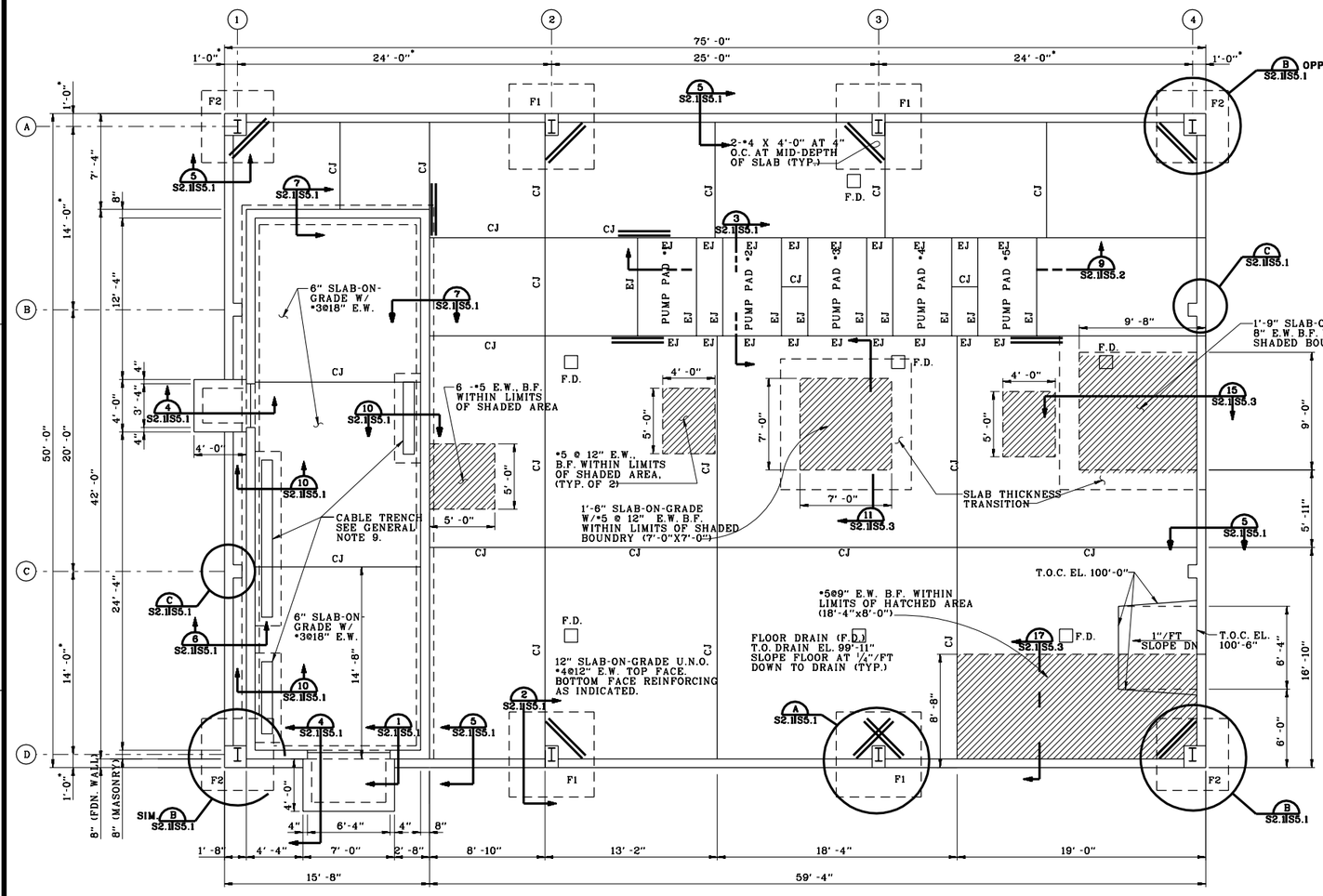
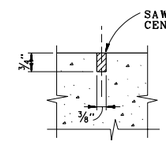


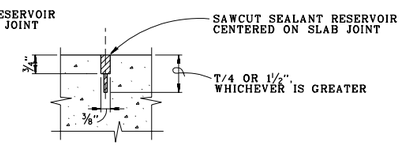
FOUNDATION AND SLAB PLAN

SCALE: 1/4 INCH = 1 FOOT

FOOTING SCHEDULE						
MARK	FOOTINGS SIZE	FOOTINGS REINFORCING	BOTTOM OF FOOTING ELEVATION	PIERS - SEE SEC. 2 ON SHT. 3 SIZE	PIERS REINFORCING	PIERS TIES
F1	6'-6"X6'-6"X12"	•5 @ 10" E.W. •'-•"		12"X20"	10•5 VERT. BARS	•3 TIES
F2	5'-6"X5'-6"X12"	•5 @ 10" E.W. •'-•"		16"X20"	10•5 VERT. BARS	•3 TIES



DETAIL A
NO SCALE



DETAIL B
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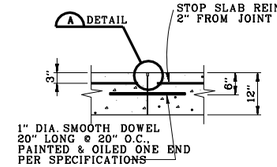
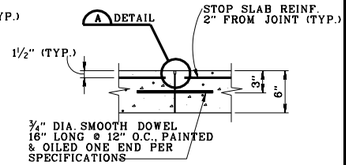
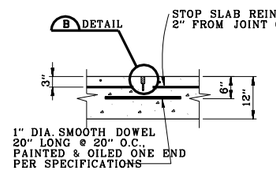


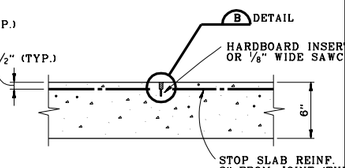
DOWELED CONSTRUCTION JOINT 12" SLAB
NO SCALE



DOWELED CONSTRUCTION JOINT 6" SLAB
NO SCALE



CONTRACTION JOINT 12" SLAB
NO SCALE



CONTRACTION JOINT 6" SLAB
NO SCALE

LAP SPLICE LENGTH (INCHES)	
BAR SIZE NO.	f'c • 4000 PSI
3	12
4	15
5	18
6	22
7	26

LAP SPLICE LENGTH FOR REINFORCED CONCRETE
NOT ALL BAR SIZES LISTED MAY BE REQUIRED

GENERAL NOTES:
1. REFERENCE ELEVATION 100'-0" EQUALS **.*' MEAN SEA LEVEL ELEVATION.
2. SLAB-ON-GRADE CONTRACTION JOINTS ARE DENOTED "CJ" IN PLAN. AT CONTRACTOR'S OPTION, CONSTRUCTION JOINTS MAY BE SUBSTITUTED FOR CONTRACTION JOINTS. SEE THIS SHEET FOR SLAB-ON-GRADE AND JOINT DETAILS.
3. ALL FLOOR SLABS SHALL BE TREATED WITH A SEALER/HARDENER. SEE SPECIFICATION SECTION 03300.
4. SUBGRADE PREPARTATION FOR SLABS SHALL BE PER THE FOUNDATION REPORT.
5. EXPANSION JOINTS ARE DENOTED "EJ" ON THE PLAN.
6. ALL FLOOR JOINTS IN THE PUMP ROOM AREA SHALL BE SEALED WITH JET FUEL RESISTANT SEALANT.
7. SLAB-ON-GRADE THICKNESS SHALL BE 12" UNLESS OTHERWISE NOTED. REINFORCE WITH •4 BARS @ 12" ON CENTER EACH WAY. SEE PIPE SUPPORT SCHEDULE FOR ADDITIONAL REINFORCEMENT BENEATH PIPE SUPPORTS.
8. SLAB-ON-GRADE THICKNESS IN THE CONTROL ROOM SHALL BE 6". REINFORCE WITH •3 BARS AT 18" ON CENTER EACH WAY.
9. MOTOR CONTROL CENTER TRENCH, APPROXIMATELY 12'-0" LONG. MAIN DISTRIBUTION SWITCHGEAR AND POWER CONTROL PANEL TRENCH APPROXIMATELY 5'-6" LONG. COORDINATE WITH EQUIPMENT MANUFACTURER FOR EXACT LENGTH OF TRENCH.
10. PUMP ROOM FLOOR SLAB SHALL BE SLOPED TO DRAINS AT 1/4"/FT. SEE PLAN.

MATERIAL NOTES:
1. REINFORCED CONCRETE:
   A. CONCRETE: SPECIFIED COMPRESSIVE STRENGTH f'c •4000 PSI
   B. REINFORCING BARS: SPECIFIED YIELD STRENGTH Fy • 60 KSI (GRADE 60)
2. STRUCTURAL STEEL
   A. ROLLED SHAPES AND PLATES: SPECIFIED YIELD STRENGTH Fy • 36 KSI (ASTM A36)
   B. STRUCTURAL TUBING: SHALL CONFORM TO ASTM A500, GRADE B.
3. WELDING ELECTRODES: ALL WELDING SHALL BE PERFORMED WITH E70 ELECTRODES.
4. ANCHOR BOLTS: SHALL CONFORM TO ASTM A307.
5. BOLTED CONNECTIONS: SHALL CONFORM TO ASTM A307 UNLESS NOTED OTHERWISE.
6. HEADED ANCHOR STUDS: SHALL CONFORM TO ASTM A108.
7. SEE MASONRY NOTES ON S8.1.

PRE-ENGINEERED METAL BUILDING NOTES:
1. PRE-ENGINEERED METAL BUILDING SHALL BE DESIGNED ACCORDING TO THE METAL BUILDING MANUFACTURERS' ASSOCIATION (MBMA), LOW RISE BUILDING SYSTEMS MANUAL, 1986 EDITION STANDARDS USING THE FOLLOWING CRITERIA:
   A. BUILDING USE CATEGORY III. SEE MBMA COMMENTARY SECTION C7.3 & AND EQUATION C7-1 FOR SEISMIC IMPORTANCE FACTOR AND COMMENTARY SECTION C5.2 AND EQUATION C5-1 FOR WIND LOAD IMPORTANCE FACTOR.
   B. MINIMUM DESIGN ROOF LIVE LOAD: (CONSTRUCTION AND MAINTENANCE) - 20 PSF (AREA REDUCTION ALLOWED).
   C. WIND LOADS:
      (1) BASIC WIND SPEED: V - ** MPH (FASTEST MILE).
      (2) SEISMIC ZONE COEFFICIENT: Z - •.•.
      (3) IMPORTANCE FACTOR: I - 1.25.
      (4) SITE/STRUCTURE COEFFICIENT: C - 2.75.
      (5) STRUCTURAL SYSTEM COEFFICIENT: Rw - • •
   D. COLLATERAL ROOF DEAD LOADS FOR MISCELLANEOUS SUSPENDED MECHANICAL AND ELECTRICAL EQUIPMENT - 4 PSF UNIFORM LOAD.
   E. CRANE LOADS: THE RIGID FRAMES SHALL BE DESIGNED FOR A 1 TON CAPACITY BRIDGE CRANE. SEE SHEET S3.1 FOR LOCATION AND DETAILS. OBTAIN FINAL CRANE LOADS FROM CRANE MFR.
2. MINOR VARIATIONS IN THE BUILDING'S DIMENSIONS (DENOTED BY AN ASTERISK, •) MAY BE SUBMITTED FOR REVIEW AND POSSIBLE APPROVAL IF REQUIRED TO CONFORM TO AN INDIVIDUAL BUILDING SUPPLIER'S STANDARDS.
3. FOR ALLOWABLE FOUNDATION LOADS AT COLUMN LOCATIONS, REFER TO FRAME REACTION TABLE ON SHEET S5.1. IF ACTUAL BUILDING LOADS EXCEED THOSE LISTED, PRE-ENGINEERED BUILDING SUPPLIER SHALL BE RESPONSIBLE FOR REQUIRED FOUNDATION RE-DESIGN AND MODIFICATION. BUILDING SUPPLIER SHALL SUBMIT FOUNDATION LOADS FOR REVIEW AND APPROVAL.
4. ANCHOR BOLT DESIGN AND REQUIREMENTS SHALL BE COORDINATED BETWEEN THE PRE-ENGINEERED METAL BUILDING SUPPLIER AND THE PRIMARY CONTRACTOR. CONTRACTOR SHALL SUBMIT DESIGNS FOR REVIEW AND APPROVAL.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING AND PLACING BUILDING X-BRACING AND OTHER STRUCTURAL MEMBERS SUCH THAT THEY DO NOT INTERFERE WITH DOORS, LOUVERS, FANS, HOODS, AND OTHER MECHANICAL AND ELECTRICAL ITEMS LOCATED ALONG THE BUILDING'S WALLS AND ROOF.

BUILDING OVERVIEW: THE BUILDING FOUNDATION WAS DESIGNED BASED UPON THE FOLLOWING CRITERIA CONCERNING THE PRE-ENGINEERED METAL BUILDING SUPERSTRUCTURE:
A. FUTURE EXPANSIONS OR ADDITIONS TO THIS BUILDING ARE NOT CONSIDERATIONS.
B. FRAMING AT LINES 1 THRU 4 CONSIST OF CLEAR-SPAN RIGID FRAMES.
C. CROSS BRACING SHALL BE PROVIDED IN COLUMN LINES A & D.
D. DOWNWARD AND UPLIFT REACTIONS, AS WELL AS LATERAL LOADS PERPENDICULAR TO THE FOUNDATION WALLS ARE CARRIED BY SPREAD FOOTINGS.
E. LATERAL LOADS PARALLEL TO THE FOUNDATION WALLS ARE CARRIED BY THE FOUNDATION SYSTEM.
F. ROOF WILL BE X-BRACED AS REQUIRED FOR LATERAL STABILITY.

NOTES TO THE DESIGNER:
1. FOUNDATION DETAILS SHOWN ARE TYPICAL FOR AN ENCLOSED PUMP HOUSE WHERE DESIGN FOR FROST IS A CONSIDERATION. ALTERNATE FOUNDATION DETAILS MAY BE PREFERRED FOR OPEN PUMP SHELTERS OR IN LOCATIONS WHERE A SLAB WITH A THICKENED EDGE MAY BE SUITABLE.
2. A SUBSURFACE INVESTIGATION WILL BE PERFORMED AND A FOUNDATION ANALYSIS WILL BE PREPARED. FOUNDATION DESIGN AND SUBGRADE PREPARATION WILL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE FOUNDATION ANALYSIS.
3. THE FOUNDATION MUST BE DESIGNED FOR THE LOADS IMPOSED BY THE METAL BUILDING. FOUNDATION DESIGN LOADS MUST BE SHOWN ON THE DRAWINGS FOR VERIFICATION AND COORDINATION.
4. SITE SPECIFIC DESIGN CRITERIA INCLUDING DESIGN LOADS (DEAD, LIVE, COLLATERAL, WIND, SNOW, CRANE AND SEISMIC) AND THE RECOMMENDATIONS OF THE FOUNDATION REPORT (ALLOWABLE BEARING PRESSURES, TYPE OF FOUNDATION, SOIL DENSITY, AND LATERAL EARTH PRESSURE COEFFICIENTS) SHALL BE SHOWN ON THE CONTRACT DRAWINGS.
5. THE STRUCTURE IS CLASSIFIED AS ESSENTIAL PER AFM 88-3, CHAPTER 1.

COMPUTER AIDED DESIGN & DRAFTING

$$ - THINK VALUE ENGINEERING - $$

REVISIONS			
SYMBOL	DESCRIPTIONS	DATE	APPROVED

ROBERT AND COMPANY 96 POPLAR ST., N.W. ATLANTA, GA 30335	US ARMY ENGINEER DISTRICT CORPS OF ENGINEERS OMAHA, NE	AIR FORCE C.E. SUPPORT AGENCY 139 BARNES DRIVE, SUITE •1 TYNDALL AFB, FL 32403-5319

DESIGNED BY: G.M.J.
DRAWN BY: G.M.J.
CHECKED BY: B.N.H.
REVIEWED BY: B.N.H.
SUBMITTED BY: CHIEF, STRUC SECTION

AIR FORCE STANDARDS
PRESSURIZED HYDRANT FUELING SYSTEM
TYPE III

FOUNDATION AND SLAB PLAN

PLOT SCALE RATIO: 4:1 | DATE: REV. •1 NOV. 1998
DESIGN FILE: SD18S201.DGN
SPEC. NO.: 78-24-28-88
DRAWING CODE: AW 78-24-28
SHEET REFERENCE NUMBER: S2.1

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