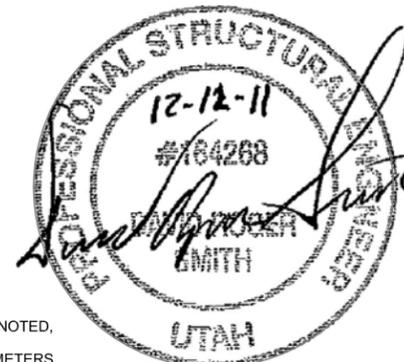
9 CONTROL JOINT DETAIL
SCALE: NTS

NO.	DATE

NO.	DESCRIPTION

DESIGNED BY: DRS	DATE: 09 DEC 2011
DWN BY: REM	SUBMITTED BY: BAKER
CHK BY: GDF	FILE NO: AF133AS-500T.DWG

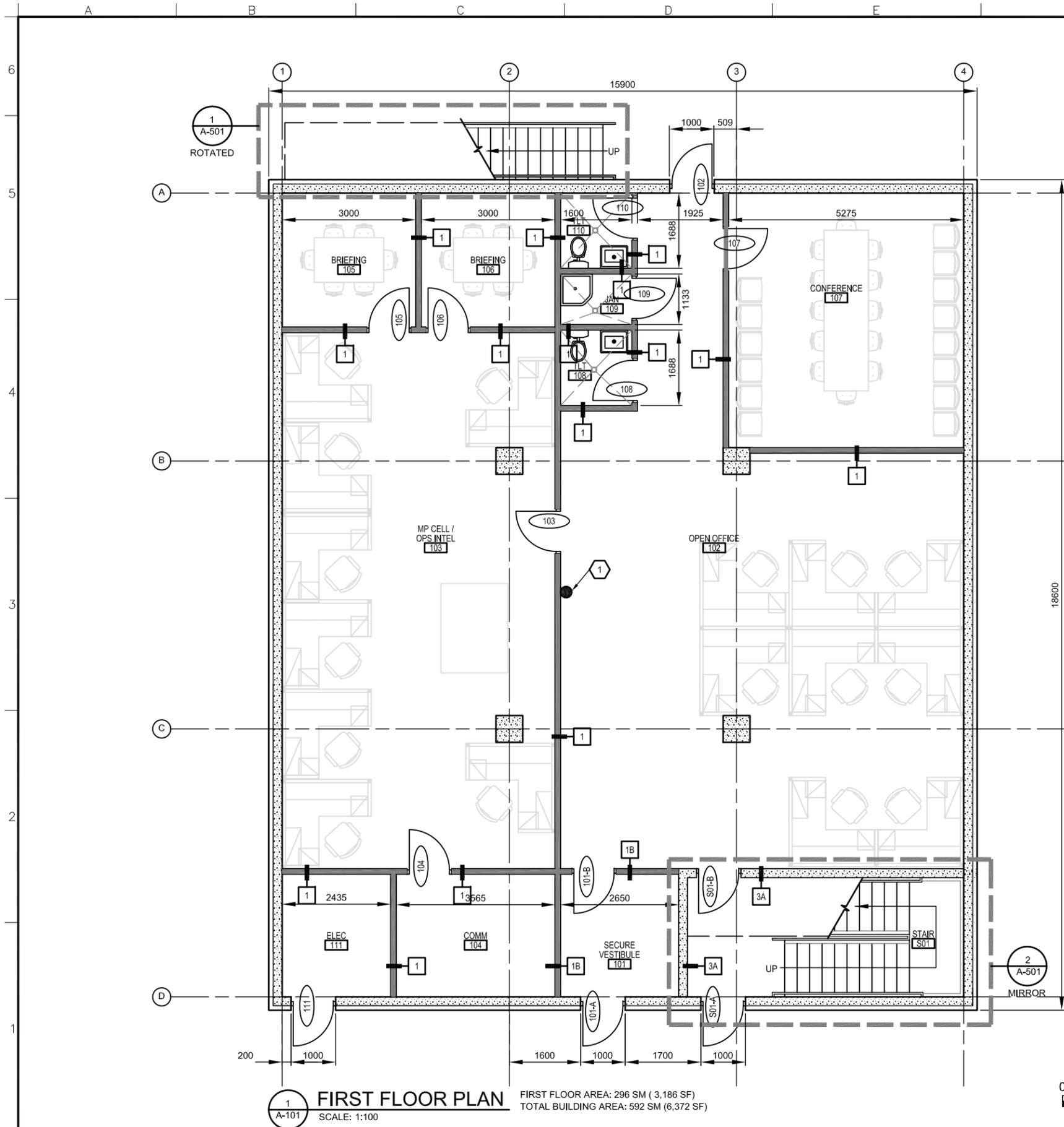
UMMC P-341 PROGRAM
451 AEW INTELLIGENCE FACILITY
KANDAHAR AIR FIELD, AFGHANISTAN
STRUCTURAL DETAILS



SHEET REFERENCE NUMBER:
J
S-502

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LINEAR DIMENSIONS
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12/14/2011 9:56 AM



GENERAL NOTES:

1. TYPICAL FIRST FLOOR FINISH ELEVATION TO BE NOMINAL 0.00M. REFER TO CIVIL & STRUCTURAL DRAWINGS.
2. ALL EQUIPMENT AND FURNITURE NOT IN CONTRACT (NIC).
3. DOOR FRAMES TO BE INSTALLED WITH OUTER EDGE OF HINGE SIDE LOCATED 100mm FROM ADJACENT WALL, UNO.
4. ALL SPACES TO HAVE NO CEILINGS, WITH EXPOSED STRUCTURE ABOVE.
5. ALL WALLS SHALL BE PAINTED, AND SHALL HAVE RUBBER BASE (EXCEPT NO RUBBER BASE AT CONCRETE WALLS)
6. ALL SPACES TO HAVE SEALED CONCRETE FINISH FLOORS.



NO.	DATE	DESCRIPTION

KEYNOTES

1. BRACKET-MOUNTED FIRE EXTINGUISHER

DESIGNED BY: MR	DATE: 09 DEC 2011
DWN BY: MH	SUBMITTED BY: BAKER
CHK BY: DP	FILE NO.: AF1133A-A-101P1.DWG

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Allentown, PA 18104
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US Army Corps of Engineers
Middle East District



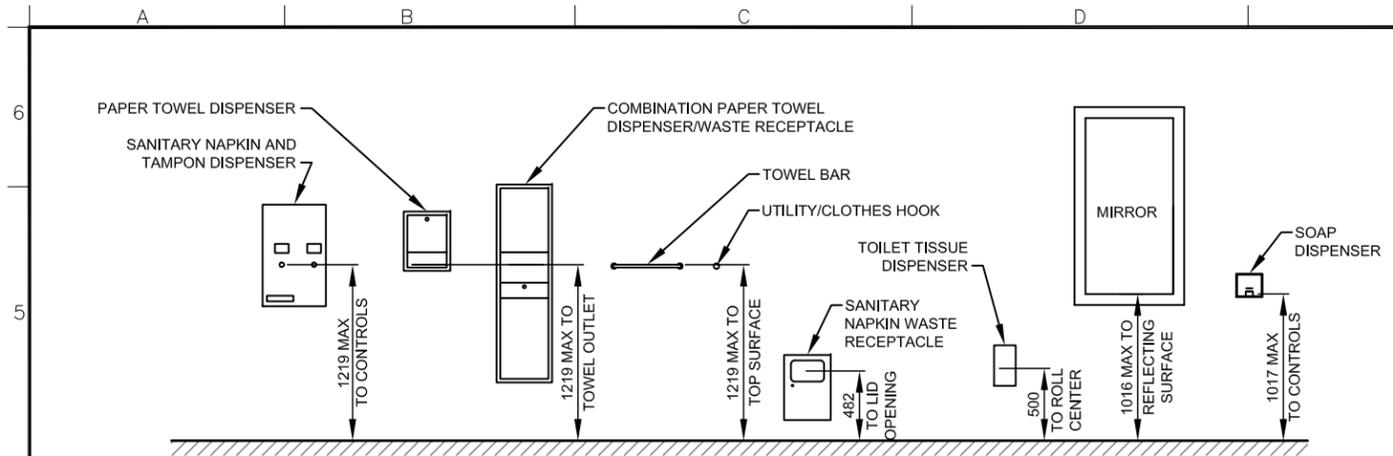
1 FIRST FLOOR PLAN
SCALE: 1:100
FIRST FLOOR AREA: 296 SM (3,186 SF)
TOTAL BUILDING AREA: 592 SM (6,372 SF)

0 2000 4000
SCALE: 1:100

UNLESS OTHERWISE NOTED,
LINEAR DIMENSIONS
SHOWN ARE IN MILLIMETERS.

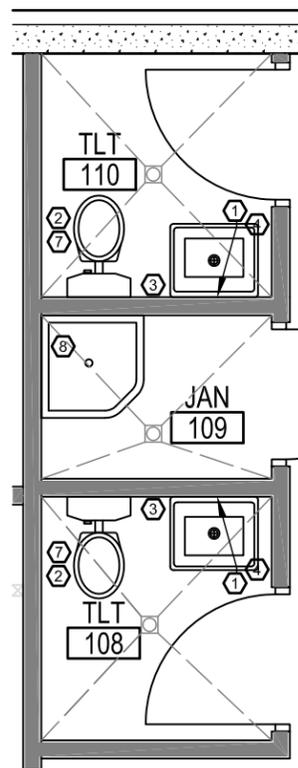
UMMC P-341 PROGRAM
J - 451 AEW INTELLIGENCE FACILITY
KANDAHAR AIR FIELD, AFGHANISTAN
FIRST FLOOR PLAN

SHEET REFERENCE NUMBER:
J A-101

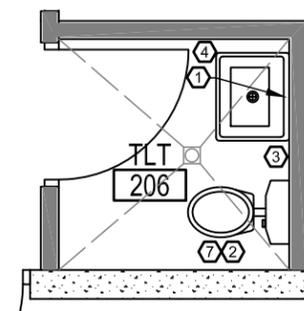


1 STANDARD ACCESSORY MOUNTING HEIGHTS
A-401 SCALE: 1:50

#	ACCESSORY LEGEND
1	600 WIDE X 1200 TALL STAINLESS STEEL FRAMED MIRROR
2	SURFACE MOUNTED TOILET TISSUE DISPENSER
3	SURFACE MOUNTED SOAP DISPENSER
4	SURFACE MOUNTED PAPER TOWEL DISPENSER
5	SURFACE MOUNTED STAINLESS STEEL TOWEL BAR
6	SURFACE MOUNTED STAINLESS STEEL UTILITY/CLOTHES HOOK PROVIDE AT INTERIOR SIDE OF DOORS INDICATED
7	SURFACE MOUNTED SANITARY NAPKIN DISPOSAL UNIT
8	MOP AND BROOM HOLDER
9	TOILET PARTITION
10	PRIVACY SCREEN
11	SHOWER CURTAIN ROD



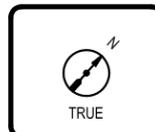
2 ENLARGED RESTROOM PLAN - FIRST FLOOR
A-101 SCALE: 1:50



3 ENLARGED RESTROOM PLAN - SECOND FLOOR
A-101 SCALE: 1:50

0 500 1000 2000
SCALE: 1:50

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NO.	DATE	DESCRIPTION

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 Michael Baker Jr. Inc.
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 Allentown, PA 18104
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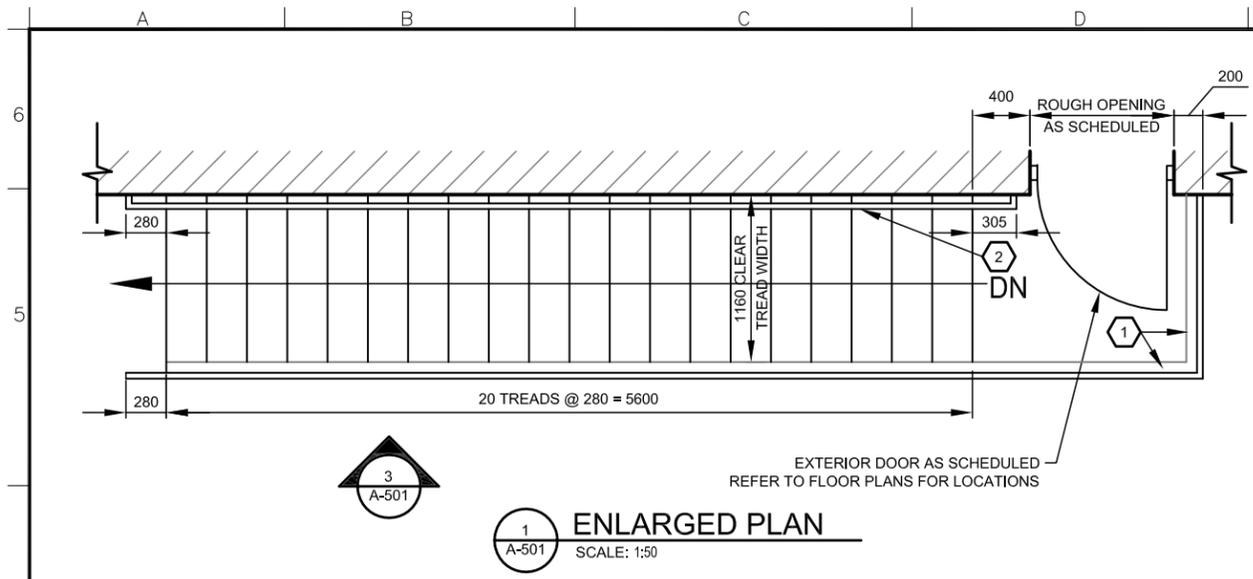
US Army Corps
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 Middle East District

DESIGNED BY: MR
 DWN BY: MH
 CHK BY: DP

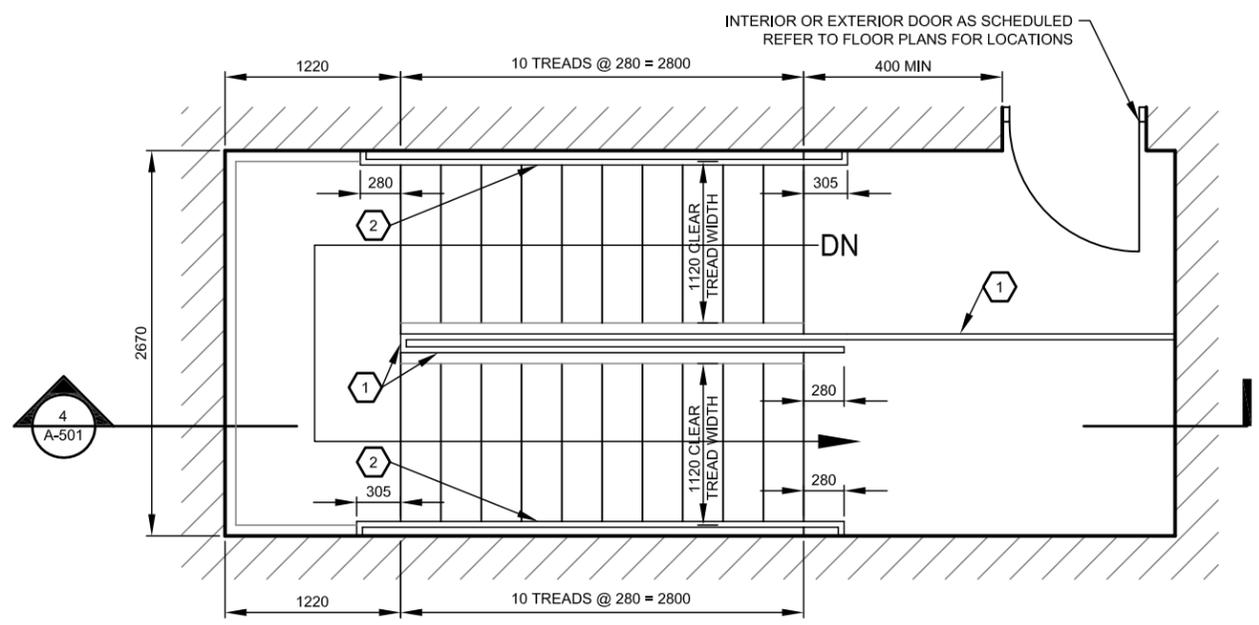
DATE: 09 DEC 2011
 SUBMITTED BY: BAKER
 FILE NO.: AF-133A-A-401-PN-DWG

UMMC P-341 PROGRAM
 J - 451 AEW INTELLIGENCE FACILITY
 KANDAHAR AIR FIELD, AFGHANISTAN
 ENLARGED RESTROOM PLANS

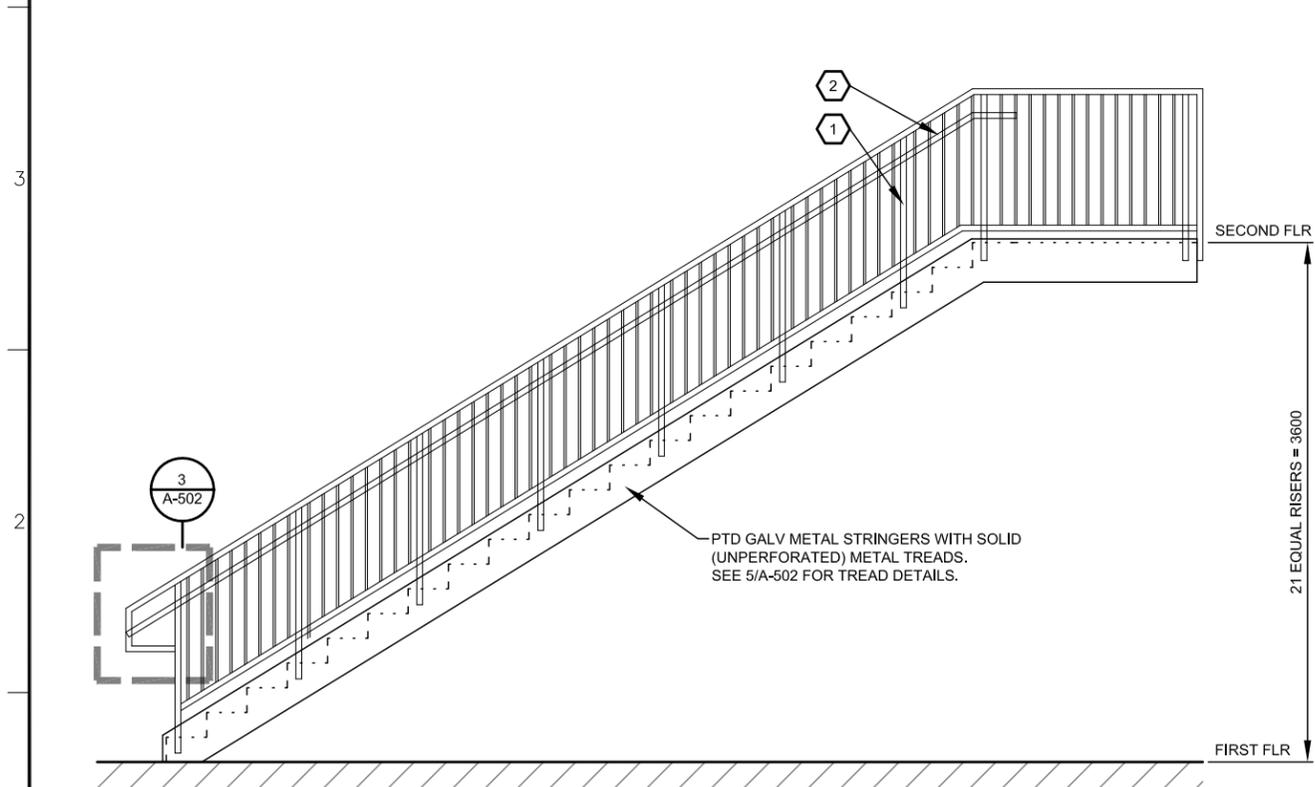
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A-401



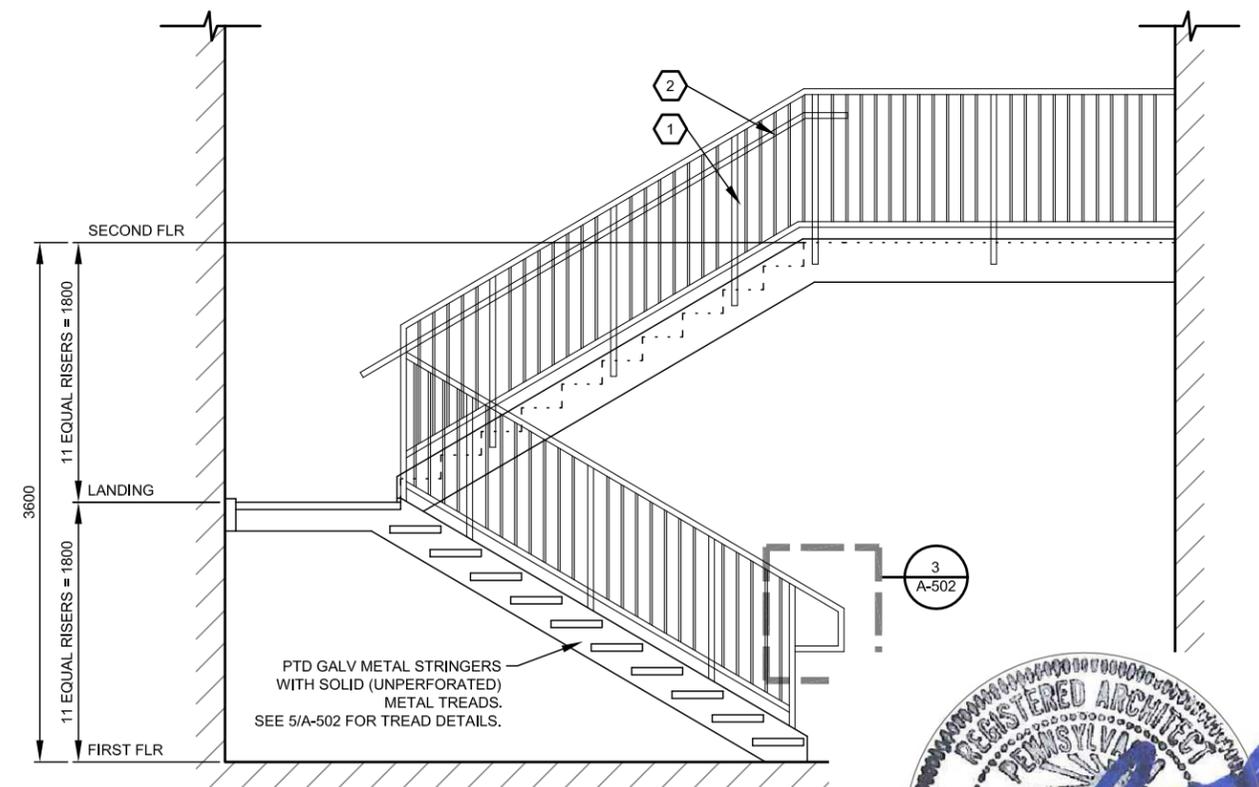
1 ENLARGED PLAN
A-501 SCALE: 1:50



2 ENLARGED PLAN
A-501 SCALE: 1:50

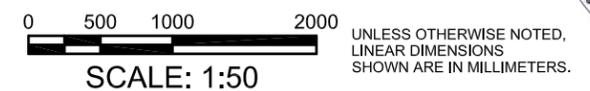


3 ELEVATION
A-501 SCALE: 1:50



4 SECTION
A-501 SCALE: 1:50

- KEYNOTES**
1. PAINTED GALVANIZED METAL GUARD/HANDRAIL. SEE DETAILS 1/A-502 AND 4/A-502.
 2. PAINTED GALVANIZED METAL HANDRAIL MOUNTED TO ADJACENT WALL. SEE DETAIL 2/A-502



--	--

DESIGNED BY:	DATE:	09 DEC 2011
MR	SUBMITTED BY:	BAKER
DWN BY:	CHK BY:	DP
MH	FILE NO.:	AF1133A-A-501-DWG

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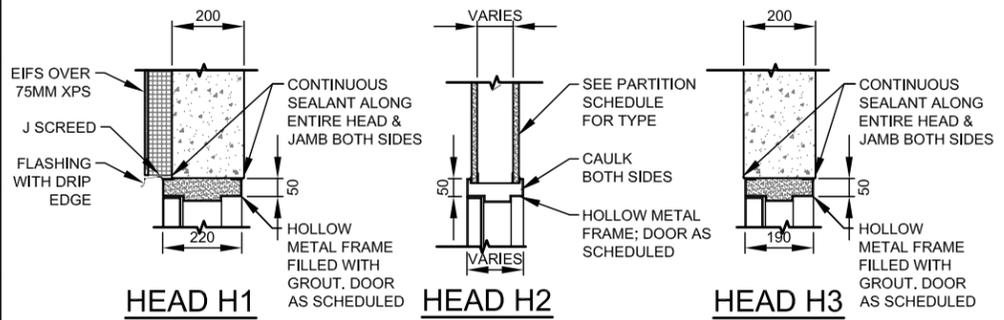
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UMMC P-341 PROGRAM
J - 451 AEW INTELLIGENCE FACILITY
KANDAHAR AIR FIELD, AFGHANISTAN
STAIR PLANS AND SECTIONS

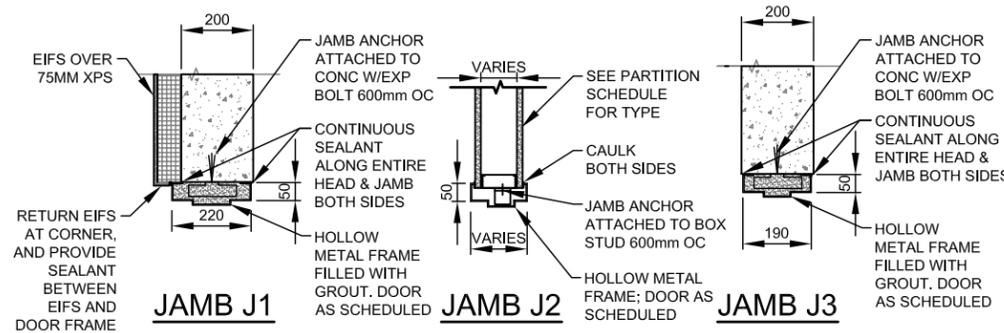
SHEET REFERENCE NUMBER:
J
A-501

DOOR NUMBER	ROOM NAME	DOOR						FRAME				LABEL	HDW SET	REMARKS	
		TYPE	WIDTH	HEIGHT	THK	MATERIAL	FINISH	TYPE	JAMB	HEAD	MATERIAL				FINISH
101-A	SECURE VESTIBULE	A	900	2150	45	HM	PTD	1	J1	H1	HM	PTD	N/A	5	
101-B	SECURE VESTIBULE	A	900	2150	45	HM	PTD	1	J2	H2	HM	PTD	N/A	8	
102	OPEN OFFICE	A	900	2150	45	HM	PTD	1	J1	H1	HM	PTD	N/A	7	
103	MP CELL/OPS INTEL	A	900	2150	45	HM	PTD	1	J2	H2	HM	PTD	N/A	17	
104	COMM	A	900	2150	45	HM	PTD	1	J2	H2	HM	PTD	N/A	13	
105	BRIEFING	A	900	2150	45	HM	PTD	1	J2	H2	HM	PTD	N/A	15	
106	BRIEFING	A	900	2150	45	HM	PTD	1	J2	H2	HM	PTD	N/A	15	
107	CONFERENCE	A	900	2150	45	HM	PTD	1	J2	H2	HM	PTD	N/A	15	
108	TLT	A	900	2150	45	HM	PTD	1	J2	H2	HM	PTD	N/A	20	PROVIDE UNDERCUT 19 mm MAX CLEAR
109	JAN	A	900	2150	45	HM	PTD	1	J2	H2	HM	PTD	N/A	13	
110	TLT	A	900	2150	45	HM	PTD	1	J2	H2	HM	PTD	N/A	20	PROVIDE UNDERCUT 19 mm MAX CLEAR
111	ELEC	A	900	2150	45	HM	PTD	1	J1	H1	HM	PTD	N/A	5	
S01-A	STAIR	A	900	2150	45	HM	PTD	1	J1	H1	HM	PTD	N/A	7	
S01-B	STAIR	A	900	2150	45	HM	PTD	1	J2	H2	HM	PTD	60 MIN	9	
201	1SGT	A	900	2150	45	HM	PTD	1	J2	H2	HM	PTD	N/A	15	
202	DO	A	900	2150	45	HM	PTD	1	J2	H2	HM	PTD	N/A	15	
203	SQCC	A	900	2150	45	HM	PTD	1	J2	H2	HM	PTD	N/A	15	
204	PED OPS	A	900	2150	45	HM	PTD	1	J1	H1	HM	PTD	N/A	7	
205	COMM	A	900	2150	45	HM	PTD	1	J2	H2	HM	PTD	N/A	13	
206	TLT	A	900	2150	45	HM	PTD	1	J2	H2	HM	PTD	N/A	20	PROVIDE UNDERCUT 19 mm MAX CLEAR
S01-C	STAIR	A	900	2150	45	HM	PTD	1	J2	H2	HM	PTD	60 MIN	18	

- NOTES:**
- ALL EXTERIOR DOORS TO BE INSULATED U.N.O.
 - ALL EXTERIOR GLAZING TO MEET AT/FP BLAST REQUIREMENTS AS SPECIFIED BY UFC & BAF
 - WHERE A FIRE RESISTANCE LABEL IS INDICATED, PROVIDE DOOR, FRAME, AND HARDWARE WITH FIRE RATING INDICATED, AND SMOKE GASKETING.
 - REFER TO SPECIFICATIONS FOR HARDWARE SETS

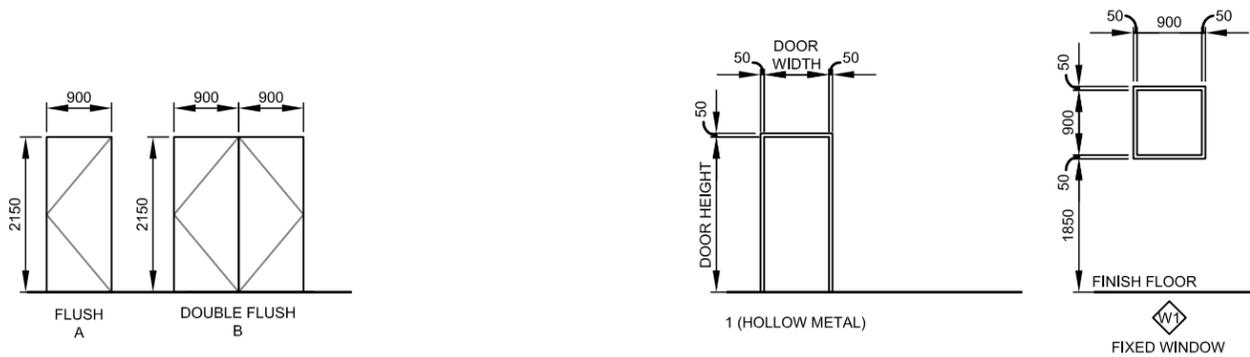


6 A-601 HEAD DETAILS SCALE: 1:20



5 A-601 JAMB DETAILS SCALE: 1:20

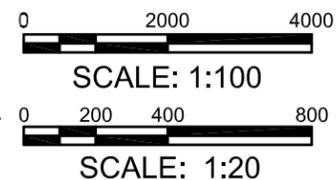
4 A-601 NOT USED SCALE: NTS



1 A-601 DOOR TYPES SCALE: 1:100

2 A-601 DOOR FRAMES SCALE: 1:100

3 A-601 WINDOWS SCALE: 1:20



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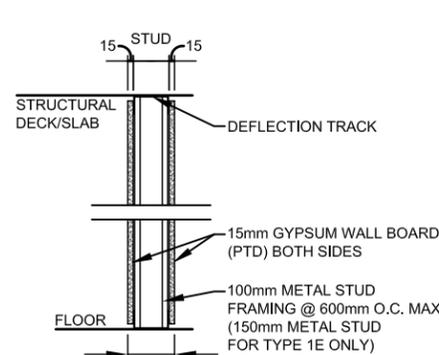
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 DP CHK BY: DP
 AF133A-A601SC.DWG

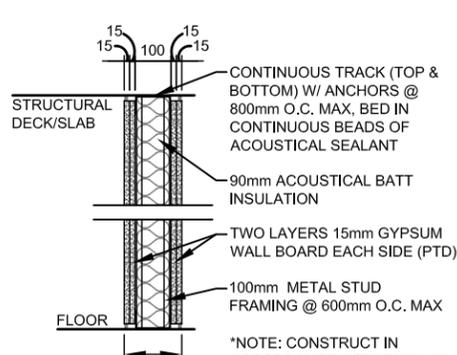
UMMC P-341 PROGRAM
 J - 451 AEW INTELLIGENCE FACILITY
 KANDAHAR AIR FIELD, AFGHANISTAN
 DOOR SCHEDULE, DOOR TYPES AND DETAILS

SHEET REFERENCE NUMBER:
J
A-601

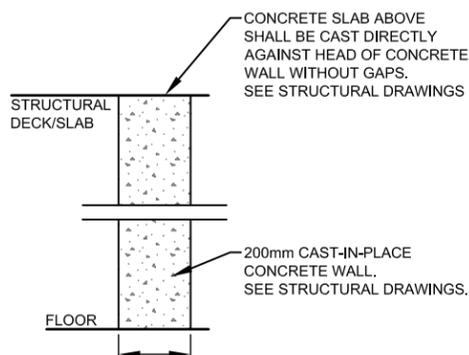
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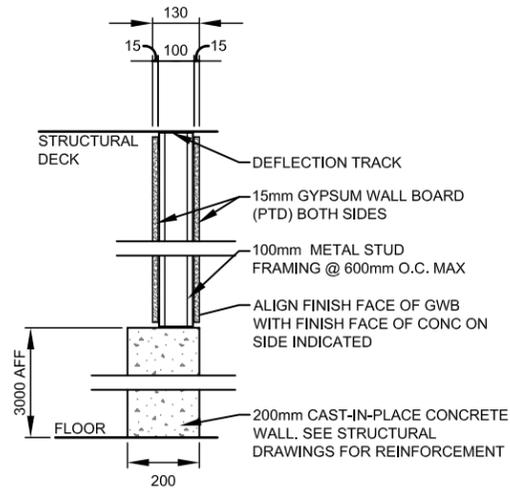
- 1 GWB ON MTL STUD
- 1A GWB ON MTL STUD - SMOKE PARTITION
- 1B GWB ON MTL STUD - 1-HR FIRE RATED - UL# U419
- 1C GWB ON MTL STUD - ABUSE-RESISTANT ONE SIDE ONLY
- 1D GWB ON MTL STUD - PARTIAL HEIGHT TO 800mm
- 1E GWB ON 150mm MTL STUD - 1-HR FIRE RATED - UL# U419



- 2 GWB ON MTL STUD - STC 50
- 2A GWB ON MTL STUD - 1-HR FIRE RATED - UL# U419 - STC 50



- 3 CONCRETE - NON-RATED
- 3A CONCRETE - 1-HR FIRE RATED - UL# U905



- 4 CONCRETE WITH GWB ON METAL STUD ABOVE - NON-RATED

PARTITION NOTES:

- ALL PARTITIONS TO BE TYPE 1, UNO
- REFER TO DATABASE REPORT FOR FLOOR FINISH AND BASE.
- PROVIDE ACOUSTICAL SEALANT AT ALL PARTITION JOINTS AND PENETRATIONS WHERE STC-RATED ASSEMBLY IS INDICATED.
- WHERE PARTITION TYPE INDICATES A FIRE RATING, PROVIDE FIRE-RESISTIVE OPENING PROTECTIVES AND FIRE-RESISTIVE JOINT AND PENETRATION ASSEMBLIES TO ACHIEVE A CONTINUOUS RATED ASSEMBLY WITH HOURLY RATING AS INDICATED.
- WHERE PARTITION TYPE INDICATES A FIRE RATING OR WHERE SMOKE PARTITION IS INDICATED, PROVIDE MARKING TO READ "FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS". SUCH SIGNS OR STENCILING SHALL CONSIST OF PERMANENT SIGNS OR STENCILING, AND SHALL BE LOCATED ON BOTH SIDES OF THE WALL OR PARTITION, SPACED AT 900 MM OC INTERVALS MIN. LOCATED AT NO LESS THAN 2750mm AFF, AND SHALL USE 13mm LETTERING HEIGHT MIN. COLOR OF LETTERING SHALL CONTRAST WITH COLOR OF THE APPLICATION SURFACE, SUCH THAT LETTERING CAN BE EASILY READ.
- REFER TO STRUCTURAL DRAWINGS FOR REINFORCEMENT OF CONCRETE WALLS. ALL METAL STUDS TO BE 20 GA. METAL STUD MIN. CONTRACTOR SHALL VERIFY APPLICABLE GAGE PER WALL CONDITION, AND USE HEAVIER GAGE AS REQUIRED TO MEET STRUCTURAL CRITERIA.
- ALL GWB TO BE STANDARD UNLESS DESIGNATED OTHERWISE PER PARTITION TYPE.

1 PARTITION TYPES
A-602 SCALE: 1:20

NO.	DESCRIPTION	DATE	REV.

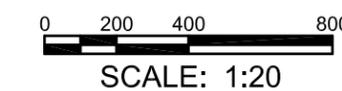
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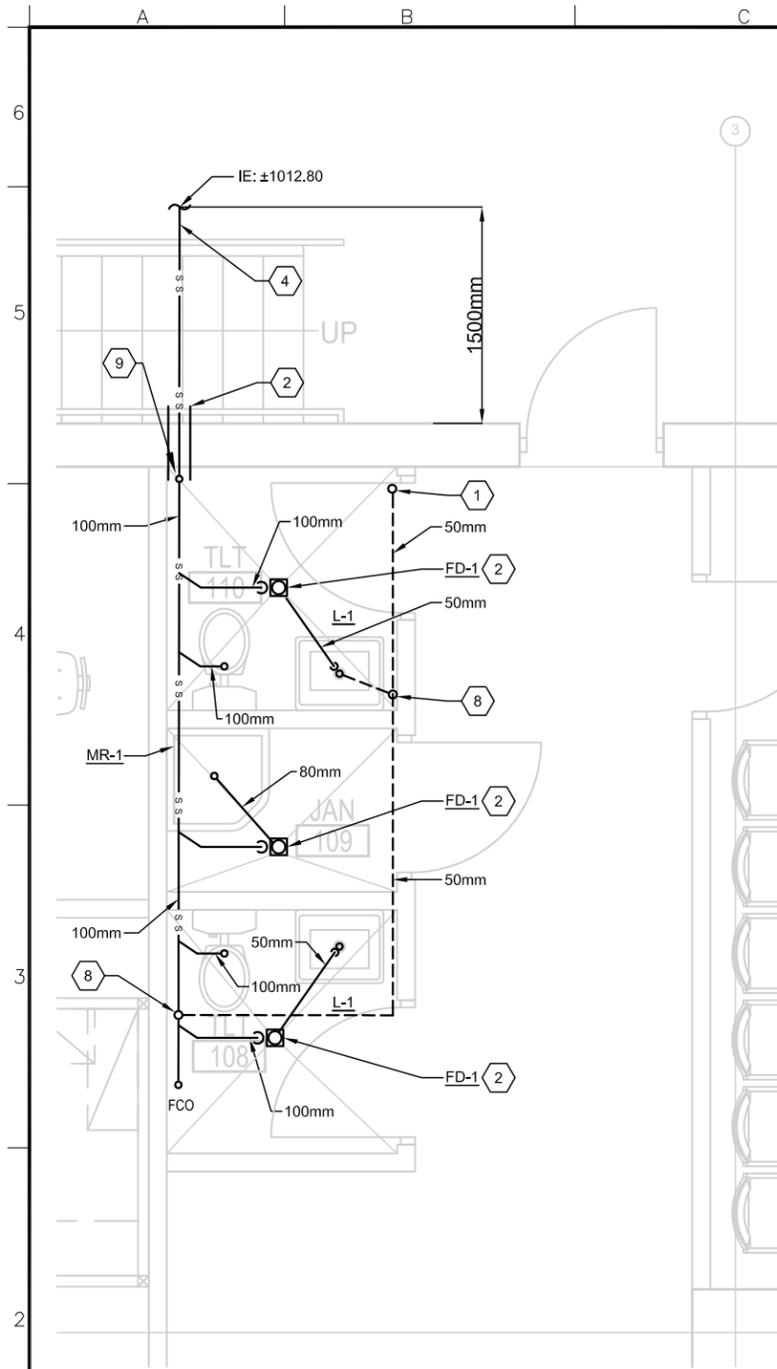
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UMC P-341 PROGRAM
J - 451 AEW INTELLIGENCE FACILITY
KANDAHAR AIR FIELD, AFGHANISTAN
PARTITION TYPES

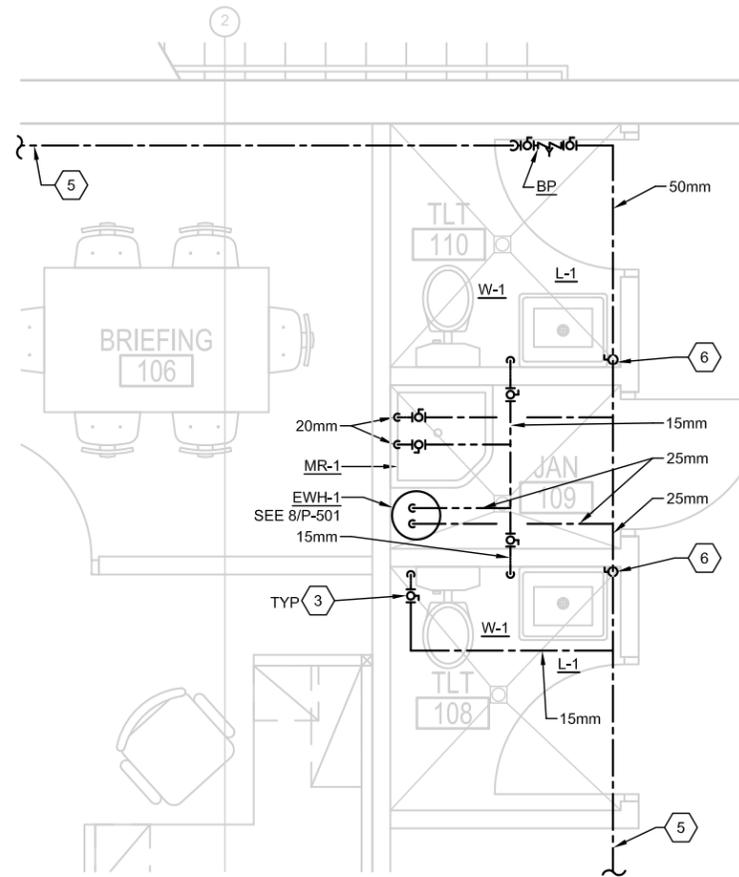
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A-602



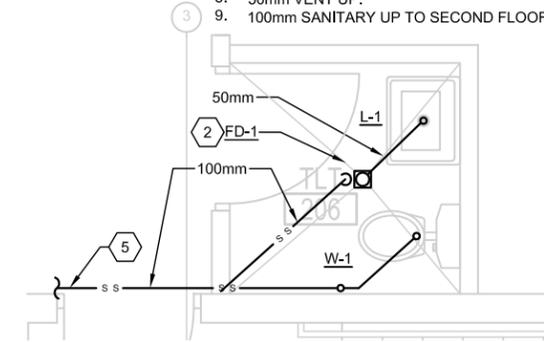
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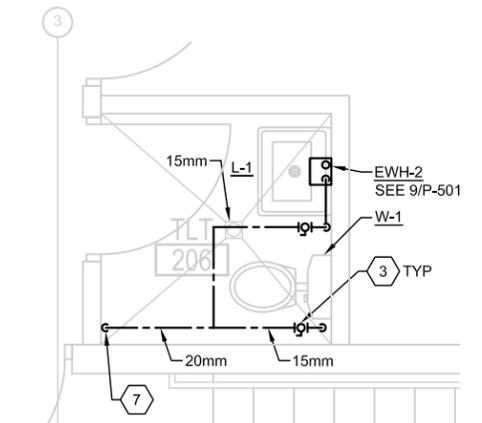
1 FIRST FLOOR ENLARGED PLAN - SANITARY
P-401 SCALE: 1:50



2 FIRST FLOOR ENLARGED PLAN - DOMESTIC HOT AND COLD WATER
P-401 SCALE: 1:50



3 SECOND FLOOR ENLARGED RESTROOM PLAN - SANITARY
P-401 SCALE: 1:50



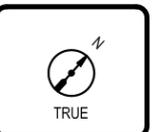
4 SECOND FLOOR ENLARGED RESTROOM PLAN - DOMESTIC HOT AND COLD WATER
P-401 SCALE: 1:50

GENERAL NOTES:

1. PIPING IS ROUTED EXPOSED ON THE UNDERSIDE OF CEILINGS OR AS HIGH AS POSSIBLE ALONG WALLS. FIELD COORDINATE ROUTING WITH OTHER TRADES.
2. PROVIDE CLEANOUTS AT A MAXIMUM SPACING OF 7.62 METERS.

KEY NOTES:

1. 50mm VENT STACK UP TO SECOND FLOOR.
2. LAVATORY DRAINS TO CONNECT TO P-TRAP OF FLOOR DRAINS.
3. PROVIDE ISOLATION VALVES FOR HOT AND COLD WATER PIPES TO EACH INDIVIDUAL FIXTURE.
4. FOR CONTINUATION OF SANITARY LINE SEE 1/C-101.
5. FOR CONTINUATION OF DOMESTIC COLD WATER LINE SEE 1/P-101.
6. PROVIDE ISOLATION VALVE FOR COLD WATER IN VERTICAL PIPE.
7. 20mm COLD WATER DOWN TO FIRST FLOOR.
8. 50mm VENT UP.
9. 100mm SANITARY UP TO SECOND FLOOR.



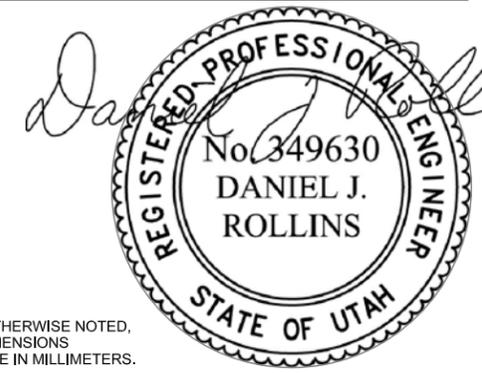
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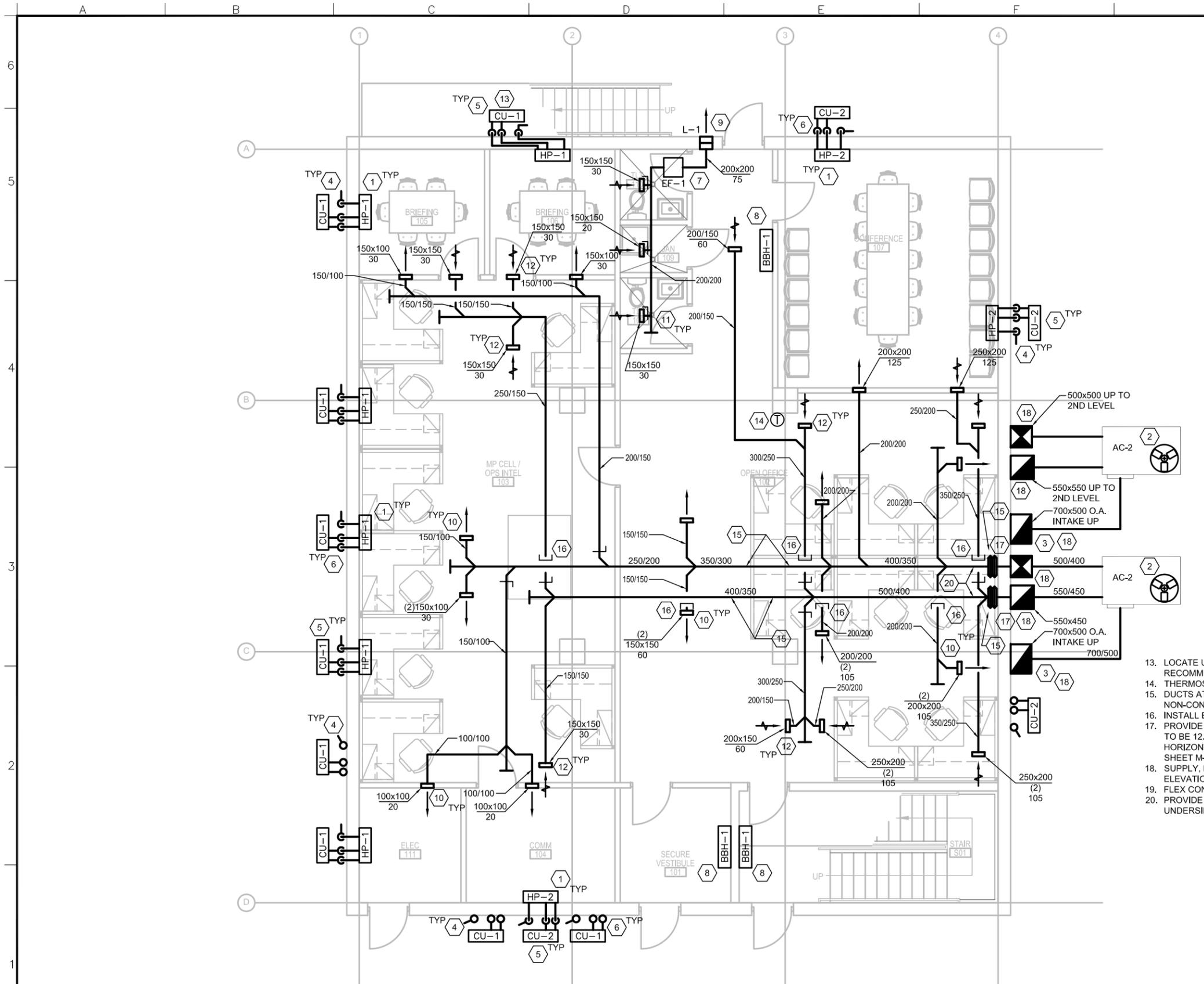
UMWIC R-341 PROGRAM
J - 451 AEW INTELLIGENCE FACILITY
KANDAHAR AIR FIELD, AFGHANISTAN
ENLARGED PLUMBING PLANS



SHEET REFERENCE NUMBER:
J
P-401



12/14/2011 9:57 AM



1 FIRST FLOOR - MECHANICAL PLAN
M-101 SCALE: 1:100

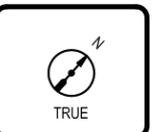


GENERAL NOTES:

- HVAC EQUIPMENT, DUCTWORK, REFRIGERANT PIPING AND ACCESSORIES WILL BE SUPPORTED, SECURED AND RESTRAINED ACCORDING TO STRUCTURAL'S SEISMIC PERFORMANCE CRITERIA AND THE INTERNATIONAL BUILDING CODE (IBC).
- ALL HVAC EQUIPMENT WILL BE INSTALLED AND TESTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

KEYNOTES:

- HEAT PUMP INDOOR UNIT MOUNTED ON WALL WITH PIPED CONDENSATE DRAIN. LOCATE INDOOR UNITS ON BLANK WALLS OR ABOVE DOORS 2.3m AFF AND 3m AFF AT LOCATIONS ABOVE WINDOWS. SEE DETAILS ON SHEET M-502, TYPICAL.
- PACKAGED HVAC UNIT, PAD MOUNTED ON GRADE, DX COOLING, ELECTRIC HEAT, 100% ECONOMIZER, POWER EXHAUST. SEE PACKAGED HVAC UNIT DETAILS ON SHEET M-501.
- PROVIDE REMOVABLE DRAIN AND ACCESS PANEL AT LOW POINT OF DUCT FOR SAND DISPOSAL. SEE EXTERIOR DUCT ELEVATION DETAIL ON SHEET M0501.
- CONDENSATE DRAIN DOWN, SECURED TO EXTERIOR WALL. LOCATE DISCHARGE 0.4m ABOVE DRIP BLOCK ON GRADE. SEE DETAIL ON SHEET M-502, TYPICAL.
- HEAT PUMP OUTDOOR UNIT MOUNTED ON GRADE. EXTEND PIPING THROUGH WALL TO INDOOR UNIT AS REQUIRED. SEAL ALL PENETRATIONS WEATHER TIGHT, TYPICAL. SEE DETAIL ON SHEET M-502.
- INSULATED REFRIGERANT AND WIRING LINES TO BE JACKETED AND SECURED TO WALL, TYPICAL.
- INLINE EXHAUST FAN SUSPENDED FROM STRUCTURE. SEE ELECTRICAL PLANS FOR CONTROL INFORMATION.
- ELECTRIC BASEBOARD HEATER, WALL-MOUNTED WITH INTEGRAL THERMOSTAT. TO BE INSTALLED 6" A.F.F.
- EXHAUST LOUVER WITH BACK-DRAFT DAMPER.
- DUCT MOUNTED SUPPLY REGISTER WITH ADJUSTABLE OPPOSED BLADE DAMPERS. BALANCE TO LPS INDICATED, TYPICAL.
- ALUMINUM DUCT MOUNTED EXHAUST GRILLE WITH ADJUSTABLE OPPOSED BLADE DAMPERS. BALANCE TO LPS INDICATED, TYPICAL.
- DUCT MOUNTED RETURN GRILLE WITH ADJUSTABLE OPPOSED BLADE DAMPERS.
- LOCATE UNIT UNDERNEATH STAIRS 0.4m ABOVE GRADE AND MAINTAIN ALL RECOMMENDED ACCESS/CLEARANCES.
- THERMOSTAT FOR AC-2.
- DUCTS AT THE INTERIOR PERIMETER OF THE BUILDING TO BE OF A NON-CONDUCTIVE MATERIAL, E.G., CANVAS OR RUBBER.
- INSTALL BRANCH DUCT WITH BOTTOM TAKE OFF, TYPICAL.
- PROVIDE BARS AT PENETRATION OF DUCTS THROUGH BUILDING. BARS ARE TO BE 12.7mm IN DIAMETER, STEEL WELDED VERTICALLY AND HORIZONTALLY 152mm ON CENTER. SEE DUCT PENETRATION DETAIL ON SHEET M-502.
- SUPPLY, RETURN AND OUTSIDE AIR DUCT RISERS. SEE EXTERIOR DUCT ELEVATION DETAIL ON SHEET M-501.
- FLEX CONNECTOR, TYPICAL.
- PROVIDE A 300mm X 300mm DUCT INSPECTION ACCESS PANEL ON UNDERSIDE OF MAIN DUCT.

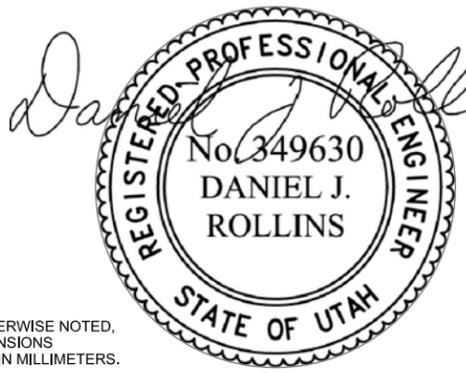


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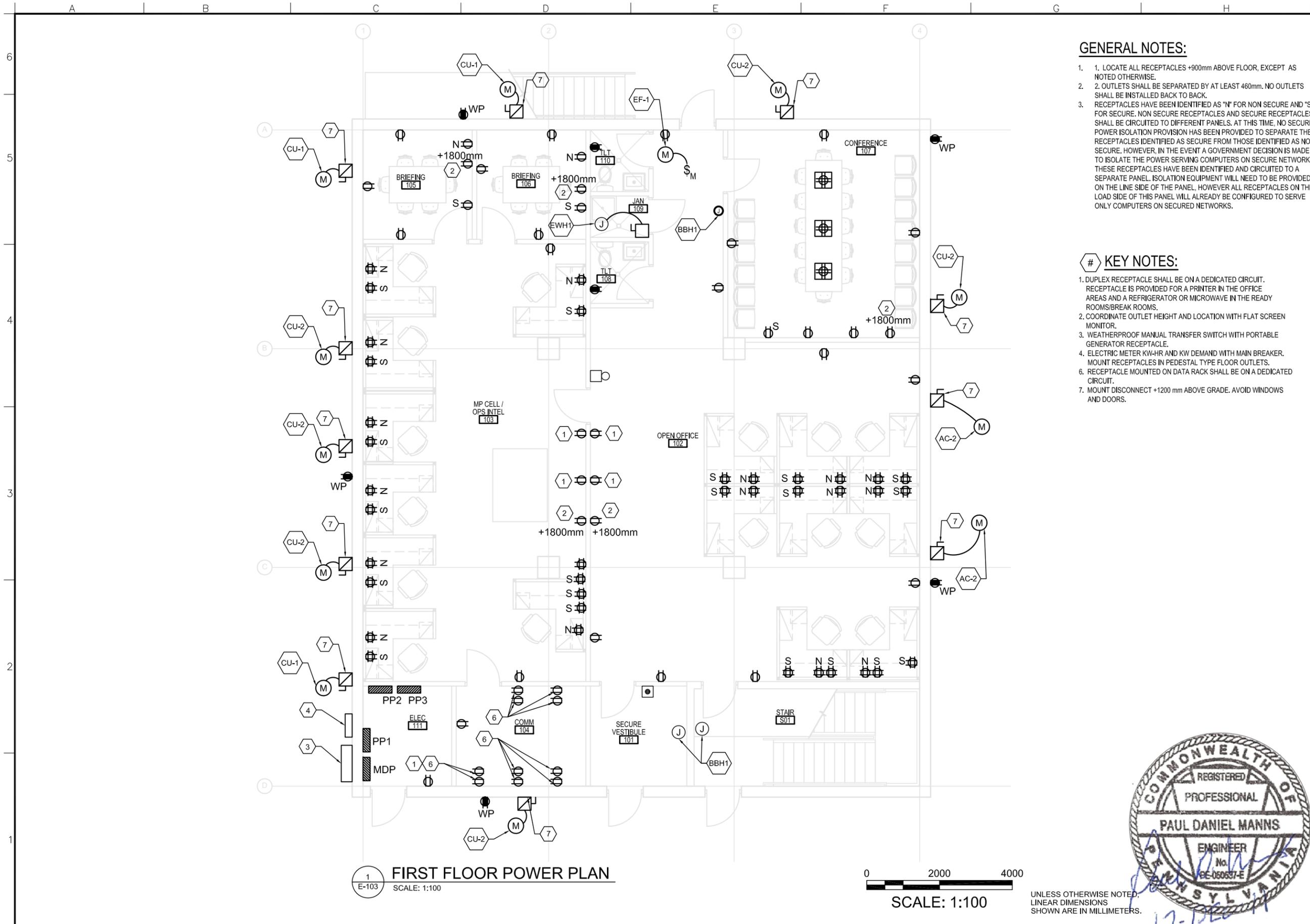
US Army Corps of Engineers
 Middle East District



UMC R-341 PROGRAM
 J-451 AEW INTELLIGENCE FACILITY
 KANDAHAR AIR FIELD, AFGHANISTAN
 FIRST FLOOR - MECHANICAL PLAN

SHEET REFERENCE NUMBER:
 J
 M-101

12/14/2011 9:58 AM



1
E-103
FIRST FLOOR POWER PLAN
SCALE: 1:100

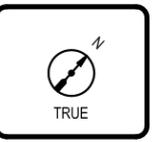


GENERAL NOTES:

1. LOCATE ALL RECEPTACLES +900mm ABOVE FLOOR, EXCEPT AS NOTED OTHERWISE.
2. OUTLETS SHALL BE SEPARATED BY AT LEAST 460mm. NO OUTLETS SHALL BE INSTALLED BACK TO BACK.
3. RECEPTACLES HAVE BEEN IDENTIFIED AS "N" FOR NON SECURE AND "S" FOR SECURE. NON SECURE RECEPTACLES AND SECURE RECEPTACLES SHALL BE CIRCUITED TO DIFFERENT PANELS. AT THIS TIME, NO SECURE POWER ISOLATION PROVISION HAS BEEN PROVIDED TO SEPARATE THE RECEPTACLES IDENTIFIED AS SECURE FROM THOSE IDENTIFIED AS NON SECURE. HOWEVER, IN THE EVENT A GOVERNMENT DECISION IS MADE TO ISOLATE THE POWER SERVING COMPUTERS ON SECURE NETWORKS, THESE RECEPTACLES HAVE BEEN IDENTIFIED AND CIRCUITED TO A SEPARATE PANEL. ISOLATION EQUIPMENT WILL NEED TO BE PROVIDED ON THE LINE SIDE OF THE PANEL, HOWEVER ALL RECEPTACLES ON THE LOAD SIDE OF THIS PANEL WILL ALREADY BE CONFIGURED TO SERVE ONLY COMPUTERS ON SECURED NETWORKS.

KEY NOTES:

1. DUPLEX RECEPTACLE SHALL BE ON A DEDICATED CIRCUIT. RECEPTACLE IS PROVIDED FOR A PRINTER IN THE OFFICE AREAS AND A REFRIGERATOR OR MICROWAVE IN THE READY ROOMS/BREAK ROOMS.
2. COORDINATE OUTLET HEIGHT AND LOCATION WITH FLAT SCREEN MONITOR.
3. WEATHERPROOF MANUAL TRANSFER SWITCH WITH PORTABLE GENERATOR RECEPTACLE.
4. ELECTRIC METER KW-HR AND KW DEMAND WITH MAIN BREAKER. MOUNT RECEPTACLES IN PEDESTAL TYPE FLOOR OUTLETS.
6. RECEPTACLE MOUNTED ON DATA RACK SHALL BE ON A DEDICATED CIRCUIT.
7. MOUNT DISCONNECT +1200 mm ABOVE GRADE. AVOID WINDOWS AND DOORS.

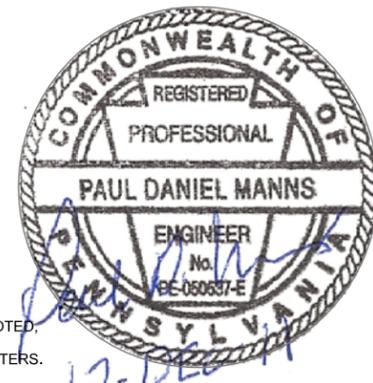


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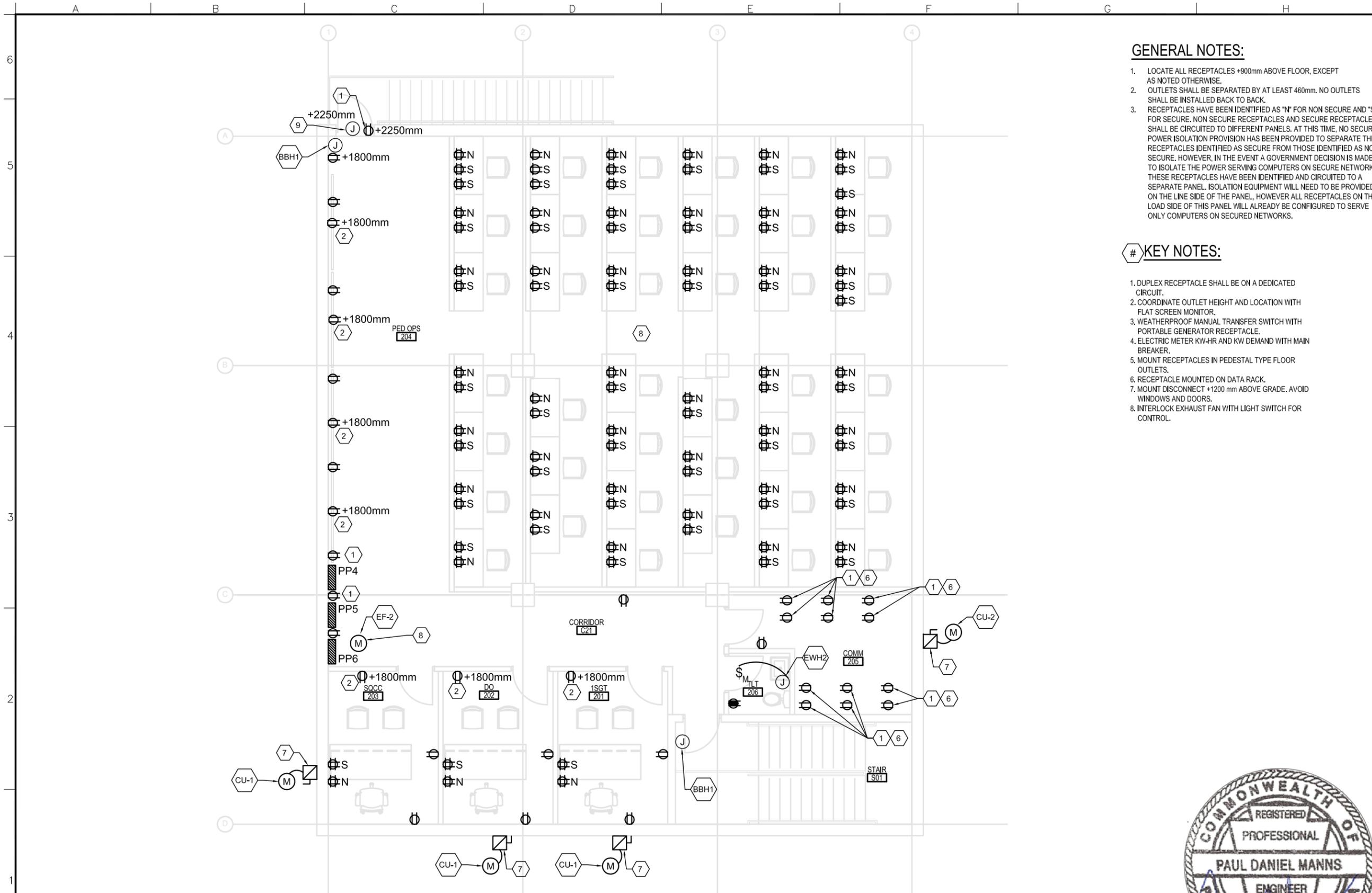
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 Middle East District



UMMC P-341 PROGRAM
 J - 451 AEW INTELLIGENCE FACILITY
 KANDAHAR AIR FIELD, AFGHANISTAN
 FIRST FLOOR POWER PLAN

SHEET REFERENCE NUMBER:
J
E-103

12/14/2011 9:58 AM



1 SECOND FLOOR POWER PLAN
E-104 SCALE: 1:100



SCALE: 1:100

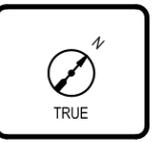
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SHOWN ARE IN MILLIMETERS.

GENERAL NOTES:

- LOCATE ALL RECEPTACLES +900mm ABOVE FLOOR, EXCEPT AS NOTED OTHERWISE.
- OUTLETS SHALL BE SEPARATED BY AT LEAST 460mm. NO OUTLETS SHALL BE INSTALLED BACK TO BACK.
- RECEPTACLES HAVE BEEN IDENTIFIED AS "N" FOR NON SECURE AND "S" FOR SECURE. NON SECURE RECEPTACLES AND SECURE RECEPTACLES SHALL BE CIRCUITED TO DIFFERENT PANELS. AT THIS TIME, NO SECURE POWER ISOLATION PROVISION HAS BEEN PROVIDED TO SEPARATE THE RECEPTACLES IDENTIFIED AS SECURE FROM THOSE IDENTIFIED AS NON SECURE. HOWEVER, IN THE EVENT A GOVERNMENT DECISION IS MADE TO ISOLATE THE POWER SERVING COMPUTERS ON SECURE NETWORKS, THESE RECEPTACLES HAVE BEEN IDENTIFIED AND CIRCUITED TO A SEPARATE PANEL. ISOLATION EQUIPMENT WILL NEED TO BE PROVIDED ON THE LINE SIDE OF THE PANEL, HOWEVER ALL RECEPTACLES ON THE LOAD SIDE OF THIS PANEL WILL ALREADY BE CONFIGURED TO SERVE ONLY COMPUTERS ON SECURED NETWORKS.

KEY NOTES:

- DUPLEX RECEPTACLE SHALL BE ON A DEDICATED CIRCUIT.
- COORDINATE OUTLET HEIGHT AND LOCATION WITH FLAT SCREEN MONITOR.
- WEATHERPROOF MANUAL TRANSFER SWITCH WITH PORTABLE GENERATOR RECEPTACLE.
- ELECTRIC METER KW-HR AND KW DEMAND WITH MAIN BREAKER.
- MOUNT RECEPTACLES IN PEDESTAL TYPE FLOOR OUTLETS.
- RECEPTACLE MOUNTED ON DATA RACK.
- MOUNT DISCONNECT +1200 mm ABOVE GRADE. AVOID WINDOWS AND DOORS.
- INTERLOCK EXHAUST FAN WITH LIGHT SWITCH FOR CONTROL.

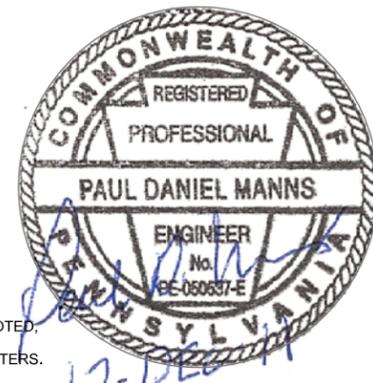


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UMMC P-341 PROGRAM
 J - 451 AEW INTELLIGENCE FACILITY
 KANDAHAR AIR FIELD, AFGHANISTAN
 SECOND FLOOR POWER PLAN

SHEET
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 J
 E-104

12/14/2011 9:58 AM



1
E-106 **SECOND FLOOR COMMUNICATIONS PLAN**
SCALE: 1:100



UNLESS OTHERWISE NOTED,
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SHOWN ARE IN MILLIMETERS.

GENERAL NOTES:

1. LOCATE ALL COMMUNICATION RECEPTACLES AT 900mm A.F.F., EXCEPT NOTED OTHERWISE.

KEY NOTES:

1. MOUNT COMMUNICATIONS OUTLETS IN MULTI-SERVICE RAISED FLOOR BOXES. REFER TO DETAIL 4/E-503 FOR CABLE TRAY MOUNTING HEIGHTS.
2. PROVIDE (3) 100mm CONDUITS DOWN TO LOCATION ABOVE PLYWOOD BACKBOARD IN COMMUNICATION ROOM 104.
3. OFFSET CABLE TRAY INTO ACCESSIBLE SPACE BELOW FLOOR TIERS.
4. CABLE TRAY SHALL BE MOUNTED BELOW FLOOR SYSTEM, SUPPORTED FROM BUILDING COLUMNS WHERE POSSIBLE AND FROM STRUCTURAL FLOOR IN OTHER LOCATIONS. BOTTOM TRAY SHALL BE A MINIMUM OF 50mm AFF. SEE SECTION 4/E-503.
5. SEE 2/E-503 FOR MOUNTING DETAILS.
6. OPTION C1: MODIFY THE COMMUNICATIONS DEVICES SHOWN AND PROVIDE ADDITIONAL DEVICES AS REQUIRED TO PROVIDE ONE QUAD NIPR AND ONE QUAD SIPR DROP AROUND THE ENTIRE PERIMETER OF THE ROOM SPACED 3m ON CENTER MAXIMUM. FINAL LOCATION OF ALL DEVICES SHALL BE COORDINATED WITH THE CONTRACTING OFFICER DURING CONSTRUCTION. "a" IS THE ESTIMATED NUMBER OF QUAD DROPS REQUIRED FOR EACH NIPR AND SIPR.
7. OPTION C1: MODIFY THE COMMUNICATIONS DEVICES SHOWN AND PROVIDE ADDITIONAL AS REQUIRED TO PROVIDE ONE QUAD NIPR AND ONE QUAD SIPR OUTLET ON EACH WALL. FINAL LOCATION OF ALL DEVICES SHALL BE COORDINATED WITH THE CONTRACTING OFFICER DURING CONSTRUCTION. "a" IS THE ESTIMATED NUMBER OF QUAD DROPS REQUIRED FOR EACH NIPR AND SIPR.
8. OPTION C1: MODIFY THE NIPR AND SIPR CABLE TRAY SHOWN TO PROVIDE ADEQUATE RACEWAYS FOR THE OPTIONAL DESIGN PERMITTED BY CABLE TRAY SHALL BE REQUIRED TO BE MAXIMUM 40% FILLED INCLUDING FUTURE 25% SPARE CAPACITY. PROPOSED CABLE TRAY DIMENSIONS 250 MM WIDE 100 MM DEEP.



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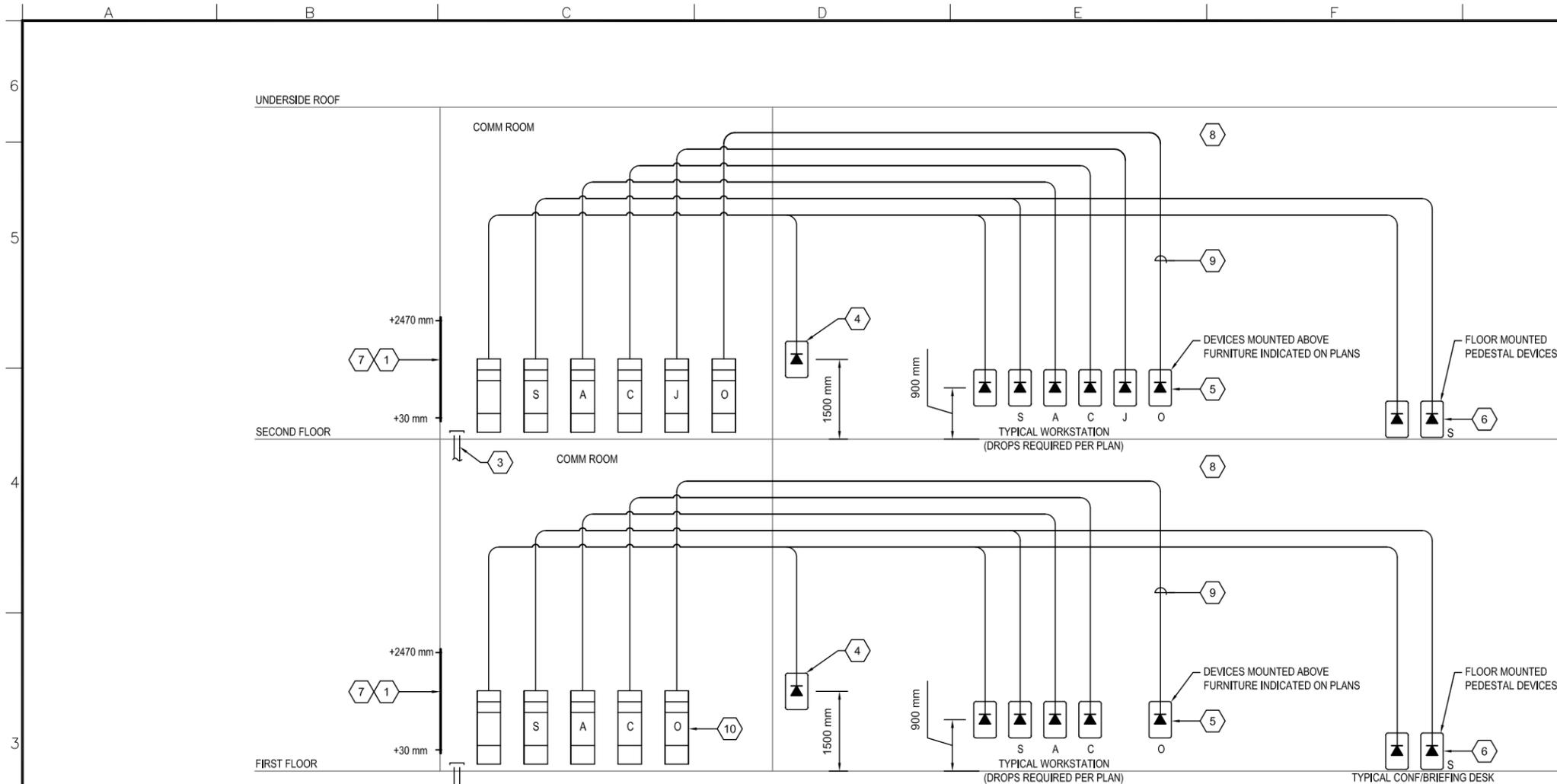
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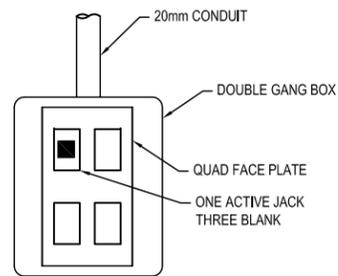
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KANDAHAR AIR FIELD, AFGHANISTAN
SECOND FLOOR COMMUNICATIONS PLAN

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REFERENCE
NUMBER:
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E-106

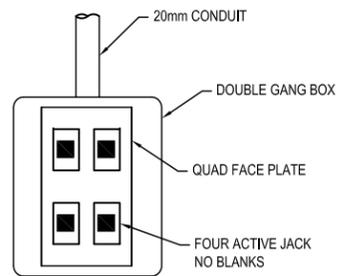




1 COMM RISER DIAGRAM - FIRST FLOOR
E-502 SCALE: NONE



2 BASE BID TYPICAL OUTLET
E-502 SCALE: NONE



3 OPTION C1 TYPICAL OUTLET
E-502 SCALE: NONE

LEGEND

- OUTLET ENCLOSURE
- VOICE OUTLET
- DATA OUTLET
- S** SIPRNET OUTLET
- SM** SINGLE MODE
- SIPRNET** SECRET INTERNET PROTOCOL ROUTER NETWORK

KEY NOTES

1. PROVIDE A MINIMUM OF 1220mm x 2440mm x 19mm FIRE RATED PLYWOOD BACKBOARD.
2. PROVIDE MINIMUM THREE 100mm AND ONE 50mm SCHEDULE 80 PVC CONDUIT SYSTEM FROM COMM ROOM OUT TO NEAREST EXISTING COMMUNICATIONS MANHOLE. PROVIDE HANDHOLES AND PULL BOXES WHERE REQUIRED TO MEET "I3A" AND "DESIGN BUILD AND RENOVATE, USAF FACILITIES ON BAGRAM AIRFIELD". EACH CONDUIT SHALL BE PROVIDED WITH A METERED PULL TAPE OR ROPE FOR ENTIRE LENGTH. CONDUITS SHALL BE TERMINATED 50mm ABOVE FINISHED FLOOR.
3. PROVIDE A MINIMUM THREE 100mm AND ONE 50mm RGS CONDUIT SLEEVE AND RACEWAY FROM SECOND FLOOR COMM ROOM TO LOCATION 2500mm ABOVE CONDUIT ENTRY POINT IN FIRST FLOOR COMM ROOM. MAINTAIN ALL FIRE RATED FLOORS AND PARTITIONS SLEEVES SHALL EXTEND 50mm ABOVE FINISHED FLOOR.
4. TYPICAL DROP MOUNTED FOR NPR VOIP WALL PHONE PROVIDE FACE PLATE TO MATCH USERS WALL PHONE REQUIREMENTS.
5. DROPS MOUNTED AT TYPICAL WORK STATIONS SHALL BE 900mm ABOVE FINISHED FLOOR. LOCATIONS AND TYPES OF SYSTEMS SHALL BE PROVIDED AS INDICATED ON PLANS. JACKS SHALL BE INSTALLED WITH A MINIMUM OF 250mm SEPARATION OF JACKS AND RACEWAYS.
6. DROPS MOUNTED ON FLOOR BELOW CONF/BRIEFING TABLES SHALL BE PEDESTAL MOUNTED. RACEWAYS SHALL BE RUN EXPOSED DOWN WALL INTO FLOOR AND OUT TO LOCATION IN R6S CONDUIT CONCEALED IN FLOOR.
7. RACEWAYS AND SPACE RESERVED FOR THE INSTALLATION OF OUTSIDE PLANT (OSP) FIBER OPTIC CABLE (FO) AND COPPER RISERS PROVIDED BY OTHERS.
8. PROVIDE STEEL, SOLID BOTTOM CABLE TRAY DEDICATED FOR EACH SYSTEM REQUIRED ON FLOOR. CABLE TRAYS SHALL BE SUPPORTED FROM WALL WHERE POSSIBLE, AND SUPPORTED BY TRAPEZE. ALL RACEWAYS SHALL MAINTAIN 250mm SPACING UNLESS OTHERWISE NOTED.
9. CAT6 SHIELDS TWISTED PAIRS CABLE IN SURFACE MOUNTED 20mm EMT CONDUIT RACEWAYS.
10. 480mm TELE/DATA RACK (TYP).



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UMMC P-341 PROGRAM
J - 451 AEW INTELLIGENCE FACILITY
KANDAHAR AIR FIELD, AFGHANISTAN
COMM RISER DIAGRAMS

SHEET REFERENCE NUMBER:
J
E-502

