

# NOVEMBER 17, 2023

		DESIGN RESBMITTAL 11/17/2023 RGM	. DESIGN RESBMITTAL 10/27/2023 RGM L DESIGN 09/08/2023 RGM	CRIPTION DATE APPR	D
		EINAL		SYM DESC	
ALS PECIS	PROFE PROFE SERT O SE SE SE SE SE SE SE SE SE SE SE SE SE	ти R <sup>A</sup>	CENCINEER JS	SEAL	С
APPROVED FOR COMMANE ACTIVITY	Amona Phone 7 Fax 760	California 760-789-3 1-789-3311 RCH	A/E II	NFO	
SATISFACTORY DES NC PM/DM BRANCH MANA CHIEF ENG/ARC FIRE PROTECT	GER CH ON CH CH	NC C	SHK RI	И	В
VAVAL FACILITIES ENGINEERING SYSTEMS CO STEMS COMMAND $\sim$ SOUTHWE san die san die	IMPERIAL BEAC	TER PEDESTAL	טובבד	סחבבו	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SY	NAVAL AIR STATION NORTH ISLAND	SH-60 HELICOP		COVEN	Α
SCALE: AS EPROJECT N CONSTR. ( CONTR. ) NO. NAVFAC DRA SHEET	NOTED 0.: CONTRA T.O. # WING NO. 1 0 G-(	.ct# ⊧ <b>)0</b> ′	<u> </u>		





-

## GENERAL NOTES

### 1. INTENT OF DRAWINGS

A. THESE GENERAL NOTES ONLY APPLY TO THE STRUCTURAL WORK ASSOCIATED WITH THE PEDESTAL FOUNDATION SYSTEM FOR THE AND ONLY APPLY WHERE THEY DO NOT CONFLICT WITH DETAILS OR NOTES SPECIFICALLY SHOWN.

B. RESOLVE CONFLICTS ON DRAWINGS AND SPECIFICATIONS WITH THE DESIGNER OF RECORD BEFORE PROCEEDING WITH CONSTRUCTION.

C. THESE STRUCTURAL FOUNDATION DRAWINGS SHOW ONLY THE BASIC FOUNDATION STRUCTURE. THEREFORE, REFER TO DRAWINGS FOR OTHER RELATED ITEMS WHICH REQUIRE SPECIAL PROVISIONS DURING THE CONSTRUCTION OF THE STRUCTURE.

D. IMPERIAL SYSTEM OF MEASUREMENTS IS USED IN THIS PROJECT. ALL DIMENSIONS, MATERIAL SIZES AND THICKNESSES ARE IN INCHES (in). ALL WEIGHTS ARE IN POUNDS (Lbf), UNLESS OTHERWISE NOTED.

E. ALL DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS.

## 2. GENERAL NOTES

- 1. ALL WORK SHALL COMPLY WITH THE 2018 INTERNATIONAL BUILDING CODE, THE UNIFIED FACILITIES CRITERIA (UFC), AND ALL OTHER PUBLICATIONS AND STANDARDS REFERENCED IN THESE DRAWINGS.
- 2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND CONDITIONS AT THE JOB SITE BEFORE STARTING WORK AND PRIOR TO SUBMITTING SHOP DRAWINGS OR BEGINNING FABRICATION, AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES. FIELD VERIFY ALL DIMENSIONS PRIOR TO SUBMITTING SHOP DRAWINGS AND PRIOR TO BEGINNING FABRICATION.
- NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THE GENERAL NOTES AND TYPICAL DETAILS SHOWN ON THE PRECEDING SHEETS. DO NOT SCALE DRAWINGS.
- 4. DRAWINGS INDICATE GENERAL AND COMPLETED CONDITIONS OF CONSTRUCTION. TYPICAL DETAILS SHOWN ARE TO BE USED WHERE APPLICABLE. WHERE NO SPECIFIC DETAILS ARE SHOWN OR NOTED, THE DETAILS SHALL BE THE SAME FOR SIMILAR WORK NOTED AT OTHER LOCATIONS OF SIMILAR CONSTRUCTION.
- 5. ALL EXISTING UTILITIES, SUCH AS DRAINS, GAS LINES AND POWER SUPPLY LINES SHALL BE VERIFIED PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY CONNECTIONS FOR EXISTING UTILITIES, AS REQUIRED. ALL EXISTING UTILITIES SHALL BE PROTECTED TO PREVENT DAMAGE AND SERVICE INTERRUPTION, AS REQUIRED.
- 6. SAFETY MEASURES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE ARCHITECT AND ENGINEER CANNOT ENFORCE SAFETY MEASURES AND ARE NOT RESPONSIBLE FOR SAFETY MEASURES AND REGULATIONS. ALL SHORING AND BRACING NECESSARY FOR THE ERECTION OF BUILDING COMPONENTS, AS REQUIRED TO COMPLETE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO ALL NATIONAL, STATE AND LOCAL HEALTH AND SAFETY STANDARDS, LAWS AND REGULATIONS.
- 7. THESE DRAWINGS INDICATE FINAL PROPOSED CONDITIONS. CONTRACTOR WILL BE RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE CODES AND ANY PRIOR AGREEMENTS WITH THE GOVERNMENT OR OTHER LOCAL JURISDICTIONS.

## 3. EXISTING CONDITIONS

1. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PERTINENT TO HIS WORK PRIOR TO MATERIAL FABRICATION AND/OR CONSTRUCTION. FIELD CONDITIONS DIFFERENT FROM THOSE NOTED ON A DRAWING SHALL BE PROMPTLY BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER.

## 4. SOILS

- 1. SOIL DESIGN PRESSURE:
- A. REFERENCE GEOTECHNICAL EVALUATION BY PREVIOUS PROJECT AT MAIN GATE AND A4 PEDESTAL.
- B. ALLOWABLE BEARING FOR SPREAD AND CONTINUOUS FOOTINGS: 1337 PSF.
- C. ALLOWABLE PASSIVE PRESSURE: 200 PSF
- D. COEFFICIENT OF FRICTION: 0.30
- E. MODULUS OF SUBGRADE: 50 PCI

2. SUBGRADE SHALL BE COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95 PERCENT AT A MINIMUM OF 2 PERCENT ABOVE OPTIMUM AS EVALUATED BY ASTM D1557

## 5. DESIGN CRITERIA (FOUNDATION ONLY)

- 1. DESIGN OF THE PROJECT IS IN ACCORDANCE WITH THE FOLLOWING:
- A. THE INTERNATIONAL BUILDING CODE (IBC), 2018 EDITION.
- B. UFC 1-200-01: DoD BUILDING CODE, 08 OCT 2019.
- C. UFC 3-301-01: STRUCTURAL ENGINEERING, 01 OCT 2019.

### 6. DESIGN LOADS - (RISK CATEGORY II): 2018 IBC AND ASCE 7-16

GRAVITY LOADS:

EMENT:	DEAD LOAD
	12.173 KIP

- 2. SITE LOCATION: 32.7015195, -117.2076912
- 3. LATERAL LOADS (PROVIDED BY PEMB MANUFACTURER):

WIND: B/ I =	ASIC WIND SPEED:	97 MPH 1.0	EXPOSUI (TAE	RE N/A BLE 1.5-2, ASCE 7-16)	
SEISMIC					
	RISK CATEGORY:	II	(IBC	TABLE 1604.5)	
	IMPORTANCE FACTOR	l: 1.0	(TAE	BLE 1.5-2 ASCE 7-16)	
	SITE CLASS:	D	(SEC	20.3.1 ASCE 7-16)	
	SEISMIC DESIGN CATE	GORY:D	) (TAE	BLE 11.6-1 & 11.6-2 AS	SCE 7-16)

ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE (SEC 12.8, ASCE 7-16)

BASIC FORCE RESISTING SYSTEM: NONSTRUCTURAL COMPONENTS

F <sub>a</sub> =	1.000	(TABLE 11.4-1 ASCE 7-16 / USGS)
F <sub>v</sub> =	1.830	(TABLE 11.4-2, ASCE 7-16 / USGS)
S <sub>S</sub> =	1.393	(FIGURE 22-1, ASCE 7-16 (OR USGS))
S <sub>1</sub> =	0.471	(FIGURE 22-2, ASCE 7-16 (OR USGS))
S <sub>DS</sub> =	0.930	(EQ. 11.4-3, ASCE 7-16)
S <sub>D1</sub> =	0.575	(EQ. 11.4-4, ASCE 7-16)
=	1.0	(TABLE 1.5-2, ASCE 7-16)
Rp =	2.5	(TABLE 13.5-1, ASCE 7-16)
ap =	2.5	(TABLE 13.5-1, ASCE 7-16)
		· · · /
Fp =	1.114*W	(EQ. 13.3-1, ASCE 7-16)

## 7. REINFORCED CONCRETE

- 1. ALL CONCRETE WORK SHALL BE PERFORMED IN CONFORMANCE WITH THE LATEST EDITION OF THE ACI MANUAL OF CONCRETE PRACTICE, THE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE & COMMENTARY (ACI 318-19) AND THE 2018 IBC.
- 2. DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS (UNLESS NOTED OTHERWISE) SHALL BE IN ACCORDANCE WITH THE ACI MANUAL OF CONCRETE PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, ACI 315 LATEST EDITION.
- 3. CONCRETE PROPERTIES: THE CONCRETE STRENGTH SHOWN IN THE FOLLOWING TABLE IS THE MINIMUM NOMINAL COMPRESSIVE STRENGTH AT 28 DAYS FOR NORMAL WEIGHT CONCRETE (150 PCF WEIGHT).

ITEMS OF CONSTRUCTION	MINIMUM STRENGTH	MAXIMUM W/C RATIO	
FOUNDATIONS	5,000 PSI	0.45	
FOOTINGS	5,000 PSI	0.45	

- CEMENT SHALL BE TYPE II, EXCEPT WHERE SULFATE EXPOSURE PER ACI 318-19 SECTION 19.3.2, TABLE 19.3.2.1 REQUIRES CEMENT TYPE V TOGETHER WITH OTHER MINIMUM REQUIREMENTS. AGGREGATES WILL CONFORM TO ASTM C33.
- 5. MIX DESIGNS: CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS FOR ALL CONCRETE TO THE STRUCTURAL ENGINEER OF RECORD FOR APPROVAL. DO NOT PLACE CONCRETE WITHOUT APPROVAL.
- 1. CONCRETE CURING: ALL CONCRETE SHALL BE CURED IN ACCORDANCE WITH ACI 301 USING WET CURE METHODS, OR CURING COMPOUNDS WHERE APPROVED BY THE ARCHITECT.
- 2. REINFORCING STEEL:
- A. DEFORMED REINFORCEMENT: ASTM A615, GRADE 60
- 3. ANCHOR BOLTS: ASTM F1554 GRADE 36
- 4. CONCRETE CURING: ALL CONCRETE SHALL BE CURED IN ACCORDANCE WITH ACI 301 USING WET CURE METHODS, OR CURING COMPOUNDS WHERE APPROVED BY THE ARCHITECT.
- 5. PROTECTION FOR REINFORCEMENT IN CAST-IN-PLACE CONCRETE PER ACI 318-19, TABLE 20.6.1.3.1: PROVIDE THE FOLLOWING MINIMUM CONCRETE COVER FOR REINFORCEMENT:

		MIN. COVER
Α.	CONCRETE IN SEVERE ENVIRONMENT (SALT WATER ETC.)	3"
Β.	CONCRETE CAST AGAINST OR EXPOSED TO EARTH	3"
C.	CONCRETE EXPOSED TO WEATHER:	
	NO. 6 THROUGH NO. 18 BAR	2"
	NO. 5 BAR, W31 OR D31 WIRE, AND SMALLER	1-1/2
D.	CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT W	ITH GROUND:
	SLABS & WALLS:	
	NO. 14 AND NO. 18 BAR	1-1/2"

NO. 14 AND NO. 16 DAR	1-1/Z
NO. 11 BAR AND SMALLER	3/4"
BEAMS & COLUMNS, PEDESTALS AND TENSION TIES:	
PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS	1-1/2"

- 6. ALL REINFORCING BARS, ANCHOR BOLTS AND INSERTS SHALL BE WELL SECURED IN PLACE PRIOR TO PLACING OF CONCRETE.
- 7. MINIMUM LAP SPLICES IN REINFORCEMENT:
- A. DEFORMED REINFORCEMENT: LAP 48 BAR DIAMETERS, 509 MM (1' 8") OR PER DETAILS, WHICHEVER IS GREATER.
- B. WELDED WIRE FABRIC: LAP 60 BAR DIAMETERS OR 305 MM (12") MINIMUM, WHICHEVER IS GREATER.
- C. WHERE "CLASS B" SPLICE IS INDICATED, SPLICE SHALL COMPLY WITH ACI 318-19 SECTION 25.5, TABLE 25.5.2.1.
- 8. WHERE CONTINUOUS BARS ARE CALLED OUT, PROVIDE TIED CONTACT SPLICES AS REQUIRED. STAGGER SPLICES OF ALTERNATE BARS BY THE FULL SPLICE LENGTH.
- 9. VERTICAL REINFORCEMENT SHALL BE DOWELED TO THE SUPPORTING MEMBERS WITH THE REINFORCEMENT OF MATCHING SIZE AND SPACING. DOWELS SHALL PROVIDE FULL LAP LENGTH WITH VERTICAL BAR AND SHALL BE ANCHORED IN SUPPORTING MEMBER WITH FULL LAP LENGTH OR WHERE FULL LAP CANNOT BE DEVELOPED, EMBED TO FAR SIDE OF MEMBER AND TERMINATE WITH A STANDARD HOOK.

10. CHAMFER: ¾" ON ALL EXPOSED CORNERS UNLESS NOTED OTHERWISE.

11. THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD SHALL BE NOTIFIED A MINIMUM OF 2 WORKING DAYS IN ADVANCE OF ALL CONCRETE PLACEMENT.

# 8. ANCHOR BOLTS (AB):

- 1. ANCHOR BOLTS SHALL BE PRE-ASSEMBLED ANCHOR BOLT "PAB7-18" OR ICC/ICBO AND ARCHITECT / ENGINEER APPROVED EQUAL, SIZE AS INDICATED PER DRAWINGS.
- 2. ALL ANCHORS TO BE USED STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 3. NUTS SHALL BE TIGHTENED TO THE MINIMUM INSTALLATION TORQUE AS INDICATED IN TABLE 2 OF ICC-ES ESR-3772 FOR CONCRETE.
- 4. ANCHOR EMBEDMENT SHALL BE THE MINIMUM REQUIRED PER THE MANUFACTURE'S LISTED REQUIREMENTS OR AS NOTED ON THE DRAWINGS, WHICHEVER IS GREATER.

# 9. FUTURE EXPANSION / ADDITION

1. NO ALLOWANCES HAVE BEEN MADE FOR FUTURE EXPANSION OR ADDITIONS TO THIS STRUCTURE.

5

10. SUMMARY OF SPECIAL INSPECTION:

CONCRETE
REINFORCING STEEL

## 11. INSPECTION REQUIRED FORM NOTES:

- 1. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO SEE THAT THESE TESTS AND INSPECTIONS ARE PERFORMED.
- 2. THE CONSTRUCTION INSPECTIONS LISTED HEREIN ARE IN ADDITION TO THE CALLED INSPECTIONS REQUIRED BY SECTION 110 AND SPECIAL INSPECTIONS IN SECTION 1705 OF THE 2018 INTERNATIONAL BUILDING CODE. SPECIAL INSPECTION IS NOT A SUBSTITUTE FOR INSPECTION BY A CERTIFIED INSPECTOR. SPECIALLY INSPECTED WORK WHICH IS INSTALLED OR COVERED WITHOUT THE APPROVAL OF THE CQC IS SUBJECT TO REMOVAL OR EXPOSURE.
- 3. CONTINUOUS INSPECTION IS ALWAYS REQUIRED DURING THE PERFORMANCE OF THE WORK UNLESS OTHERWISE SPECIFIED.
- 4. THE SPECIAL INSPECTORS MUST BE CERTIFIED TO PERFORM THE TYPE OF INSPECTION SPECIFIED. JOB SITE VISITS BY THE STRUCTURAL ENGINEER DO NOT CONSTITUTE AN OFFICIAL INSPECTION.
- 5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM THE SPECIAL INSPECTOR OR INSPECTION AGENCY AT LEAST ONE WORKING DAY PRIOR TO PERFORMING ANY WORK THAT REQUIRES SPECIAL INSPECTION. ALL WORK PERFORMED WITHOUT REQUIRED SPECIAL INSPECTION IS SUBJECT TO REMOVAL.
- 6. ALL SHOP WELDS TO BE PERFORMED IN AN APPROVED FABRICATORS SHOP. ALL WELDS REQUIRE SPECIAL INSPECTION PER AWS D1.1.

## 12. SPECIAL INSPECTION AND TESTING:

CONTINUOUS INSPECTION, PER CHAPTER 17, SECTION 1705 OF THE 2018 IBC, SHALL BE PROVIDED BY AN APPROVED SPECIAL INSPECTOR FOR THE FOLLOWING:

- 1. <u>SOILS</u>: VERIFY THAT FOUNDATION EXCAVATIONS EXTEND TO THE SPECIFIED DEPTH AND TO FIRM NATURAL BEARING STRATA AND THAT EXCAVATIONS ARE CLEAN PRIOR TO PLACING CONCRETE.
- 2. <u>CONCRETE</u>: DURING THE TAKING OF TEST SPECIMENS AND PLACING OF CONCRETE FOR GRADE BEAMS AND FOUNDATIONS.
- 3. <u>REINFORCING STEEL AND ANCHOR BOLTS</u>: SPECIAL INSPECTION IS REQUIRED VERIFYING THE PLACEMENT OF REINFORCING STEEL AND ANCHOR BOLTS PRIOR TO CLOSING OF FORMS OR DELIVERY OF CONCRETE TO THE JOBSITE FOR ALL CONCRETE.

	FINAL DESIGN RESBMITTAL 11/17/2023 RGM	FINAL DESIGN RESBMITTAL10/27/2023RGMFINAL DESIGN09/08/2023RGMSYMDESCRIPTIONDATEAPPR	D
AIS CISTER	PROFESSION BERT G. MILL SE 2321 STRUCTURA COF CALIFOR	C RATERO INCER ANNA ANNA SEAL	
APPROVED FOR COMMANE ACTIVITY SATISFACTORY DES NC PM/DM BRANCH MANA CHIEF ENG/ARC FIRE PROTECTION	A05 Maple Street 405 Maple Street Ramona, Californ Phone 760-789-31 Fax 760-789-331 A.A.BURCH ONSTRUCTION DER NAVFAC TO DATE DRW NC GER CH ION	Х MOTTIS Suite B-102 із 92065-1890 3305 8 АVЕ INFO	
NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND LITIES ENGINEERING SYSTEMS COMMAND $\sim$ SOUTHWEST SAN DIEGO, CA	DN NORTH ISLAND IMPERIAL BEACH, CA SH-60 HELICOPTER PEDESTAL	STRUCTURAL FOUNDATION GENERAL NOTES	<b>B</b>
DEPARTMENT OF THE NA SCATE: VAVAL FACILIT SCATE: VAVAL FACILIT NAVEAC DRA SHEET	NOTED D.: CONTRACT # T.O. # WING NO. - OF CONTRACT =		A

DRAWFORM REVISION: 25 AUGUST 2020





DRAWFORM REVISION: 25 AUGUST 2020