Guam and CNMI Distributed Laydown

MILCON Project List and Basis of Estimate

Headquarters Marine Corps, Plans, Policies and Operations (PP&O)

Marine Corps Installations Command (MCICOM)

Marine Forces Pacific (MARFORPAC)

April 2014

Distributed Laydown MILCON Project List with Assumption of Cantonment at Finegayan

(For Information Purposes Only)

TAB J - GUAM: FY12 Budget Year

DATE: 22 APRIL 2014

UTILITIES & SITE IMPROVEMENTS/DAR	CCN	Facility Description	U/M	FAC	Unit Cost	REQ	ACF	SW	),OMSI,	GRT	Design	CNTGY	SIOH	Env Mitg	Inflation	Cost	Notes
AAFB Gate and Fac																(b) (5)	J-001 ACE gate and Apra Harbor Improvements, dated NOV 2010, Final 1391
Apra Harbor Upgrade																(b) (5)	J-001 ACE gate and Apra Harbor Improvements, dated NOV 2010, Final 1391
AAFB NR Parking I																(b) (5)	P-101 1391 Documentation - appropriated amount reflected
AAFB NR Parking Phase II																(b) (5)	P-101A 1391 Documentation - appropriated amount reflected
AAFB NR Utilities I																(b) (5)	P-100 1391 Documentation - appropriated amount reflected
AAFB NR Util II																(b) (5)	J-200 North Ramp Utilities and Site Improvement, dated Dec 2012, received design and construction funds from GOJ
DAR Improvements I																(b) (5)	P-1006 DAR, dated DEC 2010, Final 1391 Documentation
DAR Improvements II																(b) (5)	P-205 DAR, dated FEB 2010, Final 1391 Documentation - Appropriated amount
DAR Improvements III																(b) (5)	Additional DAR Project required due to NWF LFTRC Preferred Alternative
Cantonment U&SI PH1																(b) (5)	Based on Final 1391 dated Feb 2014
Cantonment U&SI PH2																(b) (5)	Based on Final 1391 dated Feb 2014
U&SI Housing Finegayan																(b) (5)	Includes U&SI and Demolition/Abatement Costs
IT/Comm - PH3																(b) (5)	Connect ADNs - North Ramp to Finegayan
IT/Comm - PH4																(b) (5)	NLFTRC to Tata Cable Landing Facility
Power Upgrade - Harmon																(b) (5)	Provided by NFP
Water PH I																(b) (5)	Provided by NFP
Water PH II																(b) (5)	Provided by NFP

CE	CCN	Facility Description	U/M	FAC	Unit Cost	REQ	ACF	SW	),OMSI,	GRT	Design	CNTGY	SIOH	Env Mitg	Inflation	Cost	Notes
3rd MEB CE	61070	Admin	SF	6100	(b) (5)	22,280	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	17110	Academic Instruction Bldg	SF	1711	(b) (5)	6,250	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	44112	Organic Unit Storage	SF	4411	(b) (5)	6,830	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	14160	Photographic Facility - Combat Camera	SF	1441	(b) (5)	14,730	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
	45110	Open Storage Area	SY	4521	(b) (5)	560	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
																(b) (5)	
MEB Enablers	61073	Admin - H&S Co	SF	6101	(b) (5)	2,763	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Estimate based on personnel loading, mission, and typical PEI
	61073	3rd Intel Workspace - Administrative	SF	6101	(b) (5)	5,025	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Estimate based on personnel loading, mission, and typical PEI
	21710	Electronic/Comm Maint Shop, 7th Comm	SF	2171	(b) (5)	10,141	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Estimate based on personnel loading, mission, and typical PEI
																(b) (5)	
Consolidated Armory	14345	Armory	SF	4427	(b) (5)	19,483	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	14345	Armory - Cleaning Area	SF	7531	(b) (5)	6,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Covered Training Area CCN Cost factor more appropriate
																(b) (5)	
Law Enf Bn Company	61073	Administrative Office, Warehouse	SF	6101	(b) (5)	8,697	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	73076	Kennel	EA	1445	(b) (5)	5560	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	45110	Open Storage Area	SY	4521	(b) (5)	190	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	85210	Organizational Parking	SF	8521	(b) (5)	3,375	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
																(b) (5)	

GCE	CCN	Facility Description	U/M	FAC	Unit Cost	REQ	ACF	SW	),OMSI,	GRT	Design	CNTGY	SIOH	Env Mitg	Inflation	Cost	Notes
4th Marines Reg HQ	61071	Admin - H&S Co	SF	6102	(b) (5)	14,510	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	17110	Academic Instruction Bldg	SF	1711	(b) (5)	6,400	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	61074	BAS	SF	6102	(b) (5)	2,415	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
																(b) (5)	
4th Marines Reg Facilities	44112	Organic Unit Storage, H&S Co	SF	4411	(b) (5)	14,520	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21710	Electronic/Comm Maint Shop, H&S Co	SF	2171	(b) (5)	10,141	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	85210	Organizational Parking	SY	8521	(b) (5)	5,550	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21820	Utility Shop	SF	2141	(b) (5)	3,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	14378	Haz/Flam Storage	SF	1443	(b) (5)	368	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21456	Vehicle Grease Racks-Consolidated	EA	2145	(b) (5)	3	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21455	Vehicle Wash Platforms-Consolidated	EA	2145	(b) (5)	6	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21451	Auto Organizational Shop, H&S Co	SF	2141	(b) (5)	3,668	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	45110	Open Storage Area	SY	4521	(b) (5)	850	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
																(b) (5)	
GCE - Inf Bn HQ #1	61072	Battalion HQ	SF	6102	(b) (5)	6,825	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	61074	BAS	SF	6102	(b) (5)	2,415	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	17110	Academic Instruction Bldg	SF	1711	(b) (5)	6,400	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	61073	Company HQ	SF	6101	(b) (5)	10,031	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
																(b) (5)	
GCE - Inf Bn#1 Facilities	44112	Organic Unit Storage	SF	4411	(b) (5)	15,603	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21710	Electronic/Comm Maint Shop	SF	2171	(b) (5)	7,555	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21451	Auto Organizational Shop	SF	2141	(b) (5)	3,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	85210	Organizational Parking	SY	8521	(b) (5)	5,400	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	45110	Open Storage Area	SY	4521	(b) (5)	2,351	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	14378	Haz/Flam Storage	SF	1443	(b) (5)	307	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
																(b) (5)	

Distributed Laydown MILCON Project List with Assumption of Cantonment at Finegayan

(For Information Purposes Only)

Artillery Battery	61073	Battery HQ	SF	6101	(b) (5)	5,370	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21530	Heavy Gun Shop	SF	2152	(b) (5)	2,860	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	44112	Organic Unit Storage	SF	4411	(b) (5)	7,760	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21451	Auto Organizational Shop	SF	2141	(b) (5)	3,668	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21710	Electronic/Comm Maint Shop	SF	2171	(b) (5)	5,068	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	14378	Haz/Flam Storage	SF	1443	(b) (5)	760	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	85210	Organizational Parking	SY	8521	(b) (5)	4,575	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	44120	Controlled Humidity Warehouse	SF	4424	(b) (5)	7,550	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
																(b) (5)	
GCE - Inf Bn HQ #2	61072	Battalion HQ,	SF	6102	(b) (5)	6,825	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	61074	BAS	SF	6102	(b) (5)	2,415	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	61073	Company HQ	SF	6101	(b) (5)	10,031	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	17110	Academic Instruction Bldg	SF	1711	(b) (5)	6,400	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
																(b) (5)	
GCE - Inf Bn#2 Facilities	44112	Organic Unit Storage	SF	4411	(b) (5)	15,603	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21710	Electronic/Comm Maint Shop	SF	2171	(b) (5)	7,555	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21451	Auto Organizational Shop	SF	2141	(b) (5)	3,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	85210	Organizational Parking	SY	8521	(b) (5)	5,400	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	45110	Open Storage Area	SY	4521	(b) (5)	2,351	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	14378	Haz/Flam Storage	SF	1443	(b) (5)	307	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
																(b) (5)	
AAV/LAR/CEB Maint	21375	Amphib Maint Shop	SF	2133	(b) (5)	15,244	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Includes space for administrative functions - used FAC 2133
	21451	Auto Org Shop, CEB/AAV PLTs	SF	2141	(b) (5)	3,668	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012 - combine with Amphib Shop
	15966	Landing Craft Ramp	EA	1591	(b) (5)	1	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
	12317	Overhead Coverage for LAVs	SF	1459	(b) (5)	2,625	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012 (7 LAVs)
	12317	Overhead Coverage for AAVs	SF	1459	(b) (5)	7,200	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012 (16 AAVs)
	21456	Vehicle Grease Racks-Consolidated	EA	2145	(b) (5)	1	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21455	Vehicle Wash Platforms-Consolidated	EA	2145	(b) (5)	1	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	85210	Organizational Parking	SY	8521	(b) (5)	3,300	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
																(b) (5)	
PEI Warehouse	44120	Warehouse Dehumidified	SF	4424	(b) (5)	44,050	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012

LCE	CCN	Facility Description	U/M	FAC	Unit Cost	REQ	ACF	SW	),OMSI,	GRT	Design	CNTGY	SIOH	Env Mitg	Inflation	Cost	Notes
CLB-4 HQ	61072	Bn HQ - CLB H&S	SF	6102	(b) (5)	8,835	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	61074	Garrison Aid Station	SF	6102	(b) (5)	2,415	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	61073	Company HQ	SF	6101	(b) (5)	975	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	17110	Academic Instruction Building	SF	1711	(b) (5)	6,250	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	61073	Engineering Services Co HQ	SF	6101	(b) (5)	975	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	61073	Transportation Services Co HQ	SF	6101	(b) (5)	975	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	61073	Maint Services Co HQ	SF	6101	(b) (5)	975	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
																(b) (5)	
CLB-4 Facilities	44112	Organic Unit Storage	SF	4421	(b) (5)	36,100	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	14324	CLB EOD Facility	SF	1444	(b) (5)	7,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21710	Maint Shop, Comm/Elec	SF	2171	(b) (5)	14,951	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21451	Auto Organizational Shop, Int Maint	SF	2141	(b) (5)	25,620	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	3rd/4th echelon maint; revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21451	Auto Organizational Shop	SF	2141	(b) (5)	12,170	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Motor-T, revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21455	Vehicle Wash Platforms-Consolidated	EA	2145	(b) (5)	16	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	21456	Grease Racks-Consolidated	EA	2145	(b) (5)	7	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	44112	Repairable Issue Point (RIP)	SF	4411	(b) (5)	19,250	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Estimated BFR, based on CLB-3 facility at Kbay
	21820	Weight Handling Equip Shop	SF	2182	(b) (5)	6,140	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	45110	Open Storage Area	SY	4521	(b) (5)	1,260	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
	85210	Organizational Parking	SY	8521	(b) (5)	27,800	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on FY16 TO&E Report
																(b) (5)	
9th ESB EOD	14324	9th ESB EOD Facility	SF	1444	(b) (5)	7,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
																(b) (5)	
9th ESB HQ	61072	Bn HQ - H&S	SF	6102	(b) (5)	6,270	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Minimal requirement, based on BFR dated 9 AUG 09
	61073	Company HQ, H&S Co	SF	6101	(b) (5)	1,138	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Minimal requirement, based on BFR dated 16 FEB 09
	61073	Company HQ, Engineer Support Co	SF	6101	(b) (5)	488	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Minimal requirement, based on BFR dated 16 FEB 09
	61073	Company HQ, Bulk Fuel Co	SF	6101	(b) (5)	813	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Minimal requirement, based on BFR dated 16 FEB 09
	61073	Company HQ, Engineer Co	SF	6101	(b) (5)	488	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Minimal requirement, based on BFR dated 16 FEB 09
	61073	Company HQ, EOD Co	SF	6101	(b) (5)	650	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Minimal requirement, based on BFR dated 16 FEB 09
																(b) (5)	
9th ESB (-)	21451	Auto Organizational Shop, H&S Co	SF	2141	(b) (5)	8,310	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	BFR dated 9 AUG 09
	21710	Electronic/Comm Maint Shop, H&S Co	SF	2171	(b) (5)	7,950	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	BFR dated 9 AUG 09
	21356	Woodworking Shop, H&S Co	SF	2133	(b) (5)	6,620	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	BFR dated 9 AUG 09
	85210	Organizational Parking	SY	8521	(b) (5)	16,600	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	BFR dated 9 AUG 09
	14378	Haz/Flam Storage	SF	1443	(b) (5)	3,400	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	BFR dated 9 AUG 09
	45110	Open Storage Area	SY	4521	(b) (5)	5,020	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	BFR dated 9 AUG 09
	44412	Organic Unit Storage	SF	4411	(b) (5)	65,350	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	BFR dated 9 AUG 09
																(b) (5)	
Dental Co Admin	61072	Dental Co - Administrative Space	SF	6102	(b) (5)	1,950	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012

ACE	CCN	Facility Description	U/M	FAC	Unit Cost	REQ	ACF	SW	),OMSI,	GRT	Design	CNTGY	SIOH	Env Mitg	Inflation	Cost	Notes
MALS Facilities	11665	Tactical Support Van Pad	SY	1164	(b) (5)	17,949	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated Nov 2013 - III MEF Review
	61072	MALS Admin	SF	6101	(b) (5)	6,420	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated Nov 2013 - III MEF Review
	21108	MALS Airframes Shop	SF	2112	(b) (5)	13,800	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated Nov 2013 - III MEF Review
	21116	MALS AIMD	SF	2112	(b) (5)	9,875	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated Nov 2013 - III MEF Review
	21121	MALS Engine Maintenance Shop	SF	2112	(b) (5)	7,125	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated Nov 2013 - III MEF Review
	21145	MALS Avionics Shop	SF	2112	(b) (5)	9,512	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated Nov 2013 - III MEF Review
	44112	General Purpose Warehouse	SF	4421	(b) (5)	55,940	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated Nov 2013 - III MEF Review

DRAFT - NOTIONAL/PREDECISIONAL
(FOR INFORMATION PURPOSES ONLY)

Distributed Laydown MILCON Project List with Assumption of Cantonment at Finegayan

(For Information Purposes Only)

BASE	CCN	Facility Description	U/M	FAC	Unit Cost	REQ	ACF	SW	),OMSI,(	GRT	Design	CNTGY	SIOH	Env Mitg	Inflation	Cost	Notes
																(b) (5)	
MWSS Facilities																(b) (5)	P-240 MWSS Facilities at North Ramp, dated AUG 2013, Final Program 1391 - appropriated amount reflected
Corrosion Control Hangar	21103	Corrosion Control Hangar	SF	2113	(b) (5)	21,199	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated Nov 2013
GSE Shops																(b) (5)	P-230 GSE Shops at North Ramp, dated Jul 2013, Final Program 1391 - appropriated amount reflected
Ordnance Operations	42132	Inert Storage	SF	4424	(b) (5)	10,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Based on requirement identified in the Military Munitions Annex to the GJMMP
	14320	Ordnance Ops Building	SF	1444	(b) (5)	2,663	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
	14320	Expansion of Chaff and Flare - Bays	SF	1444	(b) (5)	3,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Based on requirement identified in the Military Munitions Annex to the GJMMP - BFR dated 1-26-2012
																(b) (5)	
Aviation Instruction Facility																(b) (5)	J-201 Aviation Instruction Facility, dated Dec 2012, GOJ Design 1391
Earth Mag (MSA)	42122	Earth Covered Magazines - HE	SF	4211	(b) (5)	32,100	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
Aircraft Hangar #1	21105	Type II Hangar														(b) (5)	P-109 1391 dated Jan 2013 - Final 1391
Aircraft Hangar #2	21105	Type II Hangar														(b) (5)	Based on Type II Hangar - 1391 Project for P-109 - HMH/HMLA Dets
	1404	JSF Component - SAP-F	SF		(b) (5)	3,600	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Initial estimate for the additional JSF SAP-F component - assumed FAC for SCIF space
																(b) (5)	
Air Ops Buildings	14140	Aircraft Operations Building	SF	1412	(b) (5)	9,760	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
ACE Gym and Dining	74044	Indoor Fitness Facility	SF	7421	(b) (5)	9,070	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
	72210	Enlisted Dining Facility	SF	7220	(b) (5)	7,715	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
																(b) (5)	
BASE Admin & Comm	61010	Administration	SF	6100	(b) (5)	54,188	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 2-3-2014, includes COC
	74025	Family Services Center	SF	7372	(b) (5)	5,879	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, based on installation population
	13117	BCO	SF	1311	(b) (5)	17,826	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-31-2014
	17310	Range Operations Center	SF	1731	(b) (5)	8,310	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated Nov 2013
	61040	Legal Services Facility	SF	6100	(b) (5)	11,860	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012, includes personnel from CLB
																(b) (5)	
Enlisted Dining Facility	72210	Galley	SF	7220												(b) (5)	Based on J-015 1391 dated Jan 2011 (no adjustments made to estimate)
Child Development Center	74074	CDC Consolidated	SF	7371	(b) (5)	36,413	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Based on USMC demographics and UFC, revised BFR dated 1-26-2012
BOQs	72411	BOQs	EA	7240												(b) (5)	Based on J-023 1391 dated July 2010, equates to $121,770,000 per BOQ (no change to estimate).
BEQs (E1-E5) BEQ	72124	BEQS (E1-E5)	EA	7210												(b) (5)	Based on J-016 1391 dated Sept 2010, equates to $104,740,000 per BEQ (no change to estimate)
Dependent School - Elementary School	73060	Elementary School	SF	7352	(b) (5)	52,600	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	New Elementary school for ~ 300 students; BFR from DODEA 2013
Dependent School - Middle School Expansion	73060	Middle School Expansion	SF	7352	(b) (5)	25,600	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Expansion requirement provided by DODEA 2013
Dependent School - High School	73060	High School Expansion	SF	7352	(b) (5)	25,500	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Expansion requirement provided by DODEA 2013
Dist Warehouse	44110	Base Warehousing	SF	4421	(b) (5)	106,200	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Estimate for combined facility - Base Distribution Center/SMU
Location Exchange	74002	Location Exchange	SF	7346	(b) (5)	7,525	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Based on UFC CCN 740-02, base loading, and revised BFR dated 6 Dec 11
	74030	Location Exchange Service Station	SF	7345	(b) (5)	4,064	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Based on UFC CCN 740-30, base loading, and revised BFR dated 6 Dec 11
																(b) (5)	
Corrosion Control - Ground PH 1	21931	CPAC Facility	SF	2116	(b) (5)	35,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Requirement developed through CTC - used FAC recommended by MCICOM
Corrosion Control - Ground PH 2	44120	Combat Ready Storage Point Warehouse	SF	4411	(b) (5)	100,080	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
Central Issue Facility	44110	General Purpose Warehouse	SF	4421	(b) (5)	50,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Based on recent CIF design for Camp Hansen, reduced to support Guam laydown
														1.06			
Base Warehouse	44110	Warehouse	SF	4421	(b) (5)	74,950	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Estimate for furniture awaiting to be installed
Exchange Retail Store	74001	Exchange Retail Store	SF	7346	(b) (5)	30,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Requirement reduced from previous M&RA recommendation to support new laydown
	74086	Exchange Warehouse	SF	7388	(b) (5)	10,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Requirement reduced from previous M&RA recommendation to support new laydown
	74016	Exchange Maintenance Shop	SF	7387	(b) (5)	1,100	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
	74004	Exchange Food Court/Service Outlets	SF	7346	(b) (5)	19,447	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
	74047	ITT Office	SF	7447	(b) (5)	720	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
	73085	Post Office, MCB Guam	SF	7344	(b) (5)	4,500	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Based on UFC CCN 730-85, and base loading, and revised BFR dated 6 Dec 11
																(b) (5)	
Pub Wrks/Maint Shops	21910	Public Works Shop	SF	2191	(b) (5)	12,100	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 6 Dec 11
	21977	Public Works Storage	SF	2191	(b) (5)	13,700	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 6 Dec 11
	14378	Haz/Flam Storage, Int Maint/Supply	SF	1443	(b) (5)	10,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Estimated BFR, based on CLB-3 facility at Kbay
																(b) (5)	
Sec Bldg/Pol Station	73020	PMO	SF	7313												(b) (5)	Based on J-018 1391 dated Jan 2011 (no change to cost estimate)
Base Auto Shop	21420	Automotive Maintenance Shop	SF	2141	(b) (5)	6,140	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
	21455	Vehicle Wash Platforms, Base	EA	2145	(b) (5)	4	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
	21456	Vehicle Grease Racks, Base	EA	2145	(b) (5)	2	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
																(b) (5)	
Base EOD	14324	Base EOD Facility	SF	1444	(b) (5)	7,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Revised BFR dated 1-26-2012
	42135	EOD Ready Magazine	SF	4221	(b) (5)	60	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Estimate - typical size for EOD
	17413	Field Training Area - EOD	EA	1790	(b) (5)	1	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813	(b) (5)	Requirement for testing of equipment, training, etc
																(b) (5)	

Distributed Laydown MILCON Project List with Assumption of Cantonment at Finegayan

(For Information Purposes Only)

Med/Den Clinic	55010	Medical/Dental Clinic	SF														(b) (5)	J-025, dated JUL 2010, S-1 Design 1391(no change made to cost estimate)
Youth Center	74055	Youth Center	SF	7417	(b) (5)	34,020	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Revised BFR dated 1-26-2012, based on UFC 4-740-06 worksheet
Fire Station	73010	Fire Station	SF	7311													(b) (5)	J-008 Fire Station, dated NOV 2010, Final 1391- Already received funds for design and construction from GOJ
Indoor Fitness Center	74044	Fitness Center	SF	7421	(b) (5)	42,078	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Revised BFR dated 1-26-2012, based on UFC 4-740-06 Fitness Worksheet
	75030	Outdoor Pool	EA	7512	(b) (5)	1	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on loading and UFC CCN 750-30
	75030	Outdoor Pool - Activity Support Facilities	SF	7382	(b) (5)	8,620	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on loading and UFC CCN 750-30 - used FAC 7382 for costing
	74037	Outdoor Recreation Center	SF	7447	(b) (5)	14,250	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on loading and UFC CCN 740-37
Outdoor Playing Fields	75020	Soccer/Football Field, lighted	EA	7522	(b) (5)	1	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on installation population and UFC, revised BFR dated 1-26-2012
	75020	Soccer/Football Field, unlighted	EA	7522	(b) (5)	1	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on installation population and UFC, revised BFR dated 1-26-2012
	75020	Softball/Baseball Field, lighted	EA	7522	(b) (5)	3	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on installation population and UFC, revised BFR dated 1-26-2012
	75020	Softball/Baseball Field, unlighted	EA	7522	(b) (5)	1	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on installation population and UFC, revised BFR dated 1-26-2012
	75010	Basketball lighted	EA	7521	(b) (5)	2	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on installation population and UFC, revised BFR dated 1-26-2012
	75010	Basketball unlighted	EA	7521	(b) (5)	2	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on installation population and UFC, revised BFR dated 1-26-2012
	75010	Tennis lighted	EA	7521	(b) (5)	2	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on installation population and UFC, revised BFR dated 1-26-2012
	75010	Tennis unlighted	EA	7521	(b) (5)	1	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on installation population and UFC, revised BFR dated 1-26-2012
	75010	Volleyball lighted	EA	7521	(b) (5)	2	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on installation population and UFC, revised BFR dated 1-26-2012
	75010	Volleyball unlighted	EA	7521	(b) (5)	1	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on installation population and UFC, revised BFR dated 1-26-2012
	74078	Pavilions	SF	7531	(b) (5)	2,600	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on installation population and UFC, revised BFR dated 1-26-2012
Consolidated Club	74067	All Hands Club, MCB Guam	SF	7414	(b) (5)	14,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on loading and UFC CCN 740-67
Auditorium/Theater	17125	Gen Purpose Auditorium/Theater	SF	7431	(b) (5)	12,040	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on base loading, UFC CCN 740-56, and revised BFR dated 6 Dec
Recreation Center	74054	Recreation Center	SF	7417	(b) (5)	8,800	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Revised BFR dated 1-26-2012
Religious Ministry Services	73083	Religious Ministry Facility	SF	7361	(b) (5)	18,436	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Based on installation population and UFC, revised BFR dated 1-26-2012
Education Center	74088	Educational Services Office	SF	7351	(b) (5)	9,700	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Revised BFR dated 1-26-2012
	17110	Academic Instruction Building	SF	1711	(b) (5)	10,750	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Revised BFR dated 1-26-2012
	74076	Library	SF	7416	(b) (5)	10,500	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Revised BFR dated 1-26-2012
TLF	74020	TLF	SF	7441	(b) (5)	55,420	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Revised BFR dated Dec 09
Central Fueling Facility	12310	Filling Station	OL	1231	(b) (5)	14	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Estimate for consolidated requirement, includes all types of MOGAS (diesel)
	12315	Filling Station Shelter	SF	1444	(b) (5)	500	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Revised BFR dated 1-26-2012
	12330	Fuel Storage Tank	GA	1241	(b) (5)	80,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Estimate for consolidated requirement
Transient Quarters		Transient Quarters															(b) (5)	Notional estimate until we can work with JRM on requirements
Recycle Center/Waste Transfer Station		Recycle Center/Waste Transfer Station															(b) (5)	Based on July 2013 Utility Report - Waste Transfer Station estimated $2.9M and Recycle Center $2M
ECMs (NBGOA)	42122	Earth Covered Magazines - HE	SF	4211	(b) (5)	26,750	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Revised BFR dated 1-26-2012
Waterfront HQ																	(b) (5)	J-007, dated NOV 2010, Final 1391 -Already received funds for design and construction from GOJ
Apra Medical Clinic																	(b) (5)	J-006, dated NOV 2010, Final 1391 -Already received funds for design and construction from GOJ
Apra Wharf I																	(b) (5)	P-204 appropriated amount reflected
Apra Wharf II																	(b) (5)	P-204A, dated FEB 2010, Final 1391 Documentation - Second Increment- Apprpriated amount reflected
Apra Embark Facility																	(b) (5)	P-600, dated April 2010, initial 1391 Documentation, adjusted for new ACF
Working Dog Relocation																	(b) (5)	P-1003, dated DEC 2010, Final 1391 Documentation - appropriated amount reflected
TRAINING	**CCN**	**Facility Description**	**U/M**	**FAC**	**Unit Cost**	**REQ**	**ACF**	**SW**	**OMSI**	**GRT**	**Design**	**CNTGY**	**SIOH**	**Env Mitg**	**Inflation**	**Cost**		**Notes**
KD Ranges - NWF LFTRC																	(b) (5)	P-715, dated Nov 2013, Activity Level 1391, includes KD roads and utilities project
Machine Gun Range																	(b) (5)	Very initial 1391 Documentation, dated Jan 2014
BSTF	17135	Operational Trainer Facility	SF	1721	(b) (5)	55,099	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Revised BFR, includes MISTC
	45110	Open Storage/Staging	SF	4521	(b) (5)	6,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Revised BFR dated 1-26-2012
USFW Replacement	61073	USFW Replacement Facility	SF	6101	(b) (5)	38,000	2.32	1.3	1.07	1.04	1.06	1.2	1.062	1.06	0.9813		(b) (5)	Estimate, placeholder until we can work with USFW to determine requirements for replacement facility
Eng and Bridge Complex																	(b) (5)	P-870 1391 Documentation dated Aug 2010, adjusted with new ACF
CBRNE Training																	(b) (5)	P-871 1391 Documentation dated Aug 2010, adjusted with new ACF
Individual Combat Skills Training																	(b) (5)	1391 Documentation from TCP, removed gas chamber cost, adjusted ACF
Tinian Base Camp 1																	(b) (5)	1391 Documentation with adjusted ACF - includes Infrastructure project
Tinian Aviation Landing Practice																	(b) (5)	1391 Documentation with adjusted ACF
Tinian Ammo Storage																	(b) (5)	1391 Documentation from TCP, adjusted for new ACF
Convoy Course																	(b) (5)	GOJ Design 1391 Documentation dated NOV 2013
Urban Combat Training																	(b) (5)	GOJ Design 1391 Documentation dated NOV 2013

DRAFT - NOTIONAL/PREDECISIONAL
(FOR INFORMATION PURPOSES ONLY)

Distributed Laydown MILCON Project List with Assumption of Cantonment at Finegayan

(For Information Purposes Only)

Tinian Infr Upgrades - Biosecurity																(b) (5) [redacted]	Estimate - placeholder for biosecurity and any off-base utilities not funded by GOJ project
Tinian VOA Relocation																(b) (5) [redacted]	1391 Documentation from TCP, adjusted for new ACF
Battle Simulation Center																(b) (5) [redacted]	Based on 1391 Documentation from TCP, removed Simulation Center, adjusted for new ACF
Tinian Multipurpose Range Complex																(b) (5) [redacted]	1391 Documentation from TCP, adjusted for new ACF, removed targets ($12M)
Tinian Mortar and Artillery																(b) (5) [redacted]	1391 Documentation from TCP, adjusted for new ACF
High Hazard Impact Area																(b) (5) [redacted]	Based on 1391 Documentation for Stationary Target Range, with adjusted ACF
Tinian Company Level Live Fire																(b) (5) [redacted]	1391 Documentation from TCP, adjusted for new ACF
Tinian Sm Arms & Mach Gun Ranges																(b) (5) [redacted]	1391 Documentation from TCP, adjusted for new ACF, removed targets ($31M)
Tinian Combined Arms Training																(b) (5) [redacted]	1391 Documentation from TCP, adjusted for new ACF
Landing Beach - CNMI																(b) (5) [redacted]	Based on 1391 Documentation for Tipalao Beach, with adjusted ACF
Tinian Base Camp II																(b) (5) [redacted]	1391 Documentation from TCP, adjusted for new ACF
Lease - Pagan																(b) (5) [redacted]	Estimate for lease - low end of NFP estimated range
Live Fire Convoy Course																(b) (5) [redacted]	Placeholder - need estimate
PLT Battle Course																(b) (5) [redacted]	Placeholder - need estimate
Pagan Mnvr Training Support																(b) (5) [redacted]	Initial estimate to cover infrastructure enablers on Pagan
Pagan HSV Pier																(b) (5) [redacted]	1391 Documentation from TCP, adjusted for new ACF

Total Projects Costs	**$6,692,772,202**
Family Housing (b) (5) [redacted] **per house)**	(b) (5) [redacted]
Planning and Design	**$334,638,610**

Tab J Planning Assumptions
MILCONs, BFRs, and Cost Estimates

1. All project scopes presented in Tab J are supported by Basic Facility Requirements (BFRs) generated from FY16 Table of Organization and Equipment (TO&E) Reports (for unit specific BFRs such as admin spaces, warehouse, maintenance shops, warehousing), personnel or aircraft loading (to include dependent/children demographics), and/or criteria outlined in Unified Facilities Criteria (UFC) 2-000-05N.

2. The best available data was used to determine project cost estimates. This includes 1391 documentation at the Facility Analysis Concept Design (FACD) level (used to determine estimated cost of construction at RFP), cost-certified/FEC level (NAVFAC certified costs), and Activity Level. If 1391 data was not available, costs for individual BFR level cost estimates were determined using the methodology outlined in UFC 3-701-01 DoD Facilities Pricing Guide dated August 2013.

3. BFR level estimates have been de-escalated to FY12 dollars by .9813 (1.87%) using the Joint Inflation Calculator dated Febuary 2013.

4. The BFR level cost estimates were multiplied by the following factors:
   - Area Cost Factor 2.32
   - Contingency (20%)
   - Supervision Inspection and Overhead (SIOH) - (6.02%)
   - Guam Receipt Taxes (GRT) – (4.17%)
   - Design (6%)
   - Environmental Mitigation (6%)
   - LEED (4%) / PCAS (1%) / MEC/UXO (1%) / OMSI (1%) – total of 7%
   - Site Work (30%)

5. Projects that have already been awarded reflect cost requested from Congress, not actual award.

6. Projects that have been estimated at the FACD level carry the same costs (will not be adjusted for unit cost, escalation, or ACF) - these include BEQs, BOQs, Apra Harbor Clinic (assume same scope for now), Waterfront HQ, Enlisted Dining Facility, Fire Station, Medical/Dental Clinic (assume same scope for now), and PMO/Police Station.

7. GOJ projects such as Aviation Instruction Facility, J-200 North Ramp Utilities, and MOUT/Convoy present costs indicated in latest 1391 to mid-point of construction (are not de-escalated).

8. Training Range Projects - unless more recent 1391s have been developed (such as MOUT, Convoy Course, Gas Chamber, Engineering Pit, NWF KD Ranges, and MG Range), the TCP 1391 has been used as the basis of estimate for training range projects. For these projects, cost estimates were only adjusted for ACF - costs reflected in the 1391 have been divided by 2.64 (old ACF) and then multiplied by the new ACF (2.32 - assume same as Guam). In addition, some of the TCP projects have very high costs for target emplacements which were removed since this falls under Procurement Marine Corps (PMC), not MILCON (per TECOM).

9. Cost for ranges and requirements for supporting facilities/infrastructure (such as biosecurity) in CNMI is subject to change based on the on-going NEPA process.

10. Proposed CNMI projects do not include any MILCON to support the Airfield Land Use Plan, runway at Pagan, or other on-going planning that may be covered by the CJMT EIS.

11. The USFW Replacement Facility (required to be relocated due to the SDZ associated with Machine Gun Range), is assumed to be a replacement in kind for approximate square footage. The most applicable FAC code was used per the UFC for unit costs.

12. Integrated Civ-Mil Util/OEA remains a (b) (5) place holder to account for total build on Guam (outside the fence).

13. For FY16 US projects, (NWF KD Ranges), estimates have been presented to mid-point of construction (no de-escalation). For other 1391s (i.e. Embark Ops), 1391 estimate have been adjusted for ACF.

14. Scope and costs for utility upgrades for water, power, and communications were taken from the NAVFAC Utility Study.

15. III MEF is currently reviewing the adjustment of the MASS-2 det going to Guam to a MMT det. While the overall personnel is roughly the same (~20 PN), the facilities to support these personnel may be different. Results of this adjustment may require slightly different facilities.

16. Costs for U&SI for family housing and individual cost per housing unit was developed by MCICOM and NAVFACPAC. The requirement to upgrade a north-south road connecting the northern main cantonment with the southern housing area is still under review and may increase costs.

17. The construction of the corrosion control facility will require the tow lane on the east side of the P-109 Hangar to be completed. To complete this tow lane, the retaining wall adjacent to the sinkhole will need to be extended so the finish grade can be maintained. The cost for this hangar may need to be increased to accommodate this scope. Further analysis is required.

18. The cost to lease Pagan is based on the low end of the cost range determined by NFP.

19. Defense Access Road (DAR) projects (DAR III) have been added to support the NWF Training Range alternative. Federal Highways has identified additional projects that are not reflected in this Tab J.

20. Cost for the construction of a new Fire Station at AAFB is not reflected in this Tab J. There have been previous discussions with AAFB on whether USMC will share in the funding of another Fire Station at AAFB to support additional facilities at North Ramp.

21. BFRs for specific units may need to be further refined/adjusted due to changes in TO&E, USMC reduction to 174K, or adjustments from the DOTMLPF-P process. Units currently undergoing re-alignment or transformation include the MLG (impacts to CLB), 3rd MEB (and 3rd MEB Enablers), and 9th ESB.

22. Requirements for the construction of a new Elementary School and expansion of the Middle School and High School were provided by DoDEA, based on the USMC dependent demographics.

23. Facilities associated with MCCS may be adjusted/further refined once discussions have occurred with MR and MF and certain business case analyses are completed. This may impact the size of certain facilities such as the exchange, or add/remove specific requirements.

24. The cost of the second hangar was modified to support JSF at AAFB North Ramp. A 3,600 SF SAP-F component was added to Tab J for this project. Costing was based on FAC 1404 SCIF using UFC 3-701-01. Additional requirements and costs may be needed to fully support the JSF at AAFB. Further analysis is required.

25. The total requirement for the supporting establishment is currently being determined. End-state requirements may require adjustments to facilities that support these functions.

26. The extent to which existing capabilities and functions can be leveraged within the Joint Marians Region (JRM) is still under review.

27. Requirements reflected in Tab J are based on the main cantonment and family housing constructed at Finegayan with the LFTRC at NWF.

28. There are on-going discussions about consolidating Navy requirements within then USMC Corrosion Control hangar, which will require the expansion of another bay.

29. Projects for the construction of new earth covered magazines (ECMS) at AAFB (MSA) and Ordnance Annex have been pushed to out years based on the assumption that there is existing capacity to accommodate USMC requirements during the initial build out.

30. BUMED is currently reviewing/re-assessing if there is a need to construct the Apra Medical Clinic and Medical/Dental Clinic in support of the buildup.

31. Sizing of Public Works Facilities is based on a work force of up to 50 personnel. Requirements assume that existing capabilities of JRM can be leveraged as well as a heavy reliance on BOS contracts to provide services. If additional personnel are required, the size of these facilities will need to be increased.

32. The sizing of the Base Administration Facility is based on the working installation base support personnel numbers. Adjustment to these numbers will require updates to the facility requirements.

Guam Military Construction Cost Estimates

Overview: "Programming cost estimates must be prepared as accurately as possible to reflect the budgetary cost of providing facilities. In order to do this, basic data must be accurate and it must be consistently applied. A basic cost model that reflects all applicable factors derived from accurate data forms the basis for determining the facility budgetary cost at a specific location and under specific conditions." (UFC 3-730-01).

The following columns are reflected in "Tab J", and are used to provide an approximate cost estimate for required facilities on MCB Guam:

- **Determine the facility Category Code Number (CCN), Facility Analysis Category (FAC).** The CCN is a five digit numeric code to identify a particular type of Navy or Marine Corps Class I or Class 2 Real Property (i.e., Land, Building, Structure, Utility). The FAC is a four digit DoD classification of Facilities based on similar type CCNs. Both are found in the NAVFAC P-72 "Department of the Navy Facility Category Codes" document.

- **Add a Facility Description.** Provide a brief description of the facility and occupying unit.

- **Determine the Facility Unit of Measure (U/M) and Unit Costs.** Facility U/M and unit costs were previously published in Unified Facilities Criteria (UFC) 3-700-01A "Programming Cost Estimates for Military Construction" (2005). This document has since been superseded by UFC 3-730-01 "Programming Cost Estimates for Military Construction" (2011), and supplemented by the facility costs in UFC 3-701-01 "DoD Facilities Pricing Guide" (updated annually).

- **Parametric estimates use Guidance Unit Cost (GUC):** GUCs are normalized unit costs produced for the facilities most frequently constructed by the Military Services in multiple CONUS locations and also in Alaska and Hawaii, which are published annually in the UFC 3-701-01. These costs are for primary facilities only and include: minimum antiterrorism design features; an average sales tax on building materials; built-in equipment; energy management control system; intrusion detection system; sustainable design features for criteria in effect from September, 2009 thru September 2011; progressive collapse premiums for specific facility types and standard foundation systems. These facility unit costs may not be directly applicable for those facilities that consist of unique requirements.

- **Determine the Facility Requirement.** The facility size requirement should be calculated in terms of the U/M indicated above.

- **Determine and Apply Cost Factors.** The below table lays out the cost factors applied to the facility cost calculations in Tab J, and identifies their documented source. Each cost factor must be applied to get the facilities final cost.

Cost Factor	Factor on Guam	Source	Comments
Area Cost Factor (ACF)	2.32 (or 232%)	Unified Facilities Criteria (UFC) 3-701-01 "DoD Facilities Pricing Guide" - (2013) http://www.wbdg.org/ccb/DOD/UFC/ufc_3_701_01.pdf	Area cost factors (ACFs) are used to adjust "bare" unit costs to location-specific costs for the most common locations. MILCON ACFs were developed using the Tri-Service Cost Engineering ACF software program.
Site Work	1.3 (or 30%)	Percentage developed based on an analysis of prior 1391s.	Site work includes supporting facilities items of construction directly related to and required for the support of the primary facility (e.g., special foundations, electrical utilities, roads, parking, site improvements, and demolition).
Leadership in Energy and Environmental Design (LEED)	1.04 (or 4%)	NAVFACINST 11010.45 "Regional Planning Instruction – Sustainable Planning" - 2003 https://portal.navfac.navy.mil/portal/page/portal/docs/doc_store_pub/11010.45%20(6)_2.pdf In regards to LEED silver, the source is: NAVFAC publication "MCON/MCNR PROJECT COST DEVELOPMENT & REVIEW GUIDELINES"; 2013 https://portal.navfac.navy.mil/portal/page/portal/ci/programs/milcon/pr/consistency%20review%20board%20guidelines	In section 6, about Funding and Budgeting issues and DD From 1391s, this document states: "In order to meet the requirements, additional costs may be included under a line item titled "Sustainability Features" in the Primary Facility and/or Supporting Facilities sections of DD Form 1391, Block 9, where justified by life-cycle cost analysis. As a guide, the total of these added costs should not exceed 5% of the total facility cost (first line Cost of Block 9). However, if fully justified, this figure may be exceeded" In regards to level of LEED certification: "The FY 2012 National Defense Authorization Act expressly prohibits the use of FY 2012 funds to obtain LEED Gold or Platinum level certifications without a SECDEF waiver. Obtaining a waiver is highly unlikely. It is highly likely that this legislation will be applied to FY 2013 and future program years. Therefore, the Navy policy has reverted back to LEED Silver"
Gross Receipt Tax (GRT)	1.0417 (or 4%)	Source: Guam Tax Law Book, March 2007 - https://www.guamtax.com/info/GuamTaxLawBook_revised0307.pdf	A GRT is a tax on the gross receipts (sales) of a business. In 2004, Guam's GRT was rolled back from 6% to 4%. GRT is 4% of the total "contract" amount. This is equal to an adjusted 4.17% of the

			total "construction cost", so at the end Guam receives a net 4% as revenue.
Design	1.06 (or 6%)	DFAR 236.606-70 Statutory fee limitation (10 U.S.C. 4540, 7212, and 9540) http://farsite.hill.af.mil/reghtml/regs/far2afmcfars/fardfars/dfars/dfars236.htm#P95_2934	236.606-70 states: "(a) 10 U.S.C. 4540, 7212, and 9540 limit the contract price (or fee) for architect-engineer services for the preparation of designs, plans, drawings, and specifications to six percent of the project's estimated construction cost."
Contingency	1.05 (or 5%) up to 1.2 (or 20%)	Source: NAVFAC publication "MCON/MCNR PROJECT COST DEVELOPMENT & REVIEW GUIDELINES"; 2013 https://portal.navfac.navy.mil/portal/page/portal/ci/programs/milcon/pr/consistency%20review%20board%20guidelines	"A graduated contingency amount will be used for each of the major milestones for DD 1391 development for all OPNAV-sponsored projects. The amounts to be used are as follows: • Installation/PWD Final DD 1391: 20 percent • Region/FEC Team Final DD 1391: 10 percent • Program Final DD 1391 (and all subsequent budget DD 1391s): five percent" For this Program, a contingency of 20% was chosen to be applied on parametric estimates, which is consistent with the above guidance. This 20% contingency factor accounts for known unknown variables related to construction issues, natural causes, economic conditions and professional conditions.
Supervision Inspection and Overhead (SIOH)	1.062 (or 6.2%)	Source: NAVFAC publication "MCON/MCNR PROJECT COST DEVELOPMENT & REVIEW GUIDELINES"; 2013 https://portal.navfac.navy.mil/portal/page/portal/ci/programs/milcon/pr/consistency%20review%20board%20guidelines	Section 1.1 of the source document says: "Supervision, Inspection & Overhead (SIOH) rates are: 5.7 percent for CONUS; 6.2 percent for OCONUS (includes HI); and 6.5 percent for OCONUS when the Army Corps of Engineers (COE) is the construction agent."
Environmental Mitigation	Vertical projects: 1.06 (or 6%) Horizontal Projects: 1.15 (or	Source: NAVFAC PAC estimate, based on field and historical information.	The environmental costs include the following: Cultural Resources Mitigations, Natural Resources Conservation Measures, Natural Resources Best Management Practices (BMPs), and MEC Clearances. Vertical and Horizontal projects could have the same EV requirements, however, magnitude of efforts will differ.

	15%)		
PCAS	1.01 (or 1%)	Source: NAVFAC publication "MCON/MCNR PROJECT COST DEVELOPMENT & REVIEW GUIDELINES"; 2013 https://portal.navfac.navy.mil/portal/page/portal/ci/programs/milcon/pr/consistency%20review%20board%20guidelines	Section 4.7.1 of the NAVFAC publications states: "Post Construction Contract Award Services (PCAS) applies to most MILCON projects. The PCAS line-item shall be entered as part of the "Special Costs" line-item. The nominal amount for PCAS is one percent of the primary and supporting facilities line items. This may vary depending on the project."
OMSI	1.01 (or 1%)	Source: NAVFAC publication "MCON/MCNR PROJECT COST DEVELOPMENT & REVIEW GUIDELINES"; 2013 https://portal.navfac.navy.mil/portal/page/portal/ci/programs/milcon/pr/consistency%20review%20board%20guidelines	Per section 2.11: "Operation and Maintenance Support Information (OMSI), also known as technical operating manuals, is usually estimated as a percentage of the sum of other project cost line-items. The normal range is from 0.5 percent to 1.5 percent depending on the complexity of the facility. More precise cost estimating for this line-item is preferred if available."

DEPARTMENT OF THE NAVY
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WASHINGTON, DC 20350-3000

IN REPLY REFER TO:
11000
PD
19 Feb 2014

From: Deputy Director, Pacific Division, Plans, Policies and Operations
To: Distribution

Subj: POLICY ON ENVIRONMENTAL COST ESTIMATES FOR DPRI PROJECTS

1. USG and GOJ funded Vertical and Horizontal MILCON projects in Guam and CNMI could have the same EV requirements, however, magnitude of efforts will differ. Therefore DPRI projects will utilize the following for 1391 environmental (EV) cost calculations.

a. 6% for vertical construction (e.g. excavation for foundations and installation of secondary utility lines pertaining to individual buildings or facilities).

b. 15% for horizontal construction (e.g. mass grading, installation of underground utility main lines, draining features, and street network).

2. Cost estimates include Cultural Resources Mitigations (CR), Natural Resources Conservation Measures (NR), Natural Resources Best Management Practices (BMPs), and MEC Clearances. CR and NR cost estimates are based on anticipated conservation measures/mitigations that may be required. MEC clearance costs are based on a notional unit cost and the probability of encountering munitions and explosives of concern.

3. The following EV requirements were considered when estimating vertical and horizontal percentages.

a. Cultural Resources Mitigations

(1) Archaeological Data Recovery (e.g. plan, fieldwork, lab añalysis, report, Guam Historic Properties Inventory (GHPI) data form, public education and interpretation, etc.)

(2) Archaeological monitoring during construction (e.g. plan, monitoring, 1 archeologist, equipment, lab analysis, report, fencing of CR sites, etc.)

(3) CR awareness training for construction contractors

b. Natural Resources Conservation Measures

(1) Fencing (ungulate and multi-species)

(2) Ungulate control and eradication

(3) Invasive plant removal

(4) Reforestation (e.g. out-planting of native species)

(5) Invasive insect control (e.g. scale biocontrol treatments/releases)

(6) Rodent control

(7) Brown tree snake research and suppression

(8) Preconstruction baseline biological condition

(9) Biomonitoring

(10) Designate Ecological Reserve Areas (ERA)

c. Natural Resources Best Management Practices

(1) HACCP (Hazard Analysis and Critical Point) plan and implementation

(2) NR awareness training for construction contractors

d. UXO/MEC Clearance

A notional cost estimate was developed using historical costs that have been received using the NAVFAC Marianas Munition and Explosives Concerns Multiple Award Contract (MAR MEC MAC) vehicle. There are factors that may drive this notional unit costs higher or lower, including:

a. Amount of non-MEC metal present in the surface and subsurface
b. Depth of construction
c. Amount of vegetation present
d. Level of cost estimate
e. Year of construction

4. Point of contact concerning this authorization is Ms. Natalie Latham at natalie.pilon.ctr@usmc.mil.

Newell B. Day

N. B. DAY

BASIS OF ESTIMATE

SUPPORTING DOCUMENTS

UTILITIES & SITE IMPROVEMENTS/DAR

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date

3. Installation(SA) & Location/UIC:	4. Project Title
GUAM	Guam Utilities And Site Improvements, Phase 1

5. Program Element	6. Category Code	7. Project Number	8. Project Cost (b) (5) [redacted]

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost (b) (5)
GUAM UTILITIES AND SITE IMPROVEMENTS ,PHASE 1				
On-base infrastructure project in Finegayan(Phase 1)				
Primary Facilities	LS	1		(b) (5) [redacted]
Supporting Facilities	LS	1		
Design Build	LS	1		
SUBTOTAL				
SUBTOTAL ROUNDED				
On-base infrastructure project in AAFB North ramp Area/zone				
Primary Facilities	LS	1		
Supporting Facilities	LS	1		
Design Build	LS	1		
SUBTOTAL				
SUBTOTAL ROUNDED				
On-base infrastructure project in Apra Harbor				
Primary Facilities	LS	1		
Supporting Facilities	LS	1		
Design Build	LS	1		
SUBTOTAL				
SUBTOTAL ROUNDED				
TOTAL REQUEST				

10. Description of Proposed Construction :

UTILITIES AND SITE IMPROVEMENT, PHASE 1

A.On-Base Infrastructure Project in Finegayan (Phase 1)

Phase I of the utilities and site improvements at NCTS Finegayan prepares the Finegayan USMC Bachelor Enlisted Quarters (BEQ) area for future construction. The project will include site preparation, arterial access and perimeter roads, electrical distribution, water distribution, wastewater collection lines, and communication distribution system lines. The project will also include gate houses for a commercial vehicle gate and a main gate to control access to the site. The project will facilitate follow-on construction of BEQs and related billeting facilities to support the Marines transferring from Okinawa.

B.On-Base Infrastructure Project in AAFB North Ramp Area/zone

Andersen Air Force Base (AAFB) – Construct an additional access road and entry that will provide access to the USMC facilities at the Andersen Air Force Base North Ramp area. Roadway paving and drainage will be provided the entire length of the alignment and are provided as part of the utilities and site improvements needed to support the Mamizu projects and USG MILCON projects that will be sited at Andersen Air Force Base.

Functions that this road and utilities will support will include administrative, dining, quality of life, training and maintenance. USMC personnel will use this new gate and roadway as their primary access to their new facilities complex at the Andersen Air Force Base North Ramp area. This road will also provide construction access to Japanese and American contractors who will do the construction work at Andersen Air Force Base.

C.On-Base Infrastructure Project in Apra Harbor

Upgrade the existing utilities to support the relocation of the USMC from Okinawa, Japan to Guam. Utilities that need to be upgraded include water, sewer, power, steam and oily waste. The USMC on Okinawa routinely use these utilities to support their personnel and these general utilities support the USMC facilities such as administrative buildings, medical facilities and other support buildings. The utilities upgrade at Apra will support these same types of projects and this project needs to be constructed first before any of the quality of life projects can begin construction. The project will provide utility improvements to support the Marine Corps embarkation capability on Guam.

1. Component	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date
NAVY		

3. Installation(SA) & Location/UIC:	4. Project Title
GUAM	Guam Utilities And Site Improvements, Phase 1

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
			(b) (5)

11. Requirement :

PROJECT :

This project provides site improvements, clearing, utilities, roadways and other improvements in support of building construction needed for the relocation of U.S. Marines from Okinawa to Guam.This project is located in three areas, NCTS Finegayan, Andersen Air Force Base and Naval Station, Apra.
Utilities are critical to supporting the buildings and will require power, water, sewer, storm drainage, communications, waste and other ancillary utilities.
Site improvements such as roadways, sidewalks, gate houses, clearing, grubbing, leveling, filling and site remediation are needed for each site to be able to accept facilities construction.

REQUIREMENT :

In 2006, GoJ and U.S. agreed United States-Japan Roadmap for Realignment Implementation.The agreements outline a realignment of Marine Corps elements to reduce the U.S. military footprint in Okinawa, including the relocation of forces out of Japan. In the Roadmap, about 8,000 Marines and their about 9,000 dependents are due to relocate from Okinawa to Guam by 2014, in a manner that maintains unit integrity.

CURRENT SITUATION :

There are no Marines presently stationed on Guam. The majority of the Department of Defense (DOD) Class I (Land) and II (Buildings & Structures) properties including airfield and wharves on Guam are owned by the Navy and Air Force. Limited surplus shore facilities are available but are within small footprints in various locations which inhibit any large scale usage for this relocation effort.
Additionally, most of these surplus facilities require extensive upgrades/modification for adequate permanent type use. The existing utilities systems cannot support the future growth required to support the relocation personnel, due to inadequate storage, distribution capacity, and system pressure. Therefore, proposed facilities to support the relocation of about 8,000 Marines and about 9,000 dependents will require new construction of utilities.

IMPACT IF NOT PROVIDED :

This project is part of the USMC relocation from Okinawa to Guam. Units/activities will not be able to vacate their current facilities until new replacement facilities have been completed, inspected and accepted. Failure to complete this project on time will likely prevent completion of the relocation by the target date of 2014, as agreed upon between the governments of the United States of America and Japan.

12. Supplemental Data :

A. Estimated Design Data :

1. Status :
   - (A) Date design or Parametric Cost Estimate started
   - (B) Date 35% Design or Parametric Cost Estimate complete
   - (C) Date design completed
   - (D) Percent completed as of September 2008
   - (E) Percent completed as of January 2009
   - (F) Type of design contract
   - (G) Parametric Estimate used to develop cost
   - (H) Energy Study/Life Cycle Analysis performed
2. Basis :
   - (A) Standard or Definitive Design
   - (B) Where design was previously used

Determined by the adjustment between USG and GOJ

Design Build

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date

3. Installation(SA) & Location/UIC: GUAM	4. Project Title Guam Utilities And Site Improvements, Phase 1

5. Program Element	6. Category Code	7. Project Number	8. Project Cost (b) (5) (b) (5)

3. Total Cost (C) = (A) + (B) = (D) + (E) :

(A) Production of plans and specifications
(B) All other design costs
(C) Total
(D) Contract
(E) In-house

4. Contract award :

5. Construction start :

6. Construction complete :

B. Equipment associated with this project which will be provided from other appropriations :

Activity POC: Phone No:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
AAFB NR Parking I	AAFB NR Parking I

AAFB North Ramp Parking - Inc 1 of 2

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 16 DEC 2009

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title AAFB North Ramp Parking, Inc 1 of 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	11320	P101	88,797

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost($000)
AAFB NORTH RAMP PARKING, INC 1 OF 2 (1,302,471SF)	m2	121,003.5		92,750
AIRCRAFT ACCESS APRON CC11340 (12,002SF)	m2	1,115	547.73	(610)
AIRCRAFT PARKING APRON CC11320 (1,090,804SF)	m2	101,339	539.22	(54,640)
AIRCRAFT RINSE FACILITY CC11615 (17,255SF)	m2	1,603	479.36	(770)
AIRCRAFT WASHRACK CC11610 (13,810SF)	m2	1,283	538.54	(690)
ARMING & DE-ARMING PAD CC11635 (23,002SF)	m2	2,137	572.69	(1,220)
PARKING APRON SHOULDER CC11612 (31,893SF)	m2	2,963	357.74	(1,060)
POWER CHECK PAD CC21189 (4,962SF)	m2	461	573.71	(260)
TAXIWAY CC11210 (65,240SF)	m2	6,061	547.73	(3,320)
TAXIWAY SHOULDER CC11612 (43,502SF)	m2	4,041.5	357.74	(1,450)
BUILT-IN EQUIPMENT	LS			(2,600)
SPECIAL COSTS	LS			(22,740)
OPERATION & MAINTENANCE SUPP INFO (OMSI)	LS			(680)
LEED AND EPACT 2005 COMPLIANCE	LS			(2,710)
SUPPORTING FACILITIES				65,590
PAVING AND SITE IMPROVEMENTS	LS			(25,420)
ANTI-TERRORISM/FORCE PROTECTION	LS			(580)
ELECTRICAL UTILITIES	LS			(24,480)
MECHANICAL UTILITIES	LS			(10,740)
ENVIRONMENTAL MITIGATION	LS			(3,630)
DEMOLITION	LS			(240)
WASHRACK UTILITIES BUILDING	LS			(80)
RINSE UTILITIES BUILDING	LS			(420)
SUBTOTAL				158,340
CONTINGENCY (5%)				7,920
TOTAL CONTRACT COST				166,260
SIOH (6.2%)				10,310
SUBTOTAL				176,570
DESIGN/BUILD - DESIGN COST				6,330
TOTAL REQUEST ROUNDED				182,900
TOTAL REQUEST				182,897

Auth: PL 111-84 (28 OCT 09); Approp: PL 111-117 (16 DEC 09)

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 16 DEC 2009

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title AAFB North Ramp Parking, Inc 1 of 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	11320	P101	88,797

10. Description of Proposed Construction:

Primary Facilities: Project provides aircraft parking apron with shoulders, lighted taxiways with shoulders, aircraft access apron, engine check pad, arming/de-arming pad and aircraft wash-rack and rinse facilities located at Andersen Air Force Base (AAFB).

Built-in equipment includes jet blast deflector and wash/rinse facility equipment (pumps and water holding tanks). Utilities include water distribution to pumps for the wash-rack and rinse facilities, electrical distribution (to taxiway lighting) and a utilities support building.

Supporting Facilities: Project includes storm water drainage, sanitary sewer system, electrical main building, utilities (electrical and communication) connections, aircraft servicing stations, taxiway and apron lighting and signage and area lighting. Project costs include operation manuals for utilities and equipment.

11. Requirement: 116258 m2 **Adequate:** 0 m2 **Substandard:** 0 m2

PROJECT:

Project provides aircraft parking apron, lighted taxiways, compass calibration pad, engine check pad (with jet blast deflectors), aircraft wash-rack and rinse and arming/de-arming pad located at Andersen Air Force Base to accommodate US Marines being relocated from Okinawa to Guam.

(Current Mission)

REQUIREMENT:

Adequate pavement facilities to support the relocation of US Marine Corps aviation units from Okinawa to Guam, including transient units.

CURRENT SITUATION:

There are no Marines presently stationed on Guam. The majority of the Department of Defense Class I and II properties including airfield and wharves on Guam are owned by the Navy and Air Force. Limited surplus shore facilities are available but are within small footprints in various locations which inhibit any large scale usage for this relocation effort. Additionally, most of these facilities require extensive upgrades/modification for adequate permanent type use. Therefore, proposed facilities to support the relocation of more than 8,000 Marines and their 9,000 dependents will have to be new construction.

IMPACT IF NOT PROVIDED:

This project is part of the USMC relocation from Okinawa to Guam.

12. Supplemental Data:

A. Estimated Design Data:

1. Status:

(A) Date design or Parametric Cost Estimate started	04/2009
(B) Date 35% Design or Parametric Cost Estimate complete	07/2009

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 16 DEC 2009

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title AAFB North Ramp Parking, Inc 1 of 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	11320	P101	88,797

(C) Date design completed	02/2010
(D) Percent completed as of September 2008	0%
(E) Percent completed as of January 2009	0%
(F) Type of design contract	Design Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	Yes
2. Basis:	
(A) Standard or Definitive Design	Yes
(B) Where design was previously used	n/a
3. Total cost (C) = (A) + (B) = (D) + (E):	
(A) Production of plans and specifications	$2,197
(B) All other design costs	$3,296
(C) Total	$5,493
(D) Contract	$4,944
(E) In-house	$549
4. Contract award:	05/2010
5. Construction start:	07/2010
6. Construction complete:	11/2012

B. Equipment associated with this project which will be provided from other appropriations:

JOINT USE CERTIFICATION:

The Director Land Use and Military Construction Branch, Installations and Logistics Department, Headquarters Marine Corps certifies that this project has been considered for joint use potential. Unilateral construction is recommended. This facility can be used by other components on an as available basis; however, the scope of the project is based on Department of the Navy requirements.

Authorization and Appropriation Summary

	Authorization	Appropriation	Auth for Approp.
FY 2010 Approved by Congress	$182,897K	$88,797K	$88,797K
FY 2011 Request	$0K	$93,588K	$93,588K
Total	$182,897K	$182,385K	$182,385K

Activity POC: (b) (6) [redacted] Phone No: (b) (6) [redacted]

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
AAFB NR Parking II	AAFB NR Parking II

North Ramp Parking (Andersen AFB) - Inc 2

1. Component NAVY	FY 2013 MILITARY CONSTRUCTION PROGRAM	2. Date

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title North Ramp Parking (Andersen AFB) - Inc 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	11320	P101A	(b) (5)

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost($000)
NORTH RAMP PARKING (ANDERSEN AFB) - INC 2 (1,278,715SF)	m2	118,796.5		(b) (5)
AIRCRAFT ACCESS APRON CC11340 (12,002SF)	m2	1,115	(b) (5)	(b) (5)
AIRCRAFT PARKING APRON CC11320 (1,067,048SF)	m2	99,132	(b) (5)	(b) (5)
AIRCRAFT RINSE FACILITY CC11615 (17,255SF)	m2	1,603	(b) (5)	(b) (5)
AIRCRAFT WASHRACK CC11610 (13,810SF)	m2	1,283	(b) (5)	(b) (5)
ARMING & DE-ARMING PAD CC11635 (23,002SF)	m2	2,137	(b) (5)	(b) (5)
PARKING APRON SHOULDER CC11612 (31,893SF)	m2	2,963	(b) (5)	(b) (5)
POWER CHECK PAD CC21189 (4,962SF)	m2	461	(b) (5)	(b) (5)
TAXIWAY CC11210 (65,240SF)	m2	6,061	(b) (5)	(b) (5)
TAXIWAY SHOULDER CC11612 (43,502SF)	m2	4,041.5	(b) (5)	(b) (5))
BUILT-IN EQUIPMENT	LS			(b) (5)
SPECIAL COSTS	LS			(b) (5)
OPERATION & MAINTENANCE SUPP INFO (OMSI)	LS			(b) (5)
SUPPORTING FACILITIES				(b) (5)
SITE PREPARATIONS	LS			(b) (5)
PAVING AND SITE IMPROVEMENTS	LS			(b) (5)
ANTI-TERRORISM/FORCE PROTECTION	LS			(b) (5)
ELECTRICAL UTILITIES	LS			(b) (5)
MECHANICAL UTILITIES	LS			(b) (5)
ENVIRONMENTAL MITIGATION	LS			(b) (5)
DEMOLITION	LS			(b) (5)
WASHRACK UTILITIES BUILDING	LS			(b) (5)
RINSE UTILITIES BUILDING	LS			(b) (5)
SUBTOTAL				(b) (5)
CONTINGENCY (5%)				(b) (5)
TOTAL CONTRACT COST				(b) (5)
SIOH (6.2%)				(b) (5)
SUBTOTAL				(b) (5)
DESIGN/BUILD - DESIGN COST				(b) (5)
PL113-6 SEC3002SEQUEST +SEC3001 +SEC3004 RDCT	LS			(b) (5)
TOTAL REQUEST ROUNDED				(b) (5)
TOTAL REQUEST				(b) (5)

1. Component NAVY	FY 2013 MILITARY CONSTRUCTION PROGRAM	2. Date

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title North Ramp Parking (Andersen AFB) - Inc 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost (b) (5))
0216496M	11320	P101A	(b) (5)

10. Description of Proposed Construction:

- FY2013 Authorized Amnt per FY2013 NDAA PL112-239 is $0
- FY2013 Appropriated Amnt per FY2013 MILCON Approp Act PL113-6 is $24,458,000
- FY2013 Appropriation expires 30 Sep 2017 (per PL113-6 127 STAT. 385)
- See Authorization and Appropriation Summary at end of Block 12 for totals.

Construct aircraft parking apron with shoulders, lighted taxiways with shoulders, aircraft access apron, engine check pad, arming/de-arming pad and aircraft wash-rack and rinse facilities located at Andersen Air Force Base (AAFB).

Built-in equipment includes jet blast deflector and wash/rinse facility equipment (pumps and water holding tanks). Utilities include water distribution to pumps for the wash-rack and rinse facilities, electrical distribution (to taxiway lighting) and a utilities support building.

Special costs include post construction contract award services which includes geospatial surveying and mapping.

Operations and maintenance support information is included in this project.

Sustainable design principles will be included in the design and construction of the project in accordance with Executive Order 13423 (2007) and other laws and Executive Orders. Facilities will meet LEED ratings and comply with the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. Low Impact Development will be included in the design and construction of this project as appropriate.

Paving and site improvements include grading, parking, roadways, curbs, sidewalks, landscaping, fencing, signs and storm-water drainage.

Project includes storm water drainage, sanitary sewer system, electrical main building, utilities (electrical and communication) connections, aircraft servicing stations, taxiway and apron lighting and signage and area lighting.

Facilities will be designed to meet or exceed the useful service life specified in DoD Unified Facility Criteria. Facilities will incorporate features that provide the lowest practical life cycle cost solutions satisfying the facility requirements with the goal of maximizing energy efficiency.

11. Requirement: 116258 m2 **Adequate:** 0 m2 **Substandard:** 0 m2

1. Component NAVY	FY 2013 MILITARY CONSTRUCTION PROGRAM	2. Date

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title North Ramp Parking (Andersen AFB) - Inc 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost
0216496M	11320	P101A	(b) (5) [redacted] (b) (5) [redacted]

PROJECT:

Project provides aircraft parking apron, lighted taxiways, compass calibration pad, engine check pad (with jet blast deflectors), aircraft wash-rack and rinse and arming/de-arming pad located at Andersen Air Force Base to accommodate US Marines being relocated from Okinawa to Guam.

(New Mission)

REQUIREMENT:

Adequate pavement facilities to support the relocation of US Marine Corps from Okinawa to Guam.

CURRENT SITUATION:

There is insufficient space to park Marine Corps aircraft at Andersen AFB.

IMPACT IF NOT PROVIDED:

This project is part of the USMC relocation from Okinawa to Guam. Without this increment, USMC air operations will be severely restricted by insufficient aircraft parking.

12. Supplemental Data:

A. Estimated Design Data:

1. Status:

(A) Date design or Parametric Cost Estimate started	04/2009
(B) Date 35% Design or Parametric Cost Estimate complete	05/2011
(C) Date design completed	11/2012
(D) Percent completed as of September 2011	5%
(E) Percent completed as of January 2012	15%
(F) Type of design contract	Design Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	Yes

2. Basis:

(A) Standard or Definitive Design	Yes
(B) Where design was previously used	n/a

3. Total cost (C) = (A) + (B) = (D) + (E):

(A) Production of plans and specifications	(b) (5) [redacted]
(B) All other design costs	(b) (5) [redacted]
(C) Total	(b) (5) [redacted]
(D) Contract	(b) (5) [redacted]
(E) In-house	(b) (5) [redacted]
4. Contract award:	10/2012
5. Construction start:	12/2012
6. Construction complete:	11/2013

B. Equipment associated with this project which will be provided from other appropriations:

JOINT USE CERTIFICATION:

1. Component NAVY	FY 2013 MILITARY CONSTRUCTION PROGRAM	2. Date

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title North Ramp Parking (Andersen AFB) - Inc 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost (b) (5) (b) (5)
0216496M	11320	P101A	

The Director Land Use and Military Construction Branch, Installations and Logistics Department, Headquarters Marine Corps certifies that this project has been considered for joint use potential. Unilateral construction is recommended. This facility can be used by other components on an as available basis; however, the scope of the project is based on Department of the Navy requirements.

Authorization and Appropriation Summary

	Authorization ($000)	AuthOfApprop ($000)	Appropriation ($000)
FY 2010 Approved by Congress	182,897	88,797	88,797
FY 2013 Approved by Congress	0	25,904	24,458
Total	182,897	114,701	113,255

Activity POC: Project Development Lead Phone No: (b) (6)

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
AAFB NR Utilities I	AAFB NR Utilities I

North Ramp Utilities Inc 1 of 2

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 16 DEC 2009

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title North Ramp Utilities Inc 1 of 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	81310	P100	21,500

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost($000)
NORTH RAMP UTILITIES INC 1 OF 2 (38,287LF)	m	11,670		62,740
AAFB MAIN SUBSTATION CC81230 (15,961LF)	m	4,865	4,041.55	(19,660)
COMMUNICATION DISTRIBUTION CC81230 (22,326LF)	m	6,805	2,666.57	(18,150)
WASTEWATER DISTRIBUTION	LS			(3,660)
MAIN ELECTRICAL DISTRIBUTION/SUBSTATION	LS			(7,830)
SPECIAL COSTS	LS			(12,290)
OPERATION & MAINTENANCE SUPP INFO (OMSI)	LS			(170)
LEED AND EPACT 2005 COMPLIANCE	LS			(980)
SUPPORTING FACILITIES				24,940
PAVING AND SITE IMPROVEMENTS	LS			(650)
ELECTRICAL UTILITIES	LS			(4,200)
MECHANICAL UTILITIES	LS			(20,090)
SUBTOTAL				87,680
CONTINGENCY (5%)				4,380
TOTAL CONTRACT COST				92,060
SIOH (6.2%)				5,710
SUBTOTAL				97,770
DESIGN/BUILD - DESIGN COST				3,510
TOTAL REQUEST ROUNDED				101,280
TOTAL REQUEST				101,280

10. Description of Proposed Construction:

Project upgrades, extends and/or replaces portions of the utility infrastructure for the electrical, communication, jet fuel, water (domestic and fire protection), and sewer systems to fulfill increased demand due to increased personnel, facilities, and operations associated with the relocation of US Marine Corps (USMC) aviation unit personnel and activities from Okinawa to the North Ramp Area of Andersen Air Force Base (AAFB), Guam. Project aligns with the collective utility infrastructure enhancement efforts of other stakeholders and construction programs including the planned intelligence, surveillance, and reconnaissance strike force project to be constructed by the US Air Force.

Primary Facilities - Water and wastewater Utilities - Project provides potable water distribution system and sewer force main that extends service to the North Ramp Area and connects to the existing gravity sewer system. The system includes sewer manholes and pump stations.

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 16 DEC 2009

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title North Ramp Utilities Inc 1 of 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	81310	P100	21,500

Electrical - Project constructs a new 20MVA (megavolt ampere) substation at the North Ramp Area, and constructs underground distribution of electrical power through new concrete encased duct banks from the main substation at AAFB to the new North Ramp substation and extending to the new North Ramp parking apron. The project will require modifications to be made to the Guam Power Authority portion of the main substation at AAFB and also require upgrading the off base 34.5 kilovolt (KV) feeders to provide necessary equipment, and capacity to extend two 34.5KV circuits to the new North Ramp substation. The project also includes pre-cast utility vaults and electrical manholes, installation, terminations and splices of 34.5KV and 13.8KV cables.

Communication - Project constructs a communications duct bank from the AAFB communications plant to the North Ramp area. The project includes 900 pair copper cable and a 48 strand fiber optic cable from the communications plant to the North Ramp area, communications manholes, and a pre-cast communication vault.

Aircraft Fuel Distribution - Project installs new fuel pipes, connecting to the existing fuel farm and extending pipes to 4 new fueling hydrants located on the north side of the new parking apron (FY 2010 P-101, North Ramp Parking, AAFB). Project includes a leak detection/alarm system.

Fire Suppression - Project provides for a fire protection system, water storage tank, diesel fire pump, and pump building.

Operation and maintenance support information will be included. Project includes anti-terrorism/force protection building and site measures in compliance with Navy and DoD criteria.
Sustainable principles will be integrated into the design, development and construction of the project in accordance with Executive Order 13423 and other laws and executive orders.

11. Requirement: 11670 m **Adequate:** **Substandard:**

PROJECT:

Project provides electrical, communication, fire suppression, water (domestic and fire protection) distribution, aircraft fuel distribution, and sewer distribution to the North Ramp Area of Andersen Air Force Base to support increased personnel and air operations associated with the relocation of USMC aviation units from Okinawa to Guam.

(Mission)

REQUIREMENT:

Adequate utility supply and distribution to support the relocation of USMC aviation units from Okinawa to Guam, including transient units.

CURRENT SITUATION:

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 16 DEC 2009

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title North Ramp Utilities Inc 1 of 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	81310	P100	21,500

There are no USMC personnel presently stationed on Guam. The majority of the Department of Defense (DOD) Class I and II properties including airfield and wharves on Guam are owned by the Navy and Air Force. Limited surplus shore facilities are available but are within small footprints in various locations which inhibit any large scale usage for this relocation effort. Additionally, most of these facilities require extensive upgrades/modification for adequate permanent type use. Therefore, proposed facilities to support the relocation of more than 8,000 Marines and their 9,000 dependents will have to be new construction.

IMPACT IF NOT PROVIDED:

Failure to provide new water (potable) system will result in unreliable water service to the US Marine Corps personnel assigned to the North Ramp Area.

There are no wastewater distribution/conveyance systems located with the capacity to service the planned development at the North Ramp Area.

The existing electrical system cannot support the growth associated with the relocation of USMC aviation units from Okinawa to Guam and related new development. The increased demand will result in reduced reliability of electrical system.

There are no Aircraft Fuel Distribution or Communication distribution/conveyance systems appropriately located with the capacity to service the planned development at the North Ramp Area.

12. Supplemental Data:

A. Estimated Design Data:

1. Status:

(A) Date design or Parametric Cost Estimate started	08/2008
(B) Date 35% Design or Parametric Cost Estimate complete	02/2009
(C) Date design completed	08/2009
(D) Percent completed as of September 2008	5%
(E) Percent completed as of January 2009	30%
(F) Type of design contract	Design Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	Yes

2. Basis:

(A) Standard or Definitive Design	No
(B) Where design was previously used	n/a

3. Total cost (C) = (A) + (B) = (D) + (E):

(A) Production of plans and specifications	$350
(B) All other design costs	$527
(C) Total	$877
(D) Contract	$790

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 16 DEC 2009

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title North Ramp Utilities Inc 1 of 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	81310	P100	21,500

(E) In-house $87

4. Contract award: 03/2010

5. Construction start: 05/2010

6. Construction complete: 09/2012

B. Equipment associated with this project which will be provided from other appropriations:

JOINT USE CERTIFICATION:

The Director Land Use and Military Construction Branch, Installations and Logistics Department, Headquarters Marine Corps certifies that this project has been considered for joint use potential. Unilateral construction is recommended. This is an installation utility/infrastructure project and does not qualify for joint use at this location, however, all tenants on this installation are benefited by this project.

Authorization and Appropriation Summary

	Authorization	Appropriation	Auth for Approp.
FY 2010 Approved by Congress	$101,280K	$21,500K	$21,500K
FY 2011 Request	$0K	$79,350K	$79,350K
Total	$101,280K	$100,850K	$100,850K

Activity POC: (b) (6) [redacted] Phone No: (b) (6) [redacted]

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
AAFB NR Util II	AAFB NR Util II

North Ramp Utilities and Site Improvements

1. Component NAVY	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date 14 MAY 2014

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title North Ramp Utilities II

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	81232	PJ200	(b) (5)

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost (b) (5))
NORTH RAMP UTILITIES II (93,832LF)	m	28,600		(b) (5)
ELECTRICAL DISTRIBUTION CC81232 (31,168LF)	m	9,500	(b) (5)	(b) (5)
COMMUNICATION DISTRIBUTION CC13510 (49,213LF)	m	15,000	(b) (5)	(b) (5)
WATER UTILITIES CC84210 (11,483LF)	m	3,500	(b) (5)	(b) (5)
SANITARY SEWER CC83210 (1,969LF)	m	600	(b) (5)	(b) (5)
SPECIAL COSTS	LS			(b) (5)
OPERATION & MAINTENANCE SUPP INFO (OMSI)	LS			(b) (5)
LEED AND EPACT 2005 COMPLIANCE	LS			(b) (5)
SUPPORTING FACILITIES				(b) (5)
SITE PREPARATIONS	LS			(b) (5)
PAVING AND SITE IMPROVEMENTS	LS			(b) (5)
ELECTRICAL UTILITIES	LS			(b) (5)
MECHANICAL UTILITIES	LS			(b) (5)
ENVIRONMENTAL MITIGATION	LS			(b) (5)
DEMOLITION	LS			(b) (5)
SUBTOTAL				(b) (5)
CONTINGENCY (5%)				(b) (5)
TOTAL CONTRACT COST				(b) (5)
SIOH (6.2%)				(b) (5)
SUBTOTAL				(b) (5)
TOTAL REQUEST ROUNDED				(b) (5)
TOTAL REQUEST				(b) (5)
EQUIPMENT FROM OTHER APPROPRIATIONS (NON ADD)				(b) (5)

10. Description of Proposed Construction:

PRIMARY FACILITIES:

Constructs a new Switching Station at the North Ramp Area, electrical power distribution, communications distribution, sanitary sewer and water utilities. Underground distribution of electrical through new concrete encased duct banks from the main substation at AAFB to the new North Ramp switching station and extending to the new North Ramp parking apron. The 13.8kv loop provides power to future North Ramp loads. Plumbing facilities are provided for the support spaces in the North Ramp Switching Station Building. HVAC facilities are provided for the North Ramp Switching Station Building. Underground distribution of communications through new concrete encased duct banks connect the existing communications facilities on AAFB to the North ramp area. Sanitary sewer system

for future North Ramp facilities ties into existing the existing sanitary system. Water system for the future North ramp facilities ties into the existing water main. New water system consists of water mains, fire hydrants, air release and blow-off valves, isolation valves and backflow preventers.

Special costs are included for post construction award services (PCAS), Guam gross receipts tax (GRT), and workforce logistics. Project includes Operation and Maintenance Support Information (OMSI) manuals and information systems.

Sustainable design principles will be included in the design and construction of the project in accordance with Executive Order 13423 and other laws and Executive Orders. Facilities will meet LEED ratings and comply with the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. Low Impact Development will be included in the design and construction of this project as appropriate.

SUPPORTING FACILITIES:
Site preparation will include clearing and grubbing, earthwork (cut and fill), temporary erosion and sediment control, and landscaping. Paving and site improvements will consist of flight line security fencing , access gates, and turnstiles; roadways, driveways, parking areas, and other hardscape, sidewalk and ramps, retaining walls and CMU structures; and munitions of concern (MEC)/unexploded ordnance (UXO) removal.

Demolition includes removal of older pavements, concrete pads, lighting circuits, communications lines and water lines.

This project will provide Anti-Terrorism/Force Protection (ATFP) features and comply with ATFP regulations, physical security and progressive collapse mitigation in accordance with DOD Minimum Anti-Terrorism Standards for Buildings.

The electrical infrastructure will include networks of primary feeders installed in ducts and manholes, as well as street lighting with associated service equipment. Project constructs a communications duct bank from the AAFB communications plant to the North Ramp area and includes copper cable and fiber optic cable, communications manholes, and a pre-cast communication vault.

The North Ramp utility fire protection system consists of a separate high-pressure water supply system to support automatic fire suppression systems and domestic water supply system consisting of water mains with fire hydrants. The water infrastructure includes networks of water main lines and laterals, gate valves and boxes, reducers, meters, check valves, fire hydrants, and testing. The wastewater infrastructure includes a network of sewer trunk lines and laterals, manholes, and cleanouts. The roads and street infrastructure will include networks of road systems consisting of local asphalt roads, with appropriate roadway stormwater runoff appurtenance including low impact development

1. Component NAVY	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date 14 MAY 2014

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title North Ramp Utilities II

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	81232	PJ200	(b) (5)

(LID) integrated management practices. The ground improvements will include a drainage system consistent with the USMC North Ramp Area Development Plan and the stormwater pollution prevention plan.

Environmental mitigation includes natural and cultural resource mitigation (to include direct and programmatic mitigations required by the ROD, B.O. and P.A.), archaeological monitoring, radon mitigation, and contaminated soil removal and disposal.

11. Requirement: **Adequate:** **Substandard:**

PROJECT:

This project will provide utilities infrastructure consisting of electrical, water, wastewater, communications, roads, parking , site improvements, and earthwork in support of North Ramp construction at AAFB.

(New Mission)

REQUIREMENT:

The Guam International Agreement was approved in Febuary 2009 between the United States Government and the Government of Japan. The agreement outlined a realignment of Marine Corps elements to reduce United States military footprint in Okinawa, including the relocation of forces from Japan to Guam.

The North Ramp Area Development Plan was completed in May 2012 to ensure all aviation requirements and support facilities and infrastructure were efficiently identified and sited within the AAFB North Ramp area. The majority of the USMC North Ramp area is undeveloped and requires significant site improvements, grading, earthwork, utility infrastructure, fencing, and roadways to support vertical construction.

The USMC Aviation Combat Element (ACE) requires operational, maintenance, administrative, and support facilities to conduct the mission requirements of the 1st MAW elements operating out of AAFB North Ramp.

CURRENT SITUATION:

There are currently no operational or support facilities available at AAFB North Ramp to support 1st MAW operations. Significant site improvements, grading, and utility infrastructure development is required to prepare the North Ramp site for vertical construction.

IMPACT IF NOT PROVIDED:

This project is critical in providing the infrastructure and facilities required to support the relocation of USMC aviation forces from Okinawa to Guam. Supported units/activities will not vacate current facilities until replacement facilities in Guam have been completed, inspected, and accepted.

1. Component NAVY	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date 14 MAY 2014

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title North Ramp Utilities II

5. Program Element	6. Category Code	7. Project Number	8. Project Cost (b) (5)
	81232	PJ200	(b) (5)

12. Supplemental Data:

A. Estimated Design Data:

1. Status:

(A) Date design or Parametric Cost Estimate started	08/2008
(B) Date 35% Design or Parametric Cost Estimate complete	02/2013
(C) Date design completed	03/2014
(D) Percent completed as of September 2009	5%
(E) Percent completed as of January 2010	30%
(F) Type of design contract	Design Bid Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	Yes

2. Basis:

(A) Standard or Definitive Design	No
(B) Where design was previously used	n/a

3. Total cost (C) = (A) + (B) = (D) + (E):

(A) Production of plans and specifications	(b) (5)
(B) All other design costs	(b) (5)
(C) Total	(b) (5)
(D) Contract	(b) (5)
(E) In-house	(b) (5)
4. Contract award:	09/2014
5. Construction start:	10/2014
6. Construction complete:	06/2017

B. Equipment associated with this project which will be provided from other appropriations:

Equipment Nomenclature	Procuring Approp	FY Approp or Requested	Cost($000)
.	OPN		(b) (5)

JOINT USE CERTIFICATION:

The Director Land Use and Military Construction Branch, Installations and Logistics Department, Headquarters Marine Corps certifies that this project has been considered for joint use potential. Unilateral construction is recommended. This is an installation utility/infrastructure project and does not qualify for joint use at this location, however, all tenants on this installation are benefited by this project.

Activity POC: (b) (6) Phone No: (b) (6)

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
DAR I	DAR Improvements I

Defense Access Road Improvements

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 16 DEC 2009

3. Installation(SA) and Location/UIC: N61755(AG) NAVBASE GUAM (AGANA) JOINT REGION MARIANAS, GUAM	4. Project Title Defense Access Road Improvements

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	85110	P1006	48,860

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost($000)
DEFENSE ACCESS ROAD IMPROVEMENTS	LS			21,680
AGANA BRIDGE #1 REPLACEMENT	LS			(3,640)
ROUTE 1/ROUTE 8 INTERSECTION	LS			(2,950)
ROUTE 11 PAVEMENT	LS			(8,230)
ROUTE 11/ROUTE 1 INTERSECTION	LS			(2,060)
ROUTE 1/ROUTE 3 INTERSECTION	LS			(4,800)
SUPPORTING FACILITIES				13,150
PAVING AND SITE IMPROVEMENTS	LS			(4,330)
ELECTRICAL UTILITIES	LS			(3,040)
MECHANICAL UTILITIES	LS			(2,420)
ENVIRONMENTAL MITIGATION	LS			(2,960)
DEMOLITION	LS			(400)
SUBTOTAL				34,830
CONTINGENCY (5%)				1,740
TOTAL CONTRACT COST				36,570
SIOH (6.2%)				2,270
SUBTOTAL				38,840
DESIGN/BUILD - DESIGN COST				1,390
FUTURE YEAR PROJECT DESIGN	LS			8,630
TOTAL REQUEST ROUNDED				48,860
TOTAL REQUEST				48,860

10. Description of Proposed Construction:

1) Replace Agana Bridge #1 with a reinforced concrete bridge structure including reinforced concrete bridge approaches, and related Route 4 intersection pavement improvements.
2) Route 1 and Route 8 intersection and roadway improvements to include pavement strengthening (along Route 1 between the Agana Bridge #1 and the related intersection), Route 8 northbound left-turn lane improvement and Route 1 eastbound right-turn lane improvement.
3) Route 11 roadway improvements to include pavement strengthening.
4) Widening of the Route 1 and Route 11 intersection, adding a second eastbound left turn lane, pavement strengthening.
5) Route 1 and Route 3 intersection and roadway improvements to include pavement strengthening, a Route 1 westbound right turn lane, and a Route 3 to Route 1 right turn acceleration lane.

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 16 DEC 2009

3. Installation(SA) and Location/UIC: N61755(AG) NAVBASE GUAM (AGANA) JOINT REGION MARIANAS, GUAM	4. Project Title Defense Access Road Improvements

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	85110	P1006	48,860

Work includes the demolition of the existing bridge, removal of existing pavements, subgrade improvements, relocation of existing utilities, construction traffic control, environmental mitigation, installation of traffic controls signals/signage and management of existing traffic throughout the construction process.

11. Requirement:

PROJECT:

This project provides Guam road improvements that support the construction activities and operational mission requirements associated with the relocation of Marines from Okinawa to Guam. Funds provided will be transferred to the Federal Highway Administration of the Department of Transportation which is responsible under Title 23 USC 210 for assuring proper execution of the work. Construction of roadways and bridges serving military facilities on Guam will meet American Association of State Highway and Transportation Officials and Federal Highway design standards.

(Current Mission)

REQUIREMENT:

The construction of new facilities for the relocation of 8,000 Marines and projected 9,900 dependents to Guam is similar to building a new military base with the same capabilities as currently exists on Okinawa. The construction vehicles (number and heavy weight) on the roads will have a dramatic impact on the roadway requirements. Nearly all of the materials to construct inland military facilities will be imported or transported over the haul road network. Some roads will require new turn lane reconfiguration to accommodate the increased number of vehicles. The pavement will have to be strengthened on some roads to support the number and weight of the vehicles and to mitigate the risk of structural failure of the roads. Additionally, the proposed bridge replacement on the haul road route will need to support a greater level of construction activities. The bridge is proposed to be replaced to avoid the risk of failure due to the weight of construction vehicles and loads. This project will support the road improvements needed for construction activities associated with the establishment of a military base for the relocation of the Marines from Okinawa to Guam.
This requirement has been Defense Access Roads (DAR) certified for use of DAR funding.

CURRENT SITUATION:

Guam currently has a population of roughly 176,000 of which 6,400 are active duty personnel. The road conditions range from fair to good for the existing traffic loading on the island. The traffic situation is near capacity in many of the developed areas and some roads are narrow with safety issues. Although adequate for current needs, the roads lack the capacity and strength to support large numbers of construction vehicles.

IMPACT IF NOT PROVIDED:

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 16 DEC 2009

3. Installation(SA) and Location/UIC: N61755(AG) NAVBASE GUAM (AGANA) JOINT REGION MARIANAS, GUAM	4. Project Title Defense Access Road Improvements

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	85110	P1006	48,860

If this project is not provided, the construction work required on Guam to support the Guam defense policy review initiative will be adversely impacted. Heavy traffic will significantly increase the risk of structural failures of bridges and pavement associated with the increase in heavy trucks traversing the roads, and traffic volumes supporting the military buildup on Guam. The increased level of risk for failure is not acceptable and will contribute negatively to the successful completion of the new mission facilities required to support the buildup and adversely affect the community.

12. Supplemental Data:

A. Estimated Design Data:

1. Status:

(A) Date design or Parametric Cost Estimate started	10/2008
(B) Date 35% Design or Parametric Cost Estimate complete	04/2009
(C) Date design completed	09/2009
(D) Percent completed as of September 2008	0%
(E) Percent completed as of January 2009	15%
(F) Type of design contract	Design Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	No

2. Basis:

(A) Standard or Definitive Design	Yes
(B) Where design was previously used	

3. Total cost (C) = (A) + (B) = (D) + (E):

(A) Production of plans and specifications	$1,400
(B) All other design costs	$2,100
(C) Total	$3,500
(D) Contract	$3,150
(E) In-house	$350
4. Contract award:	01/2010
5. Construction start:	04/2010
6. Construction complete:	10/2011

B. Equipment associated with this project which will be provided from other appropriations:

JOINT USE CERTIFICATION:

The Director Land Use and Military Construction Branch, Installations and Logistics Department, Headquarters Marine Corps certifies that this project has been considered for joint use potential. Unilateral construction is recommended. This is an installation utility/infrastructure project and does not qualify for joint use at this location.

Activity POC: (b) (6) [redacted] Phone No: (b) (6) [redacted]

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
DAR II - Route 3/9	DAR Improvements II

Defense Access Road Improvements

1. Component NAVY	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date 04 JAN 2010

3. Installation(SA) and Location/UIC: N61755(AG) NAVBASE GUAM (AGANA) JOINT REGION MARIANAS, GUAM	4. Project Title Defense Access Road Improvements

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0202176M	85110	P205	(b) (5)

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost ((b) (5)
DEFENSE ACCESS ROAD IMPROVEMENTS	LS			(b) (5)
ROUTE 3 IMPROVEMENTS	LS			(b) (5)
SPECIAL COSTS	LS			(b) (5)
SUPPORTING FACILITIES				(b) (5)
PAVING AND SITE IMPROVEMENTS	LS			(b) (5)
ELECTRICAL UTILITIES	LS			(b) (5)
MECHANICAL UTILITIES	LS			(b) (5)
ENVIRONMENTAL MITIGATION	LS			(b) (5)
DEMOLITION	LS			(b) (5)
SUBTOTAL				(b) (5)
CONTINGENCY (5%)				(b) (5)
TOTAL CONTRACT COST				(b) (5)
SIOH (6.2%)				(b) (5)
SUBTOTAL				(b) (5)
DESIGN/BUILD - DESIGN COST				(b) (5)
TOTAL REQUEST ROUNDED				(b) (5)
TOTAL REQUEST				(b) (5)

10. Description of Proposed Construction:

This project will consist of Route 3 roadway improvements between Route 28 and the Naval Computer and Telecommunications Station (NCTS) Finegayan to include pavement strengthening, widening from 2 lanes to 4 lanes, addition of a median, construction of 3 new gates along Route 3, and shoulder and intersection improvements.

Work includes widening of existing roads, removal of existing pavements, subgrade improvements, relocation of existing utilities, construction traffic control, environmental mitigation, installation of traffic controls signals/signage and management of existing traffic throughout the construction process.

11. Requirement:

PROJECT:

This project provides Guam road improvements that support the construction activities and operational mission requirements associated with the relocation of Marines from Okinawa to Guam. Funds provided will be transferred to the Department of Transportation's Federal Highway Administration (FHA). The FHA is responsible under Title 23 USC 210 for assuring proper execution of the work. Construction of roadways and bridges serving military facilities on Guam will meet American Association of State Highway and Transportation

Officials and Federal Highway design standards.

(Current Mission)

REQUIREMENT:

The construction of new facilities for the relocation of 8,000 Marines and 630 Army personnel and approximately 9,900 dependents to Guam is similar to building a new military base with the same capabilities as currently exists on Okinawa. Additional access control points are required for the additional personnel. The construction vehicles (number and heavy weight) on the roads will have a dramatic impact on the roadway conditions. Nearly all of the materials to construct the military facilities will be imported or transported over the haul road network. Some roads will require new thru lanes to accommodate the increased number of vehicles and thereby mitigate the traffic congestion. The pavement will have to be strengthened on some roads to support the number and weight of the vehicles and to reduce the risk of structural failure of the roads. This project will support the road improvements needed for construction activities associated with the establishment of a military base for the relocation of the Marines from Okinawa to Guam.

CURRENT SITUATION:

The Island of Guam currently has a population of roughly 176,000 of which 6,400 are active duty personnel. The road conditions range from fair to good for the existing traffic loading on the Island. The main thoroughfare roads are not adequate to accommodate the number of heavy construction vehicles and special military vehicles that are expected to arrive on the island. Currently, most trucks hauling aggregate from the rock quarries to NCTS Finegayan and Finegayan South utilize Route 15 and Chalan Lujuna out of the rock quarry to Route 1 to head west and then Route 3 to head north. Trucks hauling construction material and equipment from the Port of Guam also use Route 3 to head north towards NCTS Finegayan. Route 3 is a four-lane road until the intersection of Route 28 where it narrows down to a two-lane road.

Currently there is only one access gate to NCTS Finegayan. Most of the additional population will be based in Northwestern Guam at Finegayan. Route 3 and Route 9 serve as the main roads between NCTS Finegayan and Andersen Air Force Base (AAFB). Commuter traffic associated with the III Marine Expeditionary Force Air Combat Element working at AAFB will use this route on a daily basis. Route 3 and Route 9 are two lane narrow roads with no shoulders or median separating the opposing thru lanes. Operational improvements such as a median and shoulders are needed to improve the safety of this route.

IMPACT IF NOT PROVIDED:

If this project is not provided, the construction work required on Guam to support the relocation of the Marines will be adversely impacted and delays will lead to higher costs for the construction of the required facilities. The existing poor conditions of components of the Guam Defense Access Road Network will significantly increase congestion and risk of structural failures associated with the increased volume and weight of traffic. The increased level of risk for failure is not acceptable and will contribute negatively to the successful completion of the new mission facilities required to support

1. Component NAVY	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date 04 JAN 2010

3. Installation(SA) and Location/UIC: N61755(AG) NAVBASE GUAM (AGANA) JOINT REGION MARIANAS, GUAM	4. Project Title Defense Access Road Improvements

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0202176M	85110	P205	(b) (5)

the buildup.

12. Supplemental Data:

A. Estimated Design Data:

1. Status:

(A) Date design or Parametric Cost Estimate started	05/2009
(B) Date 35% Design or Parametric Cost Estimate complete	03/2010
(C) Date design completed	12/2010
(D) Percent completed as of September 2009	10%
(E) Percent completed as of January 2010	20%
(F) Type of design contract	Design Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	No

2. Basis:

(A) Standard or Definitive Design	No
(B) Where design was previously used	

3. Total cost (C) = (A) + (B) = (D) + (E):

(A) Production of plans and specifications	(b) (5)
(B) All other design costs	(b) (5)
(C) Total	(b) (5)
(D) Contract	(b) (5)
(E) In-house	(b) (5)
4. Contract award:	05/2011
5. Construction start:	07/2011
6. Construction complete:	02/2012

B. Equipment associated with this project which will be provided from other appropriations:

JOINT USE CERTIFICATION:

The Director Land Use and Military Construction Branch, Installations and Logistics Department, Headquarters Marine Corps certifies that this project has been considered for joint use potential. Joint Use is recommended.

Activity POC: (b) (6) Phone No: (b) (6)

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
DAR III	DAR Improvements III

Defense Access Road Improvements

PB PTG GUAM WBS

GRN 0	East Leg of 3/3A/9 intersection	Unit of Measure (UOM)	Measured Quantity WBS 1		PB/PTG Metric	Extension	Unit Price (see tabs)	Cost (2013)
WBS	**Section 1 - Earthwork**							
1000-2	*Excavation (Cut)*	*CY*	*920*	1.00	1	920	(b) (5)	(b) (5)
1000-3	*Embankment (Fill)*	*CY*	*1,283*	1.00	1	1,283		
1000-4	*Clearing and Grubbing*	*SY*	*2,567*	1.00	1	2,567		
	Section 2 - Pavement							
2000-1	*Asphalt Concrete Pavement (ACP) - Widening*	*SY*	*1,540*					
2000-1-1	Subgrade	CY		8.00	0.028	342	(b) (5)	(b) (5)
2000-1-2	Basecourse	CY		8.00	0.028	342		
2000-1-3	Prime Coat (Binding Agent)	Gal (1/2 Gal per SY)		1.00	0.5	770		
2000-1-4	Leveling Course (HMA) - Local Aggregate	SY		5.50	1	8,470		
2000-1-5	Friction Course (HMA) - Import Aggregate (1")	SY		1.00	1	779		
2000-2	*Pavement Strengthening - FDR*	*SY*	*0*					
2000-2-2	Stabilized Basecourse	CY		7.50	0.028	0	(b) (5)	0
2000-2-3	Prime Coat (Binding Agent)	Gal (1/2 Gal per SY)		1.00	0.5	0		0
2000-2-4	Leveling Course (HMA) - Local Aggregate	SY		4.50	1	0		0
2000-2-5	Friction Course (HMA) - Import Aggregate (1")	SY		1.00	1	0		0
	Section 3 - Storm Drainage							
3000-1	*Swale 8'x3'*	*LF*	*1,155*	1.00	0.89	1,027	(b) (5)	(b) (5)
3000-1-1	Pipe	LF		0.00	0.2	231		
3000-1-2	Catch Basins	EA		0.00	0.005	6		
3000-1-3	Manholes	EA		0.00	0.001	1		
3000-1-4	Culverts	LF		0.00	0.028	32		
3000-1-5	Retention / Detention / Water Quality	EA		0.00	0.0001	0.11		
3000-1-6	Temporary Erosion Sedimentation Control (TESC)	5 % of Section 3						
	Section 5 - Traffic Items							
5000-4	*Pavement Markings (4 inch)*	*LF*	*5,082*	1.00	1	5,082	(b) (5)	(b) (5)
5000-9	*Guardrail*	*LF*	*2,310*	1.00	1	2,310		
5000-9-1	Guardrail Terminal Sections	EA	1	1.00	1	1		
	Section 7 - Minor Items							
7000-2-1	Ordnance Sweep	AC	0.2	1.00	1	0.2	(b) (5)	(b) (5)
	Section 8 - Specialty							
8000-1	*Hydroseed FP03/ Landscape*	*SY*	*1,027*	1.00	1	1,027	(b) (5)	(b) (5)
8000-2-1	Environmental Mitigation	1% Section 1-6						
8000-4-1	Maintenance of Traffic	2.0% Direct Cost						
	Section 12 - Major Utility Relocs. (incl. Eng.) - Applies for Widenings							
12000-1	*Major Power - Non Military (Overhead)*	*LF*	*1,155*		1	1,155	(b) (5)	(b) (5)
12000-5	*Cable TV (O/H)*	*LF*	*1,155*		1	1,155		
12000-9	*Phone (O/H)*	*LF*	*1,155*		1	1,155		
12000-12	*Water Line - Non Military (GWA Water)*	*LF*	*1,155*		1	1,155		
12000-13	*Water Line - Military (Navy Water)*	*LF*	*1,155*		1	1,155		
12000-14	*Sewer - Non Military (GWA Sewer)*	*LF*	*1,155*		1	1,155		
	Section 9- Mobilization							
9000-1-1	Mobilization	1% of Direct Cost					(b) (5)	(b) (5)
		Sub-total Direct Cost						
		Asphalt Escalation	30%		To 01/2017			
		Non-Asphalt Escalation	12%		To 01/2017			
		Direct Cost + Esc						
	Section 13 - Design Build Engineering - Contractor Additional Expenses							
13000-1-1	DB Engineering (4% of Direct Cost + Esc)	4%					(b) (5)	(b) (5)
13000-1-2	Construction QA/QC (2% of Direct Cost + Esc)	2%						
13000-1-3	Post Design Services (1% of Direct Cost + Esc)	1%						
13000-1-4	DB Contract Administration (5% of Direct Cost + Esc)	5%						
		Sub-total Section 13						
	Section 10 - Project Development Costs							
10000-1-1	Preliminary Engineering (7% of Direct Cost + Esc)	7%					(b) (5)	(b) (5)
10000-1-2	Constr Mngmt and Insp (13% of Direct Cost + Esc)	13%						
10000-1-4	Program Management (2% of Direct Cost + Esc)	2%						
		Sub-total Section 10						
							Direct Cost	$ (b) (5)
							30% HMA Escalation	$
							12% Other Escalation	$
							DB Cost Section 13	$
							Sub-Total A	$
							Project Development Section 10	$ (b) (5)
							Right of Way Section 11	$
							Sub-Total B	$ (b) (5)
							Sub-Total A+B	$ (b) (5)
							[1]Contingency 25%	$ (b) (5)
							GRT 4.17%	$
							Total	$
								$

PB PTG GUAM WBS

GRN 2S	Route 3/3A/9 Intersection (SEIS)	Unit of Measure (UOM)	Measured Quantity WBS 1		PB/PTG Metric	Extension	Unit Price (see tabs)	Cost (2013)
WBS	**Section 1 - Earthwork**							
1000-1	*Roadway Obliteration - Demolition*	*SY*	*3,224*	1.00	1	3,224	(b)	(b)
1000-2	*Excavation (Cut)*	*CY*	*1,979*	1.00	1	1,979	(5)	(5)
1000-3	*Embankment (Fill)*	*CY*	*396*	1.00	1	396		
1000-4	*Clearing and Grubbing*	*SY*	*4,504*	1.00	1	4,504		
	Section 2 - Pavement							
2000-1	*Asphalt Concrete Pavement (ACP) - Widening*	*SY*	*3,563*				)	
2000-1-1	Subgrade	CY		8.00	0.028	792	(b)	(b) (5)
2000-1-2	Basecourse	CY		8.00	0.028	792	(5)	
2000-1-3	Prime Coat (Binding Agent)	Gal (1/2 Gal per SY)		1.00	0.5	1,781		
2000-1-4	Leveling Course (HMA) - Local Aggregate	SY		4.00	1	14,251		
2000-1-5	Friction Course (HMA) - Import Aggregate (1")	SY		1.00	1	3,563		
	Section 3 - Storm Drainage							
3000-1	*Swale 8'x3'*	*LF*	*1,689*	1.00	0.89	1,501	(b) (5)	
3000-1-1	Pipe	LF		0.00	1	1,689		(b)
3000-1-2	Catch Basins	EA		0.00	0.005	8		(5)
3000-1-3	Manholes	EA		0.00	0.001	2		
3000-1-4	Culverts	LF		0.00	0.028	47		
3000-1-5	Retention / Detention / Water Quality	EA		0.00	0.0001	0		
3000-1-6	Temporary Erosion Sedimentation Control (TESC)	5 % of Section 3						
	Section 5 - Traffic Items							
5000-2	*Lighting/Illumination - Intersections*	*EA*	*1.0*	1.00	1	1	(b) (5)	(b) (5)
5000-4	*Pavement Markings (4 inch)*	*LF*	*3,716*	1.00	1	3,716		
5000-5-1	Signage - Permanent	*LF*	*1,689*	1.00	1	1,689		
5000-6	*Traffic Signals - New Intersection*	*EA*	*1*	1.00	1	1		
5000-9	*Guardrail*	*LF*	*3,378*	1.00	1	3,378		
5000-9-1	Guardrail Terminal Sections	EA	1	1.00	2	2		
	Section 7 - Minor Items							
7000-2-1	Ordnance Sweep	AC	1	1.00	1	1	(b) (5)	(b) (5)
	Section 8 - Specialty							
8000-1	*Hydroseed FP03/ Landscape*	*SY*	*941*	1.00	1	941	(b)	(b)
8000-2-1	Environmental Mitigation	1% Section 1-6					(5)	(5)
8000-4-1	Maintenance of Traffic	2% Direct Cost	1,907,225	1.00	1			
	Section 9- Mobilization							
9000-1-1	Mobilization	1% of Direct Cost					(b) (5)	(b) (5)
		Sub-total Direct Cost						(b) (5)
		Asphalt Escalation	30%		To 01/2015			
		Non-Asphalt Escalation	12%		To 01/2015			
		Direct Cost + Esc						
	Section 13 - Design Build Engineering - Contractor Additional Expenses							
13000-1-1	DB Engineering (4% of Direct Cost + Esc)	4%					(b)	(b)
13000-1-2	Construction QA/QC (2% of Direct Cost + Esc)	2%					(5)	(5)
13000-1-3	Post Design Services (1% of Direct Cost + Esc)	1%						
13000-1-4	DB Contract Administration (5% of Direct Cost + Esc)	5%						
		Sub-total Section 13						
	Section 10 - Project Development Costs							
10000-1-1	Preliminary Engineering (7% of Direct Cost + Esc)	7%					(b)	(b)
10000-1-2	Constr Mngmt and Insp (13% of Direct Cost + Esc)	13%					(5)	(5)
10000-1-4	Program Management (2% of Direct Cost + Esc)	2%						
		Sub-total Section 10						
							Direct Cost	(b) (5)
							30% HMA Escalation	
							12% Other Escalation	
							DB Cost Section 13	
							Sub-Total A	
						Project Development Section 10		(b) (5)
							Sub-Total B	
							Sub-Total A+B	(b) (5)
							Contingency 25%	(b) (5)
							GRT 4.17%	
							Total	
								$ (b) (5)

PB PTG GUAM WBS

GRN 0	West Leg of 3/3A/9 intersection	Unit of Measure (UOM)	Measured Quantity WBS 1		PB/PTG Metric	Extension	Unit Price (see tabs)	Cost (2013)
WBS	**Section 1 - Earthwork**							
1000-2	*Excavation (Cut)*	*CY*	*1,363*	1.00	1	1,363	(b)	(b)
1000-3	*Embankment (Fill)*	*CY*	*951*	1.00	1	951	(5)	(5)
1000-4	*Clearing and Grubbing*	*SY*	*3,044*	1.00	1	3,044		
	Section 2 - Pavement							
2000-1	*Asphalt Concrete Pavement (ACP) - Widening*	*SY*	*2,283*					
2000-1-1	Subgrade	CY		8.00	0.028	507	(b)	(b)
2000-1-2	Basecourse	CY		8.00	0.028	507	(5)	(5)
2000-1-3	Prime Coat (Binding Agent)	Gal (1/2 Gal per SY)		1.00	0.5	1,141		
2000-1-4	Leveling Course (HMA) - Local Aggregate	SY		5.50	1	12,555		
2000-1-5	Friction Course (HMA) - Import Aggregate (1")	SY		1.00	1	1,522		
2000-2	*Pavement Strengthening - FDR*	*SY*	*2,092*					
2000-2-2	Stabilized Basecourse	CY		7.50	0.028	436	(b)	(b)
2000-2-3	Prime Coat (Binding Agent)	Gal (1/2 Gal per SY)		1.00	0.5	1,046	(5)	(5)
2000-2-4	Leveling Course (HMA) - Local Aggregate	SY		2.50	1	5,231		
2000-2-5	Friction Course (HMA) - Import Aggregate (1")	SY		1.00	1	2,092		
	Section 3 - Storm Drainage							
3000-1	*Swale 8'x3'*	*LF*	*856*	1.00	0.89	761	(b) (5)	(b)
3000-1-1	Pipe	LF		0.00	0.2	171		(5)
3000-1-2	Catch Basins	EA		0.00	0.005	4		
3000-1-3	Manholes	EA		0.00	0.001	1		
3000-1-4	Culverts	LF		0.00	0.028	24		
3000-1-5	Retention / Detention / Water Quality	EA		0.00	0.0001	0.08		
3000-1-6	Temporary Erosion Sedimentation Control (TESC)	5 % of Section 3						
	Section 5 - Traffic Items							
5000-4	*Pavement Markings (4 inch)*	*LF*	*4,708*	1.00	1	4,708	(b)	(b)
5000-9	*Guardrail*	*LF*	*1,712*	1.00	1	1,712	(5)	(5)
5000-9-1	Guardrail Terminal Sections	EA	1	1.00	1	1		
	Section 7 - Minor Items							
7000-2-1	Ordnance Sweep	AC	0.2	1.00	1	0.2	(b) (5)	(b) (5)
	Section 8 - Specialty							
8000-1	*Hydroseed FP03/ Landscape*	*SY*	*761*	1.00	1	761	(b)	(b)
8000-2-1	Environmental Mitigation	1% Section 1-6					(5)	(5)
8000-4-1	Maintenance of Traffic	2.0% Direct Cost						
	Section 12 - Major Utility Relocs. (incl. Eng.) - Applies for Widenings							
12000-1	*Major Power - Non Military (Overhead)*	*LF*	*856*		1	856	(b)	(b)
12000-5	*Cable TV (O/H)*	*LF*	*856*		1	856	(5)	(5)
12000-9	*Phone (O/H)*	*LF*	*856*		1	856		
12000-12	*Water Line - Non Military (GWA Water)*	*LF*	*856*		1	856		
12000-13	*Water Line - Military (Navy Water)*	*LF*	*856*		1	856		
12000-14	*Sewer - Non Military (GWA Sewer)*	*LF*	*856*		1	856		
	Section 9- Mobilization							
9000-1-1	Mobilization	1% of Direct Cost					(b) (5)	(b)
		Sub-total Direct Cost						(5)
		Asphalt Escalation	30%		To 01/2017			
		Non-Asphalt Escalation	12%		To 01/2017			
		Direct Cost + Esc						
	Section 13 - Design Build Engineering - Contractor Additional Expenses							
13000-1-1	DB Engineering (4% of Direct Cost + Esc)	4%					(b)	(b)
13000-1-2	Construction QA/QC (2% of Direct Cost + Esc)	2%					(5)	(5)
13000-1-3	Post Design Services (1% of Direct Cost + Esc)	1%						
13000-1-4	DB Contract Administration (5% of Direct Cost + Esc)	5%						
		Sub-total Section 13						
	Section 10 - Project Development Costs							
10000-1-1	Preliminary Engineering (7% of Direct Cost + Esc)	7%					(b)	(b)
10000-1-2	Constr Mngmt and Insp (13% of Direct Cost + Esc)	13%					(5)	(5)
10000-1-4	Program Management (2% of Direct Cost + Esc)	2%						
		Sub-total Section 10						
							Direct Cost	$
							30% HMA Escalation	$
							12% Other Escalation	$
							DB Cost Section 13	$
							Sub-Total A	$
							Project Development Section 10	$
							Right of Way Section 11	$
							Sub-Total B	$
							Sub-Total A+B	$
							[1]Contingency 25%	$
							GRT 4.17%	$
							Total	$
								$

(b) (5)

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Cantonment U&SI PH1	Cantonment U&SI PH1

Utilities & Site Improvements (U&SI) Phase 1, USMC Main Cantonment

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA *(Continuation)*	2. Date 7Feb2014	REPORT CONTROL SYMBOL

3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan	4. Project Title Utilities & Site Improvements (U&SI) Phase I, USMC Main Cantonment

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
MCON		J-001	(b) (5)

9. Cost Estimates

Item	UM	Quantities	Unit Cost	Total Cost
Site Preparation				(b) (5)
Paving and Site Improvements				(b) (5)
Electrical Utilities				(b) (5)
Mechanical Utilities				(b) (5)
Environmental Mitigations				(b) (5)
Demolition				(b) (5)
Special Costs				(b) (5)
Guam Gross Receipts Tax	ea	4.16%	(b) (5)	(b) (5)
Post Construction Award Services (PCAS)	ea	1.00%	(b) (5)	(b) (5)
Contingency				(b) (5)
Contingency	ea	5.00%	$(b) (5)	(b) (5)
Other Costs				(b) (5)
Design Build	ea	4.00%	$(b) (5)	(b) (5)
SIOH	ea	6.20%	(b) (5)	(b) (5)
Total Request				(b) (5)

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

Site Preparation

Clearing and Grubbing: The U&SI Phase I area covers approximately 1,633,000 square meters (163 hectares) of land requiring clearing and grubbing including removal of vegetation, stripping limestone rock, and removal and stockpiling of reusable topsoil. This site work preparation will occur prior to mass grading the site. Prior to any clearing, grubbing, or other land disturbance, the appropriate temporary erosion control measures shall be installed in accordance to Guam regulations, further described in the erosion control section of this document.

Grading and Earthwork: The U&SI Phase I includes major earth moving (mass grading) and limited fine grading along the roadway corridors and drainage systems. The grading activity will include the excavation of seven (7) permanent drainage detention ponds and drainage conveyance swales along constructed roadways, as shown on the provided figure (see attached subbasin and secondary drainage routing). The cut and fill quantities associated with this mass grading effort assume a rough building pad for future vertical construction, which anticipates further import of structural fill. The cut and fill quantities also assume a 0.6 meter deep typical

road pavement section including compacted base and pavement surfacing. Existing surface grades (based on LIDAR topo) at tie in points along the Phase I boundary, and along existing communication lines and wellheads are preserved to ensure the plan is implementable. Grading for clear zone at perimeter security fence is included.

The cut and fill quantities are based on the assumption that native material excavated on site is suitable for reuse as fill material. If soil testing and/or geotechnical recommendations indicate otherwise, additional costs and changes in grading may be decreased. Likewise, completion of a topographic survey may change the cut and fill quantities.

Green Waste Facility: Green waste processing and construction recycling would be accomplished by the contractor on site in the northeast corner of the main cantonment area by the construction gate during the U&SI Phase I contract. The processed green waste would be utilized as needed or stockpiled for future use on site as mulch and or a top soil additive to reduce quantity of soil importation.

Erosion Control: The U&SI Phase I will include all construction activity Best Management Practices (BMPs) required to stabilize disturbed ground and stockpiled material to prevent erosion and transportation of material from the site causing adverse downstream impacts. Extra care shall be taken for earth moving activities during the rainy season.

To protect the waters of Guam and the health and welfare of the public, the Guam Environmental Protection Agency (GEPA) established a set of regulations under the authority of Guam's Water Pollution Control Act. The Act serves to regulate grading, clearing, grubbing, and stockpiling activities and sets minimum standards for erosion and sedimentation control.

During design and construction, this project will adhere to the requirements set forth in the GEPA regulations that include but are not limited to completing the initial permit application process, as applicable, submitting a sediment and erosion control plan, and submitting final as-built surveys and soils and conformity documentation, at a minimum. Attention during design and construction will be given to the Section (§)10106 Special Requirements, which contains guidance regarding sinkholes and safety precautions for earth-moving activities that involve sinkholes. Special attention should also be given to work within the existing wellhead protection zones and karst areas with potential Northern Guam Lens Aquifer influence.

Paving and Site Improvements

Roads and Streets: As currently proposed, the following six roadway types would be used for the main cantonment:

(…continued)

- Arterial
- Collector–Divided
- Collector–Undivided
- Main Street
- Local Non-Residential
- Perimeter Patrol

Proposed roadway cross sections, which include required stormwater drainage, and low-impact development (LID) features and requirements, are shown in the attached figures. Dimensions shown in these figures are the “ideal” dimensions for each facility. Constructed roadway dimensions may vary based on the available land and drainage requirements.

Sidewalks: Generally, standard sidewalks will be 3 meters wide and will be installed on both sides of the street throughout the main cantonment. Where noted on the attached exhibit, due to lack of pedestrian traffic and because of available land and drainage requirements, sidewalks may be reduced to 2 meters wide and be located on only one side of the street. See attached roadway sketches for sidewalk details.

Curbs and Gutters: The majority of roads within the U&SI Phase I are anticipated to utilize a rural road section (without curb and gutter). Three road classifications within the main cantonment, however, will utilize a curb and gutter road section: “main street” and “collector divided include curb and gutter along the outside lane/shoulder, and “arterial” include a curbed median only. With the use of a curb and gutter road section within the urban core of the base, underground stormwater collection and conveyance will be utilized in place of open channels.

Traffic signs: There will be approximately 120 road signs through the U&SI Phase I area.

Perimeter Fence: A 8,434-meter long security fence will be constructed around the main cantonment and family housing perimeter. A section of security fence from the tactical vehicle/commercial gate northwest to the cliff line will not be installed in Phase I. A 4.6-meter-wide gravel perimeter road will be constructed on the on the inside of the fence line, and a 6-meter clear zone will be provided on the outside of the fence line. Conduit for closed circuit television will be provided along the perimeter security fence. The actual closed circuit television will be provided by others.

A temporary construction fence consisting of 2.5 meters high chain-link fence with three strands of barbed wire at the top will be installed. This fence will be approximately 2,876 meters long. This fence will provide temporary security for existing Naval Computer and Telecommunications Station

(NCTS) facilities and their operations plus reduce base security requirements for the U&SI contractor and subcontractors, because of the reduced security requirements for the U&SI and initial vertical facilities contractors, the temporary fence is expected to reduce the bid costs. The temporary construction fence is anticipated to be taken down after U&SI Phase II is completed. Demolition of this temporary construction fence is covered in U&SI Phase II.

Storm Drainage: U&SI Phase I anticipates sheet flow of stormwater from each parcel/building pad into vegetated roadside drainage swales, which then conveys the stormwater via swale, concrete pipe culverts, and rip-rap protected and/or concrete lined swales to detention ponds for control of the stormwater runoff leaving the site. The use of a curb and gutter road section for the “main street” and “collector divided” roadway classifications within the urban core of the base will utilize underground stormwater collection and conveyance instead of open channels. Generally, most other collection and conveyance will be handled by open channels.

The detention ponds and stormwater conveyance systems are sized to handle the appropriate design storm runoff generated within specific drainage basins and sub-basins delineated based on the proposed CDP and the notional site-grading plan. The ponds are primarily located along the perimeter of the main cantonment, downstream of where the flows are generated, prior to discharge off site. Control structures will be located at each pond to regulate the rate of stormwater discharge from the site, which is not to exceed pre-development rates. The discharge flow will be restricted via an orifice control plate and will include high level overflow within the structure and an emergency spillway from the pond for critical flows.

Stormwater quality will be provided within the vegetated swales and bio-retention features located along the roadways as part of U&SI Phase I. The use of lined ponds is also anticipated for detention basins located within remaining wellhead protection zones. Since these ponds will lack the ability to infiltrate stormwater, additional measures will be required as part of the outfall control to ensure the ponds fully recover to maintain capacity for subsequent storm events and to ensure the pond bottoms do not become a maintenance issue. The application of LID BMPs to mitigate pollutant loading associated with each land use will occur with vertical construction in subsequent phases.

In order to protect natural water resources and comply with environmental regulations, the stream drainage system shall adhere to the following documents, at a minimum:

- *Guam Transportation Stormwater Drainage Manual*, August 2010.
- Horsley Witten Group, Inc. 2006. *CNMI and Guam Stormwater Management Manual. Volumes I & II, Final*. October.

(…continued)

- *Department of the Navy Low Impact Development Policy for Stormwater Management Memorandum* (2007).
- *U.S. Naval Forces Marianas Stormwater Pollution Prevention Plan (SWPPP) Volume 6: Best Management Practices (BMPs) Manual* (2009).
- DoD *Sustainable Design and Development Implementation Direction Memorandum* (2010a).
- Unified Facilities Criteria (UFC): *3-210-10 LID* (DoD 2010b).
- Guam Environmental Protection Agency (GEPA). 1997a. Guam Administrative Rules (GAR), Title 22, Division II, Chapter 9: *Underground Injection Control Regulations*.
- GEPA. 1997b. Guam Administrative Rules (GAR), Title 22, Division II, Section 7130: *Wellhead Protection for Public Water Supply Wells*.
- GEPA. 1997c. Guam Administrative Rules (GAR), Title 22, Division II, Chapter 1: *Guam Soil Erosion and Sediment Control Regulations*.
- GEPA. 1997d. Guam Administrative Rules (GAR), Title 22, Division IX, Chapter 45: *Soil Erosion and Sedimentation Control*.

Landscaping and Site Improvements: Landscaping will consist of seeding, mulching, sodding of swales, sodding of unlined pond side slopes, grassed medians, and parkway soft shoulders; preventing erosion and enhancing the overall drainage of the main cantonment area. Trees will be planted along roadways as appropriate. Aluminum handrails and bollards to be installed for protection at swales/sidewalks and wellheads.

Electrical Utilities

Electrical Substation: A 418 square meter main substation equipped with two 15 MVA, 34.5 kV – 13.8 kV transformers, using double-ended configuration will be constructed in the main cantonment area, south of the main gate (see Electrical Distribution Plan). Provisions will be made in the substation for primary line connections to the planned 34.5 kV underground line from the Harmon Substation and to the planned 34.5 kV line from AAFB. This project will fund the connection of the main substation to the planned line originating from the AAFB Substation and the planned underground line originating from the Harmon Substation. Switchgear space for future circuit breakers and empty conduit runs for future connections to the main substation are being provided. This space is to accommodate future connections that may be necessary to support and integrate the existing 13.8 kV critical circuits and existing 4.16 kV non-critical load at NCTS.

Supervisory Control and Data Acquisition (SCADA) System: The SCADA system will use instrumentation at the electrical substation to enable monitoring and controlling of power transmission and distribution systems. The SCADA system will collect data at the substation and

provide status and controlling capability to a remote location that will support the operation and maintenance of the electrical system.

Electrical Distribution, Primary: Two looped circuits will be installed in the Phase I area to extend the 13.8 kV power to future early build-out vertical facilities. An empty conduit system will be installed and routed within the Phase I area and designed to be connected to the conduits being installed in U&SI Phase II. Conduit stub outs will be provided for future connection to vertical construction projects to prevent future trenching of newly constructed roads.

Telecommunications Conduit & Cabling: U&SI Phase I will provide an empty conduit system (no cables) for the Phase I area including both Department of Defense (DoD) and commercial systems. The cabling for these conduits will be installed in Phase II in order to minimize splicing of the cables. All ductbanks will be concrete encased for protection of the IT/COMM system. Approximately 15-meter-long stub outs, consisting of two 10-centimeter (cm) diameter empty conduits, will extend from the closest manhole towards the various possible sites for vertical construction for future service connections.

Mechanical Utilities

Water Distribution: A new transmission main, to be installed by other projects, will convey water from the well field storage tank at AAFB to the boundary of the main cantonment area near the commercial/tactical vehicle gate. This project will construct a 600-mm diameter pipe 1,065 meters long from Route 3A, near the commercial/tactical vehicle gate, to the new and included 5.7-million liter ground level water storage tank and pump/treatment facilities. The 5.7-million liter ground tank will include internal compartments to facilitate maintenance. The existing main between Well No. 6, 7, 11, and 12 will be demolished and realigned to the proposed roadways being constructed in Phase I. The existing 6-inch and 8-inch distribution mains servicing the abandoned Building 200 will also be removed within the Phase I grading limits. In the short term (interim conditions), the existing NCTS water wells will provide the Marine Corps system with water. The long-term plan will provide the Marine Corps water distribution system with water from both the existing NCTS wells and the AAFB system. This will provide an emergency backup for the water supply should the source/transmission system from AAFB be taken off line for maintenance or other reasons.

Sanitary Sewer: The existing DoD wastewater collection system within the main cantonment area at the Finegayan site consists of a trunk sewer serving Building 200 and connected to the GWA wastewater collection system through a GWA interceptor sewer along Route 3. Wastewater is conveyed to the Northern District Wastewater Treatment Plant (NDWWTP). Capacity evaluations of the existing collection system indicate the GWA interceptor sewer has adequate capacity for the proposed action. With the issuance of a revised NPDES permit in 2013, the NDWWTP currently

cannot meet the new secondary treatment discharge limits. The estimated total increase in wastewater flow from the main cantonment area throughout the entire Marine Corps construction program is within the design capacity of the NDWWTP; however, the plant is currently out of compliance with the revised NPDES permit. The implementation timeline for planning, designing, constructing, and bringing operational the required secondary treatment system to meet the new discharge requirements of the revised permit requires negotiations between the GWA and U.S. EPA. The notional grading for the main cantonment area generally slopes downhill from north to south. The U&SI Phase I sewer system would consist of 5,940 meters of sanitary sewer lines installed within Phase I Roads (see attached sewer collection sketch – Phase I area), along with 62 manholes, two WWPSs, and 900 meters of force main. A connection to the existing GWA inceptor sewer main along Route 3 is included.

Environmental Mitigation:

Cultural Mitigations: There are six known cultural resource sites in U&SI Phase I footprint; and Section 106 consultation has determined all six are eligible for listing in the National Register of Historic Places since the six sites will be adversely impacted. These Section 106 consultation with the Guam State Historic Preservation Office (SHPO) resulted in the requirement for archaeological monitoring during mass grubbing and grading for the project. This is because data recovery does not always get 100% of a site and Guam SHPO has already indicated that they want monitoring in other Joint Guam Program Office project areas, even those areas subject to prior development. Programmatic Agreement requires data recovery as mitigation for adversely affected cultural resources that are archaeological in nature. All six sites will require data recovery. Although actual data recovery cost depends on type, size, location, and condition of individual sites, recent historical cost data allows for an estimate for data recovery of (b) (5) for each site.

ESS Mitigations: TBD

Natural Resources Mitigations: TBD

Demolition

Demolition: One facility will be demolished, Bldg. #200.

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA *(Continuation)*	2. Date 7Feb2014	REPORT CONTROL SYMBOL
3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase I, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-001	8. Project Cost ($000) (b) (5) [redacted]

(…continued)

11. REQUIREMENT:

PROJECT: U&SI Phase I and the follow on U&SI Phase II will allow for the facilities construction to take place in order for the Marine Corps to be relocated from Okinawa to Guam.

REQUIREMENT: In October 2005, as part of the Defense Policy Review Initiative (DPRI), the United States and Japan signed the *Alliance Transformation and Realignment Agreement (ATARA),* which outlined an evolving security relationship between the two close allies. A follow-on document, the *United States-Japan Roadmap for Realignment Implementation* of May 2006 ("the Roadmap"), provided details on the implementation of the new agreement and established the parameters for the relocation of elements of the III Marine Expeditionary Force (MEF) from Okinawa, Japan to Guam. In April 2012, the U.S.–Japan Security Consultative Committee (SCC) issued a joint statement announcing its agreement to adjust the plan outlined in the 2006 Realignment Roadmap to reflect a new force posture in the Pacific, referred to as the Distributed Laydown. The adjustments included a reduced number of Marines (from approximately 8,600 to approximately 5,000) and dependents (from approximately 9,000 to approximately 1,300) to be relocated to Guam.

CURRENT SITUATION: There are no facilities on Guam that can be used to house the 5,000 Marines and their 1,300 dependents that must relocate from Okinawa to Guam. This U&SI project and the follow on U&SI Phase II will construct the necessary infrastructure systems, (site improvements, roads, utilities systems, storm drainage, and IT/COMM) to allow construction of the necessary main cantonment facilities of the Marine Corps.

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA *(Continuation)*	2. Date 7Feb2014	REPORT CONTROL SYMBOL

3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase I, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-001	8. Project Cost ($000) (b) (5) [redacted]

(…continued)

IMPACT IF NOT PROVIDED: If this U&SI project is not provided, the main cantonment area for the Marine Corps cannot be constructed and the agreements made between the United States and Japan will not be fulfilled.

(…continued)

A. Estimated Design Data:

1. Status:

(a) Date Design Started: March 2014

(b) Parametric Cost Estimate Used to Develop Costs: Historic Unit Costs, FY13 Trip Service Supporting Facility Unit Costs Database, 2013 PAX Newsletter

(c) Percent Complete: N/A

(d) Date 35 Percent Complete: August 2014

(e) Date Design Complete: April 2015

(f) Type of Design Contract: Design Build

2. Basis:

(a) Standard or Definitive Design: Definitive, this is a U&SI project

(b) Date Design was Most Recently Used: N/A

3. Total Cost (c) = (a) + (b) or (d) + (e) (b) (5)

(a) Production of Plans and Specifications: N/A

(b) All other Design Costs: N/A

(c) Total: N/A

(d) Contract: N/A

(e) In-house: N/A

4. Contract Award:

5. Construction Start: October 2015

6. Construction Complete: April 2018

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA *(Continuation)*	2. Date 7Feb2014	REPORT CONTROL SYMBOL

3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase I, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-001	8. Project Cost ($000) (b) (5) [redacted]

(…continued)

B. Equipment associated with this project which will be provided from other appropriations: N/A

Equipment Nomenclature	Procuring Appropriation	Fiscal Year Appropriated Or Requested	Cost ($000)
Furnishings/Equipment	O&M	xxxx	0000
Active Network Hardware for Local Area Network and Voice over IP Phone	O&M	xxxx	0000
Systems (Passive cable plant installation priced and included as part of construction)			
Electronic Security Equipment (ESS)			
Furniture/Furnishings			
NMCI Support			
Telecommunications Equipment			
Building Equipment (OFCI)			

12. SUPPLEMENTAL DATA:

Activity POC: (b) (6) [redacted] Phone No.: (b) (6) [redacted]

Attachments:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Cantonment U&SI PH2	Cantonment U&SI PH2

Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA *(Continuation)*	2. Date 7Feb2014	REPORT CONTROL SYMBOL

3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan	4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
MCON		J-017	(b) (5)

9. COST ESTIMATES

Item	UM	Quantities	Unit Cost	Total Cost
Site Preparation				(b) (5)
Paving and Site Improvements				(b) (5)
AT/FP				(b) (5)
Electrical Utilities				(b) (5)
Mechanical Utilities				(b) (5)
Environmental Mitigations				(b) (5)
Demolition				(b) (5)
Special Costs				(b) (5)
Guam Gross Receipts Tax	ea	4.16%	(b) (5)	(b) (5)
Post Construction Award Services (PCAS)	ea	1.00%	(b) (5)	(b) (5)
Contingency				(b) (5)
Contingency	ea	5.00%	(b) (5)	(b) (5)
Other Costs				(b) (5)
SIOH	ea	6.20%	(b) (5)	(b) (5)
Total Request				(b) (5)

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA *(Continuation)*	2. Date 7Feb2014	REPORT CONTROL SYMBOL

3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan	4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment

5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost ($000) (b) (5) [redacted]

(…continued)

(…continued)

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

Site Preparation

Clearing and Grubbing: The U&SI Phase II area covers approximately 635,000 square meters (64 hectares) of land requiring clearing and grubbing including removal of vegetation, stripping limestone rock, and removal and stockpiling of reusable topsoil. This site work preparation will occur prior to mass grading the site. Prior to any clearing, grubbing, or other land disturbance, the appropriate temporary erosion control measures shall be installed in accordance to Guam regulations, further described in the erosion control section of this document.

Grading and Earthwork: The U&SI Phase II includes major earth moving (mass grading) and limited fine grading along the roadway corridors and drainage systems. The grading activity will include the excavation of five permanent drainage detention ponds, and drainage conveyance swales along constructed roadways, as shown on the provided figure (see attached subbasin and secondary drainage routing). The cut and fill quantities associated with this mass grading effort assume a rough building pad for future vertical construction, which anticipates import of structural fill. The cut and fill quantities also assume a 0.6-meter deep typical road pavement section including compacted base and pavement surfacing. Existing surface grades (based on LIDAR topography) at tie in points along the Phase II boundary and along existing communication lines and wellheads are preserved to ensure the plan is implementable.

The cut and fill quantities are based on the assumption that native material excavated on site is suitable for reuse on site as fill material. If soil testing and/or geotechnical recommendations indicate otherwise, additional costs and changes in grading may be decreased. Likewise, with the completion of a topographic survey, the cut and fill quantities may vary.

Green Waste Facility: Green waste processing and construction recycling would be accomplished by the contractor on site during the construction of U&SI Phase II contract. The green waste (constructed in U&SI Phase I) site will be located in the northeast corner of the Main Cantonment by the construction gate. The processed green waste would be utilized as needed or stockpiled for future beneficial use on site as mulch and or a top soil additive to reduce quantity of soil importation.

Erosion Control: The U&SI Phase II will include all construction activity Best Management Practices (BMPs) required to stabilize disturbed ground and stockpiled material to prevent erosion and transportation of material from the site causing adverse downstream impacts. Extra care shall be taken for earth moving activities during the rainy season.

To protect the waters of Guam and the health and welfare of the public, the Guam Environmental Protection Agency (GEPA) established a set of regulations under the authority of Guam's Water

(…continued)

Pollution Control Act. The Act serves to regulate grading, clearing, grubbing, and stockpiling activities and sets minimum standards for erosion and sedimentation control.

During design and construction, this project will adhere to the requirements set forth in the GEPA regulations which include but are not limited to completing the initial permit application process, as applicable, submitting a sediment and erosion control plan, and submitting final as-built surveys and soils and conformity documentation at a minimum. Attention during design and construction will be given to the Section (§)10106 Special Requirements, which contains guidance regarding sinkholes and safety precautions for earth-moving activities that involve sinkholes. Special attention should also be given to work within the existing wellhead protection zones and karst areas with potential Northern Guam Lens Aquifer influence.

Paving and Site Improvements

Roads and Streets: As currently proposed, the following four roadway types would be used in U&SI Phase II within the main cantonment and on-base roadways:

- Arterial
- Perimeter Patrol
- Collector Undivided
- Local Non-Residential

Proposed roadway cross sections, which include required stormwater drainage, and low-impact development (LID) features and requirements, are shown in the attached sketches. Dimensions shown in these figures are the “ideal” dimensions for each facility. Constructed roadway dimensions may vary based on the available right-of-way and drainage requirements.

Sidewalks: The standard sidewalk width will be 3 meters wide and will typically be installed on both sides of the street throughout the main cantonment. As seen on the graphics, because of available land and drainage requirements, sidewalks may be reduced to 2 meters wide where little pedestrian traffic is anticipated and be located on only one side of the street. See attached roadway sketches for sidewalk details.

Curbs and Gutters: Most roads anticipated as part of the U&SI Phase II will utilize a rural road section without curb and gutter. The collector undivided and arterial road at the main gate will have sidewalks.

Traffic Signs: There will be approximately 61 road signs through the U&SI Phase II area.

Perimeter Fence: The perimeter fence for the main cantonment will be installed along Route 3A northwest from construction fence to cliff line. A 4.6-meter-wide gravel perimeter road will be

(…continued)

constructed on the inside of the fence line and a 6-meter clear zone will be provided on the outside of the fence line. Conduit for closed circuit television will be provided.

Storm Drainage: The U&SI Phase II anticipates sheet flow of stormwater from each parcel/building pad into vegetated roadside drainage swales, which then conveys the stormwater via swale, concrete pipe culverts, and rip-rap protected and/or concrete lined swales to detention ponds for control of the stormwater runoff leaving the site.

The detention ponds and stormwater conveyance systems are sized to handle the appropriate design storm runoff generated within specific drainage basins and sub-basins delineated based on the proposed CDP and the notional site grading plan. The ponds are primarily located along the perimeter of the main cantonment, downstream of where the flows are generated, prior to discharge offsite. Control structures will be located at each pond to regulate the rate of stormwater discharge from the site, which is not to exceed pre-development rates. The discharge flow will be restricted via an orifice control plate and will include high level overflow within the structure and an emergency spillway from the pond for critical flows.

Stormwater quality will be provided within the vegetated swales and bio-retention features located along the roadways as part of U&SI Phase II. The use of lined ponds is also anticipated for detention basins located within wellhead protection zones. Since these ponds will lack the ability to infiltrate stormwater, additional measures will be required as part of the outfall control to ensure the ponds fully recover to maintain capacity for subsequent storm events and to ensure the pond bottoms do not become a maintenance issue. The application of low impact drainage (LID) best management practices (BMPs) to mitigate pollutant loading associated with each land use, will occur with vertical construction in subsequent phases.

In order to protect natural water resources and comply with environmental regulations, the storm drainage system shall adhere to the following documents, at a minimum:

- *Guam Transportation Stormwater Drainage Manual*, August 2010.
- Horsley Witten Group, Inc. 2006. *CNMI and Guam Stormwater Management Manual. Volumes I & II.* Final. October.
- *Department of the Navy Low Impact Development Policy for Stormwater Management Memorandum* (2007).
- *U.S. Naval Forces Marianas Stormwater Pollution Prevention Plan (SWPPP) Volume 6: Best Management Practices (BMPs) Manual* (2009).
- *DoD Sustainable Design and Development Implementation Direction Memorandum* (2010a).
- Unified Facilities Criteria (UFC): *3-210-10 LID* (DoD 2010b).
- GEPA. 1997a. *Guam Administrative Rules (GAR), Title 22, Division II, Chapter 9: Underground Injection Control Regulations.*

(…continued)

- GEPA. 1997b. *Guam Administrative Rules (GAR), Title 22, Division II, Section 7130: Wellhead Protection for Public Water Supply Wells*.
- GEPA. 1997c. *Guam Administrative Rules (GAR), Title 22, Division II, Chapter 1-: Guam Soil Erosion and Sediment Control Regulations.*
- GEPA. 1997d. *Guam Administrative Rules (GAR), Title 22, Division IX, Chapter 45: Soil Erosion and Sedimentation Control*.

Landscaping and Site Improvements: Landscaping will consist of seeding, mulching, sodding of swales, sodding of unlined pond side slopes, grassed medians, and parkway soft shoulders; preventing erosion and enhancing the overall drainage of the main cantonment area. Trees will be planted along roadways as appropriate. Aluminum handrails, bollards, and other will be installed at drainage features and existing wells for safety and protection.

AT/FP

Main Gate: Facilities at the Main Gate consist of a covered Sentry Plaza with a 545-square meter canopy, a 19-square meter Sentry House (Overwatch Tower), and a 257-square meter Main Gate building with a 30-space parking lot.

Commercial/Tactical Vehicle Gate: Facilities at the Commercial/Tactical Vehicle Gate consist of a 20,500 meter commercial gate house at plaza, a 20-square meter Sentry House (Overwatch Tower), and a Vehicle Weigh Station Plaza with a 150-square meter canopy and a 3 square meter Vehicle Weigh Station House.

Electrical Utilities

Electrical Distribution, Primary: Phase II will provide empty conduit systems within Phase II main cantonment areas. Looped main circuit cabling will be installed allowing the vertical facilities to connect to the electrical distribution system as the vertical facilities are constructed. A conduit stub out from the new substation is provided to facilitate future connections, at lower cost, when the existing 4.16 kV NCTS load will be transferred to the new main substation. Empty conduit stub outs from new substation will also be installed to provide future connections to 13.8 KV critical loads at NCTS and allow for future connections to South Finegayan family housing. These empty conduits will facilitate future tie in to the main substation at minimal cost since the stub outs will already be installed. This will also prevent having to trench the U&SI roads when the vertical facilities are constructed.

Telecommunications Conduit & Cabling: U&SI Phase II will provide an empty conduit system (no cables) for Phase II area for both the DoD and commercial systems. The cabling for the DoD intra-base IT/COMM system will be installed in Phase II in order to minimize splicing of the cables, with loop and stowing within manholes provided by U&SI Phase I and II for connecting to future

(…continued)

vertical facilities. Any DoD cabling which terminates outside of the main cantonment will not be installed by this project, but rather by other projects which are connecting to off base locations. These off base projects will utilize the conduits installed in U&SI Phases I and II for this purpose. All ductbanks will be concrete encased for protection of the IT/COMM system. Approximately 15-meter long stub outs, consisting of two 10-cm diameter empty conduits, will extend from the closest manhole towards the various anticipated sites for vertical construction for future service connections.

Six cable huts, approximately 16 square meters each, containing copper and fiber cross connect equipment will be fed with cables from the closest manhole of the main distribution ductbank. The cables would be spliced/patched to the terminal blocks of the cross connect and then leave the cable hut to feed nearby buildings. These six cable huts will be located throughout the main cantonment to facilitate IT/COMM distribution.

Mechanical Utilities:

Water Distribution: This project will construct new distribution mains along planned roadways. To provide water connectivity to the existing Navy water system, a transmission main approximately 2,930 meters long will be installed from the water main near the commercial/tactical vehicle gate along the on-base security road just inside the security fence south along Route 3 and connect to the transmission main near the existing 757,082-liter NCTS Finegayan ground tank. A booster pump station or additional pumps in the existing NCTS structures will be needed to pump water north to supply the new 5.7-million liter ground tank during interim conditions and also to provide an emergency backup for the water supply should the source/transmission system from AAFB be taken off line for maintenance or other reasons. This connection to the transmission main will allow excess water from the current water wells at NCTS and the new wells at AAFB to be used for other DoD requirements. The existing distribution system in the NCTS Finegayan area is designated to service only the existing NCTS facilities. All of the existing NCTS water distribution system remains.

Sanitary Sewer: The U&SI Phase IIA sanitary sewer system will provide service to facilities at the main gate. The system will consist of 91 meters of sanitary sewer mains near the main gate of the main cantonment area (see attached sewer collection sketch – Phase IIA area), along with two manholes, one pump station, and 370 meters of force main. The U&SI Phase IIA sanitary sewer system will connect into the U&SI Phase I sanitary sewer system in the main cantonment area.

The U&SI Phase IIB sewer system would consist of 2,630 meters of sanitary sewer mains along the west side of the main cantonment area (see attached sewer collection sketch – Phase IIB area), along with 35 manholes, one pump station and 670 meters of force main. This U&SI Phase IIB sanitary sewer system will connect into the U&SI Phase I sanitary sewer system and

(…continued)

provide the backbone for the sanitary sewer requirements for future construction projects in the main cantonment area

The Phase IIC area, is a drainage basin and does not require sanitary sewer lines.

Environmental Mitigation:

Cultural Mitigations: There are three known cultural resource sites in U&SI Phase II footprint; and Section 106 consultation has determined all three are eligible for listing in the National Register of Historic Places since the three sites will be adversely impacted. These Section 106 consultations with the Guam State Historic Preservation Office (SHPO) resulted in the requirement for archaeological monitoring during mass grubbing and grading for the project. This is because data recovery does not always get 100% of a site and Guam SHPO has already indicated that they want monitoring in other Joint Guam Program Office project areas, even those areas subject to prior development. The Programmatic Agreement requires data recovery as mitigation for adversely affected cultural resources that are archaeological in nature. All three sites will require data recovery. Although actual data recovery cost depends on type, size, location and condition of individual sites, recent historic cost data allows for an estimate for data recovery of (b) (5) for each one.

ESS Mitigations: TBD

Natural Resources Mitigations: TBD

11. REQUIREMENT:

(…continued)

PROJECT: U&SI Phase II is a follow on to U&SI Phase I and these two U&SI projects will allow for the facilities construction to take place in order for the Marine Corps to be relocated from Okinawa to Guam.

REQUIREMENT: In October 2005, as part of the Defense Policy Review Initiative (DPRI), the United States and Japan signed the *Alliance Transformation and Realignment Agreement (ATARA),* which outlined an evolving security relationship between the two close allies. A follow-on document, the *United States-Japan Roadmap for Realignment Implementation* of May 2006 ("the Roadmap"), provided details on the implementation of the new agreement and established the parameters for the relocation of elements of the III Marine Expeditionary Force (MEF) from Okinawa, Japan to Guam. In April 2012, the U.S.–Japan Security Consultative Committee (SCC) issued a joint statement announcing its agreement to adjust the plan outlined in the 2006 Realignment Roadmap to reflect a new force posture in the Pacific, referred to as the Distributed Laydown. The adjustments included a reduced number of Marines (from approximately 8,600 to approximately 5,000) and dependents (from approximately 9,000 to approximately 1,300) to be relocated to Guam.

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA *(Continuation)*	2. Date 7Feb2014	REPORT CONTROL SYMBOL

3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan		4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment	
5. Program Element MCON	6. Category Code	7. Project Number J-017	8. Project Cost ($000) (b) (5) [redacted]

(…continued)

CURRENT SITUATION: There are no facilities on Guam that can be used to house the 5,000 Marines and their 1,300 dependents that must relocate from Okinawa to Guam. This U&SI project will construct the necessary infrastructure systems (site improvements, roads, utilities systems, storm drainage, and IT/COMM) to allow construction of the necessary the main cantonment facilities of the Marine Corps.

IMPACT IF NOT PROVIDED: If this U&SI project is not provided, the main cantonment area for the Marine Corps cannot be constructed and the agreements made between the United States and Japan will not be reached.

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROJECT DATA *(Continuation)*	2. Date 7Feb2014	REPORT CONTROL SYMBOL

3. Installation and Location/UIC: US Naval Base Guam, Telecommunication Site (NBGTS), Finegayan	4. Project Title Utilities & Site Improvements (U&SI) Phase II, USMC Main Cantonment

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
MCON		J-017	(b) (5)

(…continued)

A. Estimated Design Data:

1. Status:

(a) Date Design Started: October 2016

(b) Parametric Cost Estimate Used to Develop Costs

(c) Percent Complete: N/A

(d) Date 35 Percent Complete: April 2017

(e) Date Design Complete: January 2018

(f) Type of Design Contract: Design/Bid/Build

2. Basis:

(a) Standard or Definitive Design: Definitive, this is a U&SI project

(b) Date Design was Most Recently Used: $(b) (5)

3. Total Cost (c) = (a) + (b) or (d) + (e)

(a) Production of Plans and Specifications: N/A

(b) All other Design Costs: N/A

(c) Total: N/A

(d) Contract: N/A

(e) In-house: N/A

4. Contract Award: June 2017

5. Construction Start: October 2017

6. Construction Complete: January 2021

B. Equipment associated with this project which will be provided from other appropriations: N/A

Equipment Nomenclature	Procuring Appropriation	Fiscal Year Appropriated Or Requested	Cost ($000)
Furnishings/Equipment	O&M	xxxx	0000

(…continued)

Active Network Hardware for Local Area Network and Voice over IP Phone Systems (Passive cable plant installation priced and included as part of construction)	O&M	xxxx	0000

12. SUPPLEMENTAL DATA:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
IT/Comm PH3	IT/Comm - PH3
IT/Comm PH4	IT/Comm - PH4

IT/COMMS Infrastructure Implementation Phasing Plan

IT/COMMS INFRASTRUCTURE IMPLEMENTATION PHASING PLAN
VERSION DATE : 05 JULY 2013

PRIORITY	COMPLETED PRIOR TO FY	COMPLEX/ FACILITY	INFRASTRUCTURE DESCRIPTION Type (* Note 2)	From	To	Length	Unit	* Note 2 Unit Price ($/LF)	Sub-Total ($)	TOTAL	TOTAL w/ ALT
1	JFY 2014	NLFTRC	Underground	Finegayan NCTS Bldg 112 (DISA POP)	AAFB Entrance via RT 9	23,000	LF	$ (b) (5)	$ (b) (5)	(b) (5)	(b) (5)
			Underground	AAFB Bldg 23002 (DISA POP)	AAFB Entrance via RT 9	11,000	LF	$ (5)	$		
			Underground	AAFB Entrance via RT 9	NLFTRC via RT 1	23,000	LF	$	$		
			ALTERNATIVE DWDM Electronic Upgrade			1	LS		$ (b) (5)	(b) (5)	(b) (5)
										(b) (5)	(b) (5)
2	FY 2016	LFTRC	Underground	Finegayan NCTS Bldg 112 (DISA POP)	LFTRC Northwest Field	29,000	LF	$ (b)	$ (b) (5)	(b) (5)	
			Underground	North Ramp USMC Hanger 2 ADN	Finegayan NCTS Bldg 112 (DISA POP) via Rt 3A	100,450	LF	$ (5)	$ (b) (5)	(b) (5)	(b) (5)
			Underground								
			Underground	North Ramp USMC Hanger 2 ADN (alt 1 route)	Finegayan NCTS Bldg 112 (DISA POP) via Ace Gate & RT9	100,450	LF	$	$ (b) (5)	(b) (5)	$ -
			ALTERNATIVE Underground	North Ramp USMC Hanger 2 ADN (alt 2 route)	Finegayan NCTS Bldg 112 (DISA POP) thru MUNS,Northwest Field	119,670	LF	$	$ (b) (5)	$ -	$ (b) (5)
										(b) (5)	(b) (5)
3	FY 2017	NORTH RAMP Facilities	Underground	NLFTRC	Tata Cable Landing Facility (CLF) via RT 15, 4, 17, 5	139,650	LF	$ (b) (5)	(b) (5)	(b) (5)	-
4	JFY 2017	Base Admin	Underground	Finegayan NCTS Bldg 112 (DISA POP)	Tata Cable Landing Facility (CLF)	100,855	LF	$ (b) (5)	(b) (5)	(b) (5)	$ -

NOTES:

1 Information and data are based on the Draft NAVFAC Utility Study dated 2013 using the Finegayan/South Finegayan Alternative map IT-0.1.

2 Unit prices were calculated from the cost estimates provided in the study and include cost for installation, design, contingency, PCAS and tax costs as follows

(b) (5) per LF 8-4" conduits concrete encased including MHs + 1 ea 144 FO cable
39% design, contingency, PCAS, tax markup
(b) (5) Total burdened rate

(b) (5) per LF 8-4" conduits concrete encased including MHs + 2 ea 144 FO cable
39% design, contingency, PCAS, tax markup
(b) (5) Total burdened rate

3 Funding for new infrastructure in accordance with this priority list is to support delivery of capability and services to the dependant complex or facility FY or JFY schedule based on the Rainbow Chart dated 06/26/2013.

4 The estimate is based on the laydown strategy of the Main Cantonment located at Finegayan and LFTRC at AAFB Northwest Field.

5 There is planned FY-14 Off-base/Inter-base IT-comms OSP study that will further investigate and assess current and additional alternatives for connectivity solutions.

IT/COMMS INFRASTRUCTURE IMPLEMENTATION PHASING PLAN
VERSION DATE : 05 JULY 2013

PRIORITY	COMPLETED PRIOR TO FY	COMPLEX/ FACILITY	INFRASTRUCTURE DESCRIPTION Type (* Note 2)	From	To	Length	Unit	* Note 2 Unit Price ($/LF)	Sub-Total ($)	TOTAL	TOTAL w/ ALT
1	JFY 2014	NLFTRC	Underground	Finegayan NCTS Bldg 112 (DISA POP)	AAFB Entrance via RT 9	23,000	LF	$ (b) (5)	$ (b) (5)	$ (b) (5)	(b) (5)
			Underground	AAFB Bldg 23002 (DISA POP)	AAFB Entrance via RT 9	11,000	LF	$ (5)	$	$	
			Underground	AAFB Entrance via RT 9	NLFTRC via RT 1	23,000	LF	$	$	$	
			ALTERNATIVE DWDM Electronic Upgrade			1	LS		$ (b) (5)	$ -	$ (b) (5)
										$ (b) (5)	$ (b) (5)
2	FY 2016	LFTRC	Underground	Finegayan NCTS Bldg 112 (DISA POP)	LFTRC Northwest Field	29,000	LF	$ (b) (5)	$ (b) (5)	$ (b) (5)	$ (b) (5)
			Underground	North Ramp USMC Hanger 2 ADN	Finegayan NCTS Bldg 112 (DISA POP) via Rt 3A	100,450	LF	$ (b) (5)	$ (b) (5)	$ (b) (5)	$ (b) (5)
			Underground								
			Underground	North Ramp USMC Hanger 2 ADN (alt 1 route)	Finegayan NCTS Bldg 112 (DISA POP) via Ace Gate & RT9	100,450	LF	$ (b) (5)	$ (b) (5)	$ (b) (5)	$ -
			ALTERNATIVE Underground	North Ramp USMC Hanger 2 ADN (alt 2 route)	Finegayan NCTS Bldg 112 (DISA POP) thru MUNS,Northwest Field	119,670	LF	$ (b) (5)	$ (b) (5)	$ -	$ (b) (5)
										$ (b) (5)	$ (b) (5)
3	FY 2017	NORTH RAMP Facilities	Underground	NLFTRC	Tata Cable Landing Facility (CLF) via RT 15, 4, 17, 5	139,650	LF	$ (b) (5)	$ (b) (5)	$ (b) (5)	$ -
4	JFY 2017	Base Admin	Underground	Finegayan NCTS Bldg 112 (DISA POP)	Tata Cable Landing Facility (CLF)	100,855	LF	$ (b) (5)	$ (b) (5)	$ (b) (5)	$ -

NOTES:

1 Information and data are based on the Draft NAVFAC Utility Study dated 2013 using the Finegayan/South Finegayan Alternative map IT-0.1.

2 Unit prices were calculated from the cost estimates provided in the study and include cost for installation, design, contingency, PCAS and tax costs as follows

(b) (5) per LF 8-4" conduits concrete encased including MHs + 1 ea 144 FO cable

39% design, contingency, PCAS, tax markup

(b) (5) Total burdened rate

(b) (5) per LF 8-4" conduits concrete encased including MHs + 2 ea 144 FO cable

39% design, contingency, PCAS, tax markup

(b) (5) Total burdened rate

3 Funding for new infrastructure in accordance with this priority list is to support delivery of capability and services to the dependant complex or facility FY or JFY schedule based on the Rainbow Chart dated 06/26/2013.

4 The estimate is based on the laydown strategy of the Main Cantonment located at Finegayan and LFTRC at AAFB Northwest Field.

5 There is planned FY-14 Off-base/Inter-base IT-comms OSP study that will further investigate and assess current and additional alternatives for connectivity solutions.

		FY17					
Utility	**Item Description**	**Utility Study Estimates**	**Costs SPECIFICALLY EXCLUDED from Utility Studies**	**Updated Estimates**	**OPTION 1** (actual req't based on updated estimates)	**OPTION 2** (based strictly on Utility Study estimates)	**Notes**
Water	TMW Connection to Harmon PS (MAY NOT BE REQUIRED)		(b) (5) [redacted]				Phase 2 Utility Studies state that the following costs were not included in the Life Cycle Cost Analysis (LCCA) estimates: Paving, MEC clearance. These costs are included in the UPDATED ESTIMATES.
Water	Transmission Upgrade from Harmon PS to NCTS Finegayan Navy Storage Tank & Harmon PS Reconfiguration (MAY NOT BE REQUIRED)		(b) (5) [redacted]				Phase 2 Utility Studies state that the following costs were not included in the Life Cycle Cost Analysis (LCCA) estimates: Paving, MEC clearance. These costs are included in the UPDATED ESTIMATES.
Water	Transmission Repair from Harmon PS to Andy South & to Marbo Wells (THIS PROJECT NOT PLANNED)		(b) (5) [redacted]				Phase 2 Utility Studies state that the following costs were not included in the Life Cycle Cost Analysis (LCCA) estimates: Paving, MEC clearance. These costs are included in the UPDATED ESTIMATES.
	Subtotal #1 - Water				(b) (5) [redacted]		
Power	Harmon SS to NCTS Fin USMC SS (UG)		(b) (5) [redacted]				See notes above for cost increase. Cost increase also due to increase in UT upgrade due to NCTS Fin SS moving further north. Added [redacted] for potential electrical pole replacement
Power	NCTS Fin SS to AAFB SS (OH)		(b) (5) [redacted]				
	Subtotal #2 - Power				(b) (5) [redacted]	(b) (5) [redacted]	
	FY17 Totals ($ Mil)				(b) (5) [redacted]	(b) (5) [redacted]	

To support Programming Amounts:

Option 1: Use Updated Estimates and show their derivation. Utility Study Costs + excluded costs = Updated Estimates. This option will reflect a more accurate projection of the anticipated scope.

Option 2: Use Utility Study Estimates to arrive at a budget figure adequate to cover Updated Estimates. This option will include costs for items that are needed to generate adequate budget, but will most likely not be executed.

Primary purposes of the "Phase 2" Utilities Studies were two-fold:

1) Provide conceptual utility corridors as the basis for NEPA impact analysis.

It was understood that propose utility solutions were "reasonable" worst case.

2) Provide costs for Life Cycle Cost Analysis (LCCA).

LCCA methodology is not intended to produce accurate estimates of total cost. LCCA focuses on cost differences between alternatives and often omits "wash" costs (costs common to all alternatives).

Utility	Item Description	Utility Study Estimates	Costs SPECIFICALLY EXCLUDED from Utility Studies	Updated Estimates	Actual Requirement	OPTION 1 (based on updated estimates)	OPTION 2 (based strictly on Utility Study estimates)	Notes
Water	AAFB Well Field Development	(b) (5) [redacted]						Phase 2 Utility Studies state that the following costs were not included in the Life Cycle Cost Analysis (LCCA) estimates: MEC clearance, EV Mitigation, Vegetation Clearing, Grubbbing, & Grading. These costs are included in the UPDATED ESTIMATES. Also note, cost of drilling of test wells/exploratory wells (b) (5) [redacted] was included in the UTILITY STUDY ESTIMATE but excluded from the UPDATED ESTIMATE as this work will be done during design using P&D funds
Water	Transmission fm AAFB Well Field Water Storage Tank to NCTS Fin USMC Tank (Fin MC Option)	(b) (5) [redacted]						Phase 2 Utility Studies state that the following costs were not included in the Life Cycle Cost Analysis (LCCA) estimates: Paving, MEC clearance. These costs are included in the UPDATED ESTIMATES.
Water	Transmission from AAFB Well Field Storage Tank to AAFB Storage Tank & AAFB Pump Reconfiguration (if USMC Housing at AAFB) (MAY NOT BE REQUIRED)	(b) (5) [redacted]						Phase 2 Utility Studies state that the following costs were not included in the Life Cycle Cost Analysis (LCCA) estimates: Paving, MEC clearance. These costs are included in the UPDATED ESTIMATES.

FY18 Totals ($ Mil)	**W/out AAFB Connection**	(b) (5) [redacted]
	WITH AAFB Connection	(b) (5) [redacted]

Option 2: Use Utility Study Estimates to arrive at a budget figure adequate to cover Updated Estimates. This option will include costs for items that are needed to generate adequate budget, but will most likely not be executed.

* Primary purposes of the "Phase 2" Utilities Studies were two-fold:
1) Provide conceptual utility corridors as the basis for NEPA impact analysis.
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Utility	Item Description	FY17 Utility Study Estimates	Costs SPECIFICALLY EXCLUDED from Utility Studies	Updated Estimates	OPTION 1 (actual req't based on updated estimates)	OPTION 2 (based strictly on Utility Study estimates)	Notes
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Water	Transmission Repair from Harmon PS to Andy South & to Marbo Wells (THIS PROJECT NOT PLANNED)	(b) (5) [redacted]					Phase 2 Utility Studies state that the following costs were not included in the Life Cycle Cost Analysis (LCCA) estimates: Paving, MEC clearance. These costs are included in the UPDATED ESTIMATES.
	Subtotal #1 - Water				(b) (5) [redacted]		
Power	Harmon SS to NCTS Fin USMC SS (UG)	(b) (5) [redacted]					See notes above for cost increase. Cost increase also due to increase in UT upgrade due to NCTS Fin SS moving further north. Added (b) [redacted] for potential electrical pole replacement
Power	NCTS Fin SS to AAFB SS (OH)	(b) (5) [redacted]					
	Subtotal #2 - Power				(b) (5) [redacted]		
	FY17 Totals ($ Mil)				(b) (5) [redacted]		

To support Programming Amounts:

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Water	AAFB Well Field Development	(b) (5) [redacted]						Phase 2 Utility Studies state that the following costs were not included in the Life Cycle Cost Analysis (LCCA) estimates: MEC clearance, EV Mitigation, Vegetation Clearing, Grubbbing, & Grading. These costs are included in the UPDATED ESTIMATES. Also note, cost of drilling of test wells/exploratory wells (b) (5) [redacted] was included in the UTILITY STUDY ESTIMATE but excluded from the UPDATED ESTIMATE as this work will be done during design using P&D funds
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FY18 Totals (b) (5) [redacted]

W/out AAFB Connection (b) (5) [redacted]

WITH AAFB Connection (b) (5) [redacted]

To support Programming Amounts:

Option 1: Use Updated Estimates and show their derivation. Utility Study Costs + excluded costs = Updated Estimates. This option will reflect a more accurate projection of the anticipated scope.

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		FY17					
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	Subtotal #2 - Power				(b) (5) [redacted]		
	FY17 Totals	(b) (5) [redacted]			(b) (5) [redacted]		

To support Programming Amounts:

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FY18 Totals (b) (5) [redacted]

W/out AAFB Connection (b) (5) [redacted]

WITH AAFB Connection (b) (5) [redacted]

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COMMAND ELEMENT

(CE)

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
3rd MEB CE	3rd MEB CE

Division/Wing Headquarters (3rd MEB HQ)

Academic Instruction Building, Academic Classroom, 3rd MEB

Organic Unit Storage, 3rd MEB

Photographic Building, Base

Open Storage Area, 3rd MEB

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
DIVISION/WING HEADQUARTERS	610-70	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of a Regimental Headquarters, Marine Corps, is to provide the necessary administrative space to conduct day-to-day operations of a Marine Regimental HQ.

Requirements are shown below with backup following.

3rd MEB HQ	22,280 GSF
Total Requirement:	**22,280** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
22,280 SF (2070 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ACADEMIC INSTRUCTION BUILDING	171-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A general academic classroom is one which supports approved training programs and provides accommodations for classroom lecture instruction, using standard chairs with fixed tablet arms or a similar seating configuration providing the student a writing surface and book depository. The individual general academic classroom sizes in net square feet (i.e., within the interior walls of the room), as dictated by the required number of seats, shall not exceed the figures given in Table 17110-1.

Per the UFC, in cases where the training building is composed entirely of general academic classrooms, use the broad planning factor of 45 gross SF per student station for the entire building. Every attempt must be made, however, to minimize the number of such single subject or “dedicated” classrooms, especially in those cases where their use would be relatively infrequent.

In the spirit of this guidance and per the intent of the UFC, a MEB Audio/Visual Training Center will be provided with shared classrooms for the MEB and MEB enablers. This is due to the requirement for such classroom space on an infrequent basis.

Two 50 PN classrooms = 45 GSF x 100 PN = 4,500 SF
Computer Resource Center x 30 stations (45 SF EA) = 1,350 SF
Internet Café (Student Break Area) = 50 PN x 8 SF) = 400 SF

Academic Classroom, 3rd MEB	6,250 GSF
Total Requirement:	**6,250 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
6,250 SF (581 m2)

MOBILIZATION STATEMENT

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EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIC UNIT STORAGE	441-12	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organic Unit Storage includes general purpose storage facilities assigned to Marine Corps bases, air installations and Fleet Marine Force (FMF) units for organic requirements to include Division/Wing, Battalion/Group and Company/Squadron storage areas, special service storerooms, base shipping and receiving functions and any other organic storage requirements.

According to the UFC 2-000-05N, dated October 2005, BFR requirements may be calculated using the analytical/4-step method.

There are four steps required for determining storage space requirements by this method. This method is thought to be the preferred and most practical for use in planning up to and including the activity 1391 level or as needed to feed strategic planning.

Unit		**Total SF**	
3rd MEB		6,830	GSF
	SAY	**6,830**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
6,830 SF (635 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
PHOTOGRAPHIC BUILDING	141-60	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A photographic building provides the laboratory complete with equipment and storage to support the photographic mission of an activity. A photographic building is required by MCB Guam to support the "Combat Camera."
According to the UFC 2-000-05N dated 31 January 2005, the size of the photographic building is determined by a study of the space required to support the equipment and activity.
Laboratories are established only where authorized by the office of the Chief of Naval Operations.

Base		14,728 SF
Total Requirement:		**14,728 GSF**
	SAY	**14,730 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
14,730 SF (1369 m2)

MOBILIZATION STATEMENT

SIGNATURE:

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EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OPEN STORAGE AREA	451-10	SY

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

An Open Storage Area consists of non-covered storage, paved or otherwise established, for storage of General Supply Materials.

Requirements for the 4th Marine Regiment were based on the number of Quadcons/Palcons on-hand, stacked two and three high respectively, with the additional space to accommodate load outs. Requirements are based on the FY16 Unit TO&E Report.

An estimation of material requirements, likely lay-down scenario (i.e., how material is stowed on area) and material handling equipment access is also acceptable as a means of determining square foot (SF) requirements via a space analysis.

Unit	Total SF	
3rd MEB	560	SY
SAY	**560**	**SY**

TOTAL REQUIREMENT FOR CATEGORY CODE
560 SY (469 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
MEB Enablers	MEB Enablers

Company Headquarters, MEB Enablers - HQs Company

Company Headquarters, MEB Enablers - 3rd intel

Electronic/Comm Maint Shop, 7th Comm

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
COMPANY HEADQUARTERS	610-73	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of a Company/Battery Headquarters, Marine Corps, is for a Fleet Marine Force (FMF) facility and is intended for those FMF units of company or battery size which require separate administrative facilities.

Requirements are shown below with backup following.

MEB Enablers - HQs Company	2,763 GSF
Total Requirement:	**2,763** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
2,763 SF (257 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
COMPANY HEADQUARTERS	610-73	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)* SPECIFIC AREA

UFC 2-000-05N, revised 31 Jan 2005, states that in the absence of detailed data or when close approximation to precise requirements is not considered necessary, the gross floor area should be computed based on 162.5 square feet per building occupant.

MEB Enablers - 3rd Intel

	CMD Staff	4 PN
	S-1	2 PN
	S-2	7 PN
	S-3	3 PN
	S-4	3 PN
TOTAL PN:		19 PN
Administrative Office: 162.5 SF x	19 PN	3,088 GSF

Special Purpose or Other Space Requirements:

SCIF -	EKMS Vault	200 NSF
SCIF -	CMCC Vault	200 NSF
SCIF -	SSO Indoc Room	150 NSF
SCIF -	Comm Center	500 NSF
SCIF -	RadBn Detachment Room	500 NSF
	Subtotal:	1,550 NSF
	Net-to-Gross Conversion (1.25)	1937.5 GSF
	Total Requirement:	5,025 GSF

Total Requirement **5,025 GSF**

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ELECTRONIC/COMM MAINT SHOP	217-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Electronics maintenance shops at Naval and Marine Corps activities provide facilities for maintenance and repair of non-airborne equipment.

It contains office and support spaces for the Equipment Maintenance Officer (EMO) and the EMO Staff, equipment maintenance and training areas, and a small storage area for parts and supplies directly under the control of the EMO.

According to UFC 2-000-05N, dated January 2005, states that no specific planning criteria are provided. An engineering evaluation can be conducted to determine the office space and support area requirements using guidance contained within the Category Code series 131 Introductory section. For storage area, an engineering evaluation can be used to determine the volume of material required to be stored.

Unit	**Total SF**	
Elec/Comm Shop - 7th Comm	10,141	GSF
Total Requirement:	**10,141**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
10,141 SF (943 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Consolidated Armory	Consolidated Armory

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

An armory is required to provide a humidity controlled, air conditioned, secure place for storing and maintaining weapons assigned to personnel in garrison.

Requirements are based on FY16 Unit TO&E Report.

Armory Spaces:	
3rd MEB HQ	404 GSF
3rd MEB Enablers	504 GSF
Law Enforcement Bn	1,118 GSF
4th Marine Regiment	1,293 GSF
Infantry Battalion (2)	6,908 GSF
Artillery Battalion	897 GSF
AAV/LAV/CEB	1,435 GSF
9th ESB	2,276 GSF
CLB-4	3,529 GSF
MCB Guam	1,118 GSF
Subtotal Requirement (Armory Space):	**19,483 GSF**
Open Covered Spaces:	
Classroom (open with covered bleachers)	600 GSF
Covered Weapons Cleaning Area (600 PN x 10 GSF)	6,000 GSF
Subtotal Requirement (Open Covered Space):	**6,600 GSF**
Total Requirement:	**26,083 GSF**
Open Spaces:	
20 Palcons, 10 Quadcons, and 2 ISO containers:	2,500 GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
26,083 SF (2424 m2)

MOBILIZATION STATEMENT

SIGNATURE: _____

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARE 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Based on the UFC 2-000-05N criteria, dated January 2005, the armory requirements for 3rd MEB HQ are as follows:

Collateral Equipment	Numbers of Equipment	Numbers of Equipment Stacked	NSF of Equip/Aisle	NSF
Configurable Optics Rack (42"x16")	1	1	13.4	13.4
Configurable Optics Rack (42"x16")	1	1	13.4	13.4
Universal Weapons Rack (42"x16")	0	0	13.4	0
M16A2 Rifle Weapon Rack (42"x16")	0	0	13.4	0
M16A4 Rifle Weapon Rack (42"x16")	2	1	13.4	13.4
MWS Carbine 5.56 (42"x16")	8	4	13.4	53.6
MK32 Grenade Lncher Rack (42"x16")	0	0	13.4	0
M249 SAW Weapon Rack (42"x16")	0	0	13.4	0
M2 .50 Cal Weapon Rack (42"x16")	0	0	13.4	0
MK19 Weapon Rack (42"x16") MOD-3	0	0	13.4	0
MK19 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M240G Weapon Rack (42"x16")	0	0	13.4	0
M48 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M14 Rifle Rack (42"x16")	0	0	13.4	0
Sniper Rifle Rack (72"x12")	0	0	21	0
Shotgun Rack (42"x16")	0	0	13.4	0
Shotgun Rack, JSCS (42"x16")	1	1	13.4	13.4
Shotgun Rack (42"x16")	1	1	13.4	13.4
Subtotal:	**14**	**9**		**121**
BOXES				
SABER	0		20.1	0
Modular Universal, PAQ-3 (48"x36")	0		22	0
Designated Marksman Rifle Boxes	0		16.6	0
MK64 Mount (72"x36")	0		33	0
.50 CAL Sniper Rifle (64"x26")	0		24.9	0
SU-36P Dragon (48"x36")	0		22	0
Pistol Chest (52"x14")	0		15.9	0
Inbore Device	0		20	0
Subtotal:	**0**			**0**
CUSTODIANS & CIRCULATION				
Doorway/issue port area circulation/Hazmat storage	fixed			90
Custodian desks, computer terminal & workbench	1		105	105
Total NSF:				316 NSF
Net to Gross Factor (1.28)				404 GSF

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARE 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Based on the UFC 2-000-05N criteria, dated January 2005, the armory requirements for the 3rd MEB Enablers are as follows:

Collateral Equipment	Numbers of Equipment	Numbers of Equipment Stacked	NSF of Equip/Aisle	NSF
Configurable Shelf (42"x16")	1	1	13.4	13.4
Universal Weapons Rack (42"x16")	2*	2	13.4	26.8
M16A2 Rifle Weapon Rack (42"x16")	0	0	13.4	0
M16A4 Rifle Weapon Rack (42"x16")	9	5	13.4	67
MWS Carbine 5.56 (42"x16")	9	5	13.4	67
MK32 Grenade Lncher Rack (42"x16")	0	0	13.4	0
M249 SAW Weapon Rack (42"x16")	0	0	13.4	0
M2 .50 Cal Weapon Rack (42"x16")	0	0	13.4	0
MK19 Weapon Rack (42"x16") MOD-3	0	0	13.4	0
MK19 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M240G Weapon Rack (42"x16")	0	0	13.4	0
M48 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M14 Rifle Rack (42"x16")	0	0	13.4	0
Sniper Rifle Rack (72"x12")	0	0	13.4	0
Shotgun Rack (42"x16")	0	0	21	0
Shotgun Rack, JSCS (42"x16")	0	0	13.4	0
Shotgun Rack (42"x16")	0	0	13.4	0
Subtotal:	**19**	**13**		**174**

** Universal racks added for side mounted guns on aircraft*

BOXES			
SABER	0	20.1	0
Modular Universal, PAQ-3 (48"x36")	0	22	0
Designated Marksman Rifle Boxes	0	16.6	0
MK64 Mount (72"x36")	0	33	0
.50 CAL Sniper Rifle (64"x26")	0	24.9	0
SU-36P Dragon (48"x36")	0	22	0
Pistol Chest (52"x14")	0	15.9	0
Inbore Device	0	20	0
Subtotal:	**0**		**0**

CUSTODIANS & CIRCULATION			
Doorway/issue port area circulation/Hazmat storage	fixed		90
Custodian desks, computer terminal & workbench	1	105	105
Personal Weapons Storage (42"x16")	fixed	14.3	14.3
Pubs Locker (48"x24" Wall Locker)	1	10.5	10.5

Total NSF:	394	NSF
Net to Gross Factor (1.28)	504	GSF

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARE 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Based on the UFC 2-000-05N criteria, dated January 2005, the armory requirements for the LE Bn are as follows:

Collateral Equipment	Numbers of Equipment	Numbers of Equipment Stacked	NSF of Equip/Aisle	NSF
Configurable Optics Rack (42"x16")	4	4	13.4	53.6
Configurable Optics Rack (42"x16")	11	11	13.4	147.4
Universal Weapons Rack (42"x16")	3	3	13.4	40.2
M16A2 Rifle Weapon Rack (42"x16")	0	0	13.4	0
M16A4 Rifle Weapon Rack (42"x16")	11	6	13.4	80.4
MWS Carbine 5.56 (42"x16")	2	1	13.4	13.4
MK32 Grenade Lncher Rack (42"x16")	2	1	13.4	13.4
M249 SAW Weapon Rack (42"x16")	5	4	13.4	53.6
M2 .50 Cal Weapon Rack (42"x16")	2	3	13.4	40.2
MK19 Weapon Rack (42"x16") MOD-3	3	2	13.4	26.8
MK19 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M240G Weapon Rack (42"x16")	2	3	13.4	40.2
M48 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M14 Rifle Rack (42"x16")	1	1	13.4	13.4
Sniper Rifle Rack (72"x12")	0	0	21	0
Shotgun Rack (42"x16")	1	1	13.4	13.4
Shotgun Rack, JSCS (42"x16")	0	0	13.4	0
Shotgun Rack (42"x16")	3	2	13.4	26.8
Subtotal:	**50**	**42**		**563**
BOXES				
SABER	0		20.1	0
Modular Universal, PAQ-3 (48"x36")	0		22	0
Designated Marksman Rifle Boxes	1		16.6	16.6
MK64 Mount (72"x36")	3		33	99
.50 CAL Sniper Rifle (64"x26")	0		24.9	0
SU-36P Dragon (48"x36")	0		22	0
Pistol Chest (52"x14")	0		15.9	0
Inbore Device	0		20	0
Subtotal:	**4**			**115.6**
CUSTODIANS & CIRCULATION				
Doorway/issue port area circulation/Hazmat storage	fixed			90
Custodian desks, computer terminal & workbench	1		105	105
Total NSF:				873 NSF
Net to Gross Factor (1.28)				1,118 GSF

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Based on the UFC 2-000-05N criteria, dated January 2005, the armory requirements for the 4th Marine Regiment are as follows:

Collateral Equipment	Numbers of Equipment	Numbers of Equipment Stacked	NSF of Equip/Aisle	NSF
Configurable Shelf (42"x16")	12	12	13.4	161
Universal Weapons Rack (42"x16")	6	6	13.4	80
M16A2 Rifle Weapon Rack (42"x16")	0	0	13.4	0
M16A4 Rifle Weapon Rack (42"x16")	15	8	13.4	107
MWS Carbine 5.56 (42"x16")	10	5	13.4	67
MK32 Grenade Lncher Rack (42"x16")	2	1	13.4	13
M249 SAW Weapon Rack (42"x16")	1	1	13.4	13
M2 .50 Cal Weapon Rack (42"x16")	2	3	13.4	40
MK19 Weapon Rack (42"x16") MOD-3	2	1	13.4	13
MK19 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M240G Weapon Rack (42"x16")	2	3	13.4	40
M48 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M14 Rifle Rack (42"x16")	0	0	13.4	0
Sniper Rifle Rack (72"x12")	0	0	21	0
Shotgun Rack (42"x16")	0	0	13.4	0
Shotgun Rack, JSCS (42"x16")	2	1	13.4	13
Shotgun Rack (42"x16")	8	4	13.4	54
Subtotal:	**62**	**45**		**603**
BOXES				
SABER	4		20.1	80.4
Modular Universal, PAQ-3 (48"x36")	0		22	0
Designated Marksman Rifle Boxes	0		16.6	0
MK64 Mount (72"x36")	4		33	132
.50 CAL Sniper Rifle (64"x26")	0		24.9	0
SU-36P Dragon (48"x36")	0		22	0
Pistol Chest (52"x14")	0		15.9	0
Inbore Device	0		20	0
Subtotal:	**8**			**212.4**
CUSTODIANS & CIRCULATION				
Doorway/issue port area circulation/Hazmat storage	fixed			90
Custodian desks, computer terminal & workbench	1		105	105
Total NSF:				1,010 NSF
Net to Gross Factor (1.28)				1,293 GSF

BFRL ITEM DETERMINATION SHEET
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DATE PREPARE 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Based on the UFC 2-000-05N criteria, dated January 2005, the armory requirements for the H&S Company are as follows:

Collateral Equipment	Numbers of Equipment	Numbers of Equipment Stacked	NSF of Equip/Aisle	NSF
Configurable Shelf (42"x16")	8	8	13.4	107
Universal Weapons Rack (42"x16")	6	6	13.4	80
M16A2 Rifle Weapon Rack (42"x16")	0	0	13.4	0
M16A4 Rifle Weapon Rack (42"x16")	9	5	13.4	67
MWS Carbine 5.56 (42"x16")	17	9	13.4	121
MK32 Grenade Lncher Rack (42"x16")	1	1	13.4	13
M249 SAW Weapon Rack (42"x16")	1	1	13.4	13
M2 .50 Cal Weapon Rack (42"x16")	1	1	13.4	13
MK19 Weapon Rack (42"x16") MOD-3	1	1	13.4	13
MK19 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M240G Weapon Rack (42"x16")	1	2	13.4	27
M48 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M14 Rifle Rack (42"x16")	0	0	13.4	0
Sniper Rifle Rack (72"x12")	1	1	21	21
Shotgun Rack (42"x16")	0	0	13.4	0
Shotgun Rack, JSCS (42"x16")	0	0	13.4	0
Shotgun Rack (42"x16")	0	0	13.4	0
Subtotal:	**46**	**35**		**477**
BOXES				
Javelin (48"x24")	0		18	0
PLDR	0		9.5	0
LRTI (AN/PAS-22)	1		13.4	13.4
MK64 Mount (72"x36")	2		33	66
.50 CAL Sniper Rifle (64"x26")	1		24.9	24.9
SABER	0		20.1	0
GLTD II	0		12.5	0
Subtotal:	**4**			**104.3**
CUSTODIANS & CIRCULATION				
Doorway/issue port area circulation/Hazmat storage	fixed			90
Custodian desks, computer terminal & workbench	2		105	210
Total NSF:				881 NSF
Net to Gross Factor (1.28)				1,128 GSF
Total Requirement for H&S Company:				**1,128 GSF**

BFRL ITEM DETERMINATION SHEET
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DATE PREPARED 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Based on the UFC 2-000-05N criteria, dated January 2005, the armory requirements for the Weapons Company are as follows:

Collateral Equipment	Numbers of Equipment	Numbers of Equipment Stacked	NSF of Equip/Aisle	NSF
Configurable Optics Rack (42"x16")	2	2	13.4	27
Configurable Optics Rack (42"x16")	11	11	13.4	147
Universal Weapons Rack (42"x16")	6	6	13.4	80
M16A2 Rifle Weapon Rack (42"x16")	0	0	13.4	0
M16A4 Rifle Weapon Rack (42"x16")	4	2	13.4	27
MWS Carbine 5.56 (42"x16")	11	6	13.4	80
MK32 Grenade Lncher Rack (42"x16")	1	1	13.4	13
M249 SAW Weapon Rack (42"x16")	3	2	13.4	27
M2 .50 Cal Weapon Rack (42"x16")	1	2	13.4	27
MK19 Weapon Rack (42"x16") MOD-3	2	1	13.4	13
MK19 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M240G Weapon Rack (42"x16")	1	2	13.4	27
M48 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M14 Rifle Rack (42"x16")	0	0	13.4	0
Sniper Rifle Rack (72"x12")	0	0	21	0
Shotgun Rack (42"x16")	0	0	13.4	0
Shotgun Rack, JSCS (42"x16")	0	0	13.4	0
Shotgun Rack (42"x16")	0	0	13.4	0
Subtotal:	**42**	**35**		**469**
BOXES				
Javelin (48"x24")	3		18	54
PLDR	0		9.5	0
LRTI (AN/PAS-22)	0		13.4	0
MK64 Mount (72"x36")	6		33	198
.50 CAL Sniper Rifle (64"x26")	0		24.9	0
SABER	8		20.1	160.8
GLTD II	0		12.5	0
Subtotal:	**17**			**412.8**
CUSTODIANS & CIRCULATION				
Doorway/issue port area circulation/Hazmat storage	fixed			90
Custodian desks, computer terminal & workbench	2		105	210
Total NSF:				1,182 NSF
Net to Gross Factor (1.28)				1,513 GSF
Total Requirement for Weapons Company:				**1,513 GSF**

BFRL ITEM DETERMINATION SHEET
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DATE PREPARED 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Based on the UFC 2-000-05N criteria, dated January 2005, the armory requirements for the Rifle Companies (3) are as follows:

Collateral Equipment	Numbers of Equipment	Numbers of Equipment Stacked	NSF of Equip/Aisle	NSF
Configurable Shelf (42"x16")	7	7	13.4	94
Universal Weapons Rack (42"x16")	4	4	13.4	54
M16A2 Rifle Weapon Rack (42"x16")	0	0	13.4	0
M16A4 Rifle Weapon Rack (42"x16")	10	5	13.4	67
MWS Carbine 5.56 (42"x16")	11	5	13.4	67
MK32 Grenade Lncher Rack (42"x16")	1	1	13.4	13
M249 SAW Weapon Rack (42"x16")	1	1	13.4	13
M2 .50 Cal Weapon Rack (42"x16")	0	0	13.4	0
MK19 Weapon Rack (42"x16") MOD-3	0	0	13.4	0
MK19 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M240G Weapon Rack (42"x16")	1	2	13.4	27
M48 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M14 Rifle Rack (42"x16")	0	0	13.4	0
Sniper Rifle Rack (72"x12")	0	0	21	0
Shotgun Rack (42"x16")	0	0	13.4	0
Shotgun Rack, JSCS (42"x16")	0	0	13.4	0
Shotgun Rack (42"x16")	0	0	13.4	0
Subtotal:	**35**	**25**		**335**
BOXES				
Javelin (48"x24")	0		18	0
PLDR	0		9.5	0
LRTI (AN/PAS-22)	0		13.4	0
MK64 Mount (72"x36")	0		33	0
.50 CAL Sniper Rifle (64"x26")	0		24.9	0
SABER	0		20.1	0
GLTD II	0		12.5	0
Subtotal:	**0**			**0**
CUSTODIANS & CIRCULATION				
Doorway/issue port area circulation/Hazmat storage	fixed			90
Custodian desks, computer terminal & workbench	2		105	210
Total NSF:				635 NSF
Net to Gross Factor (1.28)				813 GSF
Total Requirement for Rifle Companies (3):				**813 GSF**

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Based on the UFC 2-000-05N criteria, dated January 2005, the armory requirements for the Artillery Battery are as follows:

Collateral Equipment	Numbers of Equipment	Numbers of Equipment Stacked	NSF of Equip/Aisle	NSF
Configurable Optics Rack (42"x16")	1	1	13.4	13
Configurable Optics Rack (42"x16")	7	7	13.4	94
Universal Weapons Rack (42"x16")	2	2	13.4	27
M16A2 Rifle Weapon Rack (42"x16")	0	0	13.4	0
M16A4 Rifle Weapon Rack (42"x16")	12	6	13.4	80
MWS Carbine 5.56 (42"x16")	4	2	13.4	27
MK32 Grenade Lncher Rack (42"x16")	0	0	13.4	0
M249 SAW Weapon Rack (42"x16")	1	1	13.4	13
M2 .50 Cal Weapon Rack (42"x16")	1	1	13.4	13
MK19 Weapon Rack (42"x16") MOD-3	3	2	13.4	27
MK19 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M240G Weapon Rack (42"x16")	1	2	13.4	27
M48 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M14 Rifle Rack (42"x16")	0	0	13.4	0
Sniper Rifle Rack (72"x12")	0	0	21	0
Shotgun Rack (42"x16")	0	0	13.4	0
Shotgun Rack, JSCS (42"x16")	0	0	13.4	0
Shotgun Rack (42"x16")	0	0	13.4	0
Subtotal:	**32**	**24**		**322**
BOXES				
Designated Marksman Rifle Boxes	0		16.6	0
Pistol Chest (52"x14")	0		15.9	0
LRTI (AN/PAS-22)	1		13.4	13.4
MK64 Mount (72"x36")	2		33	66
.50 CAL Sniper Rifle (64"x26")	0		24.9	0
SABER	0		20.1	0
GLTD II	0		12.5	0
Subtotal:	**3**			**79.4**
CUSTODIANS & CIRCULATION				
Doorway/issue port area circulation/Hazmat storage	fixed			90
Custodian desks, computer terminal & workbench	2		105	210
Total NSF:				701 NSF
Net to Gross Factor (1.28)				**897** GSF

BFRL ITEM DETERMINATION SHEET
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NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Based on the UFC 2-000-05N criteria, dated January 2005, the armory requirements for the CEB/AAV PLTs are as follows:

Collateral Equipment	Numbers of Equipment	Numbers of Equipment Stacked	NSF of Equip/Aisle	NSF
Configurable Shelf (42"x16")	4	4	13.4	54
Universal Weapons Rack (42"x16")	5	5	13.4	67
M16A2 Rifle Weapon Rack (42"x16")	0	0	13.4	0
M16A4 Rifle Weapon Rack (42"x16")	1	1	13.4	13
MWS Carbine 5.56 (42"x16")	11	6	13.4	80
MK32 Grenade Lncher Rack (42"x16")	0	0	13.4	0
M249 SAW Weapon Rack (42"x16")	2	2	13.4	27
M2 .50 Cal Weapon Rack (42"x16")	0	0	13.4	0
MK19 Weapon Rack (42"x16") MOD-3	0	0	13.4	0
MK19 Weapon Rack (42"x16") UGWS	4	2	13.4	27
M240G Weapon Rack (42"x16")	2	3	13.4	40
M48 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M14 Rifle Rack (42"x16")	0	0	13.4	0
Sniper Rifle Rack (72"x12")	0	0	21	0
Shotgun Rack (42"x16")	0	0	13.4	0
Shotgun Rack, JSCS (42"x16")	0	0	13.4	0
Shotgun Rack (42"x16")	0	0	13.4	0
Subtotal:	**29**	**23**		**308**
BOXES				
Javelin (48"x24")	0		18	0
Modular Universal, PAQ-3 (48"x36")	0		22	0
Designated Marksman Rifle Boxes	0		16.6	0
MK64 Mount (72"x36")	0		33	0
.50 CAL Sniper Rifle (64"x26")	0		24.9	0
SU-36P Dragon (48"x36")	0		22	0
Pistol Chest (52"x14")	0		15.9	0
Inbore Device	0		20	0
Subtotal:	**0**			**0**
CUSTODIANS & CIRCULATION				
Doorway/issue port area circulation/Hazmat storage	fixed			90
Custodian desks, computer terminal & workbench	1		105	105
Total NSF:				503 NSF
Net to Gross Factor (1.28)				**644 GSF**

BFRL ITEM DETERMINATION SHEET
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NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Based on the UFC 2-000-05N criteria, dated January 2005, the armory requirements for the LAR PLT are as follows:

Collateral Equipment	Numbers of Equipment	Numbers of Equipment Stacked	NSF of Equip/Aisle	NSF
Configurable Optics Rack (42"x16")	1	1	13.4	13
Configurable Optics Rack (42"x16")	3	3	13.4	40
Universal Weapons Rack (42"x16")	3	3	13.4	40
M16A2 Rifle Weapon Rack (42"x16")	0	0	13.4	0
M16A4 Rifle Weapon Rack (42"x16")	0	0	13.4	0
MWS Carbine 5.56 (42"x16")	6	3	13.4	40
MK32 Grenade Lncher Rack (42"x16")	2	1	13.4	13
M249 SAW Weapon Rack (42"x16")	0	0	13.4	0
M2 .50 Cal Weapon Rack (42"x16")	0	0	13.4	0
MK19 Weapon Rack (42"x16") MOD-3	0	0	13.4	0
MK19 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M240G Weapon Rack (42"x16")	2	3	13.4	40
M48 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M14 Rifle Rack (42"x16")	0	0	13.4	0
Sniper Rifle Rack (72"x12")	1	1	21	21
Shotgun Rack (42"x16")	0	0	13.4	0
Shotgun Rack, JSCS (42"x16")	0	0	13.4	0
Shotgun Rack (42"x16")	0	0	13.4	0
Subtotal:	**18**	**15**		**209**
BOXES				
Designated Marksman Rifle Boxes	0		16.6	0
Pistol Chest (52"x14")	0		15.9	0
LRTI (AN/PAS-22)	1		13.4	13.4
MK64 Mount (72"x36")	0		33	0
.50 CAL Sniper Rifle (64"x26")	0		24.9	0
SABER	4		20.1	80.4
GLTD II	0		12.5	0
Subtotal:	**5**			**93.8**
CUSTODIANS & CIRCULATION				
Doorway/issue port area circulation/Hazmat storage	fixed			90
Custodian desks, computer terminal & workbench	2		105	210
Total NSF:				602 NSF
Net to Gross Factor (1.28)				**771** GSF

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARE 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Based on the UFC 2-000-05N criteria, dated January 2005, the armory requirements for 9th ESB armory maintained for the battalion by H&S Co, UIC M29101 (FY08 T/E) are as follows:

Collateral Equipment	Numbers of Equipment	Numbers of Equipment Stacked	NSF of Equip/Aisle	NSF
Configurable Shelf (42"x16")	28	28	13.4	376
Universal Weapons Rack (42"x16")	0	0	13.4	0
M16A2 Rifle Weapon Rack (42"x16")	0	0	13.4	0
M16A4 Rifle Weapon Rack (42"x16")	0	0	13.4	0
MWS Carbine 5.56 (42"x16")	0	0	13.4	0
MK32 Grenade Lncher Rack (42"x16")	0	0	13.4	0
M249 SAW Weapon Rack (42"x16")	5	3	13.4	67
M2 .50 Cal Weapon Rack (42"x16")	8	8	13.4	107.2
MK19 Weapon Rack (42"x16") MOD-3	11	11	13.4	147.4
MK19 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M240G Weapon Rack (42"x16")	7	7	13.4	94
M48 Weapon Rack (42"x16") UGWS	0	0	13.4	0
Tripod Custom Racks (72"x24:)	6	12	27	324
Sniper Rifle Rack (72"x12")	0	0	13.4	0
Shotgun Rack (42"x16")	0	0	21	0
Shotgun Rack, JSCS (42"x16")	0	0	13.4	0
Shotgun Rack (42"x16")	0	1	13.4	13.4
Subtotal:	**65**	**70**		**1,129**
BOXES				
SABER	0		20.1	0
Modular Universal, PAQ-3 (48"x36")	0		22	0
Designated Marksman Rifle Boxes	2		16.6	33.2
MK64 Mount (72"x36")	12		33	396
.50 CAL Sniper Rifle (64"x26")	0		24.9	0
SU-36P Dragon (48"x36")	0		22	0
Pistol Chest (52"x14")	0		15.9	0
Inbore Device	0		20	0
Subtotal:	**14**			**429.2**
CUSTODIANS & CIRCULATION				
Doorway/issue port area circulation/Hazmat storage	fixed			90
Custodian desks, computer terminal & workbench	1		105	105
Personal Weapons Storage (42"x16")	fixed		14.3	14.3
Pubs Locker (48"x24" Wall Locker)	1		10.5	10.5
Total NSF:				1,778 NSF
Net to Gross Factor (1.28)				2,276 GSF

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Based on the UFC 2-000-05N criteria, dated January 2005, the armory requirements for the CLB H&S Company are as follows:

Collateral Equipment	Numbers of Equipment	Numbers of Equipment Stacked	NSF of Equip/Aisle	NSF
Configurable Shelf (42"x16")	3	3	13.4	40
Universal Weapons Rack (42"x16")	2	2	13.4	27
M16A2 Rifle Weapon Rack (42"x16")	0	0	13.4	0
M16A4 Rifle Weapon Rack (42"x16")	7	4	13.4	54
MWS Carbine 5.56 (42"x16")	4	2	13.4	27
MK32 Grenade Lncher Rack (42"x16")	0	0	13.4	0
M249 SAW Weapon Rack (42"x16")	0	0	13.4	0
M2 .50 Cal Weapon Rack (42"x16")	0	0	13.4	0
MK19 Weapon Rack (42"x16") MOD-3	0	0	13.4	0
MK19 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M240G Weapon Rack (42"x16")	1	2	13.4	27
M48 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M14 Rifle Rack (42"x16")	0	0	13.4	0
Sniper Rifle Rack (72"x12")	0	0	21	0
Shotgun Rack (42"x16")	0	0	13.4	0
Shotgun Rack, JSCS (42"x16")	0	0	13.4	0
Shotgun Rack (42"x16")	0	0	13.4	0
Subtotal:	**17**	**13**		**174**
BOXES				
Javelin (48"x24")	0		18	0
PLDR	0		9.5	0
LRTI (AN/PAS-22)	0		13.4	0
MK64 Mount (72"x36")	0		33	0
.50 CAL Sniper Rifle (64"x26")	0		24.9	0
SABER	0		20.1	0
GLTD II	0		12.5	0
Subtotal:	**0**			**0**
CUSTODIANS & CIRCULATION				
Doorway/issue port area circulation/Hazmat storage	fixed			90
Custodian desks, computer terminal & workbench	2		105	210
Total NSF:				474 NSF
Net to Gross Factor (1.28)				607 GSF
Total Requirement for H&S Company:				**607 GSF**

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARE 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Based on the UFC 2-000-05N criteria, dated January 2005, the armory requirements for the CLB Engineering Services Company are as follows:

Collateral Equipment	Numbers of Equipment	Numbers of Equipment Stacked	NSF of Equip/Aisle	NSF
Configurable Shelf (42"x16")	4	4	13.4	54
Universal Weapons Rack (42"x16")	0	0	13.4	0
M16A2 Rifle Weapon Rack (42"x16")	0	0	13.4	0
M16A4 Rifle Weapon Rack (42"x16")	12	6	13.4	80
MWS Carbine 5.56 (42"x16")	3	1	13.4	13
MK32 Grenade Lncher Rack (42"x16")	0	0	13.4	0
M249 SAW Weapon Rack (42"x16")	0	0	13.4	0
M2 .50 Cal Weapon Rack (42"x16")	0	0	13.4	0
MK19 Weapon Rack (42"x16") MOD-3	1	1	13.4	13
MK19 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M240G Weapon Rack (42"x16")	0	0	13.4	0
M48 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M14 Rifle Rack (42"x16")	0	0	13.4	0
Sniper Rifle Rack (72"x12")	0	0	13.4	0
Shotgun Rack (42"x16")	0	0	21	0
Shotgun Rack, JSCS (42"x16")	0	0	13.4	0
Shotgun Rack (42"x16")	0	0	13.4	0
Subtotal:	**20**	**12**		**161**
BOXES				
Javelin (48"x24")	0		18	0
PLDR	0		9.5	0
LRTI (AN/PAS-22)	0		13.4	0
MK64 Mount (72"x36")	0		33	0
.50 CAL Sniper Rifle (64"x26")	0		24.9	0
SABER	0		20.1	0
GLTD II	0		12.5	0
Subtotal:	**0**			**0**
CUSTODIANS & CIRCULATION				
Doorway/issue port area circulation/Hazmat storage	fixed			90
Custodian desks, computer terminal & workbench	2		105	210
Total NSF:				461 NSF
Net to Gross Factor (1.28)				590 GSF
Total Requirement for Engineering Services Company:				**590 GSF**

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Based on the UFC 2-000-05N criteria, dated January 2005, the armory requirements for the CLB Transportation Services Company are as follows:

Collateral Equipment	Numbers of Equipment	Numbers of Equipment Stacked	NSF of Equip/Aisle	NSF
Configurable Optics Rack (42"x16")	6	6	13.4	80
Configurable Optics Rack (42"x16")	13	13	13.4	174
Universal Weapons Rack (42"x16")	3	3	13.4	40
M16A2 Rifle Weapon Rack (42"x16")	0	0	13.4	0
M16A4 Rifle Weapon Rack (42"x16")	22	11	13.4	147
MWS Carbine 5.56 (42"x16")	3	2	13.4	27
MK32 Grenade Lncher Rack (42"x16")	3	2	13.4	27
M249 SAW Weapon Rack (42"x16")	0	0	13.4	0
M2 .50 Cal Weapon Rack (42"x16")	6	12	13.4	161
MK19 Weapon Rack (42"x16") MOD-3	7	4	13.4	54
MK19 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M240G Weapon Rack (42"x16")	3	4	13.4	54
M48 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M14 Rifle Rack (42"x16")	0	0	13.4	0
Sniper Rifle Rack (72"x12")	0	0	21	0
Shotgun Rack (42"x16")	0	0	13.4	0
Shotgun Rack, JSCS (42"x16")	0	0	13.4	0
Shotgun Rack (42"x16")	0	0	13.4	0
Subtotal:	**66**	**57**		**764**
BOXES				
Javelin (48"x24")	0		18	0
PLDR	0		9.5	0
LRTI (AN/PAS-22)	0		13.4	0
MK64 Mount (72"x36")	8		33	264
.50 CAL Sniper Rifle (64"x26")	0		24.9	0
SABER	0		20.1	0
GLTD II	0		12.5	0
Subtotal:	**8**			**264**
CUSTODIANS & CIRCULATION				
Doorway/issue port area circulation/Hazmat storage	fixed			90
Custodian desks, computer terminal & workbench	2		105	210
Total NSF:				1,328 NSF
Net to Gross Factor (1.28)				1,700 GSF
Total Requirement for Transportation Services Company:				**1,700 GSF**

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARE 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Based on the UFC 2-000-05N criteria, dated January 2005, the armory requirements for the CLB Maintenance Services Company are as follows:

Collateral Equipment	Numbers of Equipment	Numbers of Equipment Stacked	NSF of Equip/Aisle	NSF
Configurable Shelf (42"x16")	4	4	13.4	54
Universal Weapons Rack (42"x16")	1	1	13.4	13
M16A2 Rifle Weapon Rack (42"x16")	0	0	13.4	0
M16A4 Rifle Weapon Rack (42"x16")	9	5	13.4	67
MWS Carbine 5.56 (42"x16")	2	1	13.4	13
MK32 Grenade Lncher Rack (42"x16")	0	0	13.4	0
M249 SAW Weapon Rack (42"x16")	0	0	13.4	0
M2 .50 Cal Weapon Rack (42"x16")	0	0	13.4	0
MK19 Weapon Rack (42"x16") MOD-3	0	0	13.4	0
MK19 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M240G Weapon Rack (42"x16")	1	1	13.4	13
M48 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M14 Rifle Rack (42"x16")	0	0	13.4	0
Sniper Rifle Rack (72"x12")	0	0	21	0
Shotgun Rack (42"x16")	0	0	13.4	0
Shotgun Rack, JSCS (42"x16")	0	0	13.4	0
Shotgun Rack (42"x16")	0	0	13.4	0
Subtotal:	**17**	**12**		**161**
BOXES				
Javelin (48"x24")	0		18	0
PLDR	0		9.5	0
LRTI (AN/PAS-22)	0		13.4	0
MK64 Mount (72"x36")	1		33	33
.50 CAL Sniper Rifle (64"x26")	0		24.9	0
SABER	0		20.1	0
GLTD II	0		12.5	0
Subtotal:	**1**			**33**
CUSTODIANS & CIRCULATION				
Doorway/issue port area circulation/Hazmat storage	fixed			90
Custodian desks, computer terminal & workbench	2		105	210
Total NSF:				494 NSF
Net to Gross Factor (1.28)				632 GSF
Total Requirement for Maintenance Services Company:				**632 GSF**

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ARMORY	143-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Based on the UFC 2-000-05N criteria, dated January 2005, the armory requirements for the MCB Guam are as follows:

Collateral Equipment	Numbers of Equipment	Numbers of Equipment Stacked	NSF of Equip/Aisle	NSF
Configurable Optics Rack (42"x16")	4	4	13.4	53.6
Configurable Optics Rack (42"x16")	11	11	13.4	147.4
Universal Weapons Rack (42"x16")	3	3	13.4	40.2
M16A2 Rifle Weapon Rack (42"x16")	0	0	13.4	0
M16A4 Rifle Weapon Rack (42"x16")	11	6	13.4	80.4
MWS Carbine 5.56 (42"x16")	2	1	13.4	13.4
MK32 Grenade Lncher Rack (42"x16")	2	1	13.4	13.4
M249 SAW Weapon Rack (42"x16")	5	4	13.4	53.6
M2 .50 Cal Weapon Rack (42"x16")	2	3	13.4	40.2
MK19 Weapon Rack (42"x16") MOD-3	3	2	13.4	26.8
MK19 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M240G Weapon Rack (42"x16")	2	3	13.4	40.2
M48 Weapon Rack (42"x16") UGWS	0	0	13.4	0
M14 Rifle Rack (42"x16")	1	1	13.4	13.4
Sniper Rifle Rack (72"x12")	0	0	21	0
Shotgun Rack (42"x16")	1	1	13.4	13.4
Shotgun Rack, JSCS (42"x16")	0	0	13.4	0
Shotgun Rack (42"x16")	3	2	13.4	26.8
Subtotal:	**50**	**42**		**563**
BOXES				
SABER	0		20.1	0
Modular Universal, PAQ-3 (48"x36")	0		22	0
Designated Marksman Rifle Boxes	1		16.6	16.6
MK64 Mount (72"x36")	3		33	99
.50 CAL Sniper Rifle (64"x26")	0		24.9	0
SU-36P Dragon (48"x36")	0		22	0
Pistol Chest (52"x14")	0		15.9	0
Inbore Device	0		20	0
Subtotal:	**4**			**115.6**
CUSTODIANS & CIRCULATION				
Doorway/issue port area circulation/Hazmat storage	fixed			90
Custodian desks, computer terminal & workbench	1		105	105
Total NSF:				873 NSF
Net to Gross Factor (1.28)				1,118 GSF

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Law Enf Bn Co	Law Enf Bn Company

Armory

Company Headquarters, Law Enforcement Bn

Kennel, LE Bn

Open Storage Area, Law Enforcement Bn

Organizational Vehicle Parking, Law Enforcement Bn

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
COMPANY HEADQUARTERS	610-73	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of a Company/Battery Headquarters, Marine Corps, is for a Fleet Marine Force (FMF) facility and is intended for those FMF units of company or battery size which require separate administrative facilities.

Requirements are shown below with backup following.

Law Enforcement Bn	8,697 GSF
Total Requirement:	**8,697** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
8,697 SF (808 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
KENNEL	730-76	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

This category code is for Military Working Dog (MWD) kennels and quarantine facilities operated by the security department. Based on interviews with security personnel on Okinawa, the military Working Dog (MWD) kennels for the USMC Guam is projected to be required to accommodate five dogs trained for explosives and five dogs trained for drugs, for a total of ten MWDs. Personnel will include one Kennel Master, one Assistant Kennel Master, one trainer and ten MWD handlers, for a total of 13 personnel. Based upon these numbers, the space requirements are as shown below:

LE Bn	MWD Kennels	5,560	GSF
	Total Space Requirement (Kennels):	**5,560**	**GSF**
	MWD Outdoor Spaces	**23,500**	**GSF**

See attached sheets for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE

5,560 SF (517 m2) (Kennels)
23,500 SF (2184 m2) (Outdoor Space)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OPEN STORAGE AREA	451-10	SY

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

An Open Storage Area consists of non-covered storage, paved or otherwise established, for storage of General Supply Materials.

Requirements for the 4th Marine Regiment were based on the number of Quadcons/Palcons on-hand, stacked two and three high respectively, with the additional space to accommodate load outs. Requirements are based on the FY16 Unit TO&E Report.

An estimation of material requirements, likely lay-down scenario (i.e., how material is stowed on area) and material handling equipment access is also acceptable as a means of determining square foot (SF) requirements via a space analysis.

Unit	**Total SF**	
Law Enforcement Bn	187	SY
SAY	**190**	**SY**

TOTAL REQUIREMENT FOR CATEGORY CODE
190 SY (159 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 16-Feb-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIZATIONAL VEHICLE PARKING	852-10	SY

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organizational vehicle parking includes the paved and/or stabilized area within an organizational motor pool and parking lot, including space required for entrance and exit roads and aisles within the lot, will not exceed the following:

According to the UFC 2-000-05N, dated Jan 2005, Marine Corps installations with FMF Ground Units assigned allow 75 square yards for each vehicle to be accommodated. The 75 SY will be reduced to 50 SY per vehicle if more than 50% of the vehicles to be accommodated have an overall length of 18 feet or less and a width of 6 1/2 feet or less (such as administrative-type vehicles).

Unit/Department Name	Vehicles		Amount			Requirement	
Law Enforcement Bn	45	x	75	SY	=	3,375	SY
				Total		3,375	SY

TOTAL REQUIREMENT FOR CATEGORY CODE
3,375 SY (2822 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
4th Marines Reg HQ	4th Marines Reg HQ

Regimental/Group HQ, H&S Company, 4th Marines

Academic Instruction Building, Academic Classroom, 4th Marine Regiment

Garrison Aid Station, MARCOR, 4th Marines Regiment

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
REGIMENTAL/GROUP HQ	610-71	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of a Regimental Headquarters, Marine Corps, is to provide the necessary administrative space to conduct day-to-day operations of a Marine Regimental HQ.

Requirements are shown below with backup following.

H&S Company, 4th Marine Regiment	14,510 GSF
Total Requirement:	**14,510** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
14,510 SF (1349 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ACADEMIC INSTRUCTION BUILDING	171-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A general academic classroom is one which supports approved training programs and provides accommodations for classroom lecture instruction, using standard chairs with fixed tablet arms or a similar seating configuration providing the student a writing surface and book depository. The individual general academic classroom sizes in net square feet (i.e., within the interior walls of the room), as dictated by the required number of seats, shall not exceed the figures given in Table 17110-1.

Per the UFC, in cases where the training building is composed entirely of general academic classrooms, use the broad planning factor of 45 gross SF per student station for the entire building. Every attempt must be made, however, to minimize the number of such single subject or “dedicated” classrooms, especially in those cases where their use would be relatively infrequent.

In the spirit of this guidance and per the intent of the UFC, a Regimental Audio/Visual Training Center will be provided with shared classrooms for all Infantry Battalions at the Regimental level. This is due to the requirement for such classroom space on an infrequent basis.

Two 50 PN classrooms = 45 GSF x 100 PN = 4,500 SF
Computer Resource Center x 30 stations (45 SF EA) = 1,350 SF
Internet Café (Student Break Area) = (50 PN x 8 SF) = 400 SF
Training Aid Storage = 100 PN x 1.5 SF/PN = 150 GSF

Academic Classroom, 4th Marine Regiment	6,400 GSF
Total Requirement:	**6,400 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
6,400 SF (595 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
GARRISON AID STATION, MARCOR	610-74	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

An Aid Station provides medical care at the local level for Marine Corps and generally will be co-located with the Battlaion and Regimental HQ facilities. This support includes in-garrison sick-call and outpatient treatment. The functions performed in this facility are both administrative and clinical in nature which requires space for the medical personnel to work and space for medical file storage. Facilities at an Aid Station also include examination and treatment rooms, AMAL/ADAL (Authorized Medical Allowance List / Authorized Dental Allowance List) storage, offices for the Medical Officers and workstations for the corpsmen at the Station.

UFC 2-000-05N, dated Oct 2005, provides criteria for Aid Stations based upon number of medical staff and number of patients to be treated. The following requirement has been established based upon general operational characteristics of an Aid Station. A more detailed breakdown of the requirement is contained on the following page.

Total Requirement: (4th Marines Regiment) **2,415 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
2,415 SF (225 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

GROUND COMBAT ELEMENT

(GCE)

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
4th Marines Reg Fac	4th Marines Reg Facilities

Organic Unit Storage, 4th Marine Regiment

Electronic/Comm Maint Shop, 4th Marine Regiment

Organizational Vehicle Parking, 4th Marine Regiment

Construction Weight Handling Equipment Shop, H&S Company, 4th Marine Regiment

Operational Haz/Flam Storage, 4th Marine Regiment

Grease Rack, 4th Marine Regiment Consolidated

Vehicle Wash Platform, 4th Marine Regiment Consolidated

Auto Organization Shop, H&S Company, 4th Marine Regiment

Open Storage Area, 4th Marine Regiment

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIC UNIT STORAGE	441-12	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organic Unit Storage includes general purpose storage facilities assigned to Marine Corps bases, air installations and Fleet Marine Force (FMF) units for organic requirements to include Division/Wing, Battalion/Group and Company/Squadron storage areas, special service storerooms, base shipping and receiving functions and any other organic storage requirements.

According to the UFC 2-000-05N, dated October 2005, BFR requirements may be calculated using the analytical/4-step method.

There are four steps required for determining storage space requirements by this method. This method is thought to be the preferred and most practical for use in planning up to and including the activity 1391 level or as needed to feed strategic planning.

Unit		**Total SF**	
4th Marine Regiment		14,520	GSF
	SAY	**14,520**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
14,520 SF (1349 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ELECTRONIC/COMM MAINT SHOP	217-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Electronics maintenance shops at Naval and Marine Corps activities provide facilities for maintenance and repair of non-airborne equipment.

It contains office and support spaces for the Equipment Maintenance Officer (EMO) and the EMO Staff, equipment maintenance and training areas, and a small storage area for parts and supplies directly under the control of the EMO.

According to UFC 2-000-05N, dated January 2005, states that no specific planning criteria are provided. An engineering evaluation can be conducted to determine the office space and support area requirements using guidance contained within the Category Code series 131 Introductory section. For storage area, an engineering evaluation can be used to determine the volume of material required to be stored. Requirements are based on FY16 HQTRS CO 4TH MAR REGT 3D MARDIV TO&E Report.

Unit	**Total SF**	
4th Marine Regiment	10,141	GSF
Total Requirement:	**10,141**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
10,141 SF (943 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 16-Feb-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIZATIONAL VEHICLE PARKING	852-10	SY

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organizational vehicle parking includes the paved and/or stabilized area within an organizational motor pool and parking lot, including space required for entrance and exit roads and aisles within the lot, will not exceed the following:

According to the UFC 2-000-05N, dated Jan 2005, Marine Corps installations with FMF Ground Units assigned allow 75 square yards for each vehicle to be accommodated. The 75 SY will be reduced to 50 SY per vehicle if more than 50% of the vehicles to be accommodated have an overall length of 18 feet or less and a width of 6 1/2 feet or less (such as administrative-type vehicles).

Unit/Department Name	Vehicles		Amount			Requirement	
4th Marines Regiment	74	x	75	SY	=	5,550	SY
				Total		5,550	SY

TOTAL REQUIREMENT FOR CATEGORY CODE
5,550 SY (4641 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
CONSTRUCTION WEIGHT HANDLING EQUIPMENT SHOP	218-20	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

maintenance on items of organizational equipment. Per UFC 2-000-05N CCN 218-20, requirements for the Utility Shop are based on the space factors contained in Category Code 214 20, Automotive Vehicle Maintenance Shop.

H&S Company, 4th Marine Regiment	3,000 GSF
Total Requirement:	**3,000** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
3,000 SF (279 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OPERATIONAL HAZ/FLAM STORAGE	143-78	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

This category code will be used to provide a facility for the storage of materials used in daily operations that require special environmental separation. These materials such as paint, acetone, oil, etc. are considered to be hazardous and/or flammable.

According to the UFC 2-000-05N, revised Oct 2006, an engineering field analysis will be required to determine the warehouse space based on quantity of materials stored. Racks or shelves will be used to reduce footprint. Some materials may require separation and must be divided by berms or firewalls and this separation space should be added to calculations. These facilities may require some environmental controls and ventilation. If quantity is palletized, allow for forklifts in aisle ways or access through overhead doors.

4th Marine Regiment	368 GSF
Total Requirement:	**368 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
368 SF (35 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
GREASE RACK	214-56	EA

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Grease racks are required in support of III MEF units.

UFC 2-000-05N, dated 31 January 2005, allows one grease rack (two vehicles) per 125 vehicles.

Unit	Organizational Vehicles	Other Vehicles	Total Vehicles		Vehicles/ Rack		Grease Racks	
4th Marines Regiment - Consolidated	279		279	/	125	=	2.23	EA
	Total Requirement:						**3.00**	**EA**
					SAY		**3**	**EA**

TOTAL REQUIREMENT FOR CATEGORY CODE
3 EA

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
VEHICLE WASH PLATFORM	214-55	EA

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Vehicle wash facilities, including oil/water separators, are required in support of III MEF units.

UFC 2-000-05N, dated 31 January 2005, allows one wash platform per 50 vehicles assigned to the motor pool.

Unit	Organizational Vehicles	Other Vehicles	Total Vehicles		Vehicles/ Wash Space		Wash Racks	
4th Marines Regiment - Consolidated	279		279	/	50	=	5.58	
	Total Requirement						**5.58**	**EA**
					SAY		**6**	**EA**

Total Requirement:

TOTAL REQUIREMENT FOR CATEGORY CODE
6 EA

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AUTO ORGANIZATIONAL SHOP	214-51	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of an Automotive Organizational Shop provides work areas for Fleet Marine Force (FMF) units to perform maintenance on items of organizational equipment. The shop space includes administrative and dispatching areas as well as storage for OEM equipment, tools, and parts.

H&S Company, 4th Marine Regiment	3,668 GSF
Total Requirement:	**3,668** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
3,668 SF (341 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OPEN STORAGE AREA	451-10	SY

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

An Open Storage Area consists of non-covered storage, paved or otherwise established, for storage of General Supply Materials.

Requirements for the 4th Marine Regiment were based on the number of Quadcons/Palcons on-hand, stacked two and three high respectively, with the additional space to accommodate load outs. Requirements are based on the FY16 Unit TO&E Report.

An estimation of material requirements, likely lay-down scenario (i.e., how material is stowed on area) and material handling equipment access is also acceptable as a means of determining square foot (SF) requirements via a space analysis.

Unit	**Total SF**	
4th Marine Regiment	844	SY
SAY	**850**	**SY**

TOTAL REQUIREMENT FOR CATEGORY CODE
850 SY (711 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
GCE - Inf Bn HQ #1	GCE - Inf Bn HQ #1

Battalion Headquarters, Infantry Bn - H&S

Garrison Aid Station, MARCOR, Two Infantry Battalions

Academic Instruction Building, (2) Infantry Bns

Company Headquarters, 2 Infantry Bn(s) - Company HQs

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
BATTALION HEADQUARTERS	610-72	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

UFC 2-000-05N, revised 31 Jan 2005, states that in the absence of detailed data or when close approximation to precise requirements is not considered necessary, the gross floor area should be computed based on 162.5 square feet per building occupant. Requirements are based on FY16 3/5 1ST MARDIV TO&E Report.

Infantry BN - H&S

Battalion HQ	
Battalion Commander	1 PN
Executive Officer	1 PN
Sgt Major	1 PN
Messenger/Driver	2 PN
S-1 Adjutant Section	
S-1/Adjutant	1 PN
Admin Chief	1 PN
Admin Clerk	5 PN
Career Planner	1 PN
S-2 Section	
S-2 Intel Officer	1 PN
Assistant Intel Officer	1 PN
Intel Chief/Specialists	6 PN
S-3 Section	
S-3 Officer	1 PN
Assistant S-3 Officers	4 PN
Liaison Officer	1 PN
Marine Gunner	1 PN
INF OPNS Chief/Assn	2 PN
CBRN	3 PN
S-4 Section	
S-4 Officer	1 PN
Embark/Ammo/Log/Maint Chief	6 PN
Chaplain/Rel Program Specialist	2 PN
TOTAL PN:	42 PN

Administrative Office: 162.5 SF x 42 PN 6,825 GSF

Special Purpose or Other Space Requirements:
Per UFC 2-000-05N, special purpose spaces such as conference rooms, storage, mail rooms, reception areas, and telecommunications closets are included in the gross square foot computation. Space requirements for classrooms are included under CCN 171-10 under a separate BFR.

Total Requirement 6,825 GSF

Requirement for two Infantry Bns **13,650 GSF**

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
GARRISON AID STATION, MARCOR	610-74	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

An Aid Station provides medical care at the local level for Marine Corps and generally will be co-located with the Battlaion and Regimental HQ facilities. This support includes in-garrison sick-call and outpatient treatment. The functions performed in this facility are both administrative and clinical in nature which requires space for the medical personnel to work and space for medical file storage. Facilities at an Aid Station also include examination and treatment rooms, AMAL/ADAL (Authorized Medical Allowance List / Authorized Dental Allowance List) storage, offices for the Medical Officers and workstations for the corpsmen at the Station.

UFC 2-000-05N, dated Oct 2005, provides criteria for Aid Stations based upon number of medical staff and number of patients to be treated. The following requirement has been established based upon general operational characteristics of an Aid Station. A more detailed breakdown of the requirement is contained on the following page.

Total Requirement: (Two Infantry Battalions) **4,830 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
4,830 SF (449 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ACADEMIC INSTRUCTION BUILDING	171-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A general academic classroom is one which supports approved training programs and provides accommodations for classroom lecture instruction, using standard chairs with fixed tablet arms or a similar seating configuration providing the student a writing surface and book depository. The individual general academic classroom sizes in net square feet (i.e., within the interior walls of the room), as dictated by the required number of seats, shall not exceed the figures given in Table 17110-1.

Per the UFC, in cases where the training building is composed entirely of general academic classrooms, use the broad planning factor of 45 gross SF per student station for the entire building. Every attempt must be made, however, to minimize the number of such single subject or “dedicated” classrooms, especially in those cases where their use would be relatively infrequent.

In the spirit of this guidance and per the intent of the UFC, a Regimental Audio/Visual Training Center will be provided with shared classrooms for each Infantry Battalion.

Two 50 PN classrooms = 45 GSF x 100 PN = 4,500 SF
Computer Resource Center x 30 stations (45 SF EA) = 1,350 SF
Internet Café (Student Break Area) = (50 PN x 8 SF) = 400 SF
Training Aid Storage = 100 PN x 1.5 SF/PN = 150 GSF

Academic Classroom, Infantry Bn	6,400 GSF
Total Requirement (2) Infantry Bns:	**12,800 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
12,800 SF (1190 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
COMPANY HEADQUARTERS	610-73	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of a Company/Battery Headquarters, Marine Corps, is for a Fleet Marine Force (FMF) facility and is intended for those FMF units of company or battery size which require separate administrative facilities.

Requirements are shown below with backup following.

2 Infantry Bn(s) - Company HQs	20,061 GSF
Total Requirement:	**20,061** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
20,061 SF (1864 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
GCE - Inf Bn 1 Facilities	GCE - Inf Bn#1 Facilities

Organic Unit Storage, 2 Infantry Battalion(s)

Electronic/Comm Maint Shop, 2 Infantry Battalion(s)

Auto Organization Shop, H&S Company, 2 Infantry Battalion(s)

Organizational Vehicle Parking, 2 Infantry Battalion(s)

Open Storage Area, 2 Infantry Battalion(s)

Operational Haz/Flam Storage, 2 Infantry Battalion(s)

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIC UNIT STORAGE	441-12	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organic Unit Storage includes general purpose storage facilities assigned to Marine Corps bases, air installations and Fleet Marine Force (FMF) units for organic requirements to include Division/Wing, Battalion/Group and Company/Squadron storage areas, special service storerooms, base shipping and receiving functions and any other organic storage requirements.

According to the UFC 2-000-05N, dated October 2005, BFR requirements may be calculated using the analytical/4-step method.

There are four steps required for determining storage space requirements by this method. This method is thought to be the preferred and most practical for use in planning up to and including the activity 1391 level or as needed to feed strategic planning.

Unit		**Total SF**	
2 Infantry Battalion(s)		31,210	GSF
	SAY	**31,210**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
31,210 SF (2900 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ELECTRONIC/COMM MAINT SHOP	217-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Electronics maintenance shops at Naval and Marine Corps activities provide facilities for maintenance and repair of non-airborne equipment.

It contains office and support spaces for the Equipment Maintenance Officer (EMO) and the EMO Staff, equipment maintenance and training areas, and a small storage area for parts and supplies directly under the control of the EMO.

According to UFC 2-000-05N, dated January 2005, states that no specific planning criteria are provided. An engineering evaluation can be conducted to determine the office space and support area requirements using guidance contained within the Category Code series 131 Introductory section. For storage area, an engineering evaluation can be used to determine the volume of material required to be stored. Requirements are based on FY 16 3/5 1ST MARDIV TO&E Report.

Unit	**Total SF**	
2 Infantry Battalion(s)	15,110	GSF
Total Requirement:	**15,110**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
15,110 SF (1404 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AUTO ORGANIZATIONAL SHOP	214-51	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of an Automotive Organizational Shop provides work areas for Fleet Marine Force (FMF) units to perform maintenance on items of organizational equipment. The shop space includes administrative and dispatching areas as well as storage for OEM equipment, tools, and parts.

Requirements are shown below with backup following.

2 Infantry Battalion(s)	6,000 GSF
Total Requirement:	**6,000** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
6,000 SF (558 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AUTO ORGANIZATIONAL SHOP	214-51	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Automotive organizational shop is required in support of theInfantry Battalion(s). The vehicle maintenance shop performs first and limited second echelon maintenance on all organic motor transport equipment vehicles. Requirements are based on FY16 3/5 1ST MARDIV TO&E Report.

Equip Code	Pieces	Productive Space Factor	Repair Bay Requirements
0061-0099	0	0.063	0.000
0102-0299	4	0.015	0.060
0300-0700	61	0.023	1.403
0800	7	0.016	0.112
1000		0.02	0.000
2000		0.016	0.000
3000		0.025	0.000
4000		0.02	0.000
5000		0.016	0.000
7000		0.03	0.000
8000		0.092	0.000
Total:			1.575
Total repair bay requirements:	72		**2**

Table 21420-4

No. (Column 1)	SF (Column 2)	Administrative and Indirect Support Area (SF) (Column 3)	Direct Support Area (SF) (Column 4)	Total Gross Space Allowance (SF) (Columnn 5)
2	960	600	1,440	3,000
4	1,920	1,500	2,720	6,140
6	2,880	1,950	3,480	8,310
8	3,840	2,400	4,230	10,470
10	4,800	3,100	4,270	12,170
12	5,760	3,800	5,210	14,770
14	6,720	4,200	6,000	16,920
16	7,680	4,700	6,070	18,450
18	8,640	5,100	6,080	19,820
20	9,600	5,500	6,170	21,270
22	10,560	5,900	6,210	22,670
24	11,520	6,300	6,250	24,070
26	12,480	6,850	6,290	25,620

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AUTO ORGANIZATIONAL SHOP	214-51	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Summary

Repair Bays	SF		Admin and Indirect Support Area		Direct Support Area		Total Gross Space Allowance
2	960	+	600	+	1,440	=	3,000 GSF

Total Requirement: **3,000 GSF**

Requirement for two Infantry Battalions: **6,000 GSF**

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIZATIONAL VEHICLE PARKING	852-10	SY

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organizational vehicle parking includes the paved and/or stabilized area within an organizational motor pool and parking lot, including space required for entrance and exit roads and aisles within the lot, will not exceed the following:

According to the UFC 2-000-05N, dated Jan 2005, Marine Corps installations with FMF Ground Units assigned allow 75 square yards for each vehicle to be accommodated. The 75 SY will be reduced to 50 SY per vehicle if more than 50% of the vehicles to be accommodated have an overall length of 18 feet or less and a width of 6 1/2 feet or less (such as administrative-type vehicles). Requirements are based on FY16 3/5 1ST MARDIV TO&E Report.

Unit/Department Name	Vehicles		Amount			Requirement	
Infantry Battalion(s)	72	x	75	SY	=	5,400	SY
				Total		5,400	SY
Total Requirement for two Infantry Bns:						10,800	SY

TOTAL REQUIREMENT FOR CATEGORY CODE
10,800 SY (9031 m2)

MOBILIZATION STATEMENT

SIGNATURE: _____

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE: _____

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OPEN STORAGE AREA	451-10	SY

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

An Open Storage Area consists of non-covered storage, paved or otherwise established, for storage of General Supply Materials.

Requirements for the Infantry Battalion(s) was based on the number of Quadcons/Palcons on-hand, stacked two and three high respectively, with the additional space to accommodate load outs. Requirements are based on the FY16 Unit TO&E Report.

An estimation of material requirements, likely lay-down scenario (i.e., how material is stowed on area) and material handling equipment access is also acceptable as a means of determining square foot (SF) requirements via a space analysis.

Unit	Total SF	
2 Infantry Battalion(s)	4,702	SY
SAY	**4,710**	**SY**

TOTAL REQUIREMENT FOR CATEGORY CODE
4,710 SY (3939 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OPERATIONAL HAZ/FLAM STORAGE	143-78	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

This category code will be used to provide a facility for the storage of materials used in daily operations that require special environmental separation. These materials such as paint, acetone, oil, etc. are considered to be hazardous and/or flammable.

According to the UFC 2-000-05N, revised Oct 2006, an engineering field analysis will be required to determine the warehouse space based on quantity of materials stored. Racks or shelves will be used to reduce footprint. Some materials may require separation and must be divided by berms or firewalls and this separation space should be added to calculations. These facilities may require some environmental controls and ventilation. If quantity is palletized, allow for forklifts in aisle ways or access through overhead doors.

2 Infantry Battalion(s)	614 GSF
Total Requirement:	**614 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
614 SF (58 m2)

MOBILIZATION STATEMENT

SIGNATURE: _____

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE: _____

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Artillery Battery	Artillery Battery

Battery Headquarters, Artillery Battery

Heavy Gun Shop, Artillery Battery

Organic Unit Storage, Artillery Battery

Auto Organization Shop, Artillery Battery

Electronic/Comm Maint Shop, Artillery Battery

Operational Haz/Flam Storage, Artillery Battery

Organizational Vehicle Parking, Artillery Battery

Controlled Humidity Warehouse, Artillery Battery

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
BATTERY HEADQUARTERS	610-73	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of a Company/Battery Headquarters, Marine Corps, is for a Fleet Marine Force (FMF) facility and is intended for those FMF units of company or battery size which require separate administrative facilities.

Requirements are shown below with backup following.

Artillery Battery	5,370 GSF
Total Requirement:	**5,370** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
5,370 SF (499 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
HEAVY GUN SHOP	215-30	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The Artillery Battery requires a gun shop for 1st and 2nd echelon maintenance of howitzers. Space requirements are based on the size of equipment to be maintained, SL-3 gear, and any administrative space.

Unit	Total SF	
Artillery Battery	2,860	SF

TOTAL REQUIREMENT FOR CATEGORY CODE
2,860 SF (266 m2)

MOBILIZATION STATEMENT

SIGNATURE: _____

CO REVIEW ACTION

EVALUATION

SIGNATURE: _____

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIC UNIT STORAGE	441-12	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organic Unit Storage includes general purpose storage facilities assigned to Marine Corps bases, air installations and Fleet Marine Force (FMF) units for organic requirements to include Division/Wing, Battalion/Group and Company/Squadron storage areas, special service storerooms, base shipping and receiving functions and any other organic storage requirements.

According to the UFC 2-000-05N, dated October 2005, BFR requirements may be calculated using the analytical/4-step method.

There are four steps required for determining storage space requirements by this method. This method is thought to be the preferred and most practical for use in planning up to and including the activity 1391 level or as needed to feed strategic planning.

Unit	Total SF	
Artillery Battery	7,760	GSF

TOTAL REQUIREMENT FOR CATEGORY CODE
7,760 SF (721 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AUTO ORGANIZATIONAL SHOP	214-51	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of an Automotive Organizational Shop provides work areas for Fleet Marine Force (FMF) units to perform maintenance on items of organizational equipment. The shop space includes administrative and dispatching areas as well as storage for OEM equipment, tools, and parts.

Requirements are shown below with backup following.

Artillery Battery	3,668 GSF
Total Requirement:	**3,668** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
3,668 SF (341 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ELECTRONIC/COMM MAINT SHOP	217-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Electronics maintenance shops at Naval and Marine Corps activities provide facilities for maintenance and repair of non-airborne equipment.

It contains office and support spaces for the Equipment Maintenance Officer (EMO) and the EMO Staff, equipment maintenance and training areas, and a small storage area for parts and supplies directly under the control of the EMO.

According to UFC 2-000-05N, dated January 2005, states that no specific planning criteria are provided. An engineering evaluation can be conducted to determine the office space and support area requirements using guidance contained within the Category Code series 131 Introductory section. For storage area, an engineering evaluation can be used to determine the volume of material required to be stored. Requirements are based on FY 16 ARTY BTRY A 1/12 3D MARDIV TO&E Report.

Unit	**Total SF**	
Artillery Battery	5,068	GSF
Total Requirement:	**5,068**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
5,068 SF (471 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OPERATIONAL HAZ/FLAM STORAGE	143-78	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Per UFC 2-000-05N, requiremnts can be determined thorugh the Analytical or 4-Step method. Requirements are based on FY16 3/5 1ST MARDIV TO&E Report.

Unit	M/T	TCF (78.4x)	SH (FT)	NSF	GSF
Artillery Battery	62	4,861	8	607.6	759.5

Total Requirement: 759.5 GSF

Total **760 GSF**

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIZATIONAL VEHICLE PARKING	852-10	SY

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organizational vehicle parking includes the paved and/or stabilized area within an organizational motor pool and parking lot, including space required for entrance and exit roads and aisles within the lot, will not exceed the following:

According to the UFC 2-000-05N, dated Jan 2005, Marine Corps installations with FMF Ground Units assigned allow 75 square yards for each vehicle to be accommodated. The 75 SY will be reduced to 50 SY per vehicle if more than 50% of the vehicles to be accommodated have an overall length of 18 feet or less and a width of 6 1/2 feet or less (such as administrative-type vehicles).

Unit/Department Name	Vehicles		Amount			Requirement	
Artillery Battery	61	x	75	SY	=	4,575	SY
				Total		4,575	SY

TOTAL REQUIREMENT FOR CATEGORY CODE
4,575 SY (3826 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
CONTROLLED HUMIDITY WAREHOUSE	441-20	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A Controlled Humidity Warehouse is similar to a General Warehouse (441 10) in every respect except that it is constructed with appropriate vapor barriers and contains humidity control equipment to maintain humidity at desired levels. This warehouse may be a separate building or contiguous with a General Warehouse.

According to the UFC 2-000-05N, dated October 2006, BFR requirements may be calculated using the analytical/4-step method.

There are four steps required for determining storage space requirements by this method. This method is thought to be the preferred and most practical for use in planning up to and including the activity 1391 level or as needed to feed strategic planning.

Unit		Total SF	
Artillery Battery		7,550	GSF
	SAY	**7,550**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
7,550 SF (702 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
GCE Inf Bn HQ #2	GCE - Inf Bn HQ #2

Battalion Headquarters, Infantry Bn - H&S

Garrison Aid Station, MARCOR, Two Infantry Battalions

Academic Instruction Building, (2) Infantry Bns

Company Headquarters, 2 Infantry Bn(s) - Company HQs

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
BATTALION HEADQUARTERS	610-72	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

UFC 2-000-05N, revised 31 Jan 2005, states that in the absence of detailed data or when close approximation to precise requirements is not considered necessary, the gross floor area should be computed based on 162.5 square feet per building occupant. Requirements are based on FY16 3/5 1ST MARDIV TO&E Report.

Infantry BN - H&S

Battalion HQ	
Battalion Commander	1 PN
Executive Officer	1 PN
Sgt Major	1 PN
Messenger/Driver	2 PN
S-1 Adjutant Section	
S-1/Adjutant	1 PN
Admin Chief	1 PN
Admin Clerk	5 PN
Career Planner	1 PN
S-2 Section	
S-2 Intel Officer	1 PN
Assistant Intel Officer	1 PN
Intel Chief/Specialists	6 PN
S-3 Section	
S-3 Officer	1 PN
Assistant S-3 Officers	4 PN
Liaison Officer	1 PN
Marine Gunner	1 PN
INF OPNS Chief/Assn	2 PN
CBRN	3 PN
S-4 Section	
S-4 Officer	1 PN
Embark/Ammo/Log/Maint Chief	6 PN
Chaplain/Rel Program Specialist	2 PN
TOTAL PN:	42 PN

Administrative Office: 162.5 SF x 42 PN 6,825 GSF

Special Purpose or Other Space Requirements:
Per UFC 2-000-05N, special purpose spaces such as conference rooms, storage, mail rooms, reception areas, and telecommunications closets are included in the gross square foot computation. Space requirements for classrooms are included under CCN 171-10 under a separate BFR.

Total Requirement 6,825 GSF

Requirement for two Infantry Bns **13,650 GSF**

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
GARRISON AID STATION, MARCOR	610-74	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

An Aid Station provides medical care at the local level for Marine Corps and generally will be co-located with the Battlaion and Regimental HQ facilities. This support includes in-garrison sick-call and outpatient treatment. The functions performed in this facility are both administrative and clinical in nature which requires space for the medical personnel to work and space for medical file storage. Facilities at an Aid Station also include examination and treatment rooms, AMAL/ADAL (Authorized Medical Allowance List / Authorized Dental Allowance List) storage, offices for the Medical Officers and workstations for the corpsmen at the Station.

UFC 2-000-05N, dated Oct 2005, provides criteria for Aid Stations based upon number of medical staff and number of patients to be treated. The following requirement has been established based upon general operational characteristics of an Aid Station. A more detailed breakdown of the requirement is contained on the following page.

Total Requirement: (Two Infantry Battalions) **4,830 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
4,830 SF (449 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
COMPANY HEADQUARTERS	610-73	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of a Company/Battery Headquarters, Marine Corps, is for a Fleet Marine Force (FMF) facility and is intended for those FMF units of company or battery size which require separate administrative facilities.

Requirements are shown below with backup following.

2 Infantry Bn(s) - Company HQs	20,061 GSF
Total Requirement:	**20,061** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
20,061 SF (1864 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ACADEMIC INSTRUCTION BUILDING	171-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A general academic classroom is one which supports approved training programs and provides accommodations for classroom lecture instruction, using standard chairs with fixed tablet arms or a similar seating configuration providing the student a writing surface and book depository. The individual general academic classroom sizes in net square feet (i.e., within the interior walls of the room), as dictated by the required number of seats, shall not exceed the figures given in Table 17110-1.

Per the UFC, in cases where the training building is composed entirely of general academic classrooms, use the broad planning factor of 45 gross SF per student station for the entire building. Every attempt must be made, however, to minimize the number of such single subject or “dedicated” classrooms, especially in those cases where their use would be relatively infrequent.

In the spirit of this guidance and per the intent of the UFC, a Regimental Audio/Visual Training Center will be provided with shared classrooms for each Infantry Battalion.

Two 50 PN classrooms = 45 GSF x 100 PN = 4,500 SF
Computer Resource Center x 30 stations (45 SF EA) = 1,350 SF
Internet Café (Student Break Area) = (50 PN x 8 SF) = 400 SF
Training Aid Storage = 100 PN x 1.5 SF/PN = 150 GSF

Academic Classroom, Infantry Bn	6,400 GSF
Total Requirement (2) Infantry Bns:	**12,800 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
12,800 SF (1190 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
GCE Inf Bn #2 Facilities	GCE - Inf Bn#2 Facilities

Organic Unit Storage, 2 Infantry Battalion(s)

Electronic/Comm Maint Shop, 2 Infantry Battalion(s)

Auto Organization Shop, H&S Company, 2 Infantry Battalion(s)

Organizational Vehicle Parking, 2 Infantry Battalion(s)

Open Storage Area, 2 Infantry Battalion(s)

Operational Haz/Flam Storage, 2 Infantry Battalion(s)

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIC UNIT STORAGE	441-12	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organic Unit Storage includes general purpose storage facilities assigned to Marine Corps bases, air installations and Fleet Marine Force (FMF) units for organic requirements to include Division/Wing, Battalion/Group and Company/Squadron storage areas, special service storerooms, base shipping and receiving functions and any other organic storage requirements.

According to the UFC 2-000-05N, dated October 2005, BFR requirements may be calculated using the analytical/4-step method.

There are four steps required for determining storage space requirements by this method. This method is thought to be the preferred and most practical for use in planning up to and including the activity 1391 level or as needed to feed strategic planning.

Unit		**Total SF**	
2 Infantry Battalion(s)		31,210	GSF
	SAY	**31,210**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
31,210 SF (2900 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ELECTRONIC/COMM MAINT SHOP	217-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Electronics maintenance shops at Naval and Marine Corps activities provide facilities for maintenance and repair of non-airborne equipment.

It contains office and support spaces for the Equipment Maintenance Officer (EMO) and the EMO Staff, equipment maintenance and training areas, and a small storage area for parts and supplies directly under the control of the EMO.

According to UFC 2-000-05N, dated January 2005, states that no specific planning criteria are provided. An engineering evaluation can be conducted to determine the office space and support area requirements using guidance contained within the Category Code series 131 Introductory section. For storage area, an engineering evaluation can be used to determine the volume of material required to be stored. Requirements are based on FY 16 3/5 1ST MARDIV TO&E Report.

Unit	**Total SF**	
2 Infantry Battalion(s)	15,110	GSF
Total Requirement:	**15,110**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
15,110 SF (1404 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AUTO ORGANIZATIONAL SHOP	214-51	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of an Automotive Organizational Shop provides work areas for Fleet Marine Force (FMF) units to perform maintenance on items of organizational equipment. The shop space includes administrative and dispatching areas as well as storage for OEM equipment, tools, and parts.

Requirements are shown below with backup following.

2 Infantry Battalion(s)	6,000 GSF
Total Requirement:	**6,000** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
6,000 SF (558 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AUTO ORGANIZATIONAL SHOP	214-51	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Automotive organizational shop is required in support of theInfantry Battalion(s). The vehicle maintenance shop performs first and limited second echelon maintenance on all organic motor transport equipment vehicles. Requirements are based on FY16 3/5 1ST MARDIV TO&E Report.

Equip Code	Pieces	Productive Space Factor	Repair Bay Requirements
0061-0099	0	0.063	0.000
0102-0299	4	0.015	0.060
0300-0700	61	0.023	1.403
0800	7	0.016	0.112
1000		0.02	0.000
2000		0.016	0.000
3000		0.025	0.000
4000		0.02	0.000
5000		0.016	0.000
7000		0.03	0.000
8000		0.092	0.000
Total:			1.575
Total repair bay requirements:	72		**2**

Table 21420-4

No. (Column 1)	SF (Column 2)	Administrative and Indirect Support Area (SF) (Column 3)	Direct Support Area (SF) (Column 4)	Total Gross Space Allowance (SF) (Columnn 5)
2	960	600	1,440	3,000
4	1,920	1,500	2,720	6,140
6	2,880	1,950	3,480	8,310
8	3,840	2,400	4,230	10,470
10	4,800	3,100	4,270	12,170
12	5,760	3,800	5,210	14,770
14	6,720	4,200	6,000	16,920
16	7,680	4,700	6,070	18,450
18	8,640	5,100	6,080	19,820
20	9,600	5,500	6,170	21,270
22	10,560	5,900	6,210	22,670
24	11,520	6,300	6,250	24,070
26	12,480	6,850	6,290	25,620

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AUTO ORGANIZATIONAL SHOP	214-51	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Summary

Repair Bays	SF		Admin and Indirect Support Area		Direct Support Area		Total Gross Space Allowance
2	960	+	600	+	1,440	=	3,000 GSF

Total Requirement: **3,000 GSF**

Requirement for two Infantry Battalions: **6,000 GSF**

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIZATIONAL VEHICLE PARKING	852-10	SY

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organizational vehicle parking includes the paved and/or stabilized area within an organizational motor pool and parking lot, including space required for entrance and exit roads and aisles within the lot, will not exceed the following:

According to the UFC 2-000-05N, dated Jan 2005, Marine Corps installations with FMF Ground Units assigned allow 75 square yards for each vehicle to be accommodated. The 75 SY will be reduced to 50 SY per vehicle if more than 50% of the vehicles to be accommodated have an overall length of 18 feet or less and a width of 6 1/2 feet or less (such as administrative-type vehicles). Requirements are based on FY16 3/5 1ST MARDIV TO&E Report.

Unit/Department Name	Vehicles		Amount			Requirement	
Infantry Battalion(s)	72	x	75	SY	=	5,400	SY
				Total		5,400	SY
Total Requirement for two Infantry Bns:						10,800	SY

TOTAL REQUIREMENT FOR CATEGORY CODE
10,800 SY (9031 m2)

MOBILIZATION STATEMENT

SIGNATURE: _____

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE: _____

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OPEN STORAGE AREA	451-10	SY

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

An Open Storage Area consists of non-covered storage, paved or otherwise established, for storage of General Supply Materials.

Requirements for the Infantry Battalion(s) was based on the number of Quadcons/Palcons on-hand, stacked two and three high respectively, with the additional space to accommodate load outs. Requirements are based on the FY16 Unit TO&E Report.

An estimation of material requirements, likely lay-down scenario (i.e., how material is stowed on area) and material handling equipment access is also acceptable as a means of determining square foot (SF) requirements via a space analysis.

Unit	Total SF	
2 Infantry Battalion(s)	4,702	SY
SAY	**4,710**	**SY**

TOTAL REQUIREMENT FOR CATEGORY CODE
4,710 SY (3939 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OPERATIONAL HAZ/FLAM STORAGE	143-78	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

This category code will be used to provide a facility for the storage of materials used in daily operations that require special environmental separation. These materials such as paint, acetone, oil, etc. are considered to be hazardous and/or flammable.

According to the UFC 2-000-05N, revised Oct 2006, an engineering field analysis will be required to determine the warehouse space based on quantity of materials stored. Racks or shelves will be used to reduce footprint. Some materials may require separation and must be divided by berms or firewalls and this separation space should be added to calculations. These facilities may require some environmental controls and ventilation. If quantity is palletized, allow for forklifts in aisle ways or access through overhead doors.

2 Infantry Battalion(s)	614 GSF
Total Requirement:	**614 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
614 SF (58 m2)

MOBILIZATION STATEMENT

SIGNATURE: _____

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE: _____

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
AAV/LAR/CEB Maint	AAV/LAR/CEB Maint

AAV/LAV Vehicle Maint Shop, CEB/AAV/LAR PLT

Auto Organization Shop, H&S Company, CEB/AAV/LAR PLT

Landing Craft Ramp

Overhead Cover, Misc, 7 LAVs

Overhead Cover, Misc, 16 AAVs

Grease Rack, CEB/AAV/LAR PLT

Vehicle Wash Platform, CEB/AAV/LAR PLT

Organizational Vehicle Parking, CEB/AAV/LAR PLT

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AAV/LAV VEHICLE MAINT SHOP	213-75	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The amphibian vehicle maintenance shop provides special work areas for performing all organizational maintenance functions on the amphibian vehicles of the Marine Corps; space includes administrative, maintenance, and training areas as well as storage space for OEM equipment, tools and mountout.

A typical Marine Corp facility that would accommodate one battalion, i.e., four companies, would have a space requirement of 42,600 gross square feet of which 700 gross square feet would be dedicated to the mechanical equipment room. The size of the facility would be adjusted accordingly as the number of companies in the battalion increase or decrease. Space requirements are based on criteria provided for CCN 214-51 Automotive Organizational Shop, CCN 441-12 Organic Warehouse Storage, and 610-10 Administrative Office. Requirements for CEB/AAV PLTs are based on the FY16 ARTY BTRY A 1/12 3D MARDIV TO&E Report. Requirements for the LAR PLT is based on the FY 16 LAR CO A 3D LAR BN 1ST MARDIV TO&E Report, adjusted for a PLT.

Unit	**Total SF**	
CEB/AAV/LAR PLT	15,244	GSF
Total Requirement:	**15,244**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
15,244 SF (1417 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AUTO ORGANIZATIONAL SHOP	214-51	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of an Automotive Organizational Shop provides work areas for Fleet Marine Force (FMF) units to perform maintenance on items of organizational equipment. The shop space includes administrative and dispatching areas as well as storage for OEM equipment, tools, and parts.

Requirements are shown below with backup following.

CEB/AAV/LAR PLTs	3,668 GSF
Total Requirement:	**3,668** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
3,668 SF (341 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 1-Nov-12

Basic Facility Requirements

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
LANDING CRAFT RAMP	159-66	EA

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

According to the UFC 2-000-05N of 31 Jan 2005, there is no criteria for landing craft ramp. Assault Amphibian Vehicle (AAV) Company of the 3D Combat Assault Battalion requires a landing craft ramp to accommodate launching of organic amphibious vehicles.

Total Requirement 1 EA

TOTAL REQUIREMENT FOR CATEGORY CODE
1 EA

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OVERHEAD COVER, MISC	123-17	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Overhead cover is required to protect LAVs from inclement weather. Requirements are based on the number and size of vehicles that will be placed under cover.

7 LAVs (25 FT x 15 FT)	2,625 GSF
Total Requirement:	**2,625 GSF**

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
2,625 SF (244 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OVERHEAD COVER, MISC	123-17	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Overhead cover is required to protect AAVs from inclement weather. Requirements are based on the number and size of vehicles that will be placed under cover.

16 AAVs (30 FT x 15 FT) 7,200 GSF

Total Requirement: 7,200 GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
7,200 SF (669 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
GREASE RACK	214-56	EA

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Grease racks are required in support of III MEF units.

UFC 2-000-05N, dated 31 January 2005, allows one grease rack (two vehicles) per 125 vehicles.

Unit	Organizational Vehicles	Other Vehicles	Total Vehicles		Vehicles/ Rack		Grease Racks	
CEB/AAV/LAR PLTs	37		37	/	125	=	1.00	EA
	Total Requirement:						**1.00**	**EA**
					SAY		**1**	**EA**

TOTAL REQUIREMENT FOR CATEGORY CODE
1 EA

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
VEHICLE WASH PLATFORM	214-55	EA

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Vehicle wash facilities, including oil/water separators, are required in support of III MEF units.

UFC 2-000-05N, dated 31 January 2005, allows one wash platform per 50 vehicles assigned to the motor pool.

Unit	Organizational Vehicles	Other Vehicles	Total Vehicles		Vehicles/ Wash Space		Wash Racks	
CEB/AAV/LAR PLTs	37		37	/	50	=	1.00	
Total Requirement							**1.00**	**EA**
					SAY		**1**	**EA**

Total Requirement:

TOTAL REQUIREMENT FOR CATEGORY CODE
1 EA

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIZATIONAL VEHICLE PARKING	852-10	SY

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organizational vehicle parking includes the paved and/or stabilized area within an organizational motor pool and parking lot, including space required for entrance and exit roads and aisles within the lot, will not exceed the following:

According to the UFC 2-000-05N, dated Jan 2005, Marine Corps installations with FMF Ground Units assigned allow 75 square yards for each vehicle to be accommodated. The 75 SY will be reduced to 50 SY per vehicle if more than 50% of the vehicles to be accommodated have an overall length of 18 feet or less and a width of 6 1/2 feet or less (such as administrative-type vehicles).

Unit/Department Name	Vehicles		Amount			Requirement	
CEB/AAV/LAR PLTs	44	x	75	SY	=	3,300	SY
				Total		3,300	SY

TOTAL REQUIREMENT FOR CATEGORY CODE
3,300 SY (2760 m2)

MOBILIZATION STATEMENT

SIGNATURE: _____

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE: _____

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
PEI Warehouse	PEI Warehouse

Controlled Humidity Warehouse, 4th Marine Regiment

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
CONTROLLED HUMIDITY WAREHOUSE	441-20	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organic Unit Storage includes general purpose storage facilities assigned to Marine Corps bases, air installations and Fleet Marine Force (FMF) units for organic requirements to include Division/Wing, Battalion/Group and Company/Squadron storage areas, special service storerooms, base shipping and receiving functions and any other organic storage requirements.

4th Marine Regiment and Infantry Bns require warehouse space to provide covered protection for PEI rolling stock. Space requirements are based on the number and size of vehicles that will be stored, with additional space provided for clearance.

Unit		Total SF	
4th Marine Regiment		44,045	GSF
	SAY	**44,050**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
44,050 SF (4093 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
CONTROLLED HUMIDITY WAREHOUSE	441-20	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Space requirements are based on the number and size of vehicles that will be stored, with additional space provided for clearance. PEI is from the FY16 Unit TO&E Reports.

Trailer, Cargo (12 FT x 8 FT)	96	SF	x	52	4,992	NSF
Truck, Armored, Cargo (12 FT x 27 FT)	324	SF	x	6	1,944	NSF
Troop Carrier (15 FT x 9 FT)	135	SF	x	5	675	NSF
Truck, Utility (17 FT x 8 FT)	136	SF	x	147	19,992	NSF
Ambulance (22 FT x 8 FT) =	176	SF	x	10	1,760	NSF
Subtotal =					29,363	NSF
Net-to-Gross Conversion (aisle space, separation, etc) = 50%					44,045	GSF
Total Requirement:					**44,045**	**GSF**

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
CLB-4 HQ	CLB-4 HQ

Battalion Headquarters, CLB H&S CO

Garrison Aid Station, MARCOR, CLB-4

Company Headquarters, CLB H&S CO

Academic Instruction Building, Academic Classroom, CLB

Company Headquarters, CLB, Engineering Services Co

Company Headquarters, CLB, Transportation Services Co

Company Headquarters, CLB, Maint Services Co

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
BATTALION HEADQUARTERS	610-72	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of a Battalion/Squadron Headquarters, Marine Corps, is for a Fleet Marine Force (FMF) facility and is intended for those FMF units of company or battery size which require separate administrative facilities.

Requirements are shown below with backup following.

CLB H&S CO	8,835 GSF
Total Requirement:	**8,835** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
8,835 SF (821 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
GARRISON AID STATION, MARCOR	610-74	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

An Aid Station provides medical care at the local level for Marine Corps and generally will be co-located with the Battlaion and Regimental HQ facilities. This support includes in-garrison sick-call and outpatient treatment. The functions performed in this facility are both administrative and clinical in nature which requires space for the medical personnel to work and space for medical file storage. Facilities at an Aid Station also include examination and treatment rooms, AMAL/ADAL (Authorized Medical Allowance List / Authorized Dental Allowance List) storage, offices for the Medical Officers and workstations for the corpsmen at the Station.

UFC 2-000-05N, dated Oct 2005, provides criteria for Aid Stations based upon number of medical staff and number of patients to be treated. The following requirement has been established based upon general operational characteristics of an Aid Station. A more detailed breakdown of the requirement is contained on the following page.

Total Requirement: (CLB-4) **2,415 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
2,415 SF (225 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
COMPANY HEADQUARTERS	610-73	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of a Company/Battery Headquarters, Marine Corps, is for a Fleet Marine Force (FMF) facility and is intended for those FMF units of company or battery size which require separate administrative facilities.

Requirements are shown below with backup following.

CLB, H&S CO	975 GSF
Total Requirement:	**975** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
975 SF (91 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ACADEMIC INSTRUCTION BUILDING	171-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A general academic classroom is one which supports approved training programs and provides accommodations for classroom lecture instruction, using standard chairs with fixed tablet arms or a similar seating configuration providing the student a writing surface and book depository. The individual general academic classroom sizes in net square feet (i.e., within the interior walls of the room), as dictated by the required number of seats, shall not exceed the figures given in Table 17110-1.

Per the UFC, in cases where the training building is composed entirely of general academic classrooms, use the broad planning factor of 45 gross SF per student station for the entire building. Every attempt must be made, however, to minimize the number of such single subject or “dedicated” classrooms, especially in those cases where their use would be relatively infrequent.

In the spirit of this guidance and per the intent of the UFC, a CLB Audio/Visual Training Center will be provided with shared classrooms for all LCE units. This is due to the requirement for such classroom space on an infrequent basis.

Two 50 PN classrooms = 45 GSF x 100 PN = 4,500 SF
Computer Resource Center x 30 stations (45 SF EA) = 1,350 SF
Internet Café (Student Break Area) = 50 PN x 8 SF) = 400 SF

Academic Classroom, CLB	6,250 GSF
Total Requirement:	**6,250 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
6,250 SF (581 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
COMPANY HEADQUARTERS	610-73	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of a Company/Battery Headquarters, Marine Corps, is for a Fleet Marine Force (FMF) facility and is intended for those FMF units of company or battery size which require separate administrative facilities.

Requirements are shown below with backup following.

CLB, Engineering Services Co	975 GSF
Total Requirement:	**975** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
975 SF (91 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
COMPANY HEADQUARTERS	610-73	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of a Company/Battery Headquarters, Marine Corps, is for a Fleet Marine Force (FMF) facility and is intended for those FMF units of company or battery size which require separate administrative facilities.

Requirements are shown below with backup following.

CLB, Transportation Services Co	975 GSF
Total Requirement:	**975** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
975 SF (91 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
COMPANY HEADQUARTERS	610-73	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of a Company/Battery Headquarters, Marine Corps, is for a Fleet Marine Force (FMF) facility and is intended for those FMF units of company or battery size which require separate administrative facilities.

Requirements are shown below with backup following.

CLB, Maint Services Co	975 GSF
Total Requirement:	**975** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
975 SF (91 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
CLB-4 Facilities	CLB-4 Facilities

Organic Unit Storage, CLB-4

Marine Corps EOD Facility, CLB EOD

Electronic/Comm Maint Shop, CLB-4

Auto Organization Shop,CLB-4 Intermediate Maintenance

Vehicle Wash Platform, CLB-4 Consolidated

Grease Rack, CLB-4 Consolidated

Organic Unit Storage, CLB-4, Repairable Issue Parts Warehouse

Construction Weight Handling Equipment Shop, CLB-4

Open Storage Area, CLB-4

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIC UNIT STORAGE	441-12	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organic Unit Storage includes general purpose storage facilities assigned to Marine Corps bases, air installations and Fleet Marine Force (FMF) units for organic requirements to include Division/Wing, Battalion/Group and Company/Squadron storage areas, special service storerooms, base shipping and receiving functions and any other organic storage requirements.

According to the UFC 2-000-05N, dated October 2005, BFR requirements may be calculated using the analytical/4-step method.

There are four steps required for determining storage space requirements by this method. This method is thought to be the preferred and most practical for use in planning up to and including the activity 1391 level or as needed to feed strategic planning.

Unit		Total SF	
CLB-4		36,100	GSF
	SAY	**36,100**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
36,100 SF (3354 m2)

MOBILIZATION STATEMENT

SIGNATURE:

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DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
MARINE CORPS EOD FACILITY	143-24	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

This facility provides support for EOD operations on Marine Corps Bases, Marine Corps Air Stations, and Marine Corps Air Wing Support Squadrons. The facility defined below is scaled to match the EOD Team (1 Officer, 8 Enlisted) and include administrative spaces, classified publication vault, quick response ready lockers, workshop/maintenance space, classroom, equipment storage, locker room, and ordnance training aids library space. The facility will be equipped with an Intrusion Detection System (IDS). In addition, the facility will house all the emergency response vehicles, trailers (including total containment vessels), and other emergency response equipment.

Per UFC CCN 143-24, Table 14324-1 Overall Square Footage Requirements for EOD Teams, approximately 7,000 GSF is permitted. Additional space is provided for HAZMAT storage under CCN 143-78 and Ready Service Magazine under CCN 421-35.

Total Requirement: 7,000 GSF

CLB EOD **7,000 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
7,000 SF (651 m2)

MOBILIZATION STATEMENT

SIGNATURE:

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DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ELECTRONIC/COMM MAINT SHOP	217-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Electronics maintenance shops at Naval and Marine Corps activities provide facilities for maintenance and repair of non-airborne equipment.

It contains office and support spaces for the Equipment Maintenance Officer (EMO) and the EMO Staff, equipment maintenance and training areas, and a small storage area for parts and supplies directly under the control of the EMO.

According to UFC 2-000-05N, dated January 2005, states that no specific planning criteria are provided. An engineering evaluation can be conducted to determine the office space and support area requirements using guidance contained within the Category Code series 131 Introductory section. For storage area, an engineering evaluation can be used to determine the volume of material required to be stored. Requirements are based on FY16 Unit TO&E Report.

Unit	**Total SF**	
CLB-4	14,951	GSF
Total Requirement:	**14,951**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
14,951 SF (1390 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

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BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AUTO ORGANIZATIONAL SHOP	214-51	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of an Automotive Organizational Shop provides work areas for Fleet Marine Force (FMF) units to perform maintenance on items of organizational equipment. The shop space includes administrative and dispatching areas as well as storage for OEM equipment, tools, and parts. CLB-4 requires an intermediate maintenance shop to conduct higher echelon maintenance on all vehicles assigned to MCB Guam.

CLB-4 - Intermediate Maintenance	25,620 GSF
Total Requirement:	**25,620** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
25,620 SF (2381 m2)

MOBILIZATION STATEMENT

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NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AUTO ORGANIZATIONAL SHOP	214-51	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of an Automotive Organizational Shop provides work areas for Fleet Marine Force (FMF) units to perform maintenance on items of organizational equipment. The shop space includes administrative and dispatching areas as well as storage for OEM equipment, tools, and parts.

CLB-4	12,170 GSF
Total Requirement:	**12,170** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
12,170 SF (1131 m2)

MOBILIZATION STATEMENT

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BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
VEHICLE WASH PLATFORM	214-55	EA

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Vehicle wash facilities, including oil/water separators, are required in support of III MEF units.

UFC 2-000-05N, dated 31 January 2005, allows one wash platform per 50 vehicles assigned to the motor pool.

Unit	Organizational Vehicles	Other Vehicles	Total Vehicles		Vehicles/ Wash Space		Wash Racks	
CLB-4 - Consolidated	773		773	/	50	=	15.46	
	Total Requirement						**15.46**	**EA**
					SAY		**16**	**EA**

Total Requirement:

TOTAL REQUIREMENT FOR CATEGORY CODE
16 EA

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
GREASE RACK	214-56	EA

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Grease racks are required in support of III MEF units.

UFC 2-000-05N, dated 31 January 2005, allows one grease rack (two vehicles) per 125 vehicles.

Unit	Organizational Vehicles	Other Vehicles	Total Vehicles		Vehicles/ Rack		Grease Racks	
CLB-4 - Consolidated	773		773	/	125	=	6.18	EA
	Total Requirement:						**7.00**	**EA**
					SAY		**7**	**EA**

TOTAL REQUIREMENT FOR CATEGORY CODE
7 EA

MOBILIZATION STATEMENT

SIGNATURE:

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SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIC UNIT STORAGE	441-12	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organic Unit Storage includes general purpose storage facilities assigned to Marine Corps bases, air installations and Fleet Marine Force (FMF) units for organic requirements to include Division/Wing, Battalion/Group and Company/Squadron storage areas, special service storerooms, base shipping and receiving functions and any other organic storage requirements.

According to the UFC 2-000-05N, dated October 2005, BFR requirements may be calculated using the analytical/4-step method.

There are four steps required for determining storage space requirements by this method. This method is thought to be the preferred and most practical for use in planning up to and including the activity 1391 level or as needed to feed strategic planning.

Unit		Total SF	
CLB-4, Repairable Issue Parts Warehouse		19,250	GSF
	SAY	**19,250**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
19,250 SF (1789 m2)

MOBILIZATION STATEMENT

SIGNATURE:

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EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
CONSTRUCTION/WEIGHT HANDLING EQUIP SHOP	218-20	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of the Utility Shop is to provide work areas for Fleet Marine Force (FMF) units to perform maintenance on items of organizational equipment. Per UFC 2-000-05N CCN 218-20, requirements for the Utility Shop are based on the space factors contained in Category Code 214 20, Automotive Vehicle Maintenance Shop. Requirements are based on FY16 CLB 3 CLR 3 3D MLG TO&E Reports.

CLB-4	6,140 GSF
Total Requirement:	**6,140** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
6,140 SF (571 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OPEN STORAGE AREA	451-10	SY

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

An Open Storage Area consists of non-covered storage, paved or otherwise established, for storage of General Supply Materials.

Requirements for CLB-4 were based on the number of Quadcons/Palcons on-hand, stacked two and three high respectively, with the additional space to accommodate load outs. Requirements are based on the FY16 Unit TO&E Report.

An estimation of material requirements, likely lay-down scenario (i.e., how material is stowed on area) and material handling equipment access is also acceptable as a means of determining square foot (SF) requirements via a space analysis.

Unit		**Total SF**	
CLB-4		1,258	SY
	SAY	**1,260**	**SY**

TOTAL REQUIREMENT FOR CATEGORY CODE
1,260 SY (1054 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIZATIONAL VEHICLE PARKING	852-10	SY

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organizational vehicle parking includes the paved and/or stabilized area within an organizational motor pool and parking lot, including space required for entrance and exit roads and aisles within the lot, will not exceed the following:

According to the UFC 2-000-05N, dated Jan 2005, Marine Corps installations with FMF Ground Units assigned allow 75 square yards for each vehicle to be accommodated. The 75 SY will be reduced to 50 SY per vehicle if more than 50% of the vehicles to be accommodated have an overall length of 18 feet or less and a width of 6 1/2 feet or less (such as administrative-type vehicles).

Unit/Department Name	Vehicles		Amount			Requirement	
CLB-4	556	x	50	SY	=	27,800	SY
				Total		27,800	SY

TOTAL REQUIREMENT FOR CATEGORY CODE
27,800 SY (23245 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
9th ESB EOD	9th ESB EOD

Marine Corps EOD Facility, 9th ESB EOD

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
MARINE CORPS EOD FACILITY	143-24	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

This facility provides support for EOD operations on Marine Corps Bases, Marine Corps Air Stations, and Marine Corps Air Wing Support Squadrons. The facility defined below is scaled to match the EOD Team (1 Officer, 8 Enlisted) and include administrative spaces, classified publication vault, quick response ready lockers, workshop/maintenance space, classroom, equipment storage, locker room, and ordnance training aids library space. The facility will be equipped with an Intrusion Detection System (IDS). In addition, the facility will house all the emergency response vehicles, trailers (including total containment vessels), and other emergency response equipment.

Per UFC CCN 143-24, Table 14324-1 Overall Square Footage Requirements for EOD Teams, approximately 7,000 GSF is permitted. Additional space is provided for HAZMAT storage under CCN 143-78 and Ready Service Magazine under CCN 421-35.

Total Requirement: 7,000 GSF

9th ESB EOD **7,000 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
7,000 SF (651 m2)

MOBILIZATION STATEMENT

SIGNATURE:

EW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
9th ESB HQ	9th ESB HQ

Battalion/Squadron HQ, 3d MLG 9th Engineer Support BN

Company/Battery HQ, H&S Co, Enginer Support Co, Bulk Fuel Co, Engineer Co, EOD Co

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 4-Aug-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
BATTALION/SQUADRON HQ	610-72	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

This catergory code is for a Fleet Marine Force (FMF) facility and provides the necessary administrative space to conduct the day-to-day operations of a Marine Battalion or Squadron Headquarters. Squadron administrative facilities are often provided within the orginatinal maintence hangar (catergory Code 211-05 and in such cases are not authorized under this catergory code.

563	M29100	3D MLG 9th Engineer Support BN	6,263 GSF
		Total Requirement	**6,263 GSF**
		SAY	**6,270 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
6,270 SF (583 m2)

MOBILIZATION STATEMENT

SIGNATURE:

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EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 16-Feb-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
COMPANY/BATTERY HQ	610-73	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

This category code is for a Fleet Marine Force (FMF) facility and is intended for those FMF units of company or battery size which require separate administrative facilities. Requirements for company or battery administrative functions are often included as part of other facilities such as bachelor enlisted quarters. Requirements are determined using the criteria for Category Code 610-10.

Headquarters & Support Co, 9th ESB	1,138	GSF
Engineer Support Co, 9th ESB	488	GSF
Bulk Fuel Co, 9th ESB	813	GSF
Engineer Co A, 9th ESB	448	GSF
EOD Company	650	GSF
Total Requirement:	**3,536**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
3,536 SF (329 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
9th ESB (-)	9th ESB (-)

Auto Organization Shop, 9th Engineer Support Bn

Electronic/Comm Maint Shop, H&S Company, 9th Engineer Support Bn

Woodworking Shop, H&S Company, 9th Engineer Support Bn

Organizational Vehicle Parking, M29100 9th Engineer Support BN

Operational Haz/Flam Storage, H&S Co, Enginer Support Co, Bulk Fuel Co, Engineer Co, EOD Co

Open Storage Area, 9th Engineer Support BN

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 4-Aug-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AUTO ORGANIZATIONAL SHOP	214-51	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of an Automotive Organizational Shop provides work areas for Fleet Marine Force (FMF) units to perform maintenance on items of organizational equipment. The shop space includes administrative and dispatching areas as well as storage for OEM equipment, tools, and parts.

Requirements are shown below with backup following.

M29101	9th Engineer Support BN	8,310 GSF
Total Requirement:		**8,310 GSF**

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
8,310 SF (773 m2)

MOBILIZATION STATEMENT

SIGNATURE:

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BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 4-Aug-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ELECTRONIC/COMM MAINT SHOP	217-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Electronics maintenance shops at Naval and Marine Corps activities provide facilities for maintenance and repair of non-airborne equipment (see Category Code 211 45, Avionics Shop (Non-NAVAIR Depot) for airborne equipment repair facilities).

It contains office and support spaces for the Equipment Maintenance Officer (EMO) and the EMO Staff, equipment maintenance and training areas, and a small storage area for parts and supplies directly under the control of the EMO.

According to UFC 2-000-05N, dated January 2005, states that no specific planning criteria are provided. An engineering evaluation can be conducted to determine the office space and support area requirements using guidance contained within the Category Code series 131 Introductory section. For storage area, an engineering evaluation can be used to determine the volume of material required to be stored.

Unit		**Total SF**
M29101	H&S Company, 9th Engineer Support BN	7,949 GSF
	SAY	**7,950 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
7,950 SF (739 m2)

MOBILIZATION STATEMENT

SIGNATURE:

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EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 4-Aug-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
WOODWORKING SHOP	213-56	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A Woodworking shop is responsible for accomplishing operations performed by boat builders, woodcraftsmen, and shipwright. Headquarters and Support Company, 9th ESB, UIC M29101, requires a woodworking shop for construction support. An engineering analysis was conducted to determine requirements.

Function				
Drafting Room			600	NSF
Carpentry Shop			1,400	NSF
Lumber Rack Area			1,600	NSF
Equipment and Issue Office			200	NSF
Parts/Tool Control Room			200	NSF
Sign/Paint Room			250	NSF
Subtotal			4,250	NSF
Total NSF	4,250	x 1.25 Net to gross conversion	5,313	GSF
Administrative office space = 8 PN x 162.5 GSF/PN			1,300	GSF
Total requirement			**6,613**	GSF
		SAY	**6,620**	GSF

TOTAL REQUIREMENT FOR CATEGORY CODE
6,620 SF (616 m2)

MOBILIZATION STATEMENT

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BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 16-Feb-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIZATIONAL VEHICLE PARKING	852-10	SY

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organizational vehicle parking includes the paved and/or stabilized area within an organizational motor pool and parking lot, including space required for entrance and exit roads and aisles within the lot, will not exceed the following:

According to the UFC 2-000-05N, dated Jan 2005, Marine Corps installations with FMF Ground Units assigned allow 75 square yards for each vehicle to be accommodated. The 75 SY will be reduced to 50 SY per vehicle if more than 50% of the vehicles to be accommodated have an overall length of 18 feet or less and a width of 6 1/2 feet or less (such as administrative-type vehicles).

Unit/Department Name	Vehicles		Amount			Requirement	
M29100 9th Engineer Support BN	332	x	50	SY	=	16,600	SY
			Total Requirement			**16,600**	**SY**

TOTAL REQUIREMENT FOR CATEGORY CODE
16,600 SY (13880 m2)

MOBILIZATION STATEMENT

SIGNATURE:

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DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 4-Aug-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OPERATIONAL HAZ/FLAM STORAGE	143-78	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

This category code will be used to provide a facility for the storage of materials used in daily operations that require special environmental separation. These materials such as paint, acetone, oil, etc. are considered to be hazardous and/or flammable.

According to the UFC 2-000-05N, revised Oct 2006, an engineering field analysis will be required to determine the warehouse space based on quantity of materials stored. Racks or shelves will be used to reduce footprint. Some materials may require separation and must be divided by berms or firewalls and this separation space should be added to calculations. These facilities may require some environmental controls and ventilation. If quantity is palletized, allow for forklifts in aisle ways or access through overhead doors.

M29101	H&S Co, 9th ESB	1,800	GSF
M29102	Engineer Support Co, 9th ESB	200	GSF
M29103	Bulk Fuel Co, 9th ESB	200	GSF
M29104	Engineer Co A, 9th ESB	800	GSF
	Bridge Company, 9th ESB	200	GSF
	EOD Co	200	GSF
	Total Requirement:	**3,400**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
3,400 SF (316 m2)

MOBILIZATION STATEMENT

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SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 4-Aug-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OPEN STORAGE AREA	451-10	SY

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

An Open Storage Area consists of non-covered storage, paved or otherwise established, for storage of General Supply Materials.

Unless known to be otherwise, a stacking height (SH) of 4 feet should be used in accordance with the Basic Facilities Requirement (BFR) 4-step method described in the requirements section of this guidance.

An estimation of material requirements, likely lay-down scenario (i.e., how material is stowed on area) and material handling equipment access is also acceptable as a means of determining square foot (SF) requirements via a space analysis.

Unit		**Total SF**	
M29101	9th Engineer Support BN	5,018	SY
	SAY	**5,020**	**SY**

TOTAL REQUIREMENT FOR CATEGORY CODE
5,020 SY (4198 m2)

MOBILIZATION STATEMENT

SIGNATURE:

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EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 4-Aug-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIC UNIT STORAGE	441-12	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organic Unit Storage includes general purpose storage facilities assigned to Marine Corps bases, air installations and Fleet Marine Force (FMF) units for organic requirements to include Division/Wing, Battalion/Group and Company/Squadron storage areas, special service storerooms, base shipping and receiving functions and any other organic storage requirements.

According to the UFC 2-000-05N, dated October 2006, BFR requirements may be calculated using the analytical/4-step method.

There are four steps required for determining storage space requirements by this method. This method is thought to be the preferred and most practical for use in planning up to and including the activity 1391 level or as needed to feed strategic planning.

Unit		**Total SF**	
M29101	Headquarters & Support Co, 9th ESB	24,547	SF
M29104	Engineer Company A, 9th ESB	32,972	SF
	EOD Company, 9th ESB	7,825	SF
Total Requirement		**65,344**	**SF**
	SAY	**65,350**	**SF**

TOTAL REQUIREMENT FOR CATEGORY CODE
65,350 SF (6072 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name

Dental Co Admin

Appendix D Name

Dental Co Admin

Company Headquarters, 11th Dental Co, 3rd Den BN

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
COMPANY HEADQUARTERS	610-73	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The primary purpose of a Company/Battery Headquarters, Marine Corps, is for a Fleet Marine Force (FMF) facility and is intended for those FMF units of company or battery size which require separate administrative facilities.

Requirements are shown below with backup following.

11th Dental Co, 3rd Den Bn	1,950 GSF
Total Requirement:	**1,950** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
1,950 SF (182 m2)

MOBILIZATION STATEMENT

SIGNATURE:

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EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
COMPANY HEADQUARTERS	610-73	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

UFC 2-000-05N, revised 31 Jan 2005, states that in the absence of detailed data or when close approximation to precise requirements is not considered necessary, the gross floor area should be computed based on 162.5 square feet per building occupant.

11th Dental Co, 3rd Den Bn

Command Master/Senior Chief	1	PN
Field Med Tech (Admin)	1	PN
Administrative Chief	1	PN
MSC Officers (DFA, S-1, Ops and Fiscal)	4	PN
Edcuation and Training	1	PN
Correspondence Clerks	2	PN
MID Personnel	2	PN
TOTAL PN:	12	PN

Administrative Office: 162.5 SF x 12 PN 1,950 GSF

Total Requirement **1,950 GSF**

AVIATION COMBAT ELEMENT

(ACE)

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
MALS Facilities	MALS Facilities

Tactical Support Van Pad

Battalion/Squadron HQ

Airframes Shop

AIMD

Engine Maintenance Shop

Avionics Shop

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 22-Nov-13

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
TACTICAL SUPPORT VAN PAD	116-65	SY

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

According to the "new" configuration of Marine Corps vans, clusters of 35 vans require:

(104 ft. + 150 ft) x (92 ft + 120 ft) 53,848 SF

Where: 104 ft x 92 ft is the Van Placement Pad, 100 ft x 50 ft is the perimeter RATCH access/Aisle access space.

divided by 9 (convert to SY) 5,983 SY

Discussion with 1st MAW personnel concluded that three sets of van clusters are required.

3 Sets of Vans x 3,219 SY= 17,949 SY

Total Requirement: 17,949 SY

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
BATTALION/SQUADRON HQ	610-72	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Administrative office space in support of the MALS is presented below. The following table delinates the space requirement by division:

Personnel from T/O

CMD Staff	4	
S-1 Section	7	
S-2 Section	3	
S-3 Section	6	
S-4 Section	9	
S-6 Section	8	
Total	37	PN

UFC 2-000-05N, dated 31 Jan 2005, states the in the absence of detailed data or when close approximation to precise requirements is not considered necessary, the gross floor area should be computed based on 162.5 square feet per building occupant.

Office space requirement:	37 x	162.5	GSF/PN		6,013	GSF
Training Room 3	20 x	20	GSF/PN		400	GSF
Total Requirement					6,413	**GSF**
				SAY	6,420	GSF

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 22-Nov-13

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AIRFRAMES SHOP	211-08	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

An Airframes Division at the intermediate maintenance level is required at Navy and Marine Corps Air installations for the testing, maintenance and repair of airframes components. This section provides the method for determining the space requirements for this division. The primary function of the airframes shop is to repair aircraft structural and hydraulic. It contains a Structures Branch, a Hydraulics/Pneumatics Branch, a Non-Destructive Inspection (NDI) Branch; and, if authorized by NAVAIRSYSCOM, an Electro-Plating/Anodizing Branch. The shop structure is shown in Table 21108-1 of UFC 2-000-05N. In addition to the specific shop structure shown, support space for material storage, administration, training, male and female locker and restrooms, and a mechanical equipment room.

Space requirements are determined based on the number of aircraft supported and the corresponding basic space allowance presented in table 21108-2 of the UFC.

Using an aircraft loading of 50 AC, space permitted is 13,800 GSF

Airframes Shop		13,800 SF
Total Requirement:	**SAY**	**13,800 SF**

TOTAL REQUIREMENT FOR CATEGORY CODE
13,800 SF (1283 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 22-Nov-13

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AIMD	211-16	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Management space provides for the control, monitoring, and administration of the Intermediate Maintenance Activity (IMA). The Aircraft Maintenance Officer and staff are responsible for the administration and supervision of the maintenance effort for the IMA. These responsibilities include production control, material control, financial accounting, training, personnel, administration, quality control, technical publications library, data analysis, and tool control for common and special tools and test equipment.

UFC 2-000-05N, Supplement - Marine Corps Aircraft maintenance Facilities, provides 9,875 SF for this function.

Aircraft Intermediate Maintenance Shop		9,875 SF
Total Requirement:	**SAY**	**9,875 SF**

TOTAL REQUIREMENT FOR CATEGORY CODE
9,875 SF (918 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 22-Nov-13

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ENGINE MAINTENANCE SHOP	211-21	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

An Engine Maintenance Shop provides space for all work centers within the Power Plants Division of an Intermediate Level Maintenance Activity (IMA). The Power Plants or Aircraft Engine Maintenance Shop is required to maintain the aircraft engine and associated components. The primary function is to repair aircraft engines, engine components, propellers, rotors, auxiliary power units (APUs), and auxiliary fuel and refueling stores.

Space requirements for the main engine work area for first and second degree engine maintenance is based on the number of supported engine types and the corresponding space allowances presented in Table 21121-1 in UFC 2-000-05N.

Using Table 21121-1 and 50 aircraft - 5,325 GSF is permitted.

Additional support work center space is permitted per Table 21121-3 - 1,800 SF

Engine Maintenance Shop		7,125 SF
Total Requirement:	**SAY**	**7,125 SF**

TOTAL REQUIREMENT FOR CATEGORY CODE
7,125 SF (662 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 22-Nov-13

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AVIONICS SHOP	211-45	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

Column (1)		Column (2)	Column (3)		Column (4)
Airframe	#	SF Allowance	Adjustment		Adjusted SF
AH-1	10	13,400 SF	0.55	100%	7,370 SF
CH-53	8	10,900 SF	0.5	12%	654 SF
UH-1	8	12,400 SF	0.5	24%	1,488 SF
		Total Requirement:			**9,512 GSF**

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 22-Nov-13

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORGANIC UNIT STORAGE	441-12	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organic unit storage is required by MALS for logistical supply and storage of spares and repair parts.

Bulk Storage							
Palette Storage (3FT x 4FT)=	12	NSF	x	80		960	NSF
Propeller/Rotary Storage						4,000	NSF
Aircraft Canopies						2,750	NSF
Fuel Tanks						2,000	NSF
Strut Storage						1,500	NSF
Security Cage						1,500	NSF
3P Area						1,000	NSF
Aircraft Parts/spares						10,000	NSF
Shelf Storage							
Shelving Stacked (4FT x 5FT)=	20	NSF	x	125		2,500	NSF
Parts Bin (3FT x 4FT)=	12	NSF		100		1,250	NSF
Subtotal NSF:						27,460	NSF
Net to Gross conversion factor = 2:			27,460	x	2 =	54,920	GSF
Supply Clerk Office:	9	PN	x	90	x (1.25 net to gross factor)	1,013	GSF
					Total	55,933	GSF
Total Requirement:						**55,933**	**GSF**
					SAY	**55,940**	GSF

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
MWSS Facilities	MWSS Facilities

MWSS Facilities at North Ramp

1. COMPONENT: Navy	FY 2015 MILITARY CONSTRUCTION PROGRAM	2. DATE: 1-Aug-13

3. INSTALLATION (SA) & LOCATION/UIC: N41557	4. PROJECT TITLE:
NSA Andersen Guam Andersen AFB, Guam	MWSS Facilities at North Ramp

5. PROGRAM ELEMENT:	6. CATEGORY CODE:	7. PROJECT NUMBER:	8. PROJECT COST ($000):
-	21860	P240	(b) (5)

9. COST ESTIMATES:

ITEM	U/M	QTY	UNIT COST	COST (b) (5)
MWSS FACILITIES AT NORTH RAMP	**M2**	**3,212**		(b) (5)
MWSS FACILITY (28,201 SF)	M2	2,620	(b) (5)	(b) (5)
ARMORY (6,371 SF)	M2	592	(b) (5)	(b) (5)
WASH/GREASE RACKS	EA	3	(b) (5)	(b) (5)
INFORMATION SYSTEMS	LS	--		
BUILT-IN EQUIPMENT	LS	--		
SPECIAL COSTS	LS	--		
OPERATION & MAINTENANCE SUPP INFO (OMSI)	LS	--		
LEED AND EPACT 2005 COMPLIANCE (INSIDE)	LS	--		
SUPPORTING FACILITIES:	LS	--	--	(b) (5)
SITE PREPARATION	LS	--	--	
PAVING AND SITE IMPROVEMENTS	LS	--	--	
ANTI-TERRORISM/FORCE PROTECTION (OUTSIDE)	LS	--	--	
ELECTRICAL UTILITIES	LS	--	--	
MECHANICAL UTILITIES	LS	--	--	
ENVIRONMENTAL MITIGATION	LS	--	--	

SUBTOTAL CONTINGENCY (5%)	(b) (5)
TOTAL CONTRACT COSTS SUPERVISION, INSPECTION & OVERHEAD (SIOH) (6.2%)	
SUBTOTAL DESIGN/BUILD - DESIGN COST (4%)	
TOTAL REQUEST **TOTAL REQUEST (ROUNDED)**	
EQUIPMENT FROM OTHER APPROPRIATIONS (NON ADD)	

1. COMPONENT: Navy	FY 2015 MILITARY CONSTRUCTION PROGRAM	2. DATE: 1-Aug-13

3. INSTALLATION (SA) & LOCATION/UIC: N41557 NSA Andersen Guam Andersen AFB, Guam	4. PROJECT TITLE: MWSS Facilities at North Ramp

5. PROGRAM ELEMENT:	6. CATEGORY CODE:	7. PROJECT NUMBER:	8. PROJECT COST ($000):
-	21860	P240	(b) (5)

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

Construct a low-rise Marine Wing Support Squadron (MWSS) facility, an Armory, and Wash/Grease Racks. The MWSS facility is a combined facility that includes Operational Haz/Flam Storage, Auto Organizational Shop, Electronic/Comm Maintenance Shop, Construction/Weight Handling Equipment Shop, Organic Unit Storage, Battalion/Squadron HQ, supporting mechanical/electrical space and hardstand for tactical vehicles and equipment. The armory will include cleaning area and spaces to secure crew served weapons and small arms. Wash/grease racks will consist of two wash racks and two grease racks. Design will comply with the Marine Corps Base Guam Installation Appearance Plan (IAP), Andersen Air Force Base (AAFB) Architectural Compatibility and Base Design Standards and the Naval Facilities Engineering Command Marianas (NAVFACMAR) and Marine Corps Design Standards.

MWSS facility to be pre-cast concrete or cast-in-place concrete and the Armory will be cast-in-place construction. Facilities shall be one-story with slab-on-grade foundations, windows, reinforced concrete roofing, mechanical, electrical, emergency power, and information systems appropriate to Guam earthquake and environmental conditions, and designed to meet applicable Unified Facilities Criteria (UFC). Facilities will be equipped with automatic fire sprinklers and air-conditioning or ventilated as appropriate. Electronic security will be provided for the Armory.

The MWSS facility includes administrative space which consists of office space, conference rooms, EKMS vault, break rooms, and restrooms. Maintenance shops include space for drive-through equipment maintenance bays, tool rooms, battery charging/storage rooms, parts storage, administrative office space and dispatching, storage for OEM, locker/lunch room, licensing, and ready rooms.

The armory shall have an 2.4M (eight foot) high chain link fence including the double outrigger in a Y configuration with three strands of barb wire each installed at a 45 degree angle in accordance with MCO 5530.14A and UFC 4-022-03. Gates and fence shall comply with MCO 5530.14A, MIL HDBK 1013/1A and MIL HDBK 1013/10.

Information systems include basic telephone, computer network, fiber optic, cable television, mass notification, security and fire alarm systems infrastructure. Buildings will be outfitted with appropriate fire alarm control panels and smoke detection systems per UFC 3-600-01 Fire Protection Engineering Facilities. Premium information systems include Intrusion Detection Systems (IDS).

This project will provide Anti-Terrorism/Force Protection (AT/FP) features and comply with AT/FP regulations, and physical security mitigation in accordance with DOD Minimum Anti-Terrorism Standards for Buildings.

Built-in equipment includes cleaning tables and steel cages/partitions associated with the armory, radon mitigation systems and oil/water separators.

Special costs include Post Construction Award Services (PCAS) (which includes geospatial surveys and mapping).

Operations and Maintenance Support Information (OMSI) is included in this project.

Sustainable design principles will be included in the design and construction of the project in accordance with Executive Order 13423 and other laws and Executive Orders. Facilities will comply with the Energy Policy Act of 2005 (EPAct05) and the Energy Independence and Security Act of 2007. Facilities shall be designed to meet requirements for LEED Silver certification in the New Construction & Major Renovations Rating System (v.2009). Low Impact Development (LID) will be included in the design and construction of this project as appropriate.

Site preparations includes earthwork, grading, and temporary erosion and sediment control.

1. COMPONENT: Navy	FY 2015 MILITARY CONSTRUCTION PROGRAM	2. DATE: 1-Aug-13

3. INSTALLATION (SA) & LOCATION/UIC: N41557	4. PROJECT TITLE:
NSA Andersen Guam Andersen AFB, Guam	MWSS Facilities at North Ramp

5. PROGRAM ELEMENT:	6. CATEGORY CODE:	7. PROJECT NUMBER:	8. PROJECT COST ($000):
-	21860	P240	(b) (5)

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

Paving and site improvements include POV parking facilities (approximately 50 spaces), organizational parking facilities, pavement for roads and driveways, pavement for open storage, curbs/gutters, sidewalks and ramps, landscaping, security fencing (2.4 M high, barbed), trash enclosure, pedestrian and bicycle features (bike rack, trash receptacles, facility sign) injection well (LEED/LID), infiltration basin (LEED/LID) and bioswales (LEED/LID).

Anti-Terrorism/Force Protection (Outside) features include rolling gates and pipe bollards.

Electrical utilities include primary and secondary electrical distribution, pad-mounted transformers, communication distribution and alarm systems, and site lighting.

Mechanical utilities include potable water distribution systems, fire protection water distribution, sanitary sewer distribution systems, storm sewer systems, and corrosion control.

Environmental mitigation includes cultural and natural resource mitigation, and unexploded explosive ordinance (UXO)/munitions and explosives of concern (MEC) mitigation. Cultural resource mitigation consist of archaeological monitoring as required. Natural resource mitigation consists of Hazardous Analysis and Critical Control Point (HACCP) planning and implementation, rapid response contingency, biological monitoring and programmatic EV mitigation.

Facilities will be designed to meet or exceed the useful service life specified in Department of Defense (DoD) UFC. Facilities will incorporate features that provide the lowest practical life cycle cost solutions satisfying the facility requirements with the goal of maximizing energy efficiency.

11. REQUIREMENT:

1. COMPONENT: Navy	FY 2015 MILITARY CONSTRUCTION PROGRAM		2. DATE: 1-Aug-13
3. INSTALLATION (SA) & LOCATION/UIC: N41557 NSA Andersen Guam Andersen AFB, Guam		4. PROJECT TITLE: MWSS Facilities at North Ramp	
5. PROGRAM ELEMENT: -	6. CATEGORY CODE: 21860	7. PROJECT NUMBER: P240	8. PROJECT COST ($000): (b) (5)

11. REQUIREMENT:

PROJECT:

Constructs a MWSS facility, armory, and wash/grease racks that provide essential Expeditionary Airfield services (EAF), Aircraft Rescue and Firefighting (ARFF), and Aviation and Ground Refueling functions in support of Marine Aircraft Wing (MAW) current and future training requirements.
(New Mission)

REQUIREMENT:

The Guam International Agreement was approved in February 2009 between the United States Government and the Government of Japan. The agreement outlined a realignment of United States Marine Corps (USMC) elements to reduce the US military footprint in Okinawa, including the relocation of forces from Japan to Guam. This project has military utility independent of the permanent relocation of Marines from Okinawa, Japan to Guam. It supports an enduring requirement for MAW jet and tilt-rotor squadrons that frequently deploy to Guam for training as part of the bilateral Aviation Training Relocation (ATR) agreement. Under the ATR, the Government of Japan provides a significant amount of funding for these aviation units to train outside of Japan. This project will provide essential Expeditionary Airfield Services (EAF), Aircraft Rescue and Firefighting (ARFF), and Aviation and Ground Refueling functions in support of MAW current and future training requirements

The North Ramp ADP was completed in May 2012 to ensure all aviation requirements and support facilities and infrastructure were efficiently identified and sited within the AAFB North Ramp area. The majority of the AAFB North Ramp area is undeveloped.

The USMC Aviation Combat Element (ACE) requires operational, maintenance, administrative, and support facilities to conduct the mission requirements of the MAW elements operating out of AAFB North Ramp.

CURRENT SITUATION:

There are currently no operational or support facilities available at AAFB North Ramp to support MAW operations. Significant site improvements, grading, and utility infrastructure development is required to prepare the North Ramp site for vertical construction.

With the recent decision by Japan to encompass Guam into the original 2006 ATR program, USMC squadron deployments have increased significantly. The frequency of Guam deployments will increase even more once the Navy's Carrier Air Five (CVW-5) relocates from Atsugi to Iwakuni in 2016. That relocation will double the number of aircraft at Iwakuni and significantly congest the already limited Iwakuni training airspace.

IMPACT IF NOT PROVIDED:

Without dedicated USMC aviation facilities at AAFB North Ramp the relocation of USMC elements from Japan, per the Guam International Agreement (Feb 2009) will not be possible. Without dedicated USMC aviation facilities at Andersen AFB North Ramp, the requisite increase in USMC ATR deployments to Guam (as a result of the CVW-5 relocation to Iwakuni) will not be possible.

1. COMPONENT: Navy	FY 2015 MILITARY CONSTRUCTION PROGRAM	2. DATE: 1-Aug-13

3. INSTALLATION (SA) & LOCATION/UIC: N41557	4. PROJECT TITLE:
NSA Andersen Guam Andersen AFB, Guam	MWSS Facilities at North Ramp

5. PROGRAM ELEMENT:	6. CATEGORY CODE:	7. PROJECT NUMBER:	8. PROJECT COST ($000):
-	21860	P240	(b) (5)

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

1. Status

A. Date Design or Parametric Cost Estimate started		May-13
B. Date 35% Design or Parametric Cost Estimate Complete		July-13
C. Date Design Complete		April-16
D. Percent Completed as of	September-13	10%
E. Percent Completed as of	January-14	25%
F. Type of Design Contract		Design-Build
G. Parametric Estimate Used to Develop Cost		Yes
H. Energy Study/Life Cycle Analysis Performed		Yes

2. Basis

A. Standard or definitive design (Y/N)	No
B. Where design was previously used:	N/A

3. Cost (Total $000) C = A + B or D + E

A. Production of plans and specs	--
B. All other Design cost	--
C. Total design cost (C) = (A) + (B) or (D) + (E)	--
D. Contract	--
E. In-House	--

4. Contract Award	June-15
5. Construction Start	July-16
6. Construction Complete	August-18

B. Equipment associated with this project which will be provided from other appropriations:

Major Equipment	Funding Source	Fund Year	Installation Start-End Mo/Yr	Shakedown Start-End Mo/Yr	IOC Date Mo/Yr	Cost
ADP Hardware & Software	O&M	2018				(b) (5)
Audio Visual (AV) Equip	O&M	2018				(b) (5)
Furniture/Furnishings	O&M	2018				(b) (5)
NMCI Support	O&M	2018				(b) (5)
Telecommunications Equip	PMC	2018				(b) (5)
IPE (Industrial Plant Equip)	O&M	2018				(b) (5)
Building Equip (OFCI)	O&M	2018				(b) (5)
CESE-Vehicles	O&M	2018				(b) (5)
Construction Weight Handling Equip	O&M	2018				(b) (5)
Physical Security Equip	O&M	2018				(b) (5)
Telephony Switch Equip	PMC	2018				
Area Distribution Equip	O&M	2018				
Monitoring Equipment	O&M	2018				

1. COMPONENT: Navy	FY 2015 MILITARY CONSTRUCTION PROGRAM	2. DATE: 1-Aug-13

3. INSTALLATION (SA) & LOCATION/UIC: N41557 NSA Andersen Guam Andersen AFB, Guam	4. PROJECT TITLE: MWSS Facilities at North Ramp

5. PROGRAM ELEMENT:	6. CATEGORY CODE:	7. PROJECT NUMBER:	8. PROJECT COST ($000):
-	21860	P240	(b) (5)

12. SUPPLEMENTAL DATA:

Joint Use Certification:

The Director Land Use and Military Construction Branch, Installations and Logistics Department, Headquarters Marine Corps certifies that this project has been considered for joint use potential. Unilateral Construction is recommended. Mission requirements, operational considerations, and location are incompatible with use by other components.

Activity POC: (b) (6) Phone (b) (6)

Attachments:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Corr Control Hangar	Corrosion Control Hangar

Corrosion Control Hangar

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 22-Nov-13

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
CORROSION CONTROL HANGAR	211-03	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

Table 211-03-1
Aircraft Corrosion Control Hangar

Facility Type	Hangar Bay (Each Bay)	Support Space (Each Facility)	Aircraft Type
Small	27.4 m x 25.5 m (90 ft x 83.5 ft) 699 sm (7,515 SF)	64.7 m x 6.9 m (212.3 ft x 22.7 ft) 446 sm (4,819 SF)	Fixed wing, Carrier-type and Rotary Wing (F/A-18, F-14, H-60, H-53, etc.)
Large	36.6 m x 46.2 m (120 ft x 151.5 ft) 1,691 sm (18,180 SF)	36.6 m x 11.7 m (120 ft x 38.3 ft) 428 sm (4,596 SF)	Patrol and Transport (P-3, C-130, etc.)

Table 211-03-2
Aircraft Corrosion Control Hangar
Hangar Requirements

Aircraft Quantity	Hangar Bay "Clean"	Hangar Bay "Dirty"	Support Space
Up to 45	1	1	1
46 - 90	2	1	1
91 - 135	3	1	1
136 - 180	4	2	1
181 - 225	5	2	1
226 - 270	6	2	1

Aircraft Quantity Assigned: 25 UDP

TOTAL 25

Bay sizes are based on the MV-22 unfolded, with the addition of minimum clearances outlined in UFC 4-211-02NF.

MV-22 Dimensions = 58 FT x 85 FT, with clearances (10 FT all ends) = 78 FT x 105 FT = 8,190 SF

Hangar Bay "Clean" - One at 8,190 SF each	8,190 SF
Hangar Bay "Dirty" - One at 8,190 SF	8,190 SF
Support Space - One at 4,819 SF	4,819 SF
Total Requirement	**21,199 SF**

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
GSE Shops	GSE Shops

GSE Shops at North Ramp

1. Component NAVY	FY 2015 MILITARY CONSTRUCTION PROGRAM	2. Date 31 JUL 2013

3. Installation(SA) and Location/UIC: N41557 NSA ANDERSEN GUAM ANDERSEN AB, GUAM	4. Project Title GSE SHOPS AT NORTH RAMP

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	21860	P-230	(b) (5)

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost($000)
GSE SHOPS AT NORTH RAMP (24,476 SF)	m2	2,274		(b) (5)
AVIATION GSE SHOP & SHED (24,476 SF)	m2	2,274	(b) (5)	((b) (5))
BUILT-IN EQUIPMENT	LS			((b) (5))
SPECIAL COSTS	LS			((b) (5))
LEED AND EPACT 2005 COMPLIANCE (INSIDE)	LS			((b) (5))
SUPPORING FACILITIES				(b) (5)
SITE PREPARATION	LS			((b) (5))
PAVING AND SITE IMPROVEMENTS	LS			((b) (5))
ELECTRICAL UTILITIES	LS			((b) (5))
MECHANICAL UTILITIES	LS			((b) (5))
ENVIRONMENTAL MITIGATION	LS			((b) (5))
SUBTOTAL				(b) (5)
CONTINGENCY (5%)				(b) (5)
TOTAL CONTRACT COST				(b) (5)
SIOH (6.2%)				(b) (5)
SUBTOTAL				(b) (5)
DESIGN/BUILD – DESIGN COST (4%)				(b) (5)
TOTAL REQUEST				(b) (5)
TOTAL REQUEST ROUNDED				(b) (5)
EQUIPMENT FROM OTHER APPROPRIATIONS				((b) (5))

10. Description of Proposed Construction

Project constructs a low-rise and high-bay composite facility with three separate components: (1) Ground Support Equipment (GSE) Maintenance Shop and Holding Shed, (2) Aviation Armament Shop and (3) Aviation Life Support Systems Shop. Facility will be concrete-framed with reinforced concrete or precast wall and roof components, supported on concrete foundations. Structural and exterior architectural systems will be constructed with features appropriate for Guam's earthquakes and typhoons.

1. Component **NAVY**	**FY 2015 MILITARY CONSTRUCTION PROGRAM**	2. Date 31 JUL 2013

3. Installation(SA) and Location/UIC: N41557 NSA ANDERSEN GUAM ANDERSEN AB, GUAM	4. Project Title GSE SHOPS AT NORTH RAMP

5. Program Element	6. Category Code 21860	7. Project Number P-230	8. Project Cost ($000) (b) (5)

GSE Maintenance Shop and Holding Shed integrates maintenance bay and holding shed requirements for intermediate level maintenance of aircraft GSE. In addition to the maintenance bays and holding shed, the GSE Shop includes functional space for paint and blast booths, tire repair, battery repair, parts and tool storage, and administrative space.

Aviation Armament Shop is a work space for inspection and maintenance of Aviation Weapon Support Equipment (AWSE), including dedicated space for ammunition stock records, production control, supply and tool storage, caged turret storage, equipment pool trailers, and administrative space.

Aviation Life Support Systems Shop is a work space for inspecting, repairing, and repacking of parachutes, flotation devices and other life support equipment. Separately partitioned oxygen shop and administrative space are included.

This project will provide Anti-Terrorism/Force Protection (AT/FP) features and comply with AT/FP regulations and physical security mitigation in accordance with DOD Minimum Antiterrorism Standards for Buildings. DoD Guidance Unit Costs were used to derive primary facility costs. As such, the costs for specific AT/FP features are included in the unit costs.

Built-in equipment includes a bridge crane for the GSE Maintenance Shop, monorail crane for the Aviation Armament Shop, built-in vehicle lift/ spider jack, prefabricated paint and blast booths with industrial ventilation and dust collection systems, oil water separators, and radon mitigation systems for inhabited portions of the facility.

Special Costs include Post Construction Contract Award Services (PCAS) (includes geospatial surveys and mapping).

Sustainable design principles will be included in the design and construction of the project in accordance with Executive Order 13423 and other laws and Executive Orders. Facilities will meet Leadership in Energy and Environmental Design (LEED) ratings and comply with the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. Low Impact Development will be included in the design and construction of this project as appropriate.

SUPPORTING FACILITIES:
Site Preparation includes site clearing, excavation, earthwork, contaminated soil mitigation, and preparation for construction.

Paving and Site Improvements include grading, drainage, portland cement concrete pavements for GSE staging and container storage, and asphalt concrete pavements for government and privately-owned-vehicle parking. Airfield security fencing, including automated access points through the airfield flight line fence will be provided. Access roadways, curbs, sidewalks, internal fencing and gates, trash enclosures, exterior signage, landscaping, and minor demolition of existing pavements and utilities will also be provided.

1. Component **NAVY**	**FY 2015 MILITARY CONSTRUCTION PROGRAM**	2. Date 31 JUL 2013

3. Installation(SA) and Location/UIC: N41557 NSA ANDERSEN GUAM ANDERSEN AB, GUAM	4. Project Title GSE SHOPS AT NORTH RAMP

5. Program Element	6. Category Code 21860	7. Project Number P-230	8. Project Cost ($000) (b) (5) [redacted]

Electrical Utilities include primary and secondary distribution systems, exterior communications, area lighting and electrical pad-mounted transformers.

Mechanical Utilities include domestic water/ fire water/ sanitary sewer utilities, air-conditioning and ventilation systems, building plumbing and fire protection systems. Subsurface infiltration basins will be provided to meet low-impact development (LID) requirements.

Environmental Mitigation includes natural and cultural resource mitigation and removal and disposal of unexploded ordnance and munitions and explosives of concern (UXO/MEC).

Facilities will be designed to meet or exceed the useful service life specified in DoD Unified Facility Criteria. Facilities will incorporate features that provide the lowest practical life cycle cost solutions satisfying the facility requirements with the goal of maximizing energy efficiency.

11.

PROJECT:
This project will construct an Aviation Ground Support Equipment (GSE) Shop Complex with utilities, roads, tactical and personal vehicle parking, site improvements and earthwork necessary for full operation in support of the Marine Corps aviation operations on Guam.

1. Component **NAVY**	**FY 2015 MILITARY CONSTRUCTION PROGRAM**	2. Date 31 JUL 2013

3. Installation(SA) and Location/UIC: N41557 NSA ANDERSEN GUAM ANDERSEN AB, GUAM	4. Project Title GSE SHOPS AT NORTH RAMP

5. Program Element	6. Category Code 21860	7. Project Number P-230	8. Project Cost ($000) (b) (5)

REQUIREMENT:
As the Marine Corps continues to increase aviation training on Guam and in the CNMI, the 1st Marine Aircraft Wing (1st MAW) requires dedicated operational and maintenance facilities at Andersen AFB North Ramp to support current Marine Air-Ground Task Force (MAGTF) training requirements. This project has military utility independent of the permanent relocation of Marines from Okinawa to Guam. It supports an enduring requirement for 1st MAW jet and tilt-rotor squadrons that frequently deploy to Guam for training as part of the bilateral "Aviation Training Relocation" (ATR) agreement. Under the ATR, the Government of Japan provides a significant amount of funding for these aviation units to train outside of Japan.

This project is also required for the permanent relocation of USMC forces from Okinawa to Guam in accordance with the 2009 Guam International Agreement between the United States Government and the Government of Japan (reaffirmed in the April 2012 U.S. – Japan Joint Statement). Andersen AFB North Ramp will be the basing location for the Aviation Combat Element portion of the MAGTF that will be relocating to Guam.

CURRENT SITUATION:
1st MAW aviation units currently deploying to Guam have no dedicated transit facilities. Those units share ramp space with USAF units at Andersen AFB South Ramp and have very limited access to USAF aviation facilities, renting trailers during deployment for some functions.

With the recent decision by Japan to encompass Guam into the original 2006 ATR program, USMC squadron deployments have increased significantly. The frequency of Guam deployments will increase even more, once the Navy's Carrier Air Wing Five (CVW-5) relocates from Atsugi to Iwakuni in 2016. That relocation will double the number of aircraft at Iwakuni and significantly congest the already limited Iwakuni training airspace.

IMPACT IF NOT PROVIDED:
Without dedicated USMC aviation facilities at Andersen AFB North Ramp, the requisite increase in USMC ATR deployments to Guam (as a result of the CVW-5 relocation to Iwakuni) will not be possible. Additionally, this project is essential to support the future permanent relocation of the USMC Aviation Combat Element to Guam. The USMC Aviation Combat Element cannot relocate to Guam if this project is not complete.

1. Component NAVY	FY 2015 MILITARY CONSTRUCTION PROGRAM	2. Date 31 JUL 2013

3. Installation(SA) and Location/UIC: N41557 NSA ANDERSEN GUAM ANDERSEN AB, GUAM	4. Project Title GSE SHOPS AT NORTH RAMP

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	21860	P-230	(b) (5) [redacted]

A. Estimated Design Data:

1. Status:

(A) Date design or Parametric Cost Estimate started	05/2013
(B) Date 35% Design or Parametric Cost Estimate complete	07/2013
(C) Date design completed	04/2016
(D) Percent completed as of September 2013	10%
(E) Percent completed as of January 2014	25%
(F) Type of design contract	Design Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	Yes

2. Basis:

(A) Standard or Definitive Design	No
(B) Where design was previously used	No

3. Total cost (C) = (A) + (B) = (D) + (E):

(A) Production of plans and specifications	(b) (5) [redacted]
(B) All other design costs	
(C) Total	
(D) Contract	
(E) In-house	

4. Contract award:	06/2015
5. Construction start:	07/2016
6. Construction complete:	08/2018

1. Component **NAVY**	**FY 2015 MILITARY CONSTRUCTION PROGRAM**	2. Date 31 JUL 2013

3. Installation(SA) and Location/UIC: N41557 NSA ANDERSEN GUAM ANDERSEN AB, GUAM	4. Project Title GSE SHOPS AT NORTH RAMP

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	21860	P-230	(b) (5)

B. Equipment associated with this project which will be provided from other appropriations:

Major Equipment	Funding Source	Fund Year	Installation Start-End Mo/Yr	Shakedown Start-End Mo/Yr	IOC Date Mo/Yr	Cost
Furniture / Furnishings	O&MMC	2018	09/2018			(b) (5)
Industrial Plant Equipment	O&MMC	2018	09/2018			(b) (5)
ADP Hardware and Software	O&MMC	2018	09/2018			(b) (5)
Elec Security Equip (ESE)	O&MMC	2018	09/2018			(b) (5)
NMCI Support	O&MMC	2018	09/2018			(b) (5)
Telecommunications Equip	O&MMC	2018	09/2018			(b) (5)

JOINT USE CERTIFICATION:
The Regional Commander certifies that this project has been considered for joint use potential. Joint Use is recommended.

Activity POC: (b) (6) Phone No: (b) (6)

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Ordnance Ops	Ordnance Operations

Inert Storage

Ordnance Operations Building

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 16-Feb-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
INERT STOREHOUSE	421-32	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Inert Storehouses are used for the storage of such nonexplosive items as bomb tails, machine gun links, empty cartridge cases, and packing materials.

According to the UFC 2-000-05N, dated March 1998, storehouses for inert material are usually 50 x 200 ft. or 106 x 204 ft. or multiples of these basic dimensions, and are similar to commercial warehouses. Although the height of stowage in these storehouses depends on the type materials, the average stacking height is about 10 feet. Storage space available for storage will meet a minimum criteria of 60 percent of net storage space used for storage operations. The net storage capacity of the 50 x 200 ft. storehouse is approximately 60,000 cubic feet.

For planning of installation inert storehouses use only the 50 x 200 ft. storehouse.

Total Requirement **10,000 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
10,000 SF (930 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORDNANCE OPERATIONS BUILDING	143-20	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA: AAFB-MSA 1

An ordnance operations building is required to oversee the storage, issue, and control of ordnance materials. Assume LCE (controlling GCE ordnance) and MCB (controlling aviation ordnance) are consolidated in same facility. This facility will work in conjunction with the Air Force's 36th MUNS, who have operational control of the munitions storage areas at Andersen AFB.

The LCE Ordnance Operations Building (along with the inert storehouse (CCN 421-32)), at AAFB - Munitions Storage Area 1, adjacent to the existing AF 36th MUNS administration building. See GJMMP Military Munitions Annex for details.

The LCE requires an ordnance operations building to coordinate the storage, issue, maintenance, and contol of ordnance. This will include coordination with the AF 36th MUNS in AAFB MSA 1, build-up, shipments, and storage duties at MSA 1, and provide ordnance delivery to the aviation ramp and training locations on Guam. This facility requires space for 9 PN. This faciliity requires a 24-hr on-call presence of 2 to 4 PN.

In addition, based on the Military Munitions Annex, USMC requires 2 bays to be added to the existing AAFB Line Builidng #9016 for 20mm/Chaff and Flare. Building requirements are estimated ot be 3,000 GSF.

Requirements are shown below with backup following.

Ordnance Ops Building	2,663 GSF
Chaff and Flare Bays	3,000 GSF
Total Requirement	**5,663 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
5,663 SF (527 m2)

MOBILIZATION STATEMENT

SIGNATURE: _____

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE: _____

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ORDNANCE OPERATIONS BUILDING	143-20	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Ordnance Ops Building

Office space: UFC 2-000-05N, CCN 610-10 authorizes 162.5 SF per building occupant.

Admin PN =	9	PN	x	162.5	NSF/PN	1,463 GSF

Bunk Room (CCN 730-10 Fire Station Facility Requirements to Derive SF values)

Bunk Room =	4	PN	x	110	NSF/PN	440 GSF

Additional Requirement for Special Purpose Spaces

(10) QUADCONS Storage	760 GSF
Total Requirement	2,663 GSF
SAY	**2,663 GSF**

Chaff and Flare Bays

Based on the Military Munitions Annex, USMC requires 2 bays to be added to the existing AAFB Line Builidng #9016 for 20mm/Chaff and Flare. Building requirements are estimated ot be 3,000 GSF.

Total Requirement **3,000 GSF**

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Aviation Instruction Fac	Aviation Instruction Facility

Aviation instruction Facility at North Ramp

1. Component		2. Date
USMC	**JFY 2015 MILITARY CONSTRUCTION PROGRAM**	18-Jan-13

3. Installation and Location/UIC:	4. Project Title
N41557 NSA ANDERSEN AB, GUAM	AVIATION INSTRUCTION FACILITY AT NORTH RAMP

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	171-35	J- 201	(b) (5)

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
AVIATION INSTRUCTION FACILITY AT NORTH RAMP				(b) (5)
PRIMARY FACILITIES				
AVIATION INSTRUCTION FACILITY (39,193 SF)	m2	3,641	(b) (5)	(b) (5)
BUILT-IN EQUIPMENT	LS	-		
SPECIAL COSTS	LS	-	-	
TECHNICAL OPERATING MANUALS	LS	-	-	
LEED AND FEDERAL ENERGY ACTS COMPLIANCE (INSIDE)	LS	-	-	
SUPPORTING FACILITIES				
SITE PREPARATION	LS	-	-	(b) (5)
PAVING AND SITE IMPROVEMENTS	LS	-	-	
ELECTRICAL UTILITIES	LS	-	-	
MECHANICAL UTILITIES	LS	-	-	
LEED AND FEDERAL ENERGY ACTS COMPLIANCE (OUTSIDE)	LS	-	-	
ENVIRONMENTAL MITIGATION	LS	-	-	
DEMOLITION	LS	-	-	
SUBTOTAL				(b) (5)
CONTINGENCY - (5.00%)				
TOTAL CONTRACT COST				
SIOH - (6.20%)				
SUBTOTAL				
TOTAL REQUEST				
TOTAL REQUEST ROUNDED				
EQUIPMENT PROVIDED FROM OTHER APPROPRIATIONS		**(NON ADD)**		

10. Description of Proposed Construction:

PRIMARY FACILITIES:
Project will construct a mid-rise aviation instruction facility (39,193 SF) and concrete pads at Andersen Air Force Base (AAFB) North Ramp in support of USMC aviation training systems. Facility will have a reinforced concrete roof, walls, and slab on grade foundation. Spaces will support trainer devices for MV-22, CH-53, AH-1, UH-1 airframes, Marine Common Aircrew Trainer (MCAT), briefing rooms, administrative office, bulk and parts storage, shared use multi-purpose instructional classrooms, and restrooms. Design will be consistent with the applicable Installation Appearance Plan (IAP).

Building will be constructed with walls, flooring, foundation, windows, roofing, mechanical, electrical, emergency power, and information systems appropriate to Guam earthquake and environmental conditions, and designed to meet applicable Unified Facilities Criteria (UFC) . This project will provide Anti-Terrorism/Force Protection (ATFP) features and comply with ATFP regulations, physical security and progressive collapse mitigation in accordance with DOD Minimum Anti-Terrorism Standards for Buildings. Facilities will be equipped with automatic fire protection systems and air-conditioning or ventilated as appropriate. The project will provide privately owned vehicle (POV) and government owned vehicle (GOV) parking.

Information systems include basic telephone, computer network, fiber optic, cable television, security and fire alarm systems infrastructure. Buildings will be outfitted with appropriate fire alarm control panels and smoke detection systems per UFC 3-600-01 Fire Protection Engineering Facilities.

Built-in equipment includes an overhead bridge crane, hydraulic pumps, raised flooring, and conduit for secure internet protocol router network and security systems.

Special costs include post construction award services (PCAS) and Guam gross receipt taxes (GRT) costs.

1. Component	JFY 2015 MILITARY CONSTRUCTION PROGRAM	2. Date
USMC		18-Jan-13

3. Installation and Location/UIC: N41557

NSA ANDERSEN AB, GUAM

4. Project Title	
AVIATION INSTRUCTION FACILITY AT NORTH RAMP	J- 201

11. Requirement

Operation and Maintenance Support Information (OMSI) is included in this project.

Sustainable design measures will be integrated into the overall design, construction and operation of this facility to meet the requirements outlined in the Energy Policy Act of 2005, Executive Order 13123, and Assistant Secretary of the Navy (ASN) Installation and Environment Memo dated 4 August 2006 and achieve a Leadership in Energy and Environmental Design (LEED) Silver rating. Low impact development will be included in the design and construction of this project as appropriate.

SUPPORTING FACILITIES:
The site preparation includes clearing/grubbing, grading, earthwork, temporary erosion and soil control, and landscaping. Paving and site improvements consists of pavement for roads, parking and driveways; CMU block walls for trash enclosures; and concrete for side walks, ramps, and containerized trainers; outside area lighting; American with Disabilities Act (ADA) compliance measures; and munitions of concern (MEC) / unexploded ordnance (UXO) removal.

Utilities include electrical power, water (fire protection and potable), communications, sanitary sewer, and storm water drainage systems. Outside area lighting will be provided. Mechanical systems include fire protection systems, heating, ventilation and air conditioning, security entrance control, and carbon dioxide suppression system in computer areas. The roads, parking and driveways will be consistant with appropriate roadway stormwater runoff appurtenance including low impact development integrated management practices. The ground improvements will include a drainage system consistent with the USMC North Ramp Area Development Plan and the stormwater pollution prevention plan.

Environmental mitigation includes natural and cultural resource mitigation (to include direct and programmatic mitigations required by the ROD, B.O. and P.A.), archaeological monitoring, radon mitigation, and contaminated soil removal and disposal.

Project includes demolition and waste management.

FORM 1 DEC 76 PREVIOUS EDITIONS MAY BE USED INTERNALLY

DD 1391c UNTIL EXHAUSTED

1. Component	JFY 2015 MILITARY CONSTRUCTION PROGRAM	2. Date
USMC		18-Jan-13

3. Installation and Location/UIC: N41557

NSA ANDERSEN AB, GUAM

4. Project Title	
AVIATION INSTRUCTION FACILITY AT NORTH RAMP	J- 201

(...continued)

PROJECT:
This project will provide a mid-rise aviation instruction facility with utilities infrastructure consisting of electrical, water, wastewater, communications, roads, parking, concrete pads, site improvements, and earthwork in support of the construction of an aviation instruction facility at AAFB (new mission) North Ramp.

REQUIREMENT:
The Guam International Agreement was approved in Febuary 2009 between the United States Government and the Government of Japan. The agreement outlined a realignment of Marine Corps elements to reduce United States military footprint in Okinawa, including the relocation of forces from Japan to Guam.

The USMC Aviation Combat Element (ACE) requires operational, maintenance, administrative, and support facilities to conduct the mission requirements of the 1st MAW elements operating out of AAFB North Ramp. This aviation instructional facility supports the overall aviation training system (ATS) plan outlined in the annual Marine Aviation Plan. Shared use, multi-purpose classrooms will be provided within this facility that will be utilized by other USMC units on a scheduled basis.

CURRENT SITUATION:
There are currently no aviation instruction facilities available at AAFB North Ramp to support 1st MAW operations.

IMPACT IF NOT PROVIDED:
This project is critical in providing the infrastructure and facilities required to support the relocation of USMC forces from Okinawa to Guam. Supported units/activities will not vacate current facilities until replacement facilities in Guam have been completed, inspected, and accepted.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Earth Mag (MSA)	Earth Mag (MSA)

High Explosive Magazine

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
HIGH EXPLOSIVE MAGAZINE	421-22	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

High explosive magazines are used for storage of mass-detonating explosives. Some examples of munitions generally stored in high explosive magazines include bombs, warheads, naval mines, and demolition charges. According to NAVFAC P-80 420 general ammunition storage criteria, ammunition and bulk explosives should be stored in magazines of approved design that are sited and designated for specific purposes. The type and amount of material that may be stored in any magazine is dependent on the safety quantity distance requirements, permissible storage limits, and ammunition compatibility relationships as established by the Department of Defense Explosives Safety Board (DDESB) and as approved by Naval Sea Systems Command.(see NAVSEA OP-5, Volumes I and II).
There are two locations planned for USMC munitions storage, the Naval Munitions Site (NMS) in southern Guam, and Munitions Storage Area 1 (MSA 1) at Andersen AFB. The NMS will support largely the ground combat element (GCE) and long-term/contingency storage and shipments via ship. MSA 1 will largely support munitions for the air combat element (ACE) and shorter-term, training and operational uses and shipments via air.

High Explosive Magazines (MSA-1): 12 x 2,675 =	32,100 GSF
Total Requirement	**32,100 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
32,100 SF (2983 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Aircraft Hangar #1	Aircraft Hangar #1

Aircraft Maintenance Hangar North Ramp

1. Component NAVY	FY 2014 MILITARY CONSTRUCTION PROGRAM	2. Date

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title Aircraft Maintenance Hangar - North Ramp

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	21105	P109	(b) (5)

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost($000)
AIRCRAFT MAINTENANCE HANGAR - NORTH RAMP (72,484SF)	m2	6,734		(b) (5)
AIRCRAFT MAINTENANCE HANGAR CC21105 (72,484SF)	m2	6,734	(b) (5)	(b) (5)
INFORMATION SYSTEMS	LS			(b) (5)
BUILT-IN EQUIPMENT	LS			(b) (5)
SPECIAL COSTS	LS			(b) (5)
OPERATION & MAINTENANCE SUPP INFO (OMSI)	LS			(b) (5)
LEED AND EPACT 2005 COMPLIANCE	LS			(b) (5)
SUPPORTING FACILITIES				(b) (5)
SPECIAL CONSTRUCTION FEATURES	LS			(b) (5)
SITE PREPARATIONS	LS			(b) (5)
PAVING AND SITE IMPROVEMENTS	LS			(b) (5)
ELECTRICAL UTILITIES	LS			(b) (5)
MECHANICAL UTILITIES	LS			(b) (5)
ENVIRONMENTAL MITIGATION	LS			(b) (5)
SUBTOTAL				(b) (5)
CONTINGENCY (5%)				(b) (5)
TOTAL CONTRACT COST				(b) (5)
SIOH (6.2%)				(b) (5)
SUBTOTAL				(b) (5)
DESIGN/BUILD - DESIGN COST				(b) (5)
TOTAL REQUEST ROUNDED				(b) (5)
TOTAL REQUEST				(b) (5)
EQUIPMENT FROM OTHER APPROPRIATIONS (NON ADD)				(b) (5)

10. Description of Proposed Construction:

Constructs an aviation maintenance hangar with high bay spaces, crew and equipment spaces, and administrative spaces. Building electrical systems include power, emergency power, lighting, telecommunications, intercommunications/public address, grounding, lightning protection and electronic security systems. Building mechanical systems include fire suppression system, plumbing, heating and air conditioning and compressed air. Buildings will be constructed with walls, flooring, foundation, windows and roofing system features appropriate to Guam seismic and hurricane conditions.

Information systems include basic telephone, computer network, fiber optic, cable television, security, smoke and fire alarm systems and infrastructure. The facility will

also have a separate room that will accommodate an area distribution node in support of outside plant communications.

Built-in equipment includes elevators, overhead bridge cranes and hoists, emergency generators, and aqueous film-forming foam (AFFF) system. Two ready service lockers will be provided.

Special costs include post construction contract award services, geospatial survey and mapping, archaeological monitoring and Guam gross receipt taxes.

Project includes operation and maintenance support information manuals.

Sustainable design principles will be included in the design and construction of the project in accordance with Executive Order 13423 and other laws and Executive Orders. Facilities will meet LEED ratings and comply with the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. Low Impact Development will be included in the design and construction of this project as appropriate.

Site preparation includes site clearing, a large amoount of cut and fill, earthwork/grading over-excavation, structural fill, soil retaining structures and radon mitigation.

Special construction features includes land piling and additional seismic features not covered in unit cost.

Paving and site improvements includes roadway improvements, parking for approximately 105 vehicles, minor aircraft pavement and apron work, landscaping and other improvements. The road improvements include appropriate roadway stormwater runoff system. The ground improvements for this project will include a drainage system consistent with the USMC North Ramp Area Development Plan and the stormwater pollution prevention plan.

Electrical utilities includes networks of primary and secondary distribution installed in ducts and manholes, transformer/substation and street and outside area lighting with associated service equipment. The communication infrastructure will include ducts and manholes for future and current communication cabling and fiber optic lines requirements and includes the communication cabling and fiber optic lines for current requirements.

Mechanical utilities includes domestic and fire protection water distribution, sanitary sewer including lift station, fire pump building, pump station and AFFF collection and storage system.

This project will provide Anti-Terrorism/Force Protection (AT/FP) features and comply with AT/FP regulations and physical security mitigation in accordance with DoD Minimum Anti-

1. Component NAVY	FY 2014 MILITARY CONSTRUCTION PROGRAM	2. Date

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title Aircraft Maintenance Hangar - North Ramp

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	21105	P109	(b) (5)

Terrorism Standards for Buildings.

Environmental mitigation includes natural and cultural resource mitigation (to include direct and programmatic mitigations), archaeological monitoring, radon mitigation, munitions of concern, unexploded ordnance and contaminated soil removal and disposal.

Facilities will be designed to meet or exceed the useful service life specified in DoD Unified Facility Criteria. Facilities will incorporate features that provide the lowest practical life cycle cost solutions satisfying the facility requirements with the goal of maximizing energy efficiency.

11. Requirement: 6734 m2 **Adequate:** 0 m2 **Substandard:** 0 m2

PROJECT:

This project will construct an aircraft maintenance hangar with the utilities, roads, tactical and personal vehicle parking, site improvements and earthwork necessary for full operation in support of the Marine Corps aviation operations on Guam.

(New Mission)

REQUIREMENT:

As the Marine Corps continues to increase aviation training on Guam and in the CNMI, the 1st Marine Aircraft Wing (1st MAW) requires dedicated operational and maintenance facilities at the Andersen Air Force Base (AFB) North Ramp to support current Marine Air/Ground Task Force (MAGTF) training requirements. This project has military utility independent of the permanent relocation of Marines from Okinawa to Guam. It supports an enduring support requirement for 1st MAW squadrons that frequently deploy to Guam for training as part of the bilateral "Aviation Training Relocation" (ATR) agreement. Under the ATR, the Government of Japan provides a significant amount of funding for these aviation units to train outside of Japan.

This project is also required for the permanent relocation of USMC forces from Okinawa to Guam in accordance with the 2009 Guam International Agreement between the United States Government and the Government of Japan (reaffirmed in the April 2012 U.S. - Japan Joint Statement). The Andersen AFB North Ramp will be the basing location for the Aviation Combat Element portion of the MAGTF that will be relocating to Guam.

CURRENT SITUATION:

1st MAW aviation units currently deploying to Guam have no dedicated transit facilities. Those units share ramp space with USAF units on the Andersen AFB South Ramp and have very limited access to USAF hangars. Marine units have no dedicated access to squadron administrative spaces in USAF hangars and must rent trailers during the deployment for that function.

With the 2011 decision by Japan to encompass Guam into the original 2006 ATR program, USMC

1. Component NAVY	FY 2014 MILITARY CONSTRUCTION PROGRAM	2. Date

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title Aircraft Maintenance Hangar - North Ramp

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	21105	P109	(b) (5)

squadron deployments have increased significantly. The frequency of Guam deployments will increase even more once the Navy's Carrier Air Wing Five (CVW-5) relocates from Atsugi to Iwakuni in 2016. That relocation will double the number of aircraft at Iwakuni and significantly congest the already limited Iwakuni training airspace.

IMPACT IF NOT PROVIDED:

Without a dedicated USMC hangar at the Andersen AFB North Ramp, the requisite increase in USMC ATR deployments to Guam (as a result of the CVW-5 relocation to Iwakuni) will not be possible. Additionally, this project is essential to support the future permanent relocation of the USMC Aviation Combat Element (ACE) to Guam. The ACE cannot relocate to Guam if this project is not complete.

12. Supplemental Data:

A. Estimated Design Data:

1. Status:

(A) Date design or Parametric Cost Estimate started	11/2012
(B) Date 35% Design or Parametric Cost Estimate complete	02/2013
(C) Date design completed	05/2014
(D) Percent completed as of September 2012	5%
(E) Percent completed as of January 2013	5%
(F) Type of design contract	Design Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	No

2. Basis:

(A) Standard or Definitive Design	Yes
(B) Where design was previously used	MCAS New River & MCBH Kaneohe

3. Total cost (C) = (A) + (B) = (D) + (E):

(A) Production of plans and specifications	(b) (5)
(B) All other design costs	(b) (5)
(C) Total	(b) (5)
(D) Contract	(b) (5)
(E) In-house	(b) (5)
4. Contract award:	01/2014
5. Construction start:	06/2014
6. Construction complete:	01/2016

B. Equipment associated with this project which will be provided from other appropriations:

Equipment Nomenclature	Procuring Approp	FY Approp or Requested	Cost($000)
Airport Support Vehicles	PMC	2015	(b) (5)
Computer Hardware and Software	PMC	2015	
Electronic Security Equipment	PMC	2015	
Furniture / Furnishings	O&MMC	2015	
Industrial Plant Equipment	PMC	2015	

1. Component NAVY	FY 2014 MILITARY CONSTRUCTION PROGRAM	2. Date

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title Aircraft Maintenance Hangar - North Ramp

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	21105	P109	(b) (5) [redacted]

Telecommunications Equipment PMC 2015 281

JOINT USE CERTIFICATION:

The Director Land Use and Military Construction Branch, Installations and Logistics Department, Headquarters Marine Corps certifies that this project has been considered for joint use potential. Unilateral Construction is recommended. This Facility can be used by other components on an as available basis; however, the scope of the project is based on Department of the Navy requirements.

Activity POC: Project Development Lead Phone No: (b) (6) [redacted]

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Aircraft Hangar #2 - JSF	Aircraft Hangar #2

Aircraft Maintenance Hangar North Ramp

Air Intelligence Support Center

Cover Sheet/Team List for:

Project Title: Aircraft Maintenance Hangar - North Ramp **Project Number:** P109

Location: ANDERSEN AB, GUAM **Date:** 03-JAN-13

Prepared By: NSA ANDERSEN GUAM **FY:** 2014 **UIC:** N41557

A. Team Check List: Completed: [x] Working: [ ]

B. Team Meeting: Date:

On-Site: [ ] VTC: [ ] Conference Call: [ ]

Project Cost ($000)

(b) (5) [redacted]

C. Team Members:

Name	Position	Command	Phone Number
(b) (6) [redacted]	DM	NAVFACPAC	(b) (6) [redacted]
	GPMO PM	NAVFACPAC	
	HQ Sr PM	NAVFAC HQ	
	DPRI PM	MARFORPAC	
	Activity Representative	MARFORPAC	
	PM	NAVFACPAC	

D. Remarks:

E. Required Attachments:

- [ ] MILCON CHECKLIST
- [ ] Economic Analysis
- [ ] Site Plan
- [ ] Facility Planning Document(s)/P-80 Calculations
- [ ] R19 (Bachelor Housing Survey)
- [ ] Notice of Violation (NOV)
- [ ] Other
- [ ] PHOTOGRAPHS
- [ ] BFR
- [ ] PHL
- [ ] Sketches

F. Endorsements:

Signature	Position	Date

1. Component NAVY	FY 2014 MILITARY CONSTRUCTION PROGRAM	2. Date 03 JAN 2013

3. Installation(SA) and Location/UIC: N41557 NSA ANDERSEN GUAM ANDERSEN AB, GUAM	4. Project Title Aircraft Maintenance Hangar - North Ramp

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	21105	P109	(b) (5)

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost (b) (5)
AIRCRAFT MAINTENANCE HANGAR - NORTH RAMP (72,484 SF)	m2	6,734		(b) (5)
AIRCRAFT MAINTENANCE HANGAR (72,484 SF)	m2	6,734	(b) (5)	(b) (5)
INFORMATION SYSTEMS	LS			(b) (5)
BUILT-IN EQUIPMENT	LS			(b) (5)
SPECIAL COSTS	LS			(b) (5)
OPERATION & MAINTENANCE SUPP INFO (OMSI)	LS			(b) (5)
LEED AND EPACT 2005 COMPLIANCE (INSIDE)	LS			(b) (5)
SUPPORTING FACILITIES				(b) (5)
SPECIAL CONSTRUCTION FEATURES	LS			(b) (5)
SITE PREPARATIONS	LS			(b) (5)
PAVING AND SITE IMPROVEMENTS	LS			(b) (5)
ELECTRICAL UTILITIES	LS			(b) (5)
MECHANICAL UTILITIES	LS			(b) (5)
ENVIRONMENTAL MITIGATION	LS			(b) (5)
SUBTOTAL				(b) (5)
CONTINGENCY (5%)				(b) (5)
TOTAL CONTRACT COST				(b) (5)
SIOH (6.2%)				(b) (5)
SUBTOTAL				(b) (5)
DESIGN/BUILD - DESIGN COST (4%)				(b) (5)
TOTAL REQUEST ROUNDED				(b) (5)
TOTAL REQUEST				(b) (5)
EQUIPMENT FROM OTHER APPROPRIATIONS (NON ADD)				(b) (5)

Guidance Unit Cost Analysis

Cat Code	Facility	OSD Guid.	Guid. Cost	Guid. Size	Project Scope	Room Size Fctr	Area Size Fctr	Cost Fctr	Esc. Factor	Unit Cost
21105	AIRCRAFT MAINTENANCE HANGAR		(b) (5)	6734 m2	6734 m2		1.0000	1.000	1.000000000	(b) (5)

10. Description of Proposed Construction:

Constructs an aviation maintenance hangar with high bay spaces, crew and equipment spaces, and administrative spaces. Building electrical systems include power, emergency power, lighting, telecommunications, intercommunications/public address, grounding, lightning protection and electronic security systems. Building mechanical systems include fire suppression system, plumbing, heating and air conditioning and compressed air. Buildings will be constructed with features appropriate to Guam earthquake and environmental

conditions.

Information systems include basic telephone, computer network, fiber optic, cable television, security, smoke and fire alarm systems and infrastructure. The facility will also have a separate room that will accommodate an area distribution node in support of outside plant communications.

Built-in equipment includes elevators, overhead bridge cranes and hoists, emergency generators, closed circuit television and aqueous film-forming foam (AFFF) system. Two ready service lockers will be provided.

Special costs include post construction contract award services, geospatial survey and mapping and Guam gross receipt taxes.

Project includes operation and maintenance support information manuals.

Sustainable design principles will be included in the design and construction of the project in accordance with Executive Order 13423 and other laws and Executive Orders. Facilities will meet LEED ratings and comply with the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. Low Impact Development will be included in the design and construction of this project as appropriate.

The site preparation will consist of clearing and grubbing, grading, disposal and in-fills, ground improvements and preparation for construction.

Paving and site improvements includes roadway improvements, parking for approximately 105 vehicles, landscaping and other improvements. The road improvements include appropriate roadway stormwater runoff system. The ground improvements will include a drainage system consistent with the USMC North Ramp Area Development Plan and the stormwater pollution prevention plan.

Electrical utilities includes networks of primary and secondary distribution installed in ducts and manholes, transformer/substation and street and outside area lighting with associated service equipment. The communication infrastructure will include ducts and manholes for future and current communication cabling and fiber optic lines requirements and includes the communication cabling and fiber optic lines for current requirements.

Mechanical utilities includes domestic and fire protection water distribution, sanitary sewer including lift station, fire pump building, pump station and AFFF collection and storage system.

This project will provide Anti-Terrorism/Force Protection (AT/FP) features and comply with AT/FP regulations and physical security mitigation in accordance with DoD Minimum Anti-

Terrorism Standards for Buildings.

Environmental mitigation includes natural and cultural resource mitigation (to include direct and programmatic mitigations), archaeological monitoring, radon mitigation, munitions of concern, unexploded ordnance and contaminated soil removal and disposal.

Facilities will be designed to meet or exceed the useful service life specified in DoD Unified Facility Criteria. Facilities will incorporate features that provide the lowest practical life cycle cost solutions satisfying the facility requirements with the goal of maximizing energy efficiency.

11. Requirement: 6495 m2 **Adequate:** 0 m2 **Substandard:** 0 m2

FACILITY PLANNING DATA:

Category Code		Requirement	UM	Adequate	Substandard	Inadequate	Deficit/ Surplus
21105	MAINTENANCE HANGAR - OH SPACE (HIGH BAY)	6634	m2				

NOTES:

SCOPE:

Project scope is based on UFC 2-00-05N Facility Planning Criteria for Navy and Marine Corps Installations (dated January 2005) and Marine Corps Order (MCO) P11000 12C Real Property Manual Volume II Facilities Planning and Programming (dated January 1986). Utility infrastructure , earthwork requirements, and project siting is consistent with the North Ramp Area Development Plan (ADP) dated May 2012. Basic Facility Requirements (BFRs) for Category Code Number (CCN) 211- 05/06/07 Aviation Maintenance Hangar, dated January 2012 identified a total requirement of 13,207 m2 (142,158 SF). This project constructs a portion of that total requirement.

PROJECT:

This project will construct an aircraft maintenance hangar with the utilities, roads, tactical and personal vehicle parking, site improvements and earthwork necessary for full operation.

(New Mission)

REQUIREMENT:

The Guam International Agreement was approved in Febuary 2009 between the United States Government and the Government of Japan. The agreement outlined a realignment of Marine Corps elements to reduce United States military footprint in Okinawa, including the relocation of forces from Japan to Guam.

The USMC Aviation Combat Element (ACE) requires operational, maintenance, administrative, and support facilities to conduct the mission requirements of the 1st Marine Air Wing

(MAW) elements operating out of AAFB North Ramp.

CURRENT SITUATION:

There are currently no operational or support facilities available at AAFB North Ramp to support 1st MAW operations.

IMPACT IF NOT PROVIDED:

This project is critical in providing the facilities required to support the relocation of USMC aviation forces from Okinawa to Guam. Supported units/activities will not vacate current facilities until replacement facilities in Guam have been completed.

ADDITIONAL: Economic Alternatives Considered:

A. Status Quo:

There are currently no operational or support facilities available at AAFB North Ramp to support 1st MAW operations.

B. Renovation/Modernization:

AAFB does not have surplus aviation facilities available that could be renovated or modernized to meet USMC ACE requirements.

C. Lease:

This alternative is not applicable.

D. New Construction:

This project proposes to provide the construction of essential 1st MAW operational, maintenance, administrative and support facilities.

E. Other Alternatives:

No other alternatives were considered for this project.

F. Analysis Results:

Since there are no acceptable alternatives than new construction, the new construction alternative is the preferred alternative.

12. Supplemental Data:

Site Approval:

[ ] Yes, obtained date:
[X] No, expected date: 10/2014

Issues (If yes, please provide discussion under issue):

Yes	No	
[ ]	[X]	DDESB, AICUZ, Airfield, EMR, or wetlands
[ ]	[X]	Endangered species/sensitive habitat
[ ]	[X]	Air quality
[ ]	[X]	Cultural/archeological resources
[ ]	[X]	Clearing of trees
[ ]	[X]	Known contamination at selected site

1. Component NAVY	FY 2014 MILITARY CONSTRUCTION PROGRAM	2. Date 03 JAN 2013

3. Installation(SA) and Location/UIC: N41557 NSA ANDERSEN GUAM ANDERSEN AB, GUAM	4. Project Title Aircraft Maintenance Hangar - North Ramp

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	21105	P109	(b) (5)

	X	Operational problems
	X	Traffic patterns impact
	X	Existing utilities upgrade
X		Ordnance sweep required prior to Construction

Planning (If no, please provide an explanation):

Yes	No	
X		Consistent w/ Master Plan or Base/Regional Dev.

Host Nation Approval:

	Required
	Approval Date:
	Expected Date:
X	Not Required

National Capital Region Approval:

	Required
	Approval Date:
	Expected Date:
X	Not Required

NEPA Documentation:

Yes	No	
X		Complete

Level of NEPA:

Yes	No	
	X	Categorical Exclusion
	X	Environmental Assessment(EA)
X		Environmental Impact Statement(EIS)
	X	Memorandum of Negative Decision

Mitigation Issues:

Yes	No	
	X	Wetlands replacement/enhancement
	X	Hazardous waste
X		Contaminated soil/water
	X	Other

Environmental Cleanup:

	Required
	Start Date:
	Completion Date:
X	Not Required

Project Issues:

Yes	No	
	X	System safety

1. Component NAVY	FY 2014 MILITARY CONSTRUCTION PROGRAM	2. Date 03 JAN 2013

3. Installation(SA) and Location/UIC: N41557 NSA ANDERSEN GUAM ANDERSEN AB, GUAM	4. Project Title Aircraft Maintenance Hangar - North Ramp

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	21105	P109	(b) (5)

- [ ] [X] Soils - foundation and seismic conditions
- [ ] [X] Construction/operational permits
- [ ] [X] Local air quality/wastewater permits
- [ ] [X] Complies with Final Governing Standard (Environmental standard for Spain, Italy & Greece)
- [ ] [X] Land Acquisition (i.e. location, quantity)
- [ ] [X] Technical Operating Manuals
- [ ] [X] Feasibility/Constructibility in FY
- [ ] [X] Historical Preservation
- [ ] [X] Does the facility have an overhead crane requirement?
- [ ] [X] Navy Crane Center contacted to assist with dev. of crane estimate (lifting capacity < 10-tons)?
- [ ] [X] Navy Crane Center contacted to coord. procurement and timelines (lifting capacity >= 10-tons)?

Yes No

[X] [ ] Physical Security:

- [ ] Shielding
- [ ] SCIF
- [X] Fencing
- [X] IDS
- [ ] Other Type:

BUDGET ESTIMATE SUMMARY SHEET:

Item	UM	Quantity	Unit Cost	Total Cost
BUILT-IN EQUIPMENT	LS			(b) (5)
AFFF System	m2	3,967.00	(b) (5)	
Elevator, Passenger/Freight (1EA x 2 Stop)	ST	2.00		
Emergency Diesel Generator (750 KW)	EA	1.00		
Ready Service Locker	m2	2.00		
Hangar Workstation 400 Hz	EA	4.00		
Overhead Crane (7.5 ton)	EA	1.00		
Radon Mitigation System	m2	6,634.00		
Fire Alarm/Smoke Detector	EA	40.00		
Special Construction Features:				
INFORMATION SYSTEMS	LS			(b) (5)
SIPRNET/NALCOMIS Premium	m2	6634	(b) (5)	
SPECIAL COSTS	LS			
PCAS	EA	.01	(b) (5)	
Guam Gross Receipts Tax	EA	.04		
Geospatial Survey & Mapping	EA	1		
Archaeological Monitoring	ha	9		

1. Component NAVY	FY 2014 MILITARY CONSTRUCTION PROGRAM	2. Date 03 JAN 2013

3. Installation(SA) and Location/UIC: N41557 NSA ANDERSEN GUAM ANDERSEN AB, GUAM	4. Project Title Aircraft Maintenance Hangar - North Ramp

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	21105	P109	(b) (5)

Item	UM	Quantity	Unit Cost	Total Cost
OPERATION & MAINTENANCE SUPP INFO (OMSI)	LS			(b) (5)
OMSI	EA	.01	(b) (5)	(b) (5)
LEED AND EPACT 2005 COMPLIANCE (Inside)	LS			(b) (5)
Enhanced Commissioning	m2	6634	(b) (5)	(b) (5)
Sensors - Carbon Dioxide Detectors	m2	6634	(b)	(b) (5)
Water-Cooled Chilled Water System	TN	150	(b) (5)	(b) (5)
Solar Water Heating System	m2	6634	(b) (5)	(b) (5)
Ventilation - Increased Ventilation	TN	25	(b) (5)	(b) (5)
LED Lighting & Advanced Metering	m2	6634	(b) (5)	(b) (5)
Utilities and Site Improvements:				
SPECIAL CONSTRUCTION FEATURES	LS			(b) (5)
Siesmic features not covered in area cost factor	m2	6634	(b) (5)	(b) (5)
SITE PREPARATIONS	LS			(b) (5)
Clearing & Grubbing	ha	9	(b) (5)	(b) (5)
Earthwork (Cut and Fill)	m3	204752	(b) (5)	(b) (5)
Contaminated Soil Mitigation	m3	650	(b) (5)	(b) (5)
Temporary Erosion/Sediment Control	ha	9	(b) (5)	(b) (5)
FMB Budget Adjustment	EA	1	(b) (5)	(b) (5)
PAVING AND SITE IMPROVEMENTS	LS			(b) (5)
AC Pavements (road, parking, driveways)	m2	26000	(b) (5)	(b) (5)
Asphalt Concrete Apron	m2	3880	(b) (5)	(b) (5)
PCC Apron	m2	1510	(b) (5)	(b) (5)
Probe/Grout/Cavity Fill	m3	55	(b) (5)	(b) (5)
Sidewalks and Ramps	m2	609	(b) (5)	(b) (5)
Landscaping	m2	500	(b) (5)	(b) (5)
CMU Wall Structures	m	300	(b) (5)	(b) (5)
Water Quality Units (LID)	EA	10	(b) (5)	(b) (5)
Infiltration Basin (LID)	m3	5200	(b) (5)	(b) (5)
Site Demolition and Waste Management	LS	1	(b) (5)	(b) (5)
ELECTRICAL UTILITIES	LS			(b) (5)
Electrical Distribution, Primary	m	1025	(b) (5)	(b) (5)
Electricat Distribution, Secondary	m	75	(b) (5)	(b) (5)
Transformer/Substation (1500 KVA)	EA	1	(b) (5)	(b) (5)
Outside Area Lighting	EA	25	(b) (5)	(b) (5)
Communication Distribution	m	1500	(b) (5)	(b) (5)
MECHANICAL UTILITIES	LS			(b) (5)
Water/Fire Protection Distribution/Hydrants	m	2250	(b) (5)	(b) (5)
Sanitary Sewer	m	875	(b) (5)	(b) (5)
Lift Station	EA	1	(b) (5)	(b) (5)
Fire Pump Building	m2	186	(b) (5)	(b) (5)

1. Component NAVY	FY 2014 MILITARY CONSTRUCTION PROGRAM	2. Date 03 JAN 2013

3. Installation(SA) and Location/UIC: N41557 NSA ANDERSEN GUAM ANDERSEN AB, GUAM	4. Project Title Aircraft Maintenance Hangar - North Ramp

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ([redacted]
0216496M	21105	P109	[redacted]

Item	UM	Quantity	Unit Cost	Total Cost
AFFF Catchment/Holding Ponds	m3	2520	[redacted]	[redacted]
Pump Station	EA	1	[redacted]	[redacted]
Oil/Water Separators	EA	2	[redacted]	[redacted]
Storm Drainage System	m	1250	[redacted]	[redacted]
ENVIRONMENTAL MITIGATION	LS			[redacted]
Natural and Cultural Resource Mitigation	LS	1	[redacted]	[redacted]
MEC/UXO Removal	ha	9	[redacted]	[redacted]

A. Estimated Design Data:

1. Status:

(A) Date design or Parametric Cost Estimate started	11/2012
(B) Date 35% Design or Parametric Cost Estimate complete	02/2013
(C) Date design completed	05/2014
(D) Percent completed as of September 2012	0%
(E) Percent completed as of January 2013	10%
(F) Type of design contract	Design Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	No

2. Basis:

(A) Standard or Definitive Design	Yes
(B) Where design was previously used	MCAS New River & MCBH Kaneohe

3. Total cost (C) = (A) + (B) = (D) + (E):

(A) Production of plans and specifications	[redacted]
(B) All other design costs	[redacted]
(C) Total	[redacted]
(D) Contract	[redacted]
(E) In-house	[redacted]

4. Contract award:	01/2014
5. Construction start:	06/2014
6. Construction complete:	01/2016

B. Equipment associated with this project which will be provided from other appropriations:

Major Equipment	Funding Source	Fund Year	Installation Start-End Mo/Yr	Shakedown Start-End Mo/Yr	IOC Date Mo/Yr	Cost
Airport Support Vehicles	PMC	2015				[redacted]
Computer Hardware and Software	PMC	2015				[redacted]
Electronic Security Equipment	PMC	2015				[redacted]
Furniture /	O&MMC	2015				[redacted]

1. Component NAVY	FY 2014 MILITARY CONSTRUCTION PROGRAM	2. Date 03 JAN 2013

3. Installation(SA) and Location/UIC: N41557 NSA ANDERSEN GUAM ANDERSEN AB, GUAM	4. Project Title Aircraft Maintenance Hangar - North Ramp

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	21105	P109	(b) (5)

Furnishings			
Industrial Plant Equipment	PMC	2015	(b) (5)
Telecommunications Equipment	PMC	2015	(b) (5)

JOINT USE CERTIFICATION:

The Director Land Use and Military Construction Branch, Installations and Logistics Department, Headquarters Marine Corps certifies that this project has been considered for joint use potential. Unilateral Construction is recommended. This Facility can be used by other components on an as available basis; however, the scope of the project is based on Department of the Navy requirements.

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AIR INTELLIGENCE SUPPORT CENTER	141-42	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

This facility is used to store and disseminate classified material for mission planning, pilot training and briefings in support of attack aircraft operations. The design and size of the center will be determined by the type and amount of equipment to be installed and the number of standard attack squadrons assigned to a station. Typical spaces include: administrative, library/chart storage, classroom, special security office, planning rooms, briefing rooms, photo intelligence interpretation room and storage. No specific planning criteria are currently available for this facility. This CCN is being used to identified the requirement for the Secret Access Program Facility (SAPF) associated with the Joint Strike Fighter. Requirements are listed below based on UFC 4-211-01N and UFC 2-000-05N, dated Jan. 31, 2005.

Space Description		NSF
Security Work Space		90
Security Office		90
Assistant Security Office		90
Mission Planning		155
ALIS Admin		90
ALSI Maintenance		150
ALIS OMS Operations		100
Intel		100
Assistant Intel		90
Pilot Briefing (6)		500
Large Pilot Briefing		350
Storage		150
Heads		150
Break Room		65
Vaults		360
SIPRNET Communications		350
Net-to-Gross Conversion	1.25	
Total Requirement:		**3,600 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
3,600 SF (335 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Air Ops Bldg	Air Ops Buildings

Aircraft Operations Building

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 6-Dec-11

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AIRCRAFT OPERATIONS BUILDING	141-40	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Per UFC 2-000-05N, dated Jan. 31, 2005, An aircraft operations building is planned for all Navy air stations, auxiliary air stations, and air facilities. The building houses the administration of flight operational activities with all supporting functions including flight control, communications, and weather services. The operations building adjoins the airfield control tower and the radar air traffic control center where siting requirements permit. See Table 141-40 for space allowances.

Current plans are for air traffic control to be handled by the AAFB control tower. However, the location of the USMC airfield in relationship to the tower, is likely to result in gaps in direct line-of-sight to the operational extent of the rotary wing ramp from the AAFB control tower. This facility will provide the USMC a location to interface with AAFB air traffic control, and coordinate and plan arriving and departing USMC/Navy rotary aircraft from AAFB runways (or taxiways in the case of some helicopters). All arrival/departure runways/taxiways are expected to have direct line-of-sight from the AAFB air control tower, per regulations. This facility will serve as a center for overall USMC/Navy rotary aircraft operations and also as an instructional classroom and logistical center for training and mission-related aircraft activities.

Table 141-40-1
Aircraft Operations Building

Installation	Gross Area SF
Air Station	12,637
Air Facility	9,760

Aircraft Operations Building 9,760 GSF

Total Requirement: 9,760 GSF

TOTAL REQUIREMENT FOR CATEGORY CODE
9,760 SF (907 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
ACE Gym and Dining	ACE Gym and Dining

Enlisted Dining Facility

GUAM - North Ramp Gym

Select Service Branch: Marine Corps

Select size of facility:

Marine Corps size options are to the right. Check box next to appropriate size. Also enter actual total Installation population size in the space provided. Refer to UFC Section 2.1 for reference to population criteria.

Check box next to appropriate facility size.

Extra Small	☐	For populations of <500
Small	☑	For populations of 501-3,000
Medium	☐	For populations of 3,001-7,000
Large	☐	For populations of 7,001-14,000
Extra Large	☐	For populations of 14,001+

Enter actual total population: 650

Based on data entered above, facility size basis is: **Small** For populations of 501-3,000

Total Installation population is **650**

Confirm facility size basis is correct (yes or no): Yes

Many of the spaces below are determined by the size and/or population criteria confirmed above. Where appropriate or necessary, modify each space or select the appropriate options to determine the total net facility size.

Fitness Spaces		Default quantities	m^2	$ft.^2$
Lobby/Reception				
Entry Lobby		2 Vestibule/Lobby Module(s) (for 2-3 ppl).	18.58	200
Control Counter		2 Counter Module(s).	11.61	125
Equipment issue storage		2 Storage Module(s).	11.61	125
Vending		2 Vending Machine(s).	1.86	20
Waiting/Display		2 Seating/Display Module(s) (for 4 ppl).	0.09	1
Spectator peak-time circulation	For this option, select yes or no:			
Public restrooms/phones	For this option, select size of restroom:			

GUAM - North Ramp Gym

			Default quantities	m^2	$ft.^2$
Gymnasium					
Basketball/volleyball Court	Select size:				
Select the Basketball/volleyball Court size. The selected size will be described to the right.					
Additional Spectator seating	To change default, enter new quantity:		0 Additional 200-seat Module(s). 0 total seats.		
Basic storage/support					
Additional court storage					
Unit PT/Group Exercise					
Partitionable Room(s)	To change default, enter new quantity of ppl:				
Storage/support					
Fitness Spaces					
Stretching			3 people at 4.6 m2 (50 ft.2)/person.	13.94	150
Cardiovascular Equipment			27 items at 4.6 m2 (50 ft.2)/item.	125.42	1,350
Selectorized (machine) weights			27 items at 4.6 m2 (50 ft.2)/item.	125.42	1,350
Free/Plate-loaded weights			29 stations at 6.0 m2 (65 ft.2)/stations.	175.12	1,885
Finess Program Manager's Office					
Fitness Assessment Room					
Structured Activities					
Structured Activity Space			1.5 Flexible space Module(s).	74.32	800
Racquetball Courts					
Spectator/officiating					
Structured activity storage			10% of Structured Activity Space.	11.15	120
Locker Rooms					
Space criteria for men's and women's locker, shower, and toilet areas are provided at the end of the spreadsheet because they are determined by selections made throughout.					
Sauna, cool-down area	To change default, select new:	None			
Steam Room, cool-down area					
Hot Tub	To change default, select new:	None			

GUAM - North Ramp Gym

Fitness Spaces (continued)

		Default quantities	m^2	$ft.^2$
Support Areas				
Laundry	To change default, select new:			
Equipment repair and receiving				
Storage				
Additional Programmatic Storage	For this option, enter required sf:			

Core HAWC Spaces

Lobby/Reception			
Director's Office			
Program Managers' Offices			
Support Staff Workstations			
Classrooms/Training rooms			
Resource Room/Computer Lab			
Storage/support			
Ergometry and Fitness Testing *			
Wellness Assessment *			

Administrative Spaces (required or optional)

Director's Office	1 Office.	11.15	120
Program Managers' Offices			
Support Staff Workstations			
Copy/file/work/break Room			
Classroom/Training Room			
Classroom/Training Storage			

GUAM - North Ramp Gym

Optional or Service-specific Program Spaces

			Default quantities	m^2	$ft.^2$
Indoor Track					
Indoor Track	To change default, select new:				
To change the default selection (described to the right), choose the size of track desired. The description to the right will then change to reflect the new choice. To return to the default, delete the selection above.					
Indoor track lobby	To change default, enter new quantity:				
Additional Group Exercise Room					
Massage Room	For this option, select yes or no:				
Physical Therapy Training	For this option, select yes or no:				
Expanded Retail 1	For this option, select yes or no:				
Expanded Juice Bar 1	For this option, select yes or no:				
Expanded Juice Bar Seating					
Family Changing Room	For this option, select yes or no:				
Male DV Locker Room *					
Female DV Locker Room *					
Child Play Area/Parent Child Area *	For this option, select yes or no:	No			
HAWC Demonstration Kitchen					
HAWC Relaxation Room *					

Locker Rooms

The following Locker Room spaces are based on total building occupancy, which is driven by the selctions made on this spreadsheet.

Marine Corps allocates the locker area at a 80% Male and 20% Female split.

To change this default split, select new: 80% Male / 20% Female

Men's Locker Room				95.13	1,024
Locker/changing area	To change default, select new:		126 Lockers in 83 slots.		
Marine Corps designates 2 spaces (slots) for every 3 lockers (66%). This is 1 full-sized & 2 half-sized lockers for every 3 required. To change this default, select new configuration. ALSO: See Women's Locker/changing area.					
Shower/drying area			6 Showers.		
Toilet area			4 Water closets/lavatory modules.		

GUAM - North Ramp Gym

Woman's Locker Room			26.76	288
Locker/changing area	To change default, select new:	32 Lockers in 21 slots.		
Shower/drying area		1 Showers.		
Toilet area		2 Water closets/lavatory modules.		

Building Totals

		Subtotal - Total Net Building Area	**702.1**	**7,558**
	Is this facility more than one story (yes/no)?	**Net-to-gross Factor @ 0.2**	**140.4**	**1,512**
		TOTAL GROSS BUILDING	**842.6**	**9,070**

Site Spaces

		Default quantities	**m^2**	**$ft.^2$**
Staff Parking		9 Paking Spaces.	376.25	4,050
Loading dock	For this option, select yes or no:			
Service Drive/trash		1 Service Drive Module.	69.68	750
Customer Parking		80 Parking Spaces.	3344.40	36,000
Bicycle Rack Area		2 10-bike Rack(s).	29.73	320
Patio	For this option, select yes or no:			
		TOTAL GROSS SITE SUPPORT	**3,820.1**	**41,120**

TOTAL GROSS FACILITY (BUILDING + SITE SUPPORT)	**4,662.6**	**50,190**

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ENLISTED DINING FACILITY	722-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Facilities are required to feed unaccompanied enlisted personnel based on information provided by the MCB Personnel Loading Breakdown.
The calculation of the requirement for the Enlisted Dining facility is shown on the follow-on pages.

Number of Personnel to be served (Main Cantonment)	2,486	PN
Number of Personnel to be served (N Ramp)	388	PN
Total	**2,874**	**PN**

Allowance per UFC 4-722-01 Table 72210-C, Space Criteria for Enlisted Personnel Dining Facilities

Main Cantonment	53,878	SF
North Ramp	7,715	SF
Total Requirement	**61,593**	**GSF**
SAY	**61,600**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
2,874 PN
61,600 SF (5723 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ENLISTED DINING FACILITY	722-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Basis	Main Cantonment (PN)	North Ramp (PN)
Unaccompanied PCS personnel	1,032	128
Unaccompanied Transient personnel	2,520	437
Total Unaccompanied personnel	3,552	565
Total personnel to be served (70%*)	**2,486**	**396**

* As determined by HQMC, Logistics Food Service, Code LFS-4

UFC 4-722-01 TABLE 72210-C SPACE CRITERIA FOR ENLISTED PERSONNEL DINING FACILITIES

	Functional Components	**2201-3100*** Personnel Served 775 Max. Seats 4.0 Max. Turnover ft.^{2}	**251-400** Personnel Served 172 Min Seats 2.3 Max Turnover ft.^{2}
Public Areas	Dining Area and Circulation	14,200	0
	Public Toilets	410	320
	Queue	2,200	
	Sign-in Station	150	100
	Subtotal	**16,960**	**420**
Serving Areas	Regular Food Line	1,600	0
	Fast Food Line	700	650
	Combination Food Line	0	
	Beverage Line	1,310	700
	Cashier Station	300	150
	Dish Washing	1,382	0
	Subtotal	**5,292**	**1,500**
Prep Areas	Kitchen	1,900	1,100
	Vegetable Preparation	700	350
	Meat Preparation	600	0
	Bakery	1,200	0
	Utensil Wash	700	400
	Subtotal	**5,100**	**1,850**
Support Areas	Offices (Dining Facility Staff)	900	700
	Offices (Food Service Staff)	540	0
	Staff Toilets	600	430
	Staff Lockers	600	380
	Janitor's Closet	125	75
	Can Wash	70	60
	Loading Dock (at 50%)	500	300
	Subtotal	**3,335**	**1,945**
	FACILITY SUBTOTAL (SF)	30,687	5,715
	Storage ranges from 10 to 25% of Facility Subtotal	7,672	857
	Net-to-Gross ranges from 15 to 25% of Facility Subtotal (however, allowed up to 50% for OCONUS locations such as MCB Guam)	15,344	1,143
	Flight Kitchen (not all locations require a Flight Kitchen)	175	
	FACILITY TOTAL (GSF)	**53,878**	**7,715**

Total Requirement **61,593 GSF**

Note: (*) The table has been modified from the UFC as directed by HQMC Code LFS-4

BASE

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
BASE Admin & Comm	BASE Admin & Comm

Administrative Office

Family Services Center

Communications Station

Range Operations Center

Legal Services Facility

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
Administrative Office	610-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Administrative office space in support of the Base Command Headquarters is required. Pursuant to UFC 2-000-05N, dated 31 January 2005, §61010-2.3 ("Gross Floor Area"), in the absence of detailed data, the gross floor area should be computed based on 162.5 square feet per building occupant.

Personnel		
Base Admin	164	PN
Safety	8	PN
IPAC	25	PN
MCCS	58	PN
Facilities/Environmental	46	PN
Housing	15	PN
Total	**316**	**PN**

UFC 2-000-05N authorizes 162.5 gross square feet per building occupant.

Office space requirement:	316 x	162.5	GSF/PN	51,350	GSF

Requirements for Special Purpose Spaces		
Emergency Operations Center	1,500	NSF
UPS (Uninterruptible Power Source) Room	70	NSF
Duty Hut	200	NSF
Emergency Generator Room (including indoor fuel storage)	500	NSF
Subtotal Requirements for Special Purpose Spaces	2,270	NSF
NSF to GSF (Factor of 1.25)	2,838	NSF
Total Requirement for Special Purpose Space	2,838	GSF
Total Requirement for Office and Special Purpose Space	54,188	GSF

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
FAMILY SERVICES CENTER	740-25	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The Family Services Center facility supports the programs that provide the information and family services necessary to support qualified single and married Department of Defense (DoD) personnel and their family members in meeting the unique demands of the military lifestyle. The program and services provide information to DoD personnel and their family members, improve life skills by fostering competencies and coping skills, encourage self-sufficiency, and offer short-term support and assistance when necessary.

Base		5,879 GSF
	SAY	**5,880 GSF**

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
5,880 SF (547 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

MC-only Components

	Functional Component	Space Allocation Standard			Small			Medium			Large		
		m^2	$ft.^2$	Standard	No.	m^2	$ft.^2$	No.	m^2	$ft.^2$	No.	m^2	$ft.^2$
Req. MC Space	EFMP	13.01	140	per office	1	13.01	140	2	26.01	280	2	26.01	280
	Additional EFMP File Area [1]	1.67	18	per room	1	1.67	18	2	3.34	36	2	3.34	36
	EFMP Common Area	7.43	80	per office	1	7.43	80	1	7.43	80	1	7.43	80
	RAO Office	7.43	80	per office	1	7.43	80	1	7.43	80	1	7.43	80
	DDR	5.95	64	per workstation	1	5.95	64	1	5.95	64	2	11.89	128
	NPS	5.95	64	per workstation	1	5.95	64	2	11.89	128	3	17.84	192
	SUBTOTAL - MARINE CORPS REQUIRED NET SPACES					**41**	**446**		**62**	**668**		**74**	**796**
	Circulation and Mechanical Building Factor @				**20%**	**8.29**	**89**	**20%**	**12.41**	**134**	**20%**	**14.79**	**159**
	SUBTOTAL - MARINE CORPS REQUIRED GROSS SPACES					**49.72**	**535**		**74.47**	**802**		**88.74**	**955**
	SUBTOTAL MARINE CORPS FSC (Unified FSC Subtotal + MC Required Subtotal)					**287**	**3,091**		**480**	**5,165**		**844**	**9,084**
Options	Lobby Child Play Area	4.01	43	per play unit	1	4.01	43	1	4.01	43	2	8.03	86
	Kitchen	8.92	96	per kitchen unit	1	8.92	96	1	8.92	96	2	17.84	192
	Break Room	5.95	64	per break room	1	5.95	64	2	11.89	128	4	23.78	256
	N/MC Relief Society	13.01	140	per office	1	13.01	140	2	26.01	280	3	39.02	420
	RUS/Family Readiness NCO	7.13	77	per workstation	1	7.13	77	1	7.13	77	1	7.13	77
	Unisex toilet/shower/changing/locker	8.36	90	per room	1	8.36	90	1	8.36	90	2	16.72	180
	* Optional spaces include building factor												
	TOTAL MARINE CORPS FSC (Add Subtotal MC FSC + Selected Options)									**5,879**			

[1] additional file area my be centralized, accommodated in the individual offices, or some combination of the two.

Estimated Staffing (note, final facility staffing may vary): **4** **6** **8**

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 31-Jan-14

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
COMMUNICATIONS STATION	131-17	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A Communications Station is a dedicated facility that supports MCB Guam. It contains the complete command, control, and support structure, equipment and operational areas, maintenance and training areas, and limited storage areas for ready-to-issue communications systems and subsystems required for the reception, processing, routing, and dissemination of incoming and outgoing communications traffic. The Communications Station is considered the control component of a communications system in that it coordinates, controls, and monitors the functions of other communications facilities, including Satellite Communications Facility (131 24), Telephone Exchange Building (131 40), Transmitter Building (131 50), and/or a Receiver Building (131 35). At MCB Guam, the equipment and functional areas associated with Telephone Exchange Building would becontained within the Communications Station and are considered part of Category Code 131-17.CO REVIEW ACTION31,779 (2953The requirement shown below is based on information provided by MARFORPAC in an e-mail of 9 July 2010 and direction from MARFORPAC given during the 15-17 November 2010 1391 Workshop. It is assumed that requirements will include grounding, AC power, lightning protection, cable vault, fire detection/suppression, HVAC, telephone room, auxiliary power (generator), security, and alarms (based on ADN facility requirements provided by MARFORPAC in November 2009). Specific requirements must be determined based on further evaluation of the communications systems and requirements to serve MCB Guam.

Data Processing Cetner	800	GSF
Telecommuncations Room	150	GSF
Administrative Office	10,563	GSF
Electronic/Comm Maint Shop	1,388	GSF
Electronic-Spares & Storage	225	GSF
Area Distribution Node (ADN)	4,200	GSF
Cable Vault	500	GSF
Total Requirement:	**17,826**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
17,826 SF

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION | DATE

BCO Requirements Document

Project Scope:

Data Processing Center	800 GSF
Telecommunication Room	150 GSF
Administrative Offices	10,563 GSF
Electronics/Comm Maintenance Shop	1,388 GSF
Electronics-Spares and Storage	225 GSF
ADN	4,200 GSF
Cable Vault	500 GSF
TOTAL	**17,826 GSF**

Other requirements:

HAZMAT	350 GSF
POV Parking (85 Spaces x 35 SY)	2,975 SY
Organizational Parking (20 Spaces x 75 SY)	1,500 SY

1) Data Processing Center:

Scope includes the MITSC and MNOC. Requirements consist of approximately 40 racks.

40 Racks x 16 NSF Each (includes space to open racks on both sides) = 640 NSF
640 NSF x 1.25 (net-to-gross factor) = 800 GSF

Subtotal = 800 GSF

2) Telecommunications Room

Scope consists of a large communications closet to bring in cabling and ties into ADN.

150 GSF

3) Administrative Offices

65 Administrative personnel x 162.5 GSF = 10,563 GSF
Space includes break room, multi-purpose classroom, and storage

Subtotal = 10,563 GSF

4) Eelctronics/Comm Maintenance Shop

Scope includes 6 workbenches and a large bay (with roll-up door) for vehicle installs.
Small area for storage of fiber spools and equipment is required.

6 Workbenches x 45 NSF each = 270 NSF
270 NSF x 1.25 = 338 GSF

Large Bay (must accommodate largest vehicle on Base) = 960 GSF

Storage: assume 6 pallets bulk storage = 6 pallets x 12 NSF = 72 NSF
72 NSF x 1.25 = 90 GSF

Subtotal = 1,388 GSF

5) Electronics-Spares and Storage

Scope consists of storage space for spare servers, phones, and equipment.
Assume 15 pallets x 12 NSF = 180 NSF
180 NSF x 1.25 = 225 GSF

6) ADN

See attached drawing - 4,200 GSF

7) Cable Vault

Space underneath MDF – Scope is approximately 500 GSF.

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 1-Nov-13

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
RANGE OPERATIONS BUILDING	173-10	SF

ACTIVITY	ACTIVTY UIC	INSTALLATION	INSTALLATION UIC	SPECIAL AREA
MCB GUAM	M67420	MCB GUAM	M67420	MCB GUAM

Range Operations Buildings are designed for direct support to range operations. Such buildings can support a variety of operations for a firing range, such as : range operations, administrative support, target storage and issue, equipment storage and maintenance, and ammunition breakdown and distribution (not storage). This category includes buildings associated with range operations such as range operations centers, and operations/storage buildings. The Live Fire Training Range Complex (LFTRC) on Guam in support of USMC annual and sustainment live fire training requires range operations buildings including a range operations center (ROC), range maintenance facility, KD Rifle and Pistol Administrative Buildings, target factory/storage facilities, and range/observation towers.

Requirements are shown below with backup following.

Range Operations Center	8,310 GSF
Total Requirement:	**8,310** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
8,310 SF (773 m2)

MOBILIZATION STATEMENT

SIGNATURE: _____

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE: _____

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
RANGE OPERATIONS BUILDING	173-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The size of the Range Operations Center (ROC) required to support the Live Fire Training Range Complex (LFTRC) on Guam is based on an engineering analysis and criteria from CCN 610-10 Administrative Office per UFC 2-000-05N, revised 31 Jan 2005. Per the criteria outlined in CCN 610-10, building gross square footage is based on 162.5 GSF per building occupant. Additional area was included for special purpose spaces. The Table of Organization (T/O) for the Range Operations Center was developed by MFP and vetted through TECOM.

Administrative Office

Branch Head, Military Training					1 PN
Director/Deputy, RTMD					2 PN
Admin Specialist					1 PN
GIS Manager					1 PN
RFMSS FA					1 PN
Head, Range Ops Division					1 PN
Control Room Supervisor					1 PN
Fire Desk Operators					12 PN
Aviation Specialists					1 PN
Range Scheduling Supervisor					1 PN
Chief Scheduler					1 PN
IRSS Engineer/Technician					1 PN
Range Scheduling Specialist					5 PN
Chief, Range Safety Specialist					1 PN
Range Safety Spec/Inspector					8 PN
Head, Range Development					1 PN
Range Projects Lead/Range Projects					2 PN
GIS Analyst					1 PN
Total Personnel:					42 PN
Administrative Space*:	42 PN	x	162.5		6,825 GSF

* Included in this space is a 16 PN Conference Room with breakout room

Special Purpose Spaces

Range Control Work Area					
Range Control Panel Displays (8FT x 8 FT) x 9 EA					576 NSF
IRSS Display Racks (5 FT x 5 FT) x 5 EA					125 NSF
AV Equipment Storage					
Shelving Unit (4 FT x 4 FT)	8	x	16	NSF	128 NSF
Coffee Break Area	1	x	60	NSF	60 NSF
Server Room	1	x	150	NSF	150 NSF
Administrative Storage					
File Cabinets (3 FT x 4 FT)	12	x	12	NSF	144 NSF
Subtotal:					1,183 NSF
Net-to-Gross Conversion (1.25)					1,479 GSF
TOTAL REQUIREMENT:					**8,304 GSF**
				SAY	**8,310 GSF**

The size of the Range Operations Center (ROC) required to support the Live Fire Training Range Complex (LFTRC) on Guam is based on an engineering analysis and criteria from CCN 610-10 Administrative Office per UFC 2-000-05N, revised 31 Jan 2005. Per the criteria outlined in CCN 610-10, building gross square footage is based on 162.5 GSF per building occupant. Additional area was included for special purpose spaces. The Table of Organization (T/O) for the Range Operations Center was developed by MFP and vetted through TECOM.

Administrative Office

Branch Head, Military Training	1	PN

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
LEGAL SERVICES FACILITY	610-40	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The Marine Corps has specific requirements for courtroom facilities at certain locations. This facility provides space for the courtroom and immediately adjacent space for trial proceedings. Courtroom facilities allowances are described under UFC 2-000-05N (61040-7) and allow space for a courtroom, prosecution counsel, prosecution witness, defense counsel, defense witness, court reporter, judge's office, holding room, lobby, janitor, and men's toilet, women's toilet and a single occupancy toilet.

There are two types of facilities:

1) Type A (large facility) - 4,440 gross sq ft (60' x 74'). The courtroom proper is 1,512 net sq ft (42' x 36') with provision for trial by trial board members. In addition to the basic functinal elements it includes a deliberation room.

1) Type B (small facility) - 3,213 gross sq ft (51' x 63'). The courtroom proper is 825 net sq ft (30' x 27.5') with the basic functional elements as described above.

Under the criteria for Type of Function in NAVFAC P-80, a Marine Corps Base is authorized one Type A Facility and one Type B Facility. Therefore the Marine Corps Base on Guam would be authorized one of each type of facility.

Courtroom requirement: Type A (large facility)		4,440 GSF
Type B (small facility)		3,213 GSF
Legal Assistance Staff Space		4,200 GSF
	Total =	11,853 GSF
	SAY	**11,860 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
11,860 SF (1102 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Enlisted Dining Facility	Enlisted Dining Facility

Enlisted Dining Facility #1

1. Component	JFY 2012 MILITARY CONSTRUCTION PROGRAM	2. Date
GOJ (for USMC)		21 JAN 2011

3. Installation and Location/UIC: N61755	4. Project Title
MARINE CORPS BASE, FINEGAYAN, GUAM	ENLISTED DINING FACILITY #1

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	722-10	J-015	(b) (5)

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
Enlisted Dining Facility #1	LS	--	--	(b) (5)
Enlisted Dining Facility (43,451sf)	M2	4,037	(b) (5)	
Built-In Equipment	LS	--	--	
Technical Operating Manuals	LS	--	--	
Anti-Terrorism / Force Protection	LS	--	--	
LEED And Federal Energy Acts Compliance Inside	LS	--	--	
Special Costs	LS	--	--	
SUPPORTING FACILITIES	LS	--	--	
Special Foundation Features	LS	--	--	
Electrical Utilities	LS	--	--	
Mechanical Utilities	LS	--	--	
Paving and Site Improvement	LS	--	--	
Site Preparations	LS	--	--	
Anti-Terrorism/Force Protection	LS	--	--	
Environmental Mitigation	LS	--	--	
LEED, LID and Federal Energy Acts Compliance Outside	LS	--	--	
SUBTOTAL				(b) (5)
CONTINGENCY (5.0%)				
TOTAL CONTRACT COST				
SIOH (6.2%)				
TOTAL REQUEST				
TOTAL REQUEST (ROUNDED)				

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

General Description:
The project will construct a single story enlisted dining facility with walls, flooring, foundation, windows, roofing, mechanical, electrical and information systems appropriate to Guam earthquake and environmental conditions, and designed to meet applicable Unified Facilities Criteria (UFC) including appropriate Anti-Terrorism/Force Protection (AT/FP) requirements. Facility will be equipped with automatic fire sprinklers and air-conditioning or ventilated as appropriate. The project will provide privately owned vehicle (POV) and government owned vehicle (GOV) parking. The project will also construct support facilities, which include site grading, drainage, information systems, emergency power, environmental mitigation, and utility systems. Sustainable design features will be integrated into the design, development and construction of the project in accordance with LEED and applicable Federal Energy Acts, Executive Orders and other directives.

General Functional Summary:
Enlisted dining facility will include public areas, preparation areas, storage areas, administrative offices, staff support areas, mechanical rooms, communication rooms and loading dock. The dining facility has been classified as a Mass Care Feeding Facility requiring the facility to remain open and operational after an emergency incident. Supporting facilities include parking and utilities.

Built-In Equipment:
Built-In equipment includes; kitchen equipment, food service equipment, cold storage refrigeration equipment, and emergency generator.

(Continued On DD 1391C...)

1. Component GOJ (for USMC)	JFY 2012 MILITARY CONSTRUCTION PROGRAM	2. Date 21 JAN 2011

3. Installation and Location/UIC:N61755
MARINE CORPS BASE, FINEGAYAN, GUAM

4. Project Title	7. Project Number
Enlisted Dining Facility #1	J-015

(…continued)

Information Systems:
Information infrastructure systems will include government and commercial data, telephone service, cable TV, a public address system, fire alarm and mass notification system, and an electronic security system.

Emergency Power Generation:
One (100% backup) permanent generator with 72 hours fuel storage is required to provide electrical power for the entire facility since the facility is classified as a "Mass Care and Feeding Facility. As such this facility must remain operational after an emergency event.

Utilities:
This facility includes new lines and meters for electrical and water utilities (including an electrical transformer), and new lines for telephone, fiber optics, sanitary sewer, and grease interceptor. Some degree of cathodic protection will be required if steel underground piping is used. Exterior lighting is also included. This facility will require connection to the utility infrastructure (potable water, electrical power, sanitary sewer, and storm drainage etc,) as provided by the Guam Utilities & Site Improvements project.

Exterior Site Work:
Site preparation includes clearing, grubbing and grading of site. Site improvements include paved areas for both POV and GOV parking, an access road, landscaping, sidewalks, curbs, gutters, bike racks and trash enclosure. Low Impact Development for storm drainage, drainage detention and a Storm Water Pollution Prevention Plan (SWPPP).

Environmental Mitigation:
This project includes mitigation for radon gas (including soil barriers, monitoring and venting), radon gas is naturally occurring and is known to be present on Guam. Environmental mitigation also includes cultural resource mitigation (specifically archaeological monitoring).

11. REQUIREMENT:

FACILITY PLANNING DATA

Cat Code	Requirement	UM	Adequate	Substandard	Inadequate	Deficiency / Surplus

_____

_____

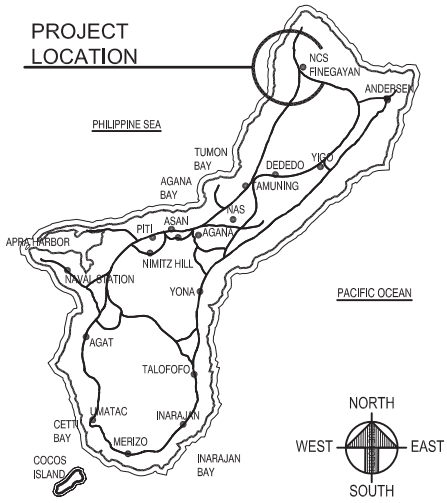
_____

DD Form 1 Dec 76 1391

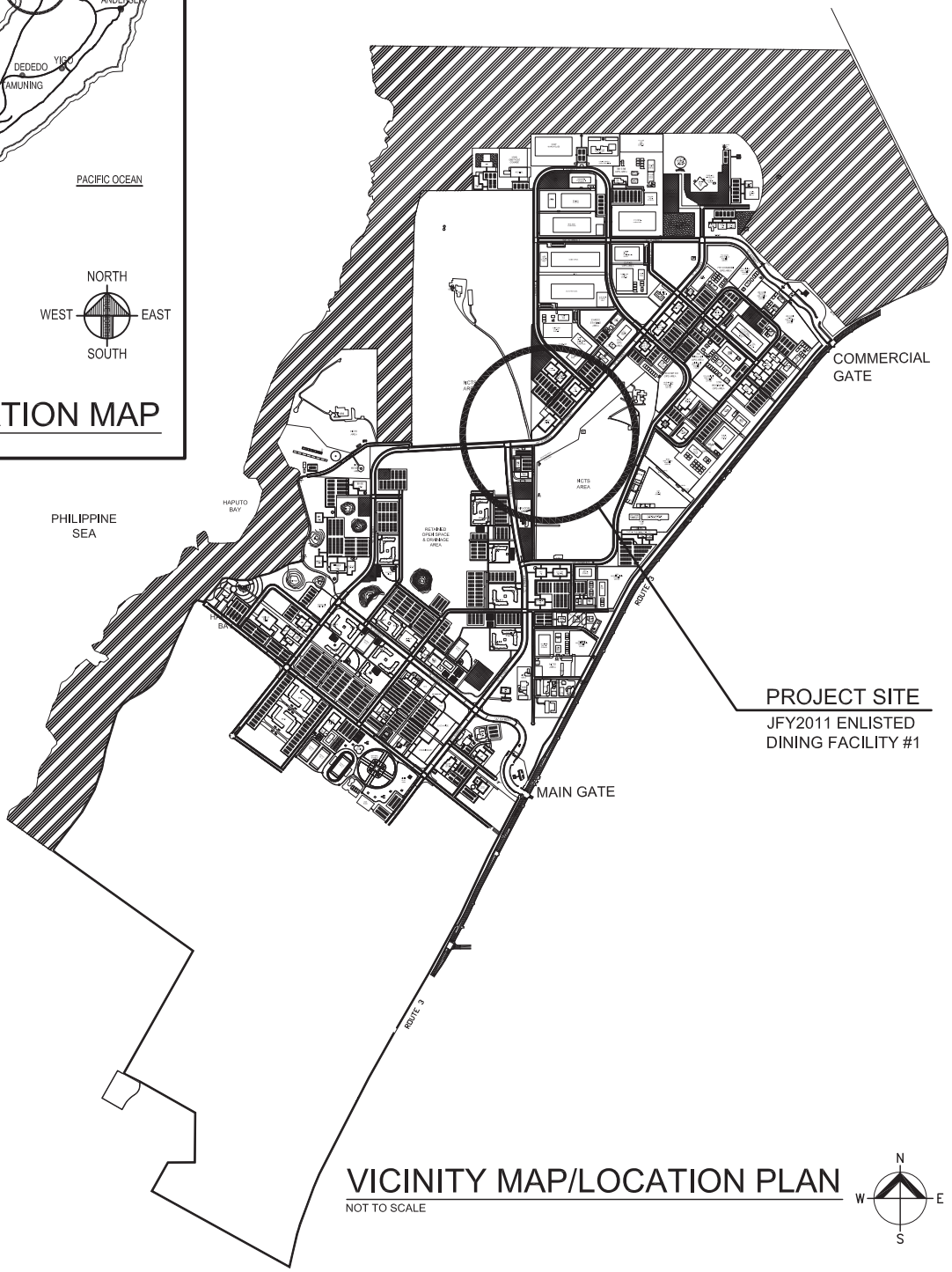
1. Component	JFY 2012 MILITARY CONSTRUCTION PROGRAM	2. Date
GOJ (for USMC)		21 JAN 2011

3. Installation and Location
MARINE CORPS BASE, FINEGAYAN, GUAM

4. Project Title	5. Project Number
ENLISTED DINING FACILITY #1	J-015



LOCATION MAP
NOT TO SCALE



VICINITY MAP/LOCATION PLAN
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PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Child Development Center	Child Development Center

Child Development Center (CDC)

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
CHILD DEVELOPMENT CENTER (CDC)	740-74	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Child Development Centers may be established as required to provide child care/development for children ages 6-weeks to 5 years old for full-day, part-day, and hourly care. The minimum capacity is 48 children and the maximum capacity for a center is 305 children. When a need exists for more than 305 children, consideration should be given to accommodation by the Family Home Care Programs as an adjunct to the center based care, and/or establishing additional centers.

Pursuant to UFC 2-000-05N, CCN 74074-1.8, capacity for the CDC is determined by actual count of military dependents by means of questionanaire, survey, documented historical data or similar processes.Based on 535 families moving to Guam, it is estimated that there will be approximately 415 children between the ages 6-weeks to 5 years old that potentially will require child care. This estimate is based on Defence Manpower Data Center (DMDC) data

Based on the assumed loading of 535 Marine families, the requirement is as follows:

One Large CDC (serving 250 children):	21,702	GSF
One Medium CDC (serving 165 children):	14,711	GSF
Total Requirement	**36,413**	**GSF**

The basis for determination of the requirement is shown on the following pages

TOTAL REQUIREMENT FOR CATEGORY CODE
36,413 SF 3,383 m2

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
BOQs	BOQs

JFY2013 Bachelors Officer's Quarters, Complex 1

1. Component NAVY	FY 2013 MILITARY CONSTRUCTION PROJECT DATA	2. Date 31 JULY 2010

3. Installation And Location	4. Project Title
MARINE CORPS BASE, FINEGAYAN, GUAM	JFY2013 Bachelors Officer's Quarters, Complex 1

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	724-11/ 724-12	J-023	(b) (5) [redacted]

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COS (b) (5) [redacted]
PRIMARY FACILITY	m2	13,666	(b) (5) [redacted]	(b) (5) [redacted]
BOQ Building (148,177 SF)	m2	13,666		
Built-In Equipment	LS	-	-	
Information Systems	LS	-	-	
Technical Operating Manuals	LS	-	-	
Anti-Terrorism/ Force Protection	LS	-	-	
LEED and Federal Acts Energy Acts Compliance	LS	-	-	
Special Costs	LS	-	-	
SUPPORTING FACILITIES	LS	-	-	(b) (5) [redacted]
Special Foundations Features	LS	-	-	
Electrical Utilities	LS	-	-	
Mechanical Utilities	LS	-	-	
Site Improvements	LS	-	-	
Site Preparation	LS	-	-	
Paving, Driveways & Walks	LS	-	-	
Environmental Mitigation	LS	-	-	
Anti-Terrorism/ Force Protection	LS	-	-	
LEED and Federal Acts Energy Compliance	LS	-	-	
SUBTOTAL	-	-	-	
CONTINGENCY (20%)	-	-	-	
TOTAL CONTRACT COST	-	-	-	
SIOH (6.2%)	-	-	-	
TOTAL REQUEST	-	-	-	
TOTAL REQUEST (ROUNDED)	-	-	-	

10. Description of Proposed Construction:

Project proposes to construct a six-story, 312 unit, Bachelors Officer's Quarters (BOQ) building of reinforced concrete walls, flooring, foundation, windows, concrete batten hip roofing, mechanical, electrical, and information systems (local area network, telephone, television, public address, fire alarm/ mass notification, and electronic security systems), and building integrated photovoltaics (BIPV) appropriate to Guam earthquake and environmental conditions, including appropriate Anti-Terrorism/ Force Protection (AT/FP) requirements. The building will be protected by an automatic fire sprinkler system and air conditioned throughout. The project will provide parking for Personally Owned Vehicles (POV) and Government Owned Vehicles (GOV) including stalls for staff and Handicap Accessibility. The project will also construct support facilities which include site grading, drainage, information systems, emergency power, environmental mitigation, and utility systems. The project will conform to the 1Bed/ 1Bath, Market Style Apartment unit. The unit will include a bedroom, living/ dining room, kitchen (with full sized appliances), bathroom, and storage closets. The building will also include common areas such as access corridors, stairways, a freight elevator, elevator lobby, main lobby, trash room/ trash chute, administration office, bulk storage room, public heads (men's & women's), vending area, janitor closets, laundry/ housekeeping rooms, mechanical rooms, electrical rooms, and telecommunication rooms (base & commercial).

1. Component NAVY	**JFY 2013 MILITARY CONSTRUCTION PROJECT DATA**	2. Date 31 JULY 2010

3. Installation and Location
MARINE CORPS BASE, FINEGAYAN, GUAM

4. Project Title JFY2013 Bachelors Officer's Quarters, Complex 1	5. Project Number J-023

The following common area spaces will be located on each floor: janitor closet, laundry/ housekeeping room, mechanical room, electrical room, and telecommunication rooms. All common areas will be barrier free in accordance with the requirements of the Uniform Federal Accessibility Standards (UFAS), Architectural Barriers Act (ABA) of 1968, and consistent with 29 U.S.C. 794 Rehabilitation Act of 1973, and meet the Americans with Disabilities Act Accessibility Guidelines (ADAAG). Two (2) of the apartment units on the ground level will be ADA accessible. The floor to floor height shall be 10'-8". Exterior design elements shall follow the Guam Installation Appearance Plan (IAP). The project will include a separate stand alone utility building housing cooling towers, chiller pumps, chillers, heat recovery units, hot water storage, chemical treatment units, a fire pump, emergency generator, and an above ground fuel storage tank. The emergency generator will provide power during outages with a three-day supply of fuel. The fuel storage tank room will need to comply with NFPA 30 (Flammable and Combustible Liquids) requirements. Site improvements include landscaping, sidewalks (with non-slip surface), picnic areas and pavilions, curbs, gutters, a recyclable bin enclosure, parade ground area, storm drainage, flag poles, a gear wash facility, and a Storm Water Pollution Prevention Plan (SWPPP). An 82'-0" AT/FP building standoff distance will be provided from the POV/GOV parking lot. The project includes new lines and meters for electrical, sanitary sewer and water utilities, an electrical transformer, telephone and fiber optic lines, and exterior lighting. The project includes cultural resource mitigation, radon gas mitigation, archeological monitoring and data recovery. The project will follow Leadership in Energy and Environmental Design (LEED) to achieve a LEED Silver Rating, Low Impact Development (LID) practices, Energy monitoring and utility control systems in accordance with FY2010 National Defense Authorization Act (NDAA), and the Federal Energy Policy Act of 2005 (EPACT) compliance criteria for design, development, and construction of the project.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
BEQs	BEQs (E1-E5) BEQ

JFY11, J-016 Bachelor Enlisted Quarters

1. Component	JFY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date
GOJ (for USMC)		22 SEP 2010

3. Installation and Location/UIC: N61755	4. Project Title
MARINE CORPS BASE, FINEGAYAN, GUAM	BACHELOR ENLISTED QUARTERS

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	721-24/25	J-016	(b) (5)

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost (b) (5)
BACHELOR ENLISTED QUARTERS (2 BEQs)	LS	--		(b) (5)
Bachelor Enlisted Quarters (308,020 SF)	M2	28,616	(b) (5)	
Built-In Equipment	LS	--		
Technical Operating Manuals	LS	--	--	
Anti-Terrorism / Force Protection	LS	--	--	
LEED and Federal Energy Acts Compliance Inside	LS	--	--	
Special Costs	LS	--	--	
SUPPORTING FACILITIES	LS	--	--	(b) (5)
Special Foundation Features	LS	--	--	
Electrical Utilities	LS	--	--	
Mechanical Utilities	LS	--	--	
Paving & Site Improvements	LS	--	--	
Site Preparations	LS	--	--	
Environmental Mitigation	LS	--	--	
LEED, LID and Federal Energy Acts Compliance Outside	LS	--	--	
SUBTOTAL				(b) (5)
CONTINGENCY (5.0%)				
TOTAL CONTRACT COST				(b) (5)
SIOH (6.2%)				
TOTAL REQUEST				(b) (5)
TOTAL REQUEST (ROUNDED)				

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

General Description:
The project will construct two (2) high rise bachelor enlisted quarters buildings with walls, flooring, foundation, windows, roofing, mechanical, electrical and information systems appropriate to Guam earthquake and environmental conditions, and designed to meet applicable Unified Facilities Criteria (UFC) including appropriate Anti-Terrorism/Force Protection (AT/FP) requirements. Facilities will be equipped with emergency power, automatic fire sprinklers and air-conditioning or ventilated as appropriate. The project will provide privately owned vehicle (POV), government owned vehicle (GOV) and motorcycle parking. The project will also construct support facilities, which include site grading, drainage, environmental mitigation, gear wash facilities, utility buildings and utility systems.

Sustainable design features will be integrated into the design, development and construction of the project in accordance with LEED and applicable Federal Energy Acts, Executive Orders and other directives.

General Functional Summary:
Each BEQ building will include standard Marine Corps 2+0 rooms for unaccompanied Marines and will include a vestibule, duty office and duty bunk room, vending machine area, multi-purpose room, public restrooms, game room, janitor closet, freight sized elevator, laundry facilities, telephone/communication room, administration office, and mechanical/electrical room. The gear wash facility includes a wash down area with secured drying bays. The utility building will house the emergency generator with fuel tank, fire pump, and HVAC equipment.

(Continued On DD 1391C…)

1. Component GOJ (for USMC)	JFY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date 22 SEP 2010

3. Installation and Location/UIC: N61755
MARINE CORPS BASE, FINEGAYAN, GUAM

4. Project Title	7. Project Number
BACHELOR ENLISTED QUARTERS	J-016

(…continued)

Built-In Equipment:
Built-In equipment includes elevators (passenger/freight), acoustic/impact resistant flooring system, emergency generators and fire pumps.

Information Systems:
Information infrastructure systems will include government and commercial data and telephone service, a public address system, fire alarm and mass notification, and an electronic security system.

Emergency Power Generation:
Permanent generators and fuel storage is required to provide electrical power for the elevators, egress lighting and fire pumps.

Utilities:
These facilities include new lines and meters for electrical and water utilities (including an electrical transformer), and new lines for telephone, fiber optics and sanitary sewer. Some degree of cathodic protection will be required if steel underground piping is used. Exterior lighting is also included. This facility will require connection to the utility infrastructure (potable water, electric power, sanitary sewage, storm drainage, etc.) as provided by the Guam Utilities & Site Improvements project.

Exterior Site Work:
Site preparation includes clearing, grubbing and grading of site. Site improvements include paved areas for both POV and GOV parking, a utility service road, access road, landscaping, sidewalks, curbs, gutters, bike racks and trash enclosure. Shared physical activity area with basketball and sand volleyball courts and covered rest areas with tables, benches, grilles and sinks will be included. Low Impact Development for storm drainage, drainage detention and a Storm Water Pollution Prevention Plan (SWPPP).

Environmental Mitigation:
This project includes mitigation for radon gas (including soil barriers, monitoring and venting). Radon gas is naturally occurring and is known to be present on Guam. Environmental mitigation also includes cultural resource mitigation (specifically archaeological monitoring).

11. REQUIREMENT:

1. Component GOJ (for USMC)	**JFY 2011 MILITARY CONSTRUCTION PROGRAM**	2. Date 22 SEP 2010
3. Installation and Location/UIC: N61755 MARINE CORPS BASE, FINEGAYAN, GUAM		
4. Project Title BACHELOR ENLISTED QUARTERS		7. Project Number J-016

(…continued)

PROJECT:
The project constructs bachelor enlisted quarters in the Finegayan area of Marine Corps Base, Guam to accommodate Marines being relocated from various sites in Okinawa. (New Mission)

REQUIREMENT:
Bachelors enlisted quarters (CCN 721-24/25) provide unaccompanied E1-E5 personnel with adequate, efficiently configured and comfortable living units and common spaces for the Marine Corps Base in Finegayan, Guam.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Elementary School	Dependent School - Elementary School
Expand Middle School	Dependent School - Middle School Expansion
Expand High School	Dependent School - High School

2012-03-16 DoDEA Facility Planner Worksheet

2012-03-16 DoDEA Facility Planner Worksheet

2012-03-16 DoDEA Facility Planner Worksheet

New Elementary School
Date: 25 Feb 2013

(Yellow Blocks require user input)
(Green Blocks are derived from formulas)

Orange - Entered/modified based on Staffing Document
Blue - Additional Special Ed, not on Staffing Document

	SS	KP	KN	Gr1	Gr2	Gr3	Gr4	Gr5	Gr6	Gr7	Gr8	Gr9	Gr10	Gr11	Gr12	Total	ES	MS	HS
Enrollment	0	55	52	47	43	38	35	33		0	0	0	0	0	0	303	303	0	0
Staff Ratio	18	36	18	18	18	18	25	25	25										
Staff	0.00	1.53	2.89	2.61	2.39	2.11	1.40	1.32	0.00							14.25	14.25	0.00	
Staff Rounded	0.0	1.5	3.0	2.5	2.5	2.0	1.5	1.5	0.0							14.5	14.5	0	
Enrollment (adjusted for half day)	0	27.5	52	47	43	38	35	33	0	0	0	0	0	0	0	275.5			

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OCONUS (y/n)	y
Japan (y/n)	n
OT/PT (y/n)	y
Satellite Food Service (y/n)	n
SMSS (y/n)	y
School Bus Office (y/n)	n

21C Ed Spec Basic Facility Requirements - Reduced

Room	Net SF	Qty	SF	Total SF	Staff	Remarks	Documented Changes
General Learning Settings							
Neighborhood			19,285	19,285			
Students - Pre-K thru Grade 6	70	276	19,285			SF per Student (min 10,000/school)	

Room	Net SF	Qty	SF	Total SF	Staff	Remarks	Documented Changes
Staff Collaboration Area			2,645	2,645			
Staff - Pre-K/Sure Start					0.0		
Staff - Pre-K (Half Day - DDESS)					1.5		
Staff - Kindergarten					3.0		
Staff - Grades 1-3					7.0		
Staff - Grades 4-6					3.0		
Staff - Host Nation					1.0		
Staff - PSCD (caseload 8 - range 6-10 - half day)					1.0		
Staff - Learning Impaired - Mild/Moderate					1.0	17.5 Total number of studio's	
Staff - Elementary Gifted (1 per school)					1.0		
Staff - Small School Allowance (1<200)					0.0		
Staff - School Support Specialist (Grades 1-3)					2.0		
Staff - ESL					1.0		
Staff - Speech					1.0		Speech/Language Assessor & Pathologist
Staff - Hearing					0.5		
Staff - Vision					0.0		
Staff Collaboration Area	75	23	1,725			23.0 Total staff in neighborhoods	
Staff Storage Area	40	23	920				
Paraprofessionals							
Pre-K Paraprofessional (Pre-K*0.77)					1.2	No office space, but contributes to total staff	
Kindergarten Paraprofessional (K*0.7)					2.1		
Learning Impared Moderate/Severe			0	0			
Student Instruction Area	1,000	0	0				
Kitchen	275	0	0				
Handicap-Accessible Restroom	75	0	0				
Changing and Shower Area	75	0	0				
Staff - Learning Impaired - Moderate/Severe	75	0	0		0.0	Open in LIMS room or enclosed with other staff	
Exploratory Learning Spaces							
Computing Center			1,200	1,200			
Computing Center	1,200	1	1,200			One per school	
Art Room			1,375	1,375		Calculated on Grades K-6	
Art Classroom	1,000	1	1,000			One per school	
Staff Area	75	1	75		1.0	Open in Art Room or enclosed/shared with other staff	
Kiln	100	1	100			One per school	
Art Workroom/Storage	200	1	200			One per school	
Music Suite			1,325	1,325		Calculated on Grades K-6	
Music Room	1,000	1	1,000			One per school	
Music Storage Room	250	1	250			One per school	
Staff Area	75	1	75		1.0	Open in Music Room or enclosed w/ other staff	
OT/PT			1,200	1,200			
Therapy Area	800	1	800				
Storage/Planning/Observation Areas	400	1	400				
Common Shared Spaces							
Commons			1,415	1,415			
Commons	1,265	1	1,265				
Recycle Area	150	1	150			Verify with LEED	
Tatami (Japan and Okinawa only)	300	0	0				

Room	Net SF	Qty	SF	Total SF	Staff	Remarks	Documented Changes
Multipurpose Room			3,511	3,511			
Multipurpose Room	2,511	1	2,511			Includes dining and performance	
Stage	800	1	800				
Stage Storage	200	1	200			Minimum - additional area from performance	
Information Center			1,622	1,622			
Instructional Area	492	1	492				
Stacks	455	1	455				
Circulation desk	125	1	125		1.0		
Adminstration Area/Storage	150	1	150				
Educational Technologist	100	1	100		1.0		
Broadcast Room	300	1	300				
Physical Education			5,625	5,625		Calculated on Grades K-6	
Gymnasium	5,075	1	5,075				
PE Storage	400	1	400				
PE Teacher Office	75	1	75		1.0	Provide shared office for PE teachers	
PE Teacher Restroom	75	1	75				
Food Service			2,502	2,502			
Serving Line/Food Prep	1,600	1	1,600				
Dishwashing	300	1	300				
Dry Storage	121	1	121				
Refrigerator/Freezer	121	1	121				
Food Service Office	100	1	100				
Restroom (Handicap)	60	1	60				
Staff Lockers	80	1	80				
Janitor	20	1	20				
Receiving Area	100	1	100				
Student Support Spaces							
Administration			1,980	1,980			
Reception/Waiting Area	200	1	200				
Clerical Work Area	100	5	500		5.0	Minimum 300sf	School Clerical/Registrar/Supply Technician + FNIDH
Principal's Office	200	1	200		1.0	Registrar and Supply Tech are part of Clerical.	
Assistant Principal	175	1	175		1.0	Registrar office is allowable, if provided delete	
SMSS Office	100	1	100		0.0	from clerical. If Supply Tech workstation	
Conference Room	200	1	200			provided in Supply/Storage, delete from clerical	
Student Records Room	75	1	75				
Work/Copy Room	100	1	100				
Mail Room	100	1	100				
Suite Circulation Markup	1,650	20%	330			Add to take interior hallway out of NTG factor	
Miscellaneous Offices (distributed)			900	900			
Itinerant Office	100	1	100				
School Officer	100	1	100				
Parents' Center	200	1	200				
Central Workroom	200	1	200				
2nd Floor Workroom	100	1	100			Provide for 2 story schools	
Shared Conference Room (Guidance-SPED)	200	1	200				

Room	Net SF	Qty	SF	Total SF	Staff	Remarks	Documented Changes
Guidance Counseling Center			600	600		Calculated on Grades K-6	
Reception/Waiting Area	100	1	100			Provide storage closet within suite gross sf	
Psychologist Office	100	1	100				
Counselor Office	100	3	300		2.5		
Suite Circulation Markup	500	20%	100			Add to take interior hallway out of NTG factor	
Special Education Office			360	360			
Technician/Waiting Area	100	1	100		0.7	Provide storage closet within suite gross sf	Assessment Clerk
CSC Office	100	1	100		1.0		Special Education Asssessor
Assessment Area	100	1	100			Add'l Assessment Areas with DSO approval	
Suite Circulation Markup	300	20%	60			Add to take interior hallway out of NTG factor	
Health Services			468	468			
Treatment Area	275	1	275		1.0		
Restroom	65	1	65				
Storage	50	1	50				
Waiting Area	80	0	0				
Nurse's Office	100	0	0				
Large School Allowance	250	0	0				
Suite Circulation Markup	390	20%	78			Add to take interior hallway out of NTG factor	
Building Services							
Janitorial Administration			150	150			
Janitorial Administration	150	1	150				
Maintenance Support			200	200			
Maintenance Support	200	1	200				
School Bus Office			0	0			
Reception/Waiting/Photo Area	100	0	0				
School Bus Office	100	0	0				
School Supply/Storage Area			503	503			
Central Storage Area	503	1	503				
Technology Service Center			500	500			
Main Telecom Room	200	1	200				
AT Workspace (desk/repair/supplies)	300	1	300				
				SF	**Staff**		
Net SF:				**47,366**	**43.5**	**7** students/staff	

Room	Net SF	Qty	SF	Total SF	Staff	Remarks	Documented Changes
Gross Allowance:			30%	14,210			
Multi-Level Allowance:			5%	2,368			
Subtotal:				**63,945**			
Mechanical Allowance:			7%	4,476			
Total Gross SF:				**68,421**			
			gross sf/student	226			
Footprint Net SF (reduced by half of neighborhood and staff collaboration):				**36,401**		This calculation is for planning (Code 0) purposes only. It assumes a two-story building with half of the neighborhoods on the 2nd floor and all other spaces on the 1st floor.	
Footprint Gross Allowance:			30%	10,920			
Footprint Multi-Level Allowance:			5%	1,820			
Footprint Subtotal				**49,142**			
Footprint Mechanical Allowance:			7%	3,440			
Building Footprint:				**52,582**			
Staff Parking Spaces:				43			
Visitor Parking Spaces (10% of enrollment):				30			
Total Parking Spaces:				74			
	Neighborhood Planning Tools						
	Hub	300	**4**	1,200		23 Total staff in neighborhoods	
	Studio	800	**4**	3,200		18 Total number of studio's	
	Group	200	1	200		**6 Minimum Group Learning Rooms**	
	One-to-one	100	1	100			
				4,700		There should be one Group Learning Room per neighborhood.	
			5	23,500	85.30	Sf/Student If the number of neighborhoods is less than the minimum	
						Group Learning Rooms listed above, then additional Group	
	Hub	300	5	1,500		Learning Rooms must be added. Do not reduce the number	
	Studio	800	**5**	4,000		of Group Learning Rooms to the minimum.	
	Group	200	1	200			
	One-to-one	100	1	100			
				5,800			
			4	23,200	84.21	Sf/Student	
	Hub	300	6	1,800			
	Studio	800	**6**	4,800			
	Group	200	1	200			
	One-to-one	100	1	100			
				6,900			
			3	20,700	75.14	Sf/Student	

Middle School Addition

26-Feb-13

(Yellow Blocks require user input)

(Green Blocks are derived from enrollment formulas)

Orange blocks - entered/modified based on Staffing Document

	SS	KP	KN	Gr1	Gr2	Gr3	Gr4	Gr5	Gr6	Gr7	Gr8	Gr9	Gr10	Gr11	Gr12	Total	ES	MS	HS
Enrollment	0	0	0	0	0	0	0	0	31	28	25	0	0	0	0	84	0	84	0
Staff Ratio									16	16	16								
Staff									1.94	1.75	1.56					5.25	0.00	5.25	
Staff Rounded									2.0	2.0	1.5					5.5	0.0	5.5	
Enrollment (adjusted for half day)	0	0	0	0	0	0	0	0	31	28	25	0	0	0	0	84			

No error checking on this - you MUST use a lower case "y" - all other entries will return a 0 value

OCONUS	n
Japan	n
OT/PT	y
Satellite Food Service	n
SMSS	y
School Bus Office	n

Science Labs - NSTA Guidelines

84	Number of students
24	class size
4.00	number of classes
5	number of sections per teacher
1.00	number of labs
50%	% sections requiring lab space
0.50	number of labs required
1	number of labs rounded

21C Ed Spec Basic Facility Requirements- Reduced

Room	Net SF	Qty	SF	Total SF	Staff	Remarks	Documented Changes
General Learning Settings							
Neighborhood			10,000	10,000			
Students - Grade 6 and above	65	84	10,000			SF per Student (min 10,000/school)	
Staff Collaboration Area			575	575			
Staff - Middle Grades 6-8					5.5	includes Art, Music, PE and Science	
Deduct - Art teacher included with Art Room					-1.0		
Deduct - Music Teacher included with Music Room					-1.0		
Deduct - PE teacher included with PE					-1.0		
Staff - Host Nation					0.0	Total number of studios	
Staff - Learning Impaired - Mild/Moderate					0.0	1.5 (reduced by # of Science Labs)	
Staff - Middle Grades Academic Support					1.0		
Staff - Small School Allowance (1<200)					1.0		
Staff - ESL					0.0		

Staff - Speech					0.0		
Staff - Hearing					0.0		
Staff - Vision					0.0		
Staff Collaboration Area	75	5	375			4.5 Total staff in neighborhoods	
Staff Storage Area	40	5	200				
Learning Impared Moderate/Severe			0	0			
Student Instruction Area	1,000	0	0				
Kitchen	275	0	0				
Handicap-Accessible Restroom	75	0	0				
Changing and Shower Area	75	0	0				
Staff - Learning Impaired - Moderate/Severe	75	0	0		0.0	Open in LIMS room or enclosed with other staff	
Exploratory Learning Spaces							
Career Technical Education (CTE)			2,275	2,275			
Staff Area	75	1	75		1.0	Open in CTE Room or enclosed/shared with other staff	
Small CTE Lab (Video)	800	1	800			(not a private office)	
Large CTE Lab (Family Consumer Science)	1,400	1	1400				
Computing Center		1	1,200	1,200			
Computing Center	1,200	1	1200				
Science Lab		1	1,500	1,500			
Science Laboratory	1,200	1	1200				
Prep Room	200	1	200				
Chemical Storage Room	100	1	100				
Art Room			0	0			
Art Classroom	1,100	*0*	0			One per school	*(Deleted for Addition)*
Staff Area	75	*0*	0		1.0	Open in Art Room or enclosed/shared with other staff	*(Deleted for Addition)*
Kiln	100	*0*	0			One per school	*(Deleted for Addition)*
Art Workroom/Storage	200	*0*	0			One per school	*(Deleted for Addition)*
Music Suite			0	0			
Music/Band Room	1,000	*0*	0				*(Deleted for Addition)*
Music/Instrument Storage Room	250	*0*	0				*(Deleted for Addition)*
Staff Area	75	*0*	0		1.0	In Music Room when enrollment <250	*(Deleted for Addition)*
Band Office	100	0	0		0.0	100sf office allowed in MS >250	
Large Practice Room	100	0	0			One per school when enrollment >250	
Small Practice Room	50	0	0				
Music Library	75	0	0				
Choral Office	100	0	0		0.0	100sf office allowed in MS >500	
Choral Room	1,000	0	0				
Computer/Keyboard Lab	500	0	0				
OT/PT			0	0			
Therapy Area	800	*0*	0				*(Deleted for Addition)*
Storage/Planning/Observation Areas	400	*0*	0				*(Deleted for Addition)*
Common Shared Spaces							
Commons			3,156	3,156			
Commons	3,006	1	3006			Includes Welcome Center, Public Space,	
Tatami (Japan and Okinawa only)	300	0	0			Dining, and Storage	
Recycle Area	150	1	150			Verify with LEED	
Performance Space			2,347	2,347			
Performance Space	1,347	1	1347				
Stage	800	1	800				
Stage Storage	200	1	200			Minimum - additional area from performance	
Dressing Rooms	200	0	0			MS > 300	
Information Center			0	0			
Instructional Area	339	*0*	0				*(Deleted for Addition)*
Stacks	400	*0*	0				*(Deleted for Addition)*
Circulation desk	125	*0*	0		0.0		*(Deleted for Addition)*
Adminstration Area/Storage	150	*0*	0				*(Deleted for Addition)*
Educational Technologist	100	*0*	0		1.0		*(Deleted for Addition)*
			0				

Physical Education			75	75			
Gymnasium	6500	*0*	0				*(Deleted for Addition)*

Spectator Seating	0	0	0			200 seats if enrollment >250	(Deleted for Addition)
Auxiliary Gym	2500	0	0				
PE Storage	400	0	0				(Deleted for Addition)
PE Teacher Office	75	1	75		1.0		
PE Teacher Restroom	75	0	0				(Deleted for Addition)
Lockers/Dressing/Showers	400	0	0				(Deleted for Addition)
Food Service			0	0			
Serving Line/Food Prep	1,600	0	0				(Deleted for Addition)
Dishwashing	300	0	0				(Deleted for Addition)
Dry Storage	100	0	0				(Deleted for Addition)
Refrigerator/Freezer	100	0	0				(Deleted for Addition)
Food Service Office	100	0	0				(Deleted for Addition)
Restroom (Handicap)	60	0	0				(Deleted for Addition)
Staff Lockers	80	0	0				(Deleted for Addition)
Janitor	20	0	0				(Deleted for Addition)
Receiving Area	100	0	0				(Deleted for Addition)
Student Support Spaces							
Administration			840	840			
Reception/Waiting Area	200	1	200				
Clerical Work Area	100	1	100		1.0	Minimum 300sf	(changed from 3 to 1 for addition)
Principal's Office	200	0	0		1.0	Registrar and Supply Tech are part of Clerical.	(Deleted for Addition)
Assistant Principal	175	0	0		0.0	Registrar office is allowable, if provided delete	
SMSS Office	100	1	100		1.0	from clerical. If Supply Tech workstation	
Conference Room	200	1	200			provided in Supply/Storage, delete from clerical	
Student Records Room	75	0	0				(Deleted for Addition)
Work/Copy Room	100	1	100				
Mail Room	100	0	0				(Deleted for Addition)
Suite Circulation Markup	700	20%	140			Add to take interior hallway out of NTG factor	
Miscellaneous Offices (distributed)			500	500			
Itinerant Office	100	1	100				
School Officer	100	1	100				
Alcohol/Substance Abuse Counselor (ASAC)	100	0	0				(Deleted for Addition)
Parents' Center	200	1	200				
Central Workroom	200	0	0				(Deleted for Addition)
2nd Floor Workroom	100	1	100			Provide for 2 story schools	
Shared Conference Room (Guidance-SPED)	200	0	0				(Deleted for Addition)
Guidance Counseling Center			120	120			
Reception/Waiting Area	100	0	0			Provide storage closet within suite gross sf	(Deleted for Addition)
Psychologist Office	100	0	0				(Deleted for Addition)
Counselor Office	100	1	100		1.0		
Career Information/Exploration Center	100	0	0				(Deleted for Addition)
Suite Circulation Markup	100	20%	20			Add to take interior hallway out of NTG factor	
Special Education Office			120	120			
Technician/Waiting Area	100	0	0			Provide storage closet within suite gross sf	(Deleted for Addition)
CSC Office	100	0	0				(Deleted for Addition)
Assessment Area	100	1	100			Add'l Assessment Areas with DSO approval	
Suite Circulation Markup	100	20%	20			Add to take interior hallway out of NTG factor	
Health Services			0	0			
Treatment Area	275	0	0		0.0		
Restroom	65	0	0				
Storage	50	0	0				
Waiting Area	80	0	0				
Nurse's Office	100	0	0				

Large School Allowance	250	0	0			
Suite Circulation Markup	0	20%	0		Add to take interior hallway out of NTG factor	
Building Services						
Janitorial Administration			0	0		
Janitorial Administration	150	0	0			
Maintenance Support			0	0		
Maintenance Support	200	*0*	0			*(Deleted for Addition)*
School Bus Office			0	0		
Reception/Waiting/Photo Area	100	0	0			
School Bus Office	100	0	0			
School Supply/Storage Area			284	284		
Central Storage Area	284	1	284			
Technology Service Center			0	0		
Active Component Area	200	*0*	0			*(Deleted for Addition)*
AT Workspace	300	*0*	0			*(Deleted for Addition)*

	SF	Staff		
Net SF:	**22,992**	**13.5**	**6**	students/staff

Gross Allowance:	30%	**6,898**
Multi-Level Allowance;	5%	**1,150**
Subtotal:		**31,039**
Mechanical Allowance:	7%	**2,173**
Total Gross SF:		**33,212**
	gross sf/student	**395**

Footprint Net SF (reduced by half of neighborhood and staff collaboration):		**17,704**
Footprint Gross Allowance:	30%	5,311
Footprint Multi-Level Allowance:	5%	885
Footprint Subtotal		**23,901**
Footprint Mechanical Allowance:	7%	1,673
Building Footprint:		**25,574**

This calculation is for planning (Code 0) purposes only. It assumes a two-story building with half of the neighborhoods on the 2nd floor and all other spaces on the 1st floor.

Staff Parking Spaces:	14
Visitor Parking Spaces (10% of enrollment):	8
Total Parking Spaces:	**22**

Neighborhood Planning Tools

Hub	300	**4**	1,200	
Studio	800	**4**	3,200	
Group	200	1	200	
One-to-one	100	1	100	
			4,700	
		1	4,700	55.95 Sf/Student

Hub	300	5	1,500	
Studio	800	**5**	4,000	
Group	200	1	200	
One-to-one	100	1	100	
			5,800	
		1	5,800	69.05 Sf/Student

Hub	300	6	1,800	
Studio	800	**6**	4,800	
Group	200	1	200	
One-to-one	100	1	100	
			6,900	
		1	6,900	82.14 Sf/Student

5	Total staff in neighborhoods
2	(reduced by # of Science Labs)
3	**Minimum Group Learning Rooms**

There should be one Group Learning Room per neighborhood. If the number of neighborhoods is less than the minimum Group Learning Rooms listed above, then additional Group Learning Rooms must be added. Do not reduce the number of Group Learning Rooms to the minimum.

Guam High School Addition (proposed)
Date: 25 Feb 2013

(Yellow Blocks require user input
(Green Blocks are derived from enrollment formulas)

Orange blocks - entered/modified based on Staffing Document

	SS	KP	KN	Gr1	Gr2	Gr3	Gr4	Gr5	Gr6	Gr7	Gr8	Gr9	Gr10	Gr11	Gr12	Total	ES	MS	HS
Enrollment	0	0	0	0	0	0	0	0	0	0	0	23	21	17	25	86	0	0	86
Staff Ratio									16	16	16								8.0
Staff									0.00	0.00	0.00						0.00	0.00	0.0
Staff Rounded									0.0	0.0	0.0						0	0	0.0
Enrollment (adjusted for half day)	0	0	0	0	0	0	0	0	0	0	0	23	21	17	25	86			0.0

HS - 8.0 - 124 enrollmen	
HS - 1:21 - 125-335	
HS - 1:25 >335	
HS - 12% for 7-period da	
Secondary Teachers	
(Grades 9-12)	8.0
Middle Grades 6-8	0.0
Total MS-HS Teachers	8.0

No error checking on this - you MUST use a lower case "y" - all other entries will return a 0 value

OCONUS	n
Japan	n
OT/PT	y
Satellite Food Service	n
SMSS	y
School Bus Office	n
7-Period Day	n
Football team	y
Field House	y

Science Labs - NSTA Guidelines

86	Number of students
69	80% take 4 years of Science
24	class size
2.87	number of classes
5	number of sections per teacher
0.57	number of labs
50%	% sections requiring lab space
0.29	number of labs required
1	number of labs rounded
86	Number of students
17	20% take 3 years of science
24	class size
1.00	number of classes
5	number of sections per teacher
1.00	number of labs
50%	% sections requiring lab space
0.50	number of labs required
1	number of labs rounded
0.79	total number of labs required
2	total number of labs rounded

21C Ed Spec Basic Facility Requirements - Reduced

Room	Net SF	Qty	SF	Total SF	Staff	Remarks	Documented Changes
General Learning Settings							
Neighborhood			10,000	10,000			
Students - Grade 6 and above	65	86	10,000			SF per Student (min 10,000/school)	
Staff Collaboration Area			920	920			
Staff - Total MS-HS Teachers					8.0	includes Art, Music, PE and Science	
Deduct - Art teacher included with Art Room					-1.0		
Deduct - Music Teacher included with Music Room					-1.0		
Deduct - PE teacher included with PE					-1.0		
Staff - Secondary Host Nation					0.0	Total number of studios	
Staff - Learning Impaired - Mild/Moderate					0.0	3.0 (Reduced by # of Science Labs)	
Staff - Middle Grades Academic Support					0.0		
Staff - Secondary Grades Academic Support					1.0		
Staff - Small School Allowance (2<260)					2.0	2 if <260 Grades 9-12	
Staff - ESL					0.0		
Staff - Speech					0.0		
Staff - Hearing					0.0		
Staff - Vision					0.0		
Staff Collaboration Area	75	8	600			8.0 Total staff in neighborhoods	
Staff Storage Area	40	8	320				
Learning Impared Moderate/Severe			0	0			
Student Instruction Area	1,000	0	0				
Kitchen	275	0	0				
Handicap-Accessible Restroom	75	0	0				
Changing and Shower Area	75	0	0				
Staff - Learning Impaired - Moderate/Severe	75	0	0		0.0	Open in LIMS room or enclosed with other staff	
Exploratory Learning Spaces							
Career Technical Education (CTE)			800	800			
Staff - CTE (formerly PTS)	75	0	0		1.0	Open in CTE Room or enclosed/shared with other staff	
Large CTE - MS (Family Consumer Science)	1,400	0	0			(not a private office)	
Small CTE - MS/HS (Video/Health Services)	800	1	800			0.0 Staff - Middle Grades CTE	
Medium CTE - HS (Business/Computer)	1,000	0	0			1.0 Staff - Secondary Grades CTE	
Large CTE - HS (Culinary/Modular Tech)	1,400	0	0				
Computing Center			1,200	1,200			
Computing Center	1,200	1	1,200				
Science Lab			2,900	2,900			
Science Laboratory	1,200	2	2,400				
Prep Room	200	2	400				
Chemical Storage Room	100	1	100				

Art Room			0	0			
Art Classroom	1,200	0	0			One per school	(deleted for the addition)
Staff Area	75	0	0		1.0	Open in Art Room or enclosed/shared with other staff	(deleted for the addition)
Kiln	100	0	0			One per school	(deleted for the addition)
Art Workroom/Storage	200	0	0			One per school	(deleted for the addition)
Music Suite			0	0			
Music/Band Room	1,000	0	0				(deleted for the addition)
Music/Instrument Storage Room	250	0	0				(deleted for the addition)
Staff Area	75	0	0		1.0	In Music Room when enrollment <250	(deleted for the addition)
Band Office	100	0	0		0.0	100sf office allowed in MS >250	
Large Practice Room	100	0	0			One per school when enrollment >250	
Small Practice Room	50	0	0				
Music Library	75	0	0				
Choral Office	100	0	0		0.0	100sf office allowed in MS >500	
Choral Room	1,000	0	0				
Computer/Keyboard Lab	500	0	0				
OT/PT			0	0			
Therapy Area	800	0	0				(deleted for the addition)
Storage/Planning/Observation Areas	400	0	0				(deleted for the addition)
JROTC			300	300			
Armory	150	0	0				(deleted for the addition)
Firing Range (Indoor) / Classroom	1,600	0	0				(deleted for the addition)
Battalion HQ	150	0	0				(deleted for the addition)
JROTC Offices	100	1	100		2.0	Add one for every 100 participants over 150	(changed from 2 to 1 for addition)
General Storage	200	1	200			Add 150SF for every 100 participants over 150	(deleted for the addition)
Common Shared Spaces							
Commons			0	0			
Commons	3,011	0	0			Includes Welcome Center, Public Space,	(deleted for the addition)
Tatami (Japan and Okinawa only)	300	0	0			Dining, and Storage	(deleted for the addition)
Recycle Area	150	0	0			Verify with LEED	(deleted for the addition)
Performance Space			0	0			
Performance Space	1,351	0	0				(deleted for the addition)
Stage	800	0	0				(deleted for the addition)
Stage Storage	200	0	0			Minimum - additional area from performance	(deleted for the addition)
Dressing Rooms	200	0	0			HS > 300	(deleted for the addition)
Information Center			1,115	1,115			
Instructional Area	340	1	340				
Stacks - Middle Grades	0	1	0				
Stacks - Secondary Grades	400	1	400				
Circulation desk	125	1	125		0.0		
Adminstration Area/Storage	150	1	150				
Educational Technologist	100	1	100		1.0		
Physical Education			400	400			
Gymnasium	7,500	0	0				(deleted for the addition)
Spectator Seating	800	0	0			200.0 seats	(deleted for the addition)
Auxiliary Gym	2,500	0	0				
PE Storage	400	1	400				
PE Teacher Office	75	0	0		1.0		(deleted for the addition)
PE Teacher Restroom	75	0	0				(deleted for the addition)
Lockers/Dressing/Showers	400	0	0				(deleted for the addition)
Athletic Spaces							
Athletic locker rooms	800	0	0				
Athletic Team Room - Football	0	0	0				(deleted for the addition)
Athletic Weight Room	850	0	0				
Athletic Office	100	0	0				
Athletic Storage	250	0	0				
Athletic Laundry	100	0	0				
Athletic Training Room	200	0	0				
Food Service			2,460	2,460			
Serving Line/Food Prep	1,600	1	1,600				
Dishwashing	300	1	300				
Dry Storage	100	1	100				
Refrigerator/Freezer	100	1	100				
Food Service Office	100	1	100				
Restroom (Handicap)	60	1	60				
Staff Lockers	80	1	80				

Janitor	20	1	20				
Receiving Area	100	1	100				
Student Support Spaces							
Administration			960	960			
Reception/Waiting Area	200	1	200				
Clerical Work Area	100	3	300		1.0	Minimum 300sf	
Principal's Office	200	*0*	0		1.0	Registrar and Supply Tech are part of Clerical.	*(deleted for the addition)*
Assistant Principal	175	*0*	0		1.0	Registrar office is allowable, if provided delete	*(deleted for the addition)*
SMSS Office	100	*0*	0		1.0	from clerical. If Supply Tech workstation	*(deleted for the addition)*
Conference Room	200	1	200			provided in Supply/Storage, delete from clerical	
Student Records Room	75	*0*	0				*(deleted for the addition)*
Work/Copy Room	100	1	100				
Mail Room	100	*0*	0				*(deleted for the addition)*
Suite Circulation Markup	800	20%	160			Add to take interior hallway out of NTG factor	
Miscellaneous Offices			400	400			
Itinerant Office	100	1	100				
School Officer	100	1	100				
Alcohol and Substance Abuse Counselor	100	1	100				
Parents' Center	200	*0*	0				*(deleted for the addition)*
Central Workroom	200	*0*	0				*(deleted for the addition)*
2nd Floor Workroom	100	1	100			Provide for 2 story schools	
Shared Conference Room (Guidance-SPED)	200	*0*	0				*(deleted for the addition)*
Guidance Counseling Center			480	480			
Reception/Waiting Area	100	1	100			Provide storage closet within suite gross sf	
Psychologist Office	100	1	100				
Counselor Office - Grades 6-8	100	0	0		0.0		
Counselor Office - Grades 9-12	100	1	100		1.0		
Career Information/Exploration Center	100	1	100				
Suite Circulation Markup	400	20%	80			Add to take interior hallway out of NTG factor	
Special Education Office			360	360			
Technician/Waiting Area	100	1	100			Provide storage closet within suite gross sf	
CSC Office	100	1	100				
Assessment Area	100	1	100			Add'l Assessment Areas with DSO approval	
Suite Circulation Markup	300	20%	60			Add to take interior hallway out of NTG factor	
Health Services			0	0			
Treatment Area	275	*0*	0		0.0		*(deleted for the addition)*
Restroom	65	*0*	0				*(deleted for the addition)*
Storage	50	*0*	0				*(deleted for the addition)*
Waiting Area	80	0	0				
Nurse's Office	100	0	0				
Large School Allowance	250	0	0				
Suite Circulation Markup	0	20%	0			Add to take interior hallway out of NTG factor	
Building Services							
Janitorial Administration			0	0			
Janitorial Administration	150	0	0				
Maintenance Support			0	0			
Maintenance Support	200	*0*	0				*(deleted for the addition)*
School Bus Office			0	0			
Reception/Waiting/Photo Area	100	0	0				
School Bus Office	100	0	0				
School Supply/Storage Area			286	286			
Central Storage Area	286	1	286				
Technology Service Center			500	500			
Active Component Area	200	1	200				
AT Workspace	300	1	300				
Field House			0	0			
Concession	290	*0*	0				*(deleted for the addition)*
Concession Storage	100	*0*	0				*(deleted for the addition)*
Restrooms	530	*0*	0				*(deleted for the addition)*
Team Equipment Storage	1,200	*0*	0				*(deleted for the addition)*
				SF	**Staff**		
Net SF:				**23,081**	**20.0**	**4** students/staff	

Gross Allowance:	30%	**6,924**
Multi-Level Allowance;	5%	**1,154**

Subtotal:		**31,160**
Mechanical Allowance:	7%	**2,181**
Total Gross SF:		**33,341**
	oss sf/student	**388**

Footprint Net SF (reduced by half of neighborhood and staff collaboration):		**17,621**
Footprint Gross Allowance:	30%	5,286
Footprint Multi-Level Allowance	5%	881
Footprint Subtotal		**23,789**
Footprint Mechanical Allowance:	7%	1,665
Building Footprint:		**25,454**

This calculation is for planning (Code 0) purposes only. It assumes a two-story building with half of the neighborhoods on the 2nd floor and all other spaces on the 1st floor.

Staff Parking Spaces:	20
Visitor Parking Spaces (10% of enrollment):	9
Student Parking Spaces (20% of Grades 11-12)	8
Total Parking Spaces:	**37**

Neighborhoo

Hub	300	**4**	1,200	
Studio	800	**4**	3,200	
Group	200	1	200	
One-to-one	100	1	100	
			4,700	
		1	4,700	54.65 Sf/Student

Hub	300	5	1,500	
Studio	800	**5**	4,000	
Group	200	1	200	
One-to-one	100	1	100	
			5,800	
		1	5,800	67.44 Sf/Student

Hub	300	6	1,800	
Studio	800	**6**	4,800	
Group	200	1	200	
One-to-one	100	1	100	
			6,900	
		1	6,900	80.23 Sf/Student

8	Total staff in neighborhoods
3	(Reduced by # of Science Labs)
5	**Minimum Group Learning Rooms**

There should be one Group Learning Room per neighborhood. If the number of neighborhoods is less than the minimum Group Learning Rooms listed above, then additional Group Learning Rooms must be added. Do not reduce the number of Group Learning Rooms to the minimum.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Dist Warehouse	Dist Warehouse

General Purpose Warehouse

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
GENERAL PURPOSE WAREHOUSE	441-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A combined Base/MAGTF Distribution Warehouse is required to provide for the inflow of goods, parts, and materials in support of the unit requirements, UDP training cycles, and supporting agency requirements. The Distribution Warehouse will consist of GSA Store, administration, 3P (Preservation, Packing, and Packaging), Supported Activity Supply System (SASSY) Management Unit (SMU), Medium Bulk Storage, and TMO (receiving, storage, and distribution).

According to the UFC 2-000-05N, dated October 2005, BFR requirements may be calculated using the analytical/4-step method.

There are four steps required for determining storage space requirements by this method. This method is thought to be the preferred and most practical for use in planning up to and including the activity 1391 level or as needed to feed strategic planning.

Unit		Total SF	
MCB Guam, Combined Base /MAGTF Distribution Warehouse		106,200	GSF
	SAY	**106,200**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
106,200 SF (9867 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name

Location Exchange

Appendix D Name

Location Exchange

Location Exchange

Exchange Service Station

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 6-Dec-11

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
LOCATION EXCHANGE	740-02	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

Location exchanges are required to provide convenient exchange coverage away from the main store. Per UFC 2-000-05N, the Location Exchange requirements are developed by the Navy Exchange Service Command, 3280 Virginia Beach Blvd, VA 23452-5742, Head Planning Branch, 757-631-3535. Using criteria from NAVFAC P-80, Table 740-02, the allowance for 4,749 military personnel is one (1) location exchanges (7,000 SF). A gross area of 7,000 SF is authorized for each location exchange. However, space allowances for individual location exchanges facilities may be adjusted upward or downward as long as the total space authorized for location exchanges is not exceeded. An additional 7.5% increase in space is required to accommodate the mechanical equipment. The total allowance is:

a	Married military personnel	535	PN
b	Single military personnel	4,214	PN
	TOTAL	4,749	PN

Table 74002-2
Number of Authorized Location Exchanges

Military Strength	Authorized
up to 2,500	none
2,500 to 5,000	1
5,001 to 7,500	2
7,501 to 10,000	3
For each additional 2,500 or any portion thereof	1

Authorized Exchange facilities (1 x 7,000 SF)	7,000	NSF
Mechanical Space (7.5%)	525	
	7,525	GSF

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 6-Dec-11

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
EXCHANGE SERVICE STATION	740-30	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Exchange Gas/Service and Auto Repair Stations provide space for gasoline and oil sales, automotive parts and accessories sales, emergency service and automotive repair service.

Per UFC 2-000-05N, Table 740-30, the space allowance for Exchange Service and Auto Repair Station is as follows:

BASE	MCB Guam	**4,064 GSF**

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
4,064 SF (378 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Corrosion Control - Ground	Corrosion Control - Ground PH 1

Paint & Related Ops Structure

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 4-Aug-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
PAINT & RELATED OPS STRUCTURE	219-31	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A facility is required to provide corrosion rehabilitation for approximately 400 principal end items of III MEF tactical ground equipment per year. Functions include sandblasting, body work, hand sanding and paint preparation, painting, undercoat protection, and rust inhibitor applications.

According to UFC 2-000-05N dated 31 JAN 2005. there are no specific planning criteria for these structures; each requirement must be individually justified. The basis for determining the requirements for this facility are shown on the following pages.

Base **35,000 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
35,000 SF (3252 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 4-Aug-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
PAINT & RELATED OPS STRUCTURE	219-31	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Space requirements were based upon an analysis of space required for specific functions. The functional area requirements and justification is shown in the following table.

Internal Functional Area	Length (ft)	Width (ft)	Area (ft^2)	Justification
Sandblast coating removal	80	40	3,200	Specific work areas were based on Maximum vehicle size that must fit entirely in the work area with ample access to conduct repairs. An MK48/16/870A2 was identified as the largest anticipated equipment. Specific dimensions indicated were based on minimum dimension and adjusted to optimize the proposed facility layout. Even when this vehicle is replaced with The LVSR MKR16 coupled with the new M870A2E1 trailer, similar dimensional requirements will exist.
Body work	82	80	6,560	
Waterjet coating removal	80	42	3,360	
Hand Sanding Area	80	42	3,360	
Drying Area	83	42	3,486	
Undercoating Area	75	35	2,625	
Priming/painting	120	42	5,040	Sized similar to above and lengthened 50% to increase throughput (multiple items painted at same time). This increased throughput eliminated the need for a second tunnel. The width facilitates maintenance access to outside of free standing paint booth.
Tool Storage Area	30	20	600	Size estimated based on anticipated equipment, utilities, and production needs to support required throughput, as well as existing facilities on Kinser.
Air Compressor Room	16	30	480	
Electrical Room	14	30	420	
Paint Kitchen (Mixing) Area	30	15	450	Required area to support 3-booth painting operation.
Hazardous Waste Accumulation Point	30	15	450	Based on types of waste generated and to ensure sufficient separation of waste containers
Office area to include: Supervisor Office Separate GS and Contractor space Conference Room File/Supply Room Break Room	45	45	2,025	Need is based on existing facility on Kinser. Space/layout designed to accommodate required number of employees.

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 4-Aug-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
PAINT & RELATED OPS STRUCTURE	219-31	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Internal Functional Area	Length (ft)	Width (ft)	Area (ft^2)	Justification
Locker Room/ Rest Room	40	30	1,200	Size based on estimated staffing requirements
Walkways	160	9	1,440	Spaces required based on proposed facility layout
Miscellaneous	70	4	304	

TOTAL REQUIREMENT **35,000** **GSF**

NOTE: The proposed facility layout is shown on the following page.

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

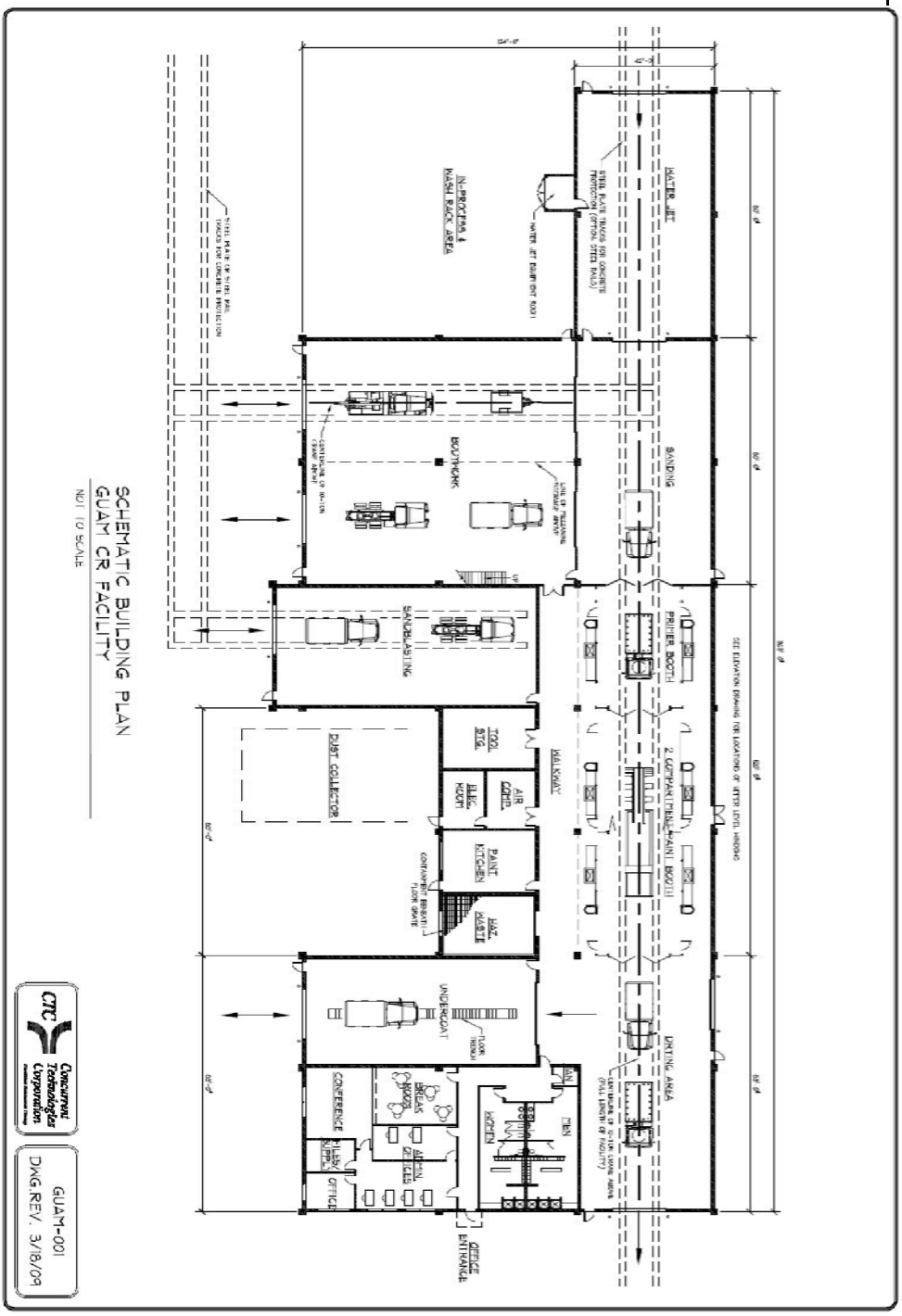
DATE PREPARED: 4-Aug-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
PAINT & RELATED OPS STRUCTURE	219-31	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA



PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Corrosion Control - Ground	Corrosion Control - Ground PH 2

Controlled Humidity Warehouse

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
CONTROLLED HUMIDITY WAREHOUSE	441-20	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Organic Unit Storage includes general purpose storage facilities assigned to Marine Corps bases, air installations and Fleet Marine Force (FMF) units for organic requirements to include Division/Wing, Battalion/Group and Company/Squadron storage areas, special service storerooms, base shipping and receiving functions and any other organic storage requirements.

A Controlled Humidity Warehouse is similar to a General Warehouse (441 10) in every respect except that it is constructed with appropriate vapor barriers and contains humidity control equipment to maintain humidity at desired levels. This facility, called a Combat Readiness Storage Point (CRSP) is required for the temporary storage of principle end item rolling stock associated with the 4th Marines and Infantry Battalions to reduce impacts of the corrosive air environment of Guam. This facility operates in conjunction with the Corrosion Prevention and Control Facility.

Space requirements are based on the number and size of vehicles that will be stored, with additional space provided for clearance.

Unit		**Total SF**	
Controlled Humidity Warehouse		100,074	GSF
	SAY	**100,080**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
100,080 SF (9298 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
CONTROLLED HUMIDITY WAREHOUSE	441-20	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Space requirements are based on the number and size of vehicles that will be stored, with additional space provided for clearance. PEI is from the FY16 Unit TO&E Reports.

Trailer, Cargo (12 FT x 8 FT)	96	SF	x	112	10,752	NSF
Truck, Armored, Cargo (12 FT x 27 FT)	324	SF	x	28	9,072	NSF
Troop Carrier (15 FT x 9 FT)	135	SF	x	20	2,700	NSF
Truck, Utility (17 FT x 8 FT)	136	SF	x	312	42,432	NSF
Ambulance (22 FT x 8 FT) =	176	SF	x	10	1,760	NSF
Subtotal =					66,716	NSF
Net-to-Gross Conversion (aisle space, separation, etc) = 50%					100,074	GSF
Total Requirement:					**100,074**	**GSF**

PROJECT REQUIREMENTS

Rainbow Chart Name

Central Issue Facility

Appendix D Name

Central Issue Facility

Central Issue Facility

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
CENTRAL ISSUE FACILITY	441-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A Central Issue Facility (CIF) is required for storage and distribution of equipment and clothing as a on-stop outlet for personnel stationed at MCB Guam. Facility is based on recent floor plan for Camp Hansen, which was adjusted to correlate with the military population that would be supported in Guam. The Hansen CIF support storage and distribution of 782 Gear and Field Gear for personnel assigned to Fuji, Schwab, MCAS, Hansen, and Courtney (13,258 PN) - Guam will support 4,749 PN.

Base	Central Issue Facility (CIF)		50,000 GSF
		Total Requirement:	50,000 GSF

TOTAL REQUIREMENT FOR CATEGORY CODE
50,000 SF (4646 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Base Warehouse	Base Warehouse

General Purpose Warehouse

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
GENERAL PURPOSE WAREHOUSE	441-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Storage space is required by the Marine Corps in Guam for storage of furnishings awaiting installation.

According to the UFC 2-000-05N, dated October 2005, BFR requirements may be calculated using the analytical/4-step method.

There are four steps required for determining storage space requirements by this method. This method is thought to be the preferred and most practical for use in planning up to and including the activity 1391 level or as needed to feed strategic planning.

Unit		Total SF	
MCB Guam, Warehouse		74,950	GSF
	SAY	**74,950**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
74,950 SF (6964 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Exchange Retail Store	Exchange Retail Store

Exchange Retail Store

Exchange Installation Warehouse

Exchange Maintenance Shop

Exchange/MWR Food Service

Information, Tickets and Travel Office

Post Office

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 16-Feb-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
EXCHANGE RETAIL STORE	740-01	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Per UFC 2-000-05N, the Exchange Retail Store is planned as part of an authorized Navy or Marine Corps Exchange. The store includes sales area, backup storage stock area, store office, toilets and circulation space. The space allowance for exchange retail stores are developed by the Navy Exchange Service Command, 3280 Virginia Beach Blvd, VA 23452-5742, Head Planning Branch, 757-631-3535.

Discussions with NEX Guam determined that a 30,000 SF Exchange Retail Store is required.

BASE **30,000 SF**

TOTAL REQUIREMENT FOR CATEGORY CODE
30,000 SF (2788 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 16-Feb-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
EXCHANGE INSTALLATION WAREHOUSE	740-86	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

NAVFAC P-80 specifies the total storage space as a function of the space authorized for the main retail store (Category Code 740-01). For the continental United States, 33% of the total space authorized for the main retail store may be provided as warehouse space; in Alaska, Hawaii and overseas, 50% of the total space authorized for the main retail store may be provided. Exchange warehouses should be located contiguous to the exchange main retail store in order to reduce the cost of moving stock from the warehouse to the main store sales area.

Discussions with M&R HQMC determined that a 10,000 SF warehouse is required.

Total Requirement: 10,000 GSF

TOTAL REQUIREMENT FOR CATEGORY CODE
10,000 SF (930 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
EXCHANGE MAINTENANCE SHOP	740-16	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

According to the UFC 2-000-05N, revised 31 Jan 2005, the Navy Exchange requirements are developed by the Navy Exchange Service Command, 3280 Virginia Beach Blvd, Virginia Beach, VA 23452-5724, Head Planning Branch 757-631-3535. An Exchange Maintenance Shop may be provided for the local repair of exchange equipment, fixtures repair of refrigeration equipment and vending machines, and to provide space for facility maintenance crews and personnel.

The NAVFAC P-80, Table 740-16, shows the total space allowances based upon Military Strength.

Table 74016-1 Space Allowances for Exchange Maintenance Shops

Military Strength	Gross Area	
	M2	SF
Up to 500	none	none
501 to 1,000	35	380
1,001 to 3,000	56	600
3,001 to 5,000	70	750
5,001 to 7,000	102	1,100
7,001 to 10,000	139	1,500
10,001 to 15,000	209	2,250
15,001 to 20,000	279	3,000
20,001 to 30,000	344	3,700
for each additional 500 add:	33	350

Based upon a military strength of 6,049 personnel, MCB Guam requires 1,100 SF.

Base	1,100 GSF
Total Requirement	1,100 GSF

TOTAL REQUIREMENT FOR CATEGORY CODE
1,100 SF (103 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 16-Feb-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
EXCHANGE/MWR FOOD SERVICE	740-04	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

This category code includes: cafeterias, specialty shops similar to deli, fast food and pizza, bake shops, ice cream shops, etc. Food serving facilities operated in and for the sole convenience of non-exchange activities such as bowling alleys, theaters, air terminals and similar, is already included in the basic space allowance for such activities.

BASE	Exchange Cafeteria	19,447 SF
	Total Requirement	**19,447** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
19,447 SF (1807 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
INFORMATION, TICKETS AND TRAVEL OFFICE	740-47	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

According to the UFC 2-000-05N, revised 31 Jan 2005, the number and appeal of local attractions and recreational opportunities will have a direct impact on the volume of ticket sales and information requests handled by an ITT Office. This volume is the primary determinant of the number of staff required to serve the market at individual bases. Based on analysis of existing operations, the staffing ratio indicated in Table 740-47-1 is recommended.

An on-base Information Ticket and Travel Office (ITT) with 3 PN (1 PN full-time and 2 PN part-time) is required to serve the military unofficial travel service needs (See Table 740-47-1).

According to UFC 2-000-05N, Table 740-47-2, an ITT staff of 2 PN allows a maximum of 720 SF.

Total Requirement 720 SF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
720 SF (67 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 6-Dec-11

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
POST OFFICE	730-85	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The purpose of this facility is to provide for central post office services based based on a total base military population of 4,749 PN.

Central Post Office		4,500 GSF
	Total	**4,500** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
4,500 SF (419 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Pub Wrks/Maint Shops	Pub Wrks/Maint Shops

Public Works Shop

Public Works Maint Shop

Operational Haz/Flam Storage

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 6-Dec-11

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
PUBLIC WORKS SHOP	219-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Public works shop space is required for repair and overhaul of installation facilities. This space includes woodworking shops, including furniture repair, packing, and crating; electrical, refrigeration, and air conditioning shops; plumbing and heating shops; metal work shops, including machine shops, sheet metal, iron work, welding, and blacksmith facilities; paint shops; maintenance and service shops, including custodial, preventive maintenance, refuse collection, insect and rodent control, road maintenance facilities, moving and rigging, and emergency service shops; central tool issue and shop stores; and shop toilets, locker rooms, and administrative spaces in direct support to shop operations. Per UFC 2-000-05N criteria, allowable shop space is based on the number of military and civilian personnel permanently assigned to the maintenance organization.

Assuming MCBG will have approximately 35 PN working in public works shop spaces, per UFC 2-000-05N, Table 2191-0-1, this facility is calssified as Shop Type B.

Shop Type	Total Maintenance Personnel	GSF
B	31-50	12,100
Base		12,100

TOTAL REQUIREMENT FOR CATEGORY CODE
12,100 GSF

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 6-Dec-11

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
PUBLIC WORKS MAINT STORAGE	219-77	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Public works storage space is required to provide covered storage for equipment and supplies needed for base operation and maintenance that must be protected from the weather. Per UFC 2-000-05N, Table 21977-1, allowable storage space is based on the Public Works Shop Type B as determined under CCN 21910. Additional space is required to store emergency generators and spare transformers. See calculations for additional space on following page.

Shop Type	Covered	Shed
B	3,400 GSF	2,300 GSF
Additional Storage Space	8,000	

Total Requirement **13,700 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
13,700 GSF

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OPERATIONAL HAZ/FLAM STORAGE	143-78	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

This category code will be used to provide a facility for the storage of materials used in daily operations that require special environmental separation. These materials such as paint, acetone, oil, etc. are considered to be hazardous and/or flammable.

According to the UFC 2-000-05N, revised Oct 2006, an engineering field analysis will be required to determine the warehouse space based on quantity of materials stored. Racks or shelves will be used to reduce footprint. Some materials may require separation and must be divided by berms or firewalls and this separation space should be added to calculations. These facilities may require some environmental controls and ventilation. If quantity is palletized, allow for forklifts in aisle ways or access through overhead doors.

CLB-4	10,000 GSF
Total Requirement:	**10,000 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
10,000 SF (930 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OPERATIONAL HAZ/FLAM STORAGE	143-78	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Per UFC 2-000-05N, requiremnts can be determined thorugh the Analytical or 4-Step method. Requirements are based on FY16 3/5 1ST MARDIV TO&E Report.

Unit	M/T	TCF (78.4x)	SH (FT)	NSF	GSF
CLB-4	816	63,974	8	7996.8	9996

Total Requirement: 9996 GSF

Total (say) 10,000 GSF

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Sec Bldg/Pol Station	Sec Bldg/Pol Station

Police Station

1. Component	JFY 2012 MILITARY CONSTRUCTION PROGRAM	2. Date
GOJ (for USMC)		21 JAN 2011

3. Installation and Location/UIC: N61755	4. Project Title
MARINE CORPS BASE, FINEGAYAN, GUAM	POLICE STATION

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	730-20	J-018	(b) (5)

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost (b) (5)
POLICE STATION	LS	--	--	(b) (5)
Police Station (24,420 SF)	M2	2,268	(b) (5)	
Built-In Equipment	LS	--		
Technical Operating Manuals	LS	--	--	
Information Systems	LS	--	--	
Anti-Terrorism / Force Protection	LS	--	--	
LEED And Federal Energy Acts Compliance Inside	LS	--	--	
Special Costs	LS	--	--	
SUPPORTING FACILITIES	LS	--	--	(b)
Special Foundation Features	LS	--	--	(5)
Electrical Utilities	LS	--	--	
Mechanical Utilities	LS	--	--	
Paving and Site Improvement	LS	--	--	
Site Preparations	LS	--	--	
Anti-Terrorism/Force Protection	LS	--	--	
Environmental Mitigation	LS	--	--	
LEED, LID and Federal Energy Acts Compliance Outside	LS	--	--	
SUBTOTAL				(b) (5)
CONTINGENCY (10.0%)				
TOTAL CONTRACT COST				(b) (5)
SIOH (6.2%)				
TOTAL REQUEST				(b) (5)
TOTAL REQUEST (ROUNDED)				

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

General Description:
The project will construct a low rise police station with walls, flooring, foundation, windows, roofing, mechanical, electrical, emergency power and information systems appropriate to Guam earthquake and environmental conditions, and designed to meet applicable Unified Facilities Criteria (UFC) including appropriate Anti-Terrorism/Force Protection (AT/FP) requirements. Facilities will be equipped with automatic fire sprinklers and air-conditioning or ventilated as appropriate. The project will provide privately owned vehicle (POV) and government owned vehicle (GOV) parking. The project will also construct support facilities, which include site grading, drainage, information systems, emergency power, environmental mitigation, and utility systems.

Sustainable design features will be integrated into the design, development and construction of the project in accordance with LEED and applicable Federal Energy Acts, Executive Orders and other directives.

General Functional Summary:
Police Station building will include administrative spaces to conduct the day-to-day security related operations and training of the base security force at the Marine Corps Base Finegayan. This facility includes spaces for the Provost Marshall's Office (PMO) Operations, PMO Training, PMO Services, PMO Criminal Investigative Division (CID) and PMO Storage. PMO Operations consist of operations administrative offices, temporary detention cells, records library, ready for issue armory, lobby, waiting/holding area, interview rooms, conference rooms, locker rooms and storage. PMO Training

(Continued On DD 1391C...)

1. Component GOJ (for USMC)	JFY 2012 MILITARY CONSTRUCTION PROGRAM	2. Date 21 JAN 2011

3. Installation and Location/UIC: N61755
MARINE CORPS BASE, FINEGAYAN, GUAM

4. Project Title	7. Project Number
POLICE STATION	J-018

(…continued)

consists of training administrative offices, classrooms, and physical training spaces. PMO Services consists of services administrative offices, administrative police records spaces, police liaison spaces, physical security spaces, crime prevention spaces, impound services, customer counter, check-in station, and traffic court. PMO CID consists of CID administrative offices, interrogation rooms, fingerprint/photo room, evidence rooms, conference/training rooms, lost and found, gear storage, SIPR room, kitchen area, and lobby. PMO Storage consists of storage spaces for mobile lights, generators, signs, force protection gear, post/sky towers, long term records, cones/traffic signs and bulk storage. Other spaces include blind vendor's area, mechanical and electrical rooms and restrooms. Supporting facilities include parking and utilities including secured parking lot, secured entry and walkways/ramps.

Built-In Equipment:

Built-In equipment to include raised access flooring, emergency generator(s) and a Uninterrupted Power Supply (UPS) system.

Information Systems:
Information infrastructure systems will include premium costs for classified data and telephone service. Outside plant telecommunication system include the fiber optics and copper cabling to connect to the main base communications room.

Emergency Power Generation:
Permanent generator(s) and fuel storage is required to provide electrical power for the entire facility since the facility is classified as a "Mission Critical" facility. Uninterrupted power supply (UPS) units will be provided.

Utilities:
These facilities include new lines and meters for electrical and water utilities (including an electrical transformer), and new lines for telephone, fiber optics and sanitary sewer. Some degree of cathodic protection will be required if steel underground piping is used. Exterior lighting is also included. This facility will require connection to the utility infrastructure (potable water, electric power, sanitary sewage, storm drainage, etc.) as provided by the Guam Utilities & Site Improvements project.

Exterior Site Work:
Site preparation includes scalping (removal of minor vegetation) and fine grading of site. Site improvements include paved areas for both POV and GOV parking, utility service road, access road, landscaping, sidewalks, curbs, gutters, bike racks, generator enclosures and trash enclosures. Low Impact Development for storm drainage, drainage detention and a Storm Water Pollution Prevention Plan (SWPPP) is included.

Environmental Mitigation:
This project includes mitigation for radon gas (including soil barriers, monitoring and venting). Radon gas is naturally occurring and is known to be present on Guam. Environmental mitigation also includes cultural resource mitigation (specifically archaeological monitoring).

11. REQUIREMENT:
FACILITY PLANNING DATA

Cat Code	Requirement	UM	Adequate	Substandard	Inadequate	Deficiency / Surplus
730-20 – Police Station	2,268.62	m2	--	--	--	--
852-10 – Parking Area	3,429.00	m2	--	--	--	--

DD Form 1 Dec 76 1391

1. Component GOJ (for USMC)	JFY 2012 MILITARY CONSTRUCTION PROGRAM	2. Date 21 JAN 2011
3. Installation and Location/UIC: N61755 MARINE CORPS BASE, FINEGAYAN, GUAM		
4. Project Title POLICE STATION		7. Project Number J-018

(…continued)

SCOPE:

The proposed project scope was determined in accordance with all relevant guidance including UFC 2-000-05N Facilities Planning Criteria (P-80) dated 31 January 2005 and UFC 4-730-04AN Military Police Facilities dated 1 March 2005.

PROJECT:
The project constructs a police station in the Finegayan area of Marine Corps Base, Guam to accommodate Marines being relocated from various sites in Okinawa. (New Mission)

REQUIREMENT:
Police Station (CCN 730-20) is required by the PMO to provide adequate and efficiently configured spaces to conduct the day-to-day security related operations and training of the base security force operations at the Marine Corps Base in Finegayan, Guam.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Base Auto Shop	Base Auto Shop

Auto Organizational Shop

Vehicle Wash Platform

Grease Rack

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
AUTO ORGANIZATIONAL SHOP	214-20	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The purpose of an Automotive Vehicle Maintenance Shop is to develop covered work areas for inspection, maintenance, and repair of all transportation equipment assigned to an installation, and as applicable, its supported activities. For reasons of overall efficiency and economy, the maintenance and operations function for automotive, construction, materials handling, and railroad equipment are combined.
Requirements are shown below with backup following.

MCBG	6,140 GSF
Total Requirement:	**6,140** GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
6,140 SF (571 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
VEHICLE WASH PLATFORM	214-55	EA

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

UFC 2-000-05N, dated 31 January 2005, allows one wash platform per 50 vehicles assigned to the motor pool.

Unit	Organizational Vehicles	Other Vehicles	Total Vehicles		Vehicles/ Wash Space		Wash Racks	
BASE	200		200	/	50	=	4.00	
	Total Requirement						**4.00**	**EA**
					SAY		**4**	**EA**

Notional base motor pool was developed using

TOTAL REQUIREMENT FOR CATEGORY CODE
4 EA

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
GREASE RACK	214-56	EA

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

UFC 2-000-05N, dated 31 January 2005, allows one grease rack (two vehicles) per 125 vehicles.

Unit	Organizational Vehicles	Other Vehicles	Total Vehicles		Vehicles/ Wash Space		Wash Racks
BASE	200		200	/	125	=	1.60
	Total Requirement						**2 EA**

Notional base motor pool was developed using

TOTAL REQUIREMENT FOR CATEGORY CODE
2 EA

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Base EOD	Base EOD

Marine Corps EOD Facility

Ready Service Magazine

Field Training Area

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
MARINE CORPS EOD FACILITY	143-24	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

This facility provides support for EOD operations on Marine Corps Bases, Marine Corps Air Stations, and Marine Corps Air Wing Support Squadrons. The facility defined below is scaled to match the EOD Team (1 Officer, 8 Enlisted) and include administrative spaces, classified publication vault, quick response ready lockers, workshop/maintenance space, classroom, equipment storage, locker room, and ordnance training aids library space. The facility will be equipped with an Intrusion Detection System (IDS). In addition, the facility will house all the emergency response vehicles, trailers (including total containment vessels), and other emergency response equipment.

Per UFC CCN 143-24, Table 14324-1 Overall Square Footage Requirements for EOD Teams, approximately 7,000 GSF is permitted. Additional space is provided for HAZMAT storage under CCN 143-78 and Ready Service Magazine under CCN 421-35.

Total Requirement: 7,000 GSF

Base EOD **7,000 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
7,000 SF (651 m2)

MOBILIZATION STATEMENT

SIGNATURE:

EW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Feb-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
READY SERVICE MAGAZINE	421-35	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Ready service lockers are required by the Explosive Ordnance Division (EOD) on Guam for storage of 1.3/1.4 ordnance (water charges, etc). This type of magazine is generally used to store small quantities of belted or boxed small-arms ammunition, certain pyrotechnics, and similar fire, no blast hazard material. Per UFC 2-000-05N, it is not practical to derive a meaningful square foot per ton planning factor for the material that might temporarily be stored in this facility. However, a 6'x10' Keyport magazine is quite suitable to perform this function and has the added benefit of being able to be secured. Historical data should be used to determine the number of these facilities required, which is dependent upon the amount of explosives as well as the compatibility of the explosives.

		Units	Requirement
Ready Service Lockers	(6'x10' EA)	1	60 GSF
Total requirement			**60 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
60 SF (6 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
FIELD TRAINING AREA	174-13	EA

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

The Explosive Ordnance Division (EOD) requires a field training area for operation and training of EOD devices and setting up scenarios. A Field Training Area is a specific area that is intended for the training of personnel in a field environment that cannot be categorized by the other Category Codes in the 174 basic series.

Requirement

Field Training Area	1 EA
Total Requirement	**1 EA**

TOTAL REQUIREMENT FOR CATEGORY CODE
1 EA

MOBILIZATION STATEMENT

SIGNATURE: _____

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENNT

SIGNITURE: _____

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Med/Den Clinic	Med/Den Clinic

Medical / Dental Clinic

1. Component	JFY13 MILITARY CONSTRUCTION PROGRAM	2. Date
GOJ (for NAVY)		31-Jul-10

3. Installation and Location:	4. Project Title
MARINE CORPS BASE, GUAM Finegayan, Guam	Medical / Dental Clinic

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	550-10	J-025	(b) (5)

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost ($000)
PRIMARY FACILITIES				(b) (5)
MEDICAL/DENTAL CLINIC (64,078 SF)	M2	5,953	(b) (5)	(b) (5)
BUILT-IN EQUIPMENT	LS	1		(b) (5)
TECHNICAL OPERATING MANUALS	LS	1		(b) (5)
LEED and Federal Energy Acts Compliance Inside	LS	1		(b) (5)
SPECIAL COSTS	LS	1		(b) (5)
SUPPORTING FACILITIES				(b) (5)
SPECIAL FOUNDATION FEATURES	LS	1		(b) (5)
ELECTRICAL UTILITIES	LS	1		(b) (5)
MECHANICAL UTILITIES	LS	1		(b) (5)
PAVING & SITE IMPROVEMENTS	LS	1		(b) (5)
SITE PREPARATION	LS	1		(b) (5)
ENVIRONMENTAL MITIGATION	LS	1		(b) (5)
ANTI-TERRORISM/FORCE PROTECTION	LS	1		(b) (5)
LEED COMPLIANCE & LID OUTSIDE	LS	1		(b) (5)
ARCADE	LS	1		(b) (5)
SUBTOTAL	-			(b) (5)
Contingency (20%)	-			(b) (5)
Total Contract Cost				(b) (5)
SIOH (6.2%)	-			(b) (5)
TOTAL REQUEST				(b) (5)
TOTAL REQUEST ROUNDED				(b) (5)

10. Description of Proposed Construction:

General Structure Description:

Project constructs a low-rise outpatient facility at Finegayan, Guam. The facility will be constructed of reinforced concrete structures such as exterior walls, roof slabs and slab on grade foundations, and with all components such as exterior walls, windows, exterior doors, storm shutters, roofing, mechanical and electrical systems appropriate to Guam earthquake and environmental conditions. The facility will be designed to meet applicable Unified Facilities Criteria (UFC), including appropriate Medical Military Facilities, Anti-Terrorism/Force Protection (AT/FP), accessibility, and base design standards and requirements. The building will be protected by fire sprinklers and utilize an HVAC system for interior environmental controls. Sustainable design features will be integrated into the design, development and construction of the project in accordance with applicable Federal Energy Acts, Executive Orders, and other directives. Special design considerations for radon control system, termite mitigations, mold prevention and corrosion control.

General Functional Summary:

This Medical/Dental Clinic provides the necessary spaces and equipment to provide proper health care services. The facility will include associated supporting facilities such as parking and utilities.

Ventilation and Air Conditioning:
The entire facility will require mechanical ventilation and air conditioning.

Fire Protection:
The facility will be designed to comply with Unified Facilities Criteria (UFC) 3-600-01, Department of Defense Fire Protection Engineering for Facilities. The entire facility will be protected by an automatic fire sprinkler system.

Accessibility:
The facility will be designed to comply with UFC 4-722-01, 3-1.1 Accessibility. Areas including vestibules, corridors, public toilet facilities, and all facilities will be designed in accordance with the requirements of the Americans with Disabilities Act (ADA) and Architectural Barriers Act Accessibility Guidelines of July 23, 2004.

Anti-Terrorism/Force Protection (AT/FP):
The facility and exterior site will be designed to comply with Unified Facilities Criteria (UFC) 4-010-01 Department of Defense Minimum Anti-Terrorism Standards for Buildings. Design strategies include maximizing building standoff distances, preventing building collapse, minimizing hazardous flying debris, providing an effective building layout, limiting airborne contamination, providing mass notification, and facilitating future upgrades.

EPACT 2005 / LEED Compliance:
Energy Policy Act of 2005 (EPACT) and Leadership in Energy and Environmental Design (LEED) sustainable design features to achieve LEED Silver Rating, and Low Impact Development (LID) practices are included in the project. Energy monitoring and utility control systems in accordance with FY2010 National Defense Authorization Act (NDAA) are also included.

Information Systems:
Information infrastructure systems will be provided to support the facility.

Utilities:
This facility includes new lines and meters for electrical and water utilities (including an electrical transformer), and new lines for telephone, fiber optics, sanitary sewer. Some degree of cathodic protection will be required if steel underground piping is used. Exterior lighting is also included. This facility will require connection to the utility infrastructure (potable water, electric power, sanitary sewage, storm drainage, etc.) as provided by the Guam Utilities & Site Improvements Phase II project.

1. Component	JFY13 MILITARY CONSTRUCTION PROGRAM	2. Date
GOJ (for NAVY)		31-Jul-10

3. Installation and Location:	4. Project Title
MARINE CORPS BASE, GUAM Finegayan, Guam	Medical / Dental Clinic

Emergency Power Generation:

The UFC 3-520-01 Interior Electrical Systems provides guidance for emergency power generation. Emergency power is required to provide electrical power for vital operations. This facility will include an emergency generator and fuel storage. A three-day supply of fuel is required. This facility requires an alternative power source as it is a Command and Control facility required to support the United States Marine Corps within Guam and Japan as authorized by the MIL-HDBK-1190 (Page 9-8).

Exterior Site Work:

Site preparation includes clearing and grubbing of site. The project will also construct support facilities which include site grading, drainage, information systems, emergency power, environmental mitigation, utility systems, an access driveway to the covered drop off area, parking for privately-owned, organizational, and emergency vehicles in accordance with the applicable UFC, landscaping, sidewalks (with non-slip surface), curbs, gutters, trash enclosure, storm drainage, and a Storm Water Pollution Prevention Plan (SWPPP).

Environmental Mitigation:

This project includes cultural resource mitigation, Radon gas mitigation (including soil barriers, monitoring and venting), archeological monitoring and data recovery. Natural resource mitigation is included in the Guam Utilities & Site Improvement projects.

Workforce Logistics:

Workforce Logistics will support the housing, feeding, medical care, transportation, and security of the off-island workforce coming to Guam. The cost for all these provisions will be shared among all the new facilities planned for Guam.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Youth Center	Youth Center

Youth Center Space Program Worksheet

			Gross m^2	Gross $ft.^2$
Select Service Branch:	Marine Corps			
School Age Care (SAC): Enter no. of SAC Rooms *For Marine Corps, SAC Program includes the number of SAC rooms selected plus appropriate space for storage and toilets.	2	SAC Building	317.72	3,420
Youth Program: Select Size of Youth Program	61 to 90 Youth	Youth Building	441.73	4,755
Teen Program: Select Size of Teen Program	31 to 45 Teens	Teen Building	175.27	1,887
Additional Spaces and Options				
Select Size of Multipurpose Room *Marine Corps options include items 2 through 4.	2. Half-court w/o bleachers	Multipurpose Room	400.12	4,307
Select Kitchen size	None	Kitchen		
Select Music Room option (no. of rooms)		Music Rooms		
Select Additional Parent Waiting option *This is an additional waiting area located near the Activity Rooms and is in addition to the lobby waiting area. Requires Youth Program selection.		Parent Waiting		
Select Laundry Room option *A One-washer Room includes one washing machine and two dryers. A Two-washer Room includes two washing machines and three dryers.		Laundry		
Administrative Area				
Select Size of General Admin. Area	Small	General Admin. Area	103.25	1,111
Office Requirements				
Enter no. of private offices required:		Private offices		
Enter no. of workstations required:		Workstations		
		Subtotal Admin. Area and Offices	**103.25**	**1111**
		TOTAL GROSS BUILDING	**1438.00**	**15,480**
Site				
SAC Site Program: Tied to SAC building selection (entered above)		SAC Site Support	355.81	3,830
Select Youth Site option *In facilities where Youth Program is provided but SAC is not, Youth Site area is mandatory. If SAC is provided, Youth Site area is optional.	No	Youth Site Support		
Teen Site: Tied to Teen Program building selection (entered above)		Teen Site Support	371.60	4,000
Select Outdoor Open Area Option		Outdoor Open Area		
Administrative: Tied to building selection (entered above)		Admin. Site Support	994.96	10,710
		TOTAL GROSS SITE SUPPORT	**1722.37**	**18,540**

TOTAL GROSS FACILITY (BUILDING + SITE SUPPORT)	**3,160**	**34,020**

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Fire Station	Fire Station

Fire Station

1. Component		2. Date
GOJ (for NAVY)	**JFY 2010 MILITARY CONSTRUCTION PROGRAM**	24-Sep-09

3. Installation and Location/UIC:	4. Project Title
Guam	Fire Station

5. Program Element	6. Category Code		8. Project Cost ($000)
	730-10	J - 008	(b) (5)

9. COST ESTIMATES (5)

Item	U/M	Quantity	Unit Cost	Cost (b) (5)
Primary Facilities	m2	2,169	(b) (5)	(b) (5)
Fire Station (3 Companies)	m2	2,169	(b) (5)	
Information Systems	LS	1	(b) (5)	
Special Building Cost	LS	1	(b) (5)	
Built-in Equipment	LS	1	(b) (5)	
Special Costs	LS	1	(b) (5)	
SUPPORTING FACILITIES				
Site Preparation	m2	10,700	(b) (5)	
Site Improvements	LS	1	(b) (5)	
Parking	SP	46	(b) (5)	
Utilities	LS	1	(b) (5)	
Environmental Mitigation	HC	1	(b) (5)	
Radon Mitigation	m2	1,325	(b) (5)	
Archeological Monitoring/Data Recovery	LS	1	(b) (5)	
Workforce Logistics (8%)	EA	1	(b) (5)	
SUBTOTAL				(b) (5)
TOTAL REQUEST				(b) (5)
TOTAL REQUEST ROUNDED				(b) (5)

10. Description of Proposed Construction

GENERAL PROJECT DESCRIPTION: Project constructs one single-level fire station in the Finegayan area of Naval Station Guam. The facility will be constructed of reinforced concrete, and with all components such as exterior walls, windows, roofing, mechanical and electrical systems appropriate to Guam earthquake and weather standards, designed to withstand 170 miles per hour winds. Project to include Anti-terrorism/Force Protection measures. Facilities include: training facilities, living quarters, recreational/dining facilities, administrative support areas, EMS support, HAZMAT support, fire prevention offices, maintenance/repair/support, storage and bays for the engines and apparatus. Facilities will be protected by fire sprinklers, fire alarm, mass notification, and carbon monoxide detection, and they are provided with air conditioned. Parking for POV vehicles and emergency vehicles are included. Areas including vestibules, corridors, and public toilet facilities are to be barrier free, and all facilities will be designed in accordance with the requirements of the Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines, dated July 23, 2004. (ADAAG). All design and construction will comply with the Energy Policy Act 2005 (EPAct 2005) requirements. Operations and maintenance manuals are included in project costs as are Post Construction Award Servces. Sustainable features will be incorporated to the extent possible and the facility will be commissioned. Leadership in Energy and Environmental Design (LEED) will be integrated into the design to achieve at least a Silver-level certification by the United States Green Building Counsel (USGBC). Currently, Naval Base Guam operates the fire station for all naval facilities on the island. The fire station project will service mainly the Finegayan site. Similar to the USMC bases in Okinawa, the project will have the proper fire protection and emergency medical services to support the Marines.

1. Component		2. Date
GOJ (for NAVY)	**JFY 2010 MILITARY CONSTRUCTION PROGRAM**	24-Sep-09

3. Installation and Location/UIC:

Guam

4. Project Title

Fire Station

(...continued)

INFORMATION SYSTEMS:

Voice/Data System: Project will provide voice (telephone) service and for data service (LAN).

CATV: The project will provide a television system for entertainment and educational television programs Cable television from at least two CATV vendors and satellite feed for AFN will be provided for television program sources. The project will connect to an existing CATV distribution system.

Public Address System: The project will provide a mutli-channel public address system. The firefighter alert system will be tied into the public address system.

Fire Alarm/Mass Notification System: The facility will provide a fire alarm/mass notification system for audible and visual notification of building occupants to evacuate the facility for emergency.
The fire alarm/mass notification system will be separate from the public address system.

Future Video Monitoring Capabilities: The provisions for monitoring at Central Dispatch will include conduit only from two proposed locations on the exterior of the building to the IT Room for future connections.

Firefighter alert system: When a call comes in, the aubile message will be done by the Central Dispatch. Lights in the various areas will alert personnel of the call, initiated locally. Also initiated locally will be the overhead doors will open and traffic beacons in the street.

SPECIAL BUILDING COSTS:

Includes probing/grouting/cavity fill on/structural fill.

BUILT-IN EQUIPMENT:

Includes a compressed air system for vehicle maintenance, generator, SCBA compressor, fireman gear lockers, fire pump, vehicle exhaust system, wash station (for decontamination), medical vault and emergency stand-by generator.

1. Component		2. Date
GOJ (for NAVY)	**JFY 2010 MILITARY CONSTRUCTION PROGRAM**	24-Sep-09

3. Installation and Location/UIC:
Guam

4. Project Title
Fire Station

(...continued)

SUPPORTING FACILITIES:

Site Preparation: Project costs include clearing and grubbing of site and grading.

Site improvements: Project costs include earthwork, landscaping, sidewalks/ramps (with nonslip surface), bollards, service aprons (concrete), curbs, gutters, trash enclosure, mechanical unit enclosure, solar panel enclosure, transformer / storage building, generator / fire pump / agent storage building, fire/emergency traffic lights/controls, BBQ and picnic area, basketball hoop/backboard, and a Storm Water Pollution Prevention Plan (SWPPP). Storm and sanitary work include sanitary sewer and storm drainage including infiltration trench/grassy swale and a sand/oil interceptor.

Parking: Project costs include paved parking for 46 parking stalls.

Utilities: Project costs include electrical utilities such as primary/secondary electrical distribution, communication distribution, substation/transformer and exterior area lighting. Mechanical utilities includes water, fire protection including fire protection water storage tank and underground rainwater catchment tank. A standby generator with controls, an above ground fuel tank and building will also be provided.

Mitigation: Project costs include environmental mitigation (loss of habitat), radon gas mitigation (including soil barriers, monitoring and venting), archaeological monitoring (budgetary estimate if artifacts found) and unexploded ordnance (UXO) monitoring (budgetary estimate if UXO found).

SCOPE: The proposed project scope was determined in accordance with all relevant UFC guidelines including the Unified Facilities Criteria (UFC) 4-730-10, Fire Stations, dated 15 June 2006 and is based upon a requirement for a three-company headquarters station.

PROJECT: The project constructs a fire station headquarters facility in the Finegayan area of Naval Base, Guam to accommodate Marines and dependents being relocated from various sites in Okinawa (New Mission)

REQUIREMENT: On October 29, 2005, the Security Consultative Committee (SCC) approved the document, "U.S.-Japan Alliance: Transformation and Realignment for the Future," which outlined initiatives on roles, missions, and capabilities of U.S. and Government of Japan (GoJ) forces. Also in 2005, GoJ and U.S. officials signed the Agreed Implementation Plan (AIP). The agreements outline a realignment of Marine Corps elements to reduce the U.S. military footprint in Okinawa, including the relocation of forces out of Japan. The AIP described the U.S.-GoJ agreed upon Marine Corps elements that would be relocated, which are referred to as the AIP requirements.

CURRENT SITUATION: There are no Marines presently stationed on Guam. The majority of the Department of Defense (DOD) Class I and II properties including airfield and wharves on Guam are owned by the Navy and Air Force. Limited surplus shore facilities are available but are within small footprints in various locations which inhibit any large scale usage for this relocation effort. Additionally, most of these surplus facilities require extensive upgrades/modification for adequate permanent type use. Therefore proposed facilities to support the relocation of more than 8,000 Marines and their dependents will have to be new construction.

IMPACT IF NOT PROVIDED: This project is part of the relocation of USMC relocation from Okinawa to Guam. Units/activities will not vacate their current facilities until new replacement facilities have been completed, inspected and accepted. Failure to complete this project on time will likely prevent completion of the relocation.

Main Base Gym

Select Service Branch: Marine Corps

Select size of facility:

Marine Corps size options are to the right. Check box next to appropriate size. Also enter actual total Installation population size in the space provided. Refer to UFC Section 2.1 for reference to population criteria.

Check box next to appropriate facility size.

Extra Small	☐	For populations of <500
Small	☐	For populations of 501-3,000
Medium	☑	For populations of 3,001-7,000
Large	☐	For populations of 7,001-14,000
Extra Large	☐	For populations of 14,001+

Enter actual total population: 6,049

Based on data entered above, facility size basis is: **Medium** For populations of 3,001-7,000

Total Installation population is **6,049**

Confirm facility size basis is correct (yes or no): Yes

Many of the spaces below are determined by the size and/or population criteria confirmed above. Where appropriate or necessary, modify each space or select the appropriate options to determine the total net facility size.

Fitness Spaces		Default quantities	m^2	$ft.^2$
Lobby/Reception				
Entry Lobby		3 Vestibule/Lobby Module(s) (for 2-3 ppl).	27.87	300
Control Counter		3 Counter Module(s).	23.23	250
Equipment issue storage		3 Storage Module(s).	32.52	350
Vending		4 Vending Machine(s).	3.72	40
Waiting/Display				
Spectator peak-time circulation	For this option, select yes or no:			
Public restrooms/phones	For this option, select size of restroom:			

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Fitness Center	Indoor Fitness Center

Main Base Gym

Outdoor Swimming Pool Installation

MWR Supply/Support Facility

Main Base Gym

Select Service Branch: Marine Corps

Select size of facility:

Marine Corps size options are to the right. Check box next to appropriate size. Also enter actual total Installation population size in the space provided. Refer to UFC Section 2.1 for reference to population criteria.

Check box next to appropriate facility size.

Extra Small	☐	For populations of <500
Small	☐	For populations of 501-3,000
Medium	☑	For populations of 3,001-7,000
Large	☐	For populations of 7,001-14,000
Extra Large	☐	For populations of 14,001+

Enter actual total population: 6,049

Based on data entered above, facility size basis is: **Medium** For populations of 3,001-7,000

Total Installation population is **6,049**

Confirm facility size basis is correct (yes or no): Yes

Many of the spaces below are determined by the size and/or population criteria confirmed above. Where appropriate or necessary, modify each space or select the appropriate options to determine the total net facility size.

Fitness Spaces		Default quantities	m^2	$ft.^2$
Lobby/Reception				
Entry Lobby		3 Vestibule/Lobby Module(s) (for 2-3 ppl).	27.87	300
Control Counter		3 Counter Module(s).	23.23	250
Equipment issue storage		3 Storage Module(s).	32.52	350
Vending		4 Vending Machine(s).	3.72	40
Waiting/Display				
Spectator peak-time circulation	For this option, select yes or no:			
Public restrooms/phones	For this option, select size of restroom:			

Main Base Gym

			Default quantities	m^2	$ft.^2$
Gymnasium					
Basketball/volleyball Court	Select size:	Two Courts	1 Two-court/200-seat Module(s)	1630.95	17,556
Select the Basketball/volleyball Court size. The selected size will be described to the right.					
Additional Spectator seating	To change default, enter new quantity:		0 Additional 200-seat Module(s). 200 total seats.		
Basic storage/support					
Additional court storage					
Unit PT/Group Exercise					
Partitionable Room(s)	To change default, enter new quantity of ppl:				
Storage/support					
Fitness Spaces					
Stretching			4 people at 4.6 m2 (50 ft.2)/person.	18.58	200
Cardiovascular Equipment	For Medium and larger facilities, this number includes area for cardio, selectorized, and free weights.			891.37	9,595
Selectorized (machine) weights			See above.		
Free/Plate-loaded weights			See above.		
Finess Program Manager's Office					
Fitness Assessment Room					
Structured Activities					
Structured Activity Space			3 Flexible space Module(s).	148.64	1,600
Racquetball Courts					
Spectator/officiating					
Structured activity storage			10% of Structured Activity Space.	22.30	240
Locker Rooms					
Space criteria for men's and women's locker, shower, and toilet areas are provided at the end of the spreadsheet because they are determined by selections made throughout.					
Sauna, cool-down area	To change default, select new:	None			
Steam Room, cool-down area					
Hot Tub	To change default, select new:	None			

Main Base Gym

Fitness Spaces (continued)		Default quantities	m^2	$ft.^2$
Support Areas				
Laundry	To change default, select new: 2/4 machine	2/4 machine combo Laundry Room.	21.37	230
Equipment repair and receiving		Repair/receiving Room.	104.93	1,129
Storage		Storage Room.	45.50	490
Additional Programmatic Storage	For this option, enter required sf:			

Core HAWC Spaces			
Lobby/Reception			
Director's Office			
Program Managers' Offices			
Support Staff Workstations			
Classrooms/Training rooms			
Resource Room/Computer Lab			
Storage/support			
Ergometry and Fitness Testing *			
Wellness Assessment *			

Administrative Spaces (required or optional)			
Director's Office	1 Office.	11.15	120
Program Managers' Offices			
Support Staff Workstations	6 Workstation(s).	17.84	192
Copy/file/work/break Room			
Classroom/Training Room			
Classroom/Training Storage			

Main Base Gym

Optional or Service-specific Program Spaces

			Default quantities	m^2	$ft.^2$
Indoor Track					
Indoor Track	To change default, select new:				
To change the default selection (described to the right), choose the size of track desired. The description to the right will then change to reflect the new choice. To return to the default, delete the selection above.					
Indoor track lobby	To change default, enter new quantity:				
Additional Group Exercise Room					
Massage Room	For this option, select yes or no:				
Physical Therapy Training	For this option, select yes or no:				
Expanded Retail 1	For this option, select yes or no:				
Expanded Juice Bar 1	For this option, select yes or no:				
Expanded Juice Bar Seating					
Family Changing Room	For this option, select yes or no:	Yes	3 Family Changing Room(s).	30.66	330
Male DV Locker Room *					
Female DV Locker Room *					
Child Play Area/Parent Child Area *	For this option, select yes or no:	No			
HAWC Demonstration Kitchen					
HAWC Relaxation Room *					

Locker Rooms

The following Locker Room spaces are based on total building occupancy, which is driven by the selctions made on this spreadsheet.

Marine Corps allocates the locker area at a 80% Male and 20% Female split.

To change this default split, select new: 80% Male / 20% Female

Men's Locker Room				177.81	1,914
Locker/changing area	To change default, select new:		232 Lockers in 153 slots.		
Marine Corps designates 2 spaces (slots) for every 3 lockers (66%). This is 1 full-sized & 2 half-sized lockers for every 3 required. To change this default, select new configuration. ALSO: See Women's Locker/changing area.					
Shower/drying area			11 Showers.		
Toilet area			8 Water closets/lavatory modules.		

Main Base Gym

Woman's Locker Room			49.14	529
Locker/changing area	To change default, select new:	58 Lockers in 38 slots.		
Shower/drying area		3 Showers.		
Toilet area		3 Water closets/lavatory modules.		

Building Totals

		Subtotal - Total Net Building Area	**3,257.6**	**35,065**
	Is this facility more than one story (yes/no)?	**Net-to-gross Factor @ 0.2**	**651.5**	**7,013**
		TOTAL GROSS BUILDING	**3,909.1**	**42,078**

Site Spaces

		Default quantities	**m^2**	**$ft.^2$**
Staff Parking		10 Paking Spaces.	418.05	4,500
Loading dock	For this option, select yes or no:			
Service Drive/trash		1 Service Drive Module.	69.68	750
Customer Parking		120 Parking Spaces.	5016.60	54,000
Bicycle Rack Area		2 10-bike Rack(s).	29.73	320
Patio	For this option, select yes or no:			
		TOTAL GROSS SITE SUPPORT	**5,534.1**	**59,570**

TOTAL GROSS FACILITY (BUILDING + SITE SUPPORT)	**9,443.1**	**101,648**

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OUTDOOR SWIMMING POOL INSTALLATION	750-30	EA

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

TABLE 74053-4 Space Allowances for Swimming Pools

NOTE: The following space allowances are for one 50m, 9 lane pool

Functional Component	# of Units		Space Allocation Factor	Total NSF	Min/Max NSF
ACTIVITY AREAS					
Swimming Pool - 50 Meter Length	9	x	1,348 NSF per lane	12,132	
Poolside Deck Area for Outdoor Pool			300% total NSF lanes	36,396	
ACTIVITY SUPPORT					
Bathhouse					
Lockers, Showers, Toilets			33.33% total NSF lanes	4,044	
Control Desk	2	x	45 NSF per station	90	45 min.
Administrative Office	1	x	120 NSF per office	120	120 min.
Lifeguard Office	2	x	40 NSF per station	80	80 min.
Storge (equip., supplies,etc.	2	x	20 NSF per lane	720	100 min.
			total Activity Support	5,054	
BUILDING SUPPORT					
Entrance/Circulation/House-keeping	12.50%		10-15% x subtotal NSF Activity Support Areas	632	
Mechanical, Electrical/ Communication Equipment Space			5-10% x subtotal NSF Activity Support Areas	379	
Pool Plant Room (pump filter, etc.)			20% total NSF lanes	2,426	
Chemical Storage Room(s)	2		60 NSF per room	120	60 min.
Allowance for Support Facilities for one 50m, 9 lane pool:				8,611	GSF
			SAY	**8,620**	**GSF**
TOTAL ALLOWANCE FOR SUPPORT FACILITIES (50m, 9 lane pools)				**8,620**	**GSF**

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
MWR SUPPLY/SUPPORT FACILITY	740-37	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The military population served is as follows:

Military Strength	4,749	PN
Dependents (25% of 1,300)	325	PN
Military Population	5,074	PN

Per UFC 2-000-05N Table 74037-2, the allowance for 4,749 military strength personnel and 325 dependents is a MEDIUM facility:

BASE	MCB Guam		**14,246**	**GSF**
		SAY	**14,250**	**GSF**

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
14,250 SF (1324 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Outdoor Playing Fields	Outdoor Playing Fields

Outdoor Playing Fields

Outdoor Playing Courts

Recreation Pavilion

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 26-Jan-12

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OUTDOOR PLAYING FIELDS	750-20	EA

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Playing fields provide facilities and support services to meet the individual physical fitness, coordination, skills development, training and recreation needs of military personnel. The facilities may also serve dependents. Actiities which may be accommodated in Playing Fields include: baseball, football, soccer, softball, track and field, etc. Outdoor playing fields are required to support a military population of 4,749 PN.

UFC2-000-05N provides limited guidance for Category Code 750-20, therefore, previous guidance from the NAVFAC P-80 was used. The NAVFAC P-80 authorizes outdoor playing fields based on Tables 750-20A and 750-20B. The number of courts is based on peak hour usage.

Table 750-20A
SOCCER/FOOTBALL FIELD DEMAND CALCULATION

Population Category	Loading		Participation Factor		Peak Hour Demand
Enlisted	4,346	x	0.0029	=	13
Officers	403	x	0.0028	=	1
			Subtotal:		14
	divide by max capacity per soccer/football field per average peak hour:				8
	Total number of soccer/football fields:				2
	Multiply by 0.67 to obtain the number of lighted fields (67%):				1

Table 750-20B
SOFTBALL/BASEBALL FIELD DEMAND CALCULATION

Population Category	Loading		Participation Factor		Peak Hour Demand
Enlisted	4,346	x	0.0081	=	35
Officers	403	x	0.0068	=	3
			Subtotal:		38
	divide by max capacity per soccer/football field per average peak hour:				10
	Total number of soccer/baseball fields:				4
	Multiply by 0.67 to obtain the number of lighted fields (67%):				3

	Total		(x 67%)	**Lighted**	
Soccer/Football Field	2	EA		1	EA
Softball/Baseball Field	4	EA		3	EA
Total	**6**	**EA**		**4**	**EA**

Total playing field requirements = 6

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
OUTDOOR PLAYING COURTS	750-10	EA

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Outdoor playing courts provide facilities and support services to meet the individual physical fitness and recreation needs of military personnel. The facilities may also serve dependents, . Activities that may be accommodated in Outdoor Playing Courts include basketball, tennis, and volleyball. Outdoor playing courts are required to support a military population of 4,749 PN.

UFC2-000-05N provides limited guidance for Category Code 750-10, therefore, previous guidance from the NAVFAC P-80 was used. The NAVFAC P-80 authorizes outdoor playing courts based on Tables 750-10A, 750-10B, and 750-10C. The number of courts is based on peak hour usage.

Lighted courts may be provided as an alternative to unlighted courts, in proportion to their relative total numbers as calculated in Tables 750-10A, 750-10B, and 750-10C (attached).
The allowance for a military population of 4,749 PN is:

	Unlighted			Lighted	
Basketball Courts	4	EA	(x 60%)	2	EA
Tennis Courts	3	EA	(x 67%)	2	EA
Volleyball Courts	3	EA	(x 60%)	2	EA
Total	**10**	**EA**		**6**	**EA**

Total outdoor playing courts requirement = 10

See attached sheets for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
10 Total, of which 6 are lighted courts

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
RECREATION PAVILION	740-78	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Recreation Pavilion space is required for support of various morale, welfare and recreational activities.

The requirement is based upon the following:

Active Duty Military	4,749	PN
Dependents 60% of 1,300	780	PN
TOTAL	5,529	PN

Per UFC 2-000-05N Table 750-78-1 Space Allowance for Recreational Pavilions, the allowance for 5,529 PN is 2,600 SF.

Total Requirement: 2,600 SF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
2,600 SF (242 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Consolidated Club	Consolidated Club

All Hands Club

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ALL HANDS CLUB	740-67	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

The All Hands Club is used to plan the space requirements for a single facility to accommodate on-base facilities, surrounding competitive environment and size of the components. Full Table Service Restaurant, Quick Service (over the counter) Restaurant, Banquet/Catering Room(s), Cafeteria, Beverage Lounge(s) with or without Entertainment.

According to the UFC 2-000-05N, space allowances in Table 74067-1 may be used to detemrine space requirements for planning purposes. However, the actual size of any programmed club project is based upon market analysis and consequent financial projections that must justify programming of the facility and comply with the financial performance requirements of DODINST 7700.18. Contact CNIC N925, N944 for additional information.

In the absence of detailed space criteria for an All Hands Club, Table 740-67-1 permits 14,000 GSF of space for a MEDIUM size population.

Total 14,000 SF

TOTAL REQUIREMENT FOR CATEGORY CODE
14,000 SF (1301 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Auditorium/Theater	Auditorium/Theater

Theater

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 6-Dec-11

Basic Facility Requirements
Guam Master Plan

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
THEATER	740-56	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A theater is provided as a recreation facility designed to accommodate an installation's military population plus 50% of their dependents.

Base	12,040 GSF
Total Requirement:	**12,040 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
12,040 SF (1119 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 6-Dec-11

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
THEATER	740-56	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

Space allowances ifor theaters will be determined by the following method:

Step 1: Determine the basic authorized number and seating capacity from Table 74056-1.

Step 2: Determine Environmental Adjustment Factor from Table 74056-2 and adjust the value obtained from Step 1 accordingly.

Step 3: Determine gross SF requirements from Table 74056-3.

All facilities, except the general purpose facility, will be provided with a stage.

Table 74056-1 Authorized Numbers and Seating Capacities for Theaters

Military Population (1)	Number	Seat Capacity	Dressing Rooms
Up to 300	Note (2)		
301 to 1,000	1	General Purpose	Without
1,001 to 2,000	1	350	With
2,001 to 3,000	1	500	With
3,001 to 25,000	Program as an auditorium CCN 171-25		

(1) Military population military strength plus 50% of dependents.

Table 74056-2 Environmental Adjustment Factors for Theaters

Condition	Civilian Community	Other Recreational Facilities (2)	Current Installation Theater (3)
Normal	0.70	0.70	1.00
Poor	1.00	1.00	0.50

(1) Civilian Community Facilities

Normal: At least one civilian theater or drive-in within 30 minutes driving time of installation and local TV or CATV reception.

Poor: No civilian theater or drive-in within 30 minutes driving time or no local TV or CATV.

(2) Other Recreational Facilities (On Installation)

Normal: Three or more of the following five facilities are either available or construction funds have been appropriated:

1) a club or open mess
2) bowling alley
3) hobby shop
4) bymnasium
5) playing courts and fields.

Poor: Two or less fo the five facilities are available and no construction funds have been appropriated for them.

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 6-Dec-11

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
THEATER	740-56	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

Table 74056-3 Space Allowances for Theaters

Capacity Seats	Gross SF with dressing rooms	Gross SF w/out dressing rooms
General Purpose	3,500	3,500
350	6,500	5,800
500	10,900	9,600
1,000	17,200	15,500

1) Military Population:

The military strength is 4,749 personnel	**4,749**	**PN**
Dependent population is calculated to be:	**1,300**	**PN**
Fifty percent of the dependent population is	**650**	**PN**
Total miliary population:	**5,399**	**PN**

Table 74056-1 is used to determine authorized number and sitting capacities for theaters. Maximum seat capacity is 500 for a population of 3,000; therefore 5,400 divided by 3,000 equals 1.8, rounded to 2; 2 times 500 seats = 1,000 Seats

2) Table 74056-2 lists the Environmental adjustment factor to be applied. The factors selected are as follows:

Civilian Community - Poor (1.00)
Other Recreational - Normal (.70)
Current Installation - None (1.00)
Therefore EAF is:
1.00 x .70 x 1.00 = 0.70

Adjusted seat capacity:: 1,000 seats x 0.70 = 700 seats

3) Table 74056-3 maximum space allowance for theaters of 1,000 seat capacity is 17,200 GSF
700 seats divded by 1,000 seat capacity = 1
Space allowance is **12,040 GSF**

PROJECT REQUIREMENTS

Rainbow Chart Name

Recreation Center

Appendix D Name

Recreation Center

Recreation Center

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 6-Dec-11

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
RECREATION CENTER	740-54	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A Recreation Center is designed to serve primarily younger (ages 18-24) enlisted personnel (mostly E1-E6), particularly those living in Bachelor Enlisted Quarters. Some basic support facilities such as a vending / snack area and a telephone bank (with private booths and a waiting area) may be included for the convenience of patrons, particularly in locations where such services may not otherwise be available.

According to UFC 2-000-05N, revised January 2005, each base where a Recreation Center is located should be individually analyzed to understand its specific situation, and determine the mix of Recreation Center functions most appropriate to meet local needs. The space allowance should be based on the development of a justifiable program of functions, capacities and sizes, comparable to the Sample Space Programs contained in UFC 4-740-16 Design: Military Recreation Facilities.

Recreation Center facilities are sized on the basis of the sized classification determined by active duty population and the corresponding space program presented in UFC 4-740-16.

Per Table 2-1 in the UFC, an active duty population of 4,749 PN falls within the "Medium" size classification. The space program presented on the following page provides the minimum requirements alloted.

Total Requirement	8,799 GSF
SAY	**8,800 GSF**

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
8,800 SF (818 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Rel Min Services	Religious Ministry Services

Religious Ministry Facility

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
RELIGIOUS MINISTRY FACILITY	730-83	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

Department of the Navy Policy requires that commanders and commanding officers will provide for the free exercise of religion by military personnel and their dependants through Command Religious Programs. Religious Ministry Facility (RMF) is a generic term for facility assets used to support Command Religious Programs. RMFs must therefore accommodate the religious rights and needs of a multi-faith, intergenerational, culturally diverse sea service population.

BASE 18,436 GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
18,436 SF (1713 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name

Education Center

Appendix D Name

Education Center

Educational Services Office

Academic Instruction Building

Library

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 6-Dec-11

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
EDUCATIONAL SERVICES OFFICE	740-88	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A facility is required to provide opportunity for technical, academic and vocational advancement for military personnel.

PCS Military Strength 4,749 PN
For this CCN, assume military strength should include PCS only: 1,792 PN

Per UFC 2-000-05N Table 74088-1, the space allowance for a PCS military strength of 1,792 is:

Education Center	8,700	SF
On-the-Job Training (OJT)	500	SF
Career Advisory and Counseling (CAC)	500	SF
Total	9,700	GSF
SAY	**9,700**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
9,700 SF (902 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
ACADEMIC INSTRUCTION BUILDING	171-10	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A general academic classroom is one which supports approved training programs and provides accommodations for classroom lecture instruction, using standard chairs with fixed tablet arms or a similar seating configuration providing the student a writing surface and book depository. The individual general academic classroom sizes in net square feet (i.e., within the interior walls of the room), as dictated by the required number of seats, shall not exceed the figures given in Table 17110-1.

Per the UFC, in cases where the training building is composed entirely of general academic classrooms, use the broad planning factor of 45 gross SF per student station for the entire building. Every attempt must be made, however, to minimize the number of such single subject or “dedicated” classrooms, especially in those cases where their use would be relatively infrequent.

In the spirit of this guidance and per the intent of the UFC, a consolidated MCB Guam Audio/Visual Training Center will be provided with shared classrooms for all MCB Guam departments. This is due to the requirement for such classroom space on an infrequent basis.

Four 50 PN classrooms = 45 GSF x 200 PN = 9,000 SF
Computer Resource Center x 30 stations (45 SF EA) = 1,350 SF
Internet Café (Student Break Area) = 50 PN x 8 SF) = 400 SF

Academic Classroom, MCB Guam	10,750 GSF
Total Requirement:	**10,750 GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
10,750 SF (999 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
LIBRARY	740-76	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A library is required to support the following military strength and 40% of dependents.

Military Strength	4,749	PN
Dependents (40% of 1,300 PN)	520	PN
Authorized Customers	5,269	PN

Per UFC 2-000-05N Table 74076-1, the allowance for 5,269 PN is

Basic Allowance	10,500	SF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
10,500 SF (976 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Temp Lodging Fac	TLF

Temporary Lodging Facilities (Navy Lodge)

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 21-Dec-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
TEMPORARY LODGING FACILITIES (NAVY LODGE)	740-20	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

These facilities are temporary living accommodations which normally are rented for a service charge for overnight or short term use to authorized personnel such as: official military or civilian visitors to the installation, visitors to installation personnel, transient personnel or families awaiting assignment to quarters. Included are motels, hotels, and apartments. Where such facilities are authorized for new construction, they shall be of motel type with bath and with kitchenettes, if required. Appropriate circulation, administration, mechanical and service space will be provided.

Base		**55,413 GSF**
	SAY	**55,420 GSF**

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
55,420 SF (5149 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DATE PREPARED: 21-Dec-09

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
TEMPORARY LODGING FACILITIES (NAVY LODGE)	740-20	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

Based upon their experience with operation of other temporary lodging facilities, Marine Corps Community Services (MCCS) has determined that the following square footage is required to support the demand for temporary logding at Marine Corps Base Guam

Lodging Rooms with Kitchenettes	60	x	413	NSF/EA =	24,780	NSF
Lodging Rooms without Kitchenettes	30	x	340	NSF/EA =	10,200	NSF
Suites (2 Rooms)	10	x	463	NSF/EA =	4,630	NSF
		SubTotal NSF =			39,610	NSF
Net to Gross SF Conversion =		1.25	GSF/NSF	=	49,513	GSF
Administration, Lobby, Restrooms and Check In Area				=	2,700	GSF
Guest Laundry				=	550	GSF
Breakfast Area				=	800	GSF
Fitness Center				=	550	GSF
Business Center				=	500	GSF
Mechanical and Storage Areas				=	800	GSF
Total Temporary Lodging Requirement:					**55,413**	GSF

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Central Fueling Station	Central Fueling Facility

Filling Station

Filling Station Shelter

Vehicle and Equipment Ready Fuel Storage

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 16-Feb-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
FILLING STATION	123-10	OL

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A filling station is a fueling facility for official vehicles and equipment on Navy and Marine Corps installations. This Category Code applies to pump outlets including the covered islands that support the pump outlets, the concrete parking area, lighting and the access paving to the pumps/islands. Per UFC 2-000-05N, requirements are based on three dispensing pumps (outlets - OL) for each 250-gasoline engine vehicles in the official motor pool. It is estimated that approximately 3,500 vehicles will be present at MCB Guam. This includes vehicles and equipment organic to the units as well as white gear associated with the installation and public works.

3,500 vehicles and equipment / 250 = 14 OL

Total Requirement: 14 OL

TOTAL REQUIREMENT FOR CATEGORY CODE
14 OL

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 16-Feb-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
FILLING STATION SHELTER	123-15	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

This code is used for reporting the administrative shelter associated with a filling station. If the filling station is operated by a private entity, then use the 740-30/31 Category Codes. Where credit card systems are used and operators are not needed, a shelter is not required. A shed may be provided to protect or house equipment.

Total Requirement: 500 SF

TOTAL REQUIREMENT FOR CATEGORY CODE
500 SF

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 16-Feb-09

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
VEHICLE AND EQUIPMENT READY FUEL STORAGE	123-30	GA

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

This code is used for reporting the tank storage requirement associated with Category Code 123 10 and 740 30, including those tanks in remote locations that are considered Real Property. One tank for each grade of fuel required (low, medium, and high octane fuels; diesel fuel; and other fuels as required). The total amount of storage capacity in each station should be approximately twice the capacity of all fuel tanks of vehicles and equipment assigned to an activity. Service station tanks should be a minimum of 5,000 gallons unless approved by Service Headquarters. For other tanks, such as heating fuel, small tanks may be used. In addition, there should be a 10-day total storage capacity for CONUS bases and a 30-day total capacity for overseas bases. This total storage should be based on high average such as winter months for heating oil. Location of base and access to fuel resources as well as current delivery schedules should be considered when developing this immediate backup fuel requirement. Don't forget to include emergency generators for buildings and utilities that may be needed in a hurricane or other base emergency. Some of these generators and equipment may have service contracts (i.e., utilities privatization, etc.) that should not be included in these calculations. A good resource for the rate of consumption information is the historical accounting and billing records. If records are not available, provide 32 gallons per vehicle for each type of fuel used at overseas bases. Equipment requirements will vary.

Total Requirement: 80,000 GA

TOTAL REQUIREMENT FOR CATEGORY CODE
80,000 GA

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Transient Quarters	Transient Quarters

MFR Transient Quarters Requirement for Marine Corps Base Guam dtd 5 Feb 14

5 Feb 14

MEMORANDUM FOR THE RECORD

Subj: TRANSIENT QUARTERS REQUIREMENT FOR MARINE CORPS BASE GUAM

1. Department of Defense (DoD) policy requires military travelers on temporary duty (TDY) orders to utilize on-base transient quarters when available. The preferred location of the main cantonment is Finegayan, adjacent to Andersen AFB Northwest Field. The exact capacity of transient quarters at Andersen AFB is unknown but a significant portion is known to be in Q3/Q4 condition. Transient quarters at Navy Base Guam are not a viable option due to driving distance and traffic congestion. Utilizing local hotels is not cost effective due to the high per diem rate of $157. Therefore, transient quarters are necessary to support the mission of the main cantonment in Finegayan.

2. The methodology shown below to estimate the number of transient rooms that would be required is for planning purposes and is based upon the best information available at this time. Upon consultation with the MCICOM (GF-3) Transient & Unaccompanied Housing Manager, Neil J. Jacob, the variables used to establish the requirement are TAD, PCS, and CNA room-nights of USMC installations with similar mission requirements. Three installations were considered for this analysis: MCAS Cherry Point, MCAS Iwakuni, and MCAS Miramar. All three installations are Marine Corps Air Stations, and were chosen in part due to the fact that the main cantonment is planned to support a Marine Expeditionary Brigade (-) whose Aviation Combat Element will be located at adjacent Andersen AFB North Ramp. Table 1 depicts the data provided by Mr. Jacob.

Installation	Total TDY Room Nights FY13	Total PCS Room Nights FY13	Total CNA Room Nights FY13
MCAS Cherry Point	19004	2922	1566
MCAS Iwakuni	91025	0	48
MCAS Miramar	39185	0	7541

Table 1

Subj: TRANSIENT QUARTERS REQUIREMENT FOR MARINE CORPS BASE GUAM

3. To calculate the number of Transient Housing (TH) rooms required, the following methodology was used for each installation considered:

$$TH\ Rooms = \left[\frac{\text{Average TDY room nights} + \text{average PCS room nights} + \text{average CNA bed nights}}{365\ days}\right]$$

$$TH\ Rooms, Guam = \frac{\sum(TH\ Rooms)}{3}$$

Applying this methodology to the data depicted in Table 1, we find that the number of transient rooms required at the main cantonment is **147** rooms, as shown in Table 2 below.

Installation	Total TDY Room Nights FY13	Total PCS Room Nights FY13	Total CNA Room Nights FY13	Totals
MCAS Cherry Point	19004	2922	1566	23492
MCAS Iwakuni	91025	0	48	91073
MCAS Miramar	39185	0	7541	46726
Averages	49738	974	3052	53764
			TH Rooms Required	**147**

Table 2

4. Using Basic Facility Requirements (BFR) documentation on hand for Bachelor Enlisted Quarters planned for construction on the main cantonment as a template, we assume that each transient room will be allocated an average area of 52 m^2. Rounding the number of transient rooms required up to **150**, we find that the total area required is:

$$(150\ \text{transient rooms})(52\ \text{m}^2/\text{room}) = 7{,}800\ m^2$$

Using the cost factor cited in the associated DD 1391 of [redacted] (b) (5) /m^2 to estimate construction cost:

[redacted] (b) (5) /m^2)(7,800 m^2) = [redacted] (b) (5)

5. Any synergy that may be leveraged with Andersen AFB transient housing is yet to be determined. There is a possibility that we may establish a cost-share agreement with them which may in turn reduce the number of rooms required for the transient quarters project planned for the main cantonment. Until that is determined, we elect to continue to use the amount listed in the current Tab J of (b) (5) as a placeholder.

//s//
K. B. BARTON

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Recycle Center/Waste Tran	Recycle Center/Waste Transfer Station

Volume V, Guam Phase II Utility Report

ROM Cost Estimate
SW Handling Facilities, Main Cantonment and Family Housing Alternatives
Volume V, Guam Phase II Utility Report

Prepared: 25 June 2013 (PO)

A. Purpose: To prepare the ROM cost estimates applicable to the Main Cantonment and Family Housing Alternatives connected with the Solid Waste (Volume V) portion of the Guam Phase II Roadmap Adjustment Utilities Study.

B. Background Information: The solid waste (SW) planning involves evaluation of requirements and formulation of facilities support connected with the four Main Cantonment and Family Housing alternatives (i.e., Finegayan, Finegayan-South Finegayan, Barrigada, and Andersen Air Force Base (AAFB). Because 100% of the USMC relocation population would be assigned to the selected alternative, the planned solid waste handling facilities (footprint) would be identical among the four alternatives. Accordingly, the following facilities and equipment would be required:

- **SW Transfer Station**: steel-framed building with rolling doors and high ceilings; paved area to support parking of solid waste container trucks and load/unload capability
- **Recycling Center**: steel-framed building with rolling doors and high ceilings; paved area to support recycling operations and load/unload capability
- **SW Handling Equipment and Vehicles**: balers, glass-crushing machines, compactors, waste-separation hoppers, containers, SW trucks, and material handling equipment

The solid wastes planning also involves estimation of the ROM cost to clear, grub and demolish existing facilities at each of the four alternatives during the utilities and site improvement (U&SI) phase of the USMC relocation. The amount of C&D waste would vary at each of the alternatives, based on the green waste (affected acreage) and concrete, steel, and asphalt rubble expected to be generated. In addition, the cost to dispose of the green waste is provided for each alternative.

C. ROM Cost Estimate:

(1) SW Operations Facilities (same for all four alternatives)

Line Item	Qty	Unit Cost	Total Cost	Cost Reference
Solid Waste Transfer Station Building (steel-framed building with 30-foot-high ceilings)	1	(b) (5)	(b) (5)	RSMeans SF estimate (see attached Enclosure 6 Excel spreadsheet). Building size is 25,000 SF and the per SF cost is (b)). The planned size of the hardstand (paved area) is 61,600 SF.
Recycling Center (steel-framed building with 30-foot-high ceilings)	1	(b) (5)	(b) (5)	RSMeans SF estimate (see attached Enclosure 7 Excel spreadsheet). Building size is 17,000 SF and the per SF cost is (b)). The planned size of the hardstand (paved area) is 86,800 SF.
Solid Waste Container Trucks (30 CY)	3	(b) (5)	(b) (5)	Hambicki's Truck and Container Sales, 2001, cost of a Mack Front-Loading Garbage Truck
Solid Waste Container Trucks (15 CY)	2	(b) (5)	(b) (5)	Hambicki's Truck and Container Sales, 2001, cost of a Mack Front-Loading Garbage Truck

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
ECMs (NBGOA)	ECMs (NBGOA)

High Explosive Magazine

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
HIGH EXPLOSIVE MAGAZINE	421-22	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

High explosive magazines are used for storage of mass-detonating explosives. Some examples of munitions generally stored in high explosive magazines include bombs, warheads, naval mines, and demolition charges. According to NAVFAC P-80 420 general ammunition storage criteria, ammunition and bulk explosives should be stored in magazines of approved design that are sited and designated for specific purposes. The type and amount of material that may be stored in any magazine is dependent on the safety quantity distance requirements, permissible storage limits, and ammunition compatibility relationships as established by the Department of Defense Explosives Safety Board (DDESB) and as approved by Naval Sea Systems Command.(see NAVSEA OP-5, Volumes I and II).
There are two locations planned for USMC munitions storage, the Naval Munitions Site (NMS) in southern Guam, and Munitions Storage Area 1 (MSA 1) at Andersen AFB. The NMS will support largely the ground combat element (GCE) and long-term/contingency storage and shipments via ship. MSA 1 will largely support munitions for the air combat element (ACE) and shorter-term, training and operational uses and shipments via air.

High Explosive Magazines (Ordnance Annex): 10 x 2,675 =	26,750	GSF
Total Requirement	**26,750**	**GSF**

TOTAL REQUIREMENT FOR CATEGORY CODE
26,750 SF (2486 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Waterfront HQ	Waterfront HQ

Waterfront Headquarters Building

1. Component NAVY	FY 2009 MILITARY CONSTRUCTION PROGRAM	2. Date 17 NOV 2011

3. Installation(SA) and Location/UIC: N61755(AG) NAVBASE GUAM (AGANA) JOINT REGION MARIANAS, GUAM	4. Project Title Waterfront Headquarters Building

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	15964	PJ007	(b) (5)

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost (b) (5)
WATERFRONT HEADQUARTERS BUILDING (28,072SF)	m2	2,608		(b) (5)
WATERFRONT HEADQUARTERS BUILDING CC15964 (28,072SF)	m2	2,608	(b) (5)	
INFORMATION SYSTEMS	LS			
SPECIAL COSTS	LS			
SUPPORTING FACILITIES				
SITE PREPARATIONS	LS			
SPECIAL FOUNDATION FEATURES	LS			
PAVING AND SITE IMPROVEMENTS	LS			
ELECTRICAL UTILITIES	LS			
MECHANICAL UTILITIES	LS			
ENVIRONMENTAL MITIGATION	LS			
PARKING	LS			
SUBTOTAL				
CONTINGENCY (5%)				
TOTAL CONTRACT COST				
SIOH (6.2%)				
SUBTOTAL				
TOTAL REQUEST ROUNDED				
TOTAL REQUEST				

10. Description of Proposed Construction:

Construct a Waterfront Headquarters Building in the Apra Harbor area of Naval Station Guam. The facility will be constructed of reinforced concrete with pile foundations, and with all components such as exterior walls, windows, roofing, mechanical, and electrical systems appropriate to Guam earthquake and weather standards, designed to withstand 170 miles per hour winds. Project will include Anti-terrorism/Force Protection measures. Facilities include open office space, multi-purpose/dining area, open bay billeting, observation tower, open mustering facilities and a material and MHE storage area. Facilities will be protection by fire sprinklers and air conditioned. Parking for POW vehicles are included. Areas including vestibules, corridors, and public toilet facilities are to be barrier free, and all facilities will be designed in accordance with the requirements of the Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines, dated July 23, 2004 (ADAAG), whichever provides the greatest barrier-free design requirements. All design and construction will comply with the Energy Policy Act 2005 (EPAct 2005) requirements. Operations and maintenance manuals are included in project costs as are Post Construction Award Services. Sustainable features

1. Component NAVY	FY 2009 MILITARY CONSTRUCTION PROGRAM	2. Date 17 NOV 2011

3. Installation(SA) and Location/UIC: N61755(AG) NAVBASE GUAM (AGANA) JOINT REGION MARIANAS, GUAM	4. Project Title Waterfront Headquarters Building

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	15964	PJ007	(b) (5)

will be incorporated to the extent possible and the facility will be commissioned. Leadership in Energy and Environmental Design (LEED) will be integrated into the design to achieve a Silver-level certification by the Unites States Green Building Counsel (USGBC).

The building is a waterfront operations support facility for III Marine Expeditionary Force (III MEF) to support the Port Operations Group (POG). The building includes an open office administrative space for 12 persons, open bay billeting for 25 persons, a multi-purpose/dining area, observation tower, restrooms, material and MHE storage area, and a covered open area for mustering transiting troops (approximately 400PN) with gear.

The project will provide a multi-channel public address system.

The facility will provide a fire alarm/mass notification system for audible and visual notification of building occupants to evacuate the facility and for notifying occupants for emergency. The fire alarm/mass notification system will be separate from the public address system.

The project will provide voice (telephone) service services, data service (NIPRNet and SIPRNet), and cable television.

The facility will provide an Intrusion Detection System (IDS) and secure room for SIPRNet system.

Site preparation includes clearing, grubbing, and grading of site.

Site improvements include earthwork, landscaping, sidewalks/ramps (with nonslip surface), bollards, bike rack, fence and gates, monument signage, trash enclosure, mechanical unit enclosure, solar panel enclosure, storm drainage and a Storm Water Pollution Prevention Plan (SWPPP).

Parking: Project costs include parking for 12 parking stalls.

Utilities: Project costs include new lines and meters for electrical and water utilities (including an electrical transformer), and new lines for communications distribution and sanitary sewer. Exterior lighting is also included.

Mitigation: Project costs include environmental mitigation, radon gas mitigation (venting), and archeological monitoring.

11. Requirement: 3052 m2 **Adequate:** **Substandard:**

PROJECT:

1. Component NAVY	FY 2009 MILITARY CONSTRUCTION PROGRAM	2. Date 17 NOV 2011

3. Installation(SA) and Location/UIC: N61755(AG) NAVBASE GUAM (AGANA) JOINT REGION MARIANAS, GUAM	4. Project Title Waterfront Headquarters Building

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	15964	PJ007	(b) (5)

This project constructs a new Waterfront Headquarters building at Apra Harbor, Naval Base Guam to support the USMC personnel who will utilize this facility.
(New Mission)

(Current Mission)

REQUIREMENT:

On October 29, 2005, the Security Consultative Committee (SCC) approved the document, "U.S. - Japan Alliance: Transformation and Realignment for the Future" ,which outlined initiatives on roles, missions, and capabilities of U.S. and Government of Japan (GoJ) forces. Also in 2005, GoJ and U.S. officials signed the Agreed Implementation Plan (AIP). The agreements outline a realignment of Marine Corps elements to reduce the U.S. military footprint in Okinawa, including the relocation of forces out of Japan. The AIP described the U.S. - GoJ agreed upon Marine Corps elements that would be relocated, which are referred to as the AIP requirements.

CURRENT SITUATION:

There are no Marines presently stationed on Guam. The majority of the Department of Defense (DoD) Class I and II properties including airfield and wharves on Guam are owned by the Navy and Air Force. Limited surplus shore facilities are available but are within small footprints in various locations which inhibit any large scale usage for this relocation effort. Additionally, most of these surplus facilities require extensive upgrades/modification for adequate permanent type use. Therefore, proposed facilities to support the relocation of more than 8,000 Marines and their dependents will have to be new construction.

USMC utilizes the Navy¿s Port Control Office Bldg at White Beach to support the Port Operations Group during embarkation and debarkation activities. The size of this facility is very limited and requires the USMC to pitch tents and bring in support equipment (generators, etc) to support operations. The current situation is inadequate to meet USMC requirements.

IMPACT IF NOT PROVIDED:

This project is part of the relocation of USMC relocation from Okinawa to Guam. Units/activities will not vacate their current facilities until new replacement facilities have been completed, inspected and accepted. Failure to complete this project on time will likely prevent completion of the relocation.

12. Supplemental Data:

A. Estimated Design Data:

1. Status:

(A) Date design or Parametric Cost Estimate started	05/2008
(B) Date 35% Design or Parametric Cost Estimate complete	07/2009
(C) Date design completed	08/2010

1. Component NAVY	FY 2009 MILITARY CONSTRUCTION PROGRAM	2. Date 17 NOV 2011

3. Installation(SA) and Location/UIC: N61755(AG) NAVBASE GUAM (AGANA) JOINT REGION MARIANAS, GUAM	4. Project Title Waterfront Headquarters Building

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	15964	PJ007	(b) (5)

(D) Percent completed as of September 2007	0%
(E) Percent completed as of January 2008	0%
(F) Type of design contract	Design Bid Build
(G) Parametric Estimate used to develop cost	No
(H) Energy Study/Life Cycle Analysis performed	No
2. Basis:	
(A) Standard or Definitive Design	No
(B) Where design was previously used	N/A
3. Total cost (C) = (A) + (B) = (D) + (E):	
(A) Production of plans and specifications	(b) (5)
(B) All other design costs	(b) (5)
(C) Total	(b) (5)
(D) Contract	(b) (5)
(E) In-house	(b) (5)
4. Contract award:	01/2012
5. Construction start:	02/2012
6. Construction complete:	08/2014

B. Equipment associated with this project which will be provided from other appropriations:

JOINT USE CERTIFICATION:

The Director Land Use and Military Construction Branch, Installations and Logistics Department, Headquarters Marine Corps certifies that this project has been considered for joint use potential. Unilateral Construction is recommended. This Facility can be used by other components on an as available basis; however, the scope of the project is based on Department of the Navy requirements.

Activity POC: Phone No:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Apra Medical Clinic	Waterfront HQ

Apra Harbor Medical Clinic

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 06 JUL 2011

3. Installation(SA) and Location/UIC: N61755 NAVBASE GUAM JOINT REGION MARIANAS, GUAM	4. Project Title Apra Harbor Medical Clinic

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	55010	PJ006	(b) (5) [redacted]

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost (b) (5) [redacted]
APRA HARBOR MEDICAL CLINIC (48,599SF)	m2	4,515		(b) (5) [redacted]
MEDICAL CLINIC, APRA HARBOR CC55010 (48,599SF)	m2	4,515	(b) (5) [redacted]	
INFORMATION SYSTEMS	LS			
BUILT-IN EQUIPMENT	LS			
SPECIAL COSTS	LS			
LEED AND EPACT 2005 COMPLIANCE	LS			
SUPPORTING FACILITIES				
SPECIAL CONSTRUCTION FEATURES	LS			
SITE PREPARATIONS	LS			
PAVING AND SITE IMPROVEMENTS	LS			
ELECTRICAL UTILITIES	LS			
MECHANICAL UTILITIES	LS			
LEED AND EPACT 2005 COMPLIANCE	LS			
ENVIRONMENTAL MITIGATION	LS			
RADON MITIGATION	LS			
ARCHEOLOGICAL MONITORING/DATA RECOVERY	LS			
SUBTOTAL				
CONTINGENCY (5%)				
TOTAL CONTRACT COST				
SIOH (6.2%)				
SUBTOTAL				
TOTAL REQUEST ROUNDED				
TOTAL REQUEST				

10. Description of Proposed Construction:

Construct a single-level outpatient facility in the Apra Harbor family housing area of Naval Station Guam. The facility will be constructed of reinforced concrete with slab on grade foundations. All components such as exterior walls, windows, roofing, mechanical and electrical systems will be compatible with the Guam environment and Commander, Joint Region Marianas design standards. The facility includes spaces for administration, medical, mental health, urgent care and dental clinics, preventive medicine, ancillary services and required support functions. The facility will be designed to withstand 170 miles per hour winds and will be sited to include appropriate Anti-terrorism/Force Protection distance setbacks. Areas including vestibules, corridors and public toilet facilities are to be barrier free, and all facilities will be designed in accordance with the requirements of all applicable Federal Accessibility Standards.

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 06 JUL 2011

3. Installation(SA) and Location/UIC: N61755 NAVBASE GUAM JOINT REGION MARIANAS, GUAM	4. Project Title Apra Harbor Medical Clinic

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	55010	PJ006	(b) (5)

Information systems include basic telephone, computer network, fiber optic, cable television, security and fire alarm systems and infrastructure.

Built in equipment includes a generator.

Special costs include Post Construction Contract Award Services and Work Force Logistics. Operations and maintenance manuals are included in project costs.

Sustainable design principles will be included in the design and construction of the project in accordance with Executive Order 13423 (2007) and other laws and Executive Orders. Facilities will meet Leadership in Energy and Environmental Design (LEED) ratings and comply with the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. Low Impact Development will be included in the design and construction of this project as appropriate.

Special construction features include canopies for the main, emergency and staff entrances.

Site preparation includes site clearing, excavation and preparation for construction.

Paving and site improvements include grading, landscaping, sidewalks, curbs, roadways, fencing, storm-water drainage and parking facilities for personal vehicles and emergency vehicles. Site soil conditions and seismic concerns require construction with enhanced materials for the parking areas.

Electrical utilities include primary and secondary distribution systems, lighting, transformers, and tele-communications infrastructure.

Mechanical utilities include heating, ventilation and air conditioning, water lines, plumbing and plumbing fixtures, sanitary sewer lines, fire protection systems and supply lines.

Outside LEED includes the storm water management system.

Project includes environmental mitigation, radon mitigation and archeological monitoring and data recovery in accordance with the Environmental Impact Statement and Programmatic Agreement.

11. Requirement: 4650 m2 **Adequate:** 0 m2 **Substandard:** 0 m2

PROJECT:

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 06 JUL 2011

3. Installation(SA) and Location/UIC: N61755 NAVBASE GUAM JOINT REGION MARIANAS, GUAM	4. Project Title Apra Harbor Medical Clinic

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	55010	PJ006	(b) (5)

This project consolidates existing inadequate and separately located medical and dental clinics into a single new facility convenient to family housing and bachelor quarters and accommodates outpatient functions to be relocated from U.S. Naval Hospital (USNH) Guam.

(Current Mission)

REQUIREMENT:

An adequately sized, modern outpatient clinic is required to provide the space to accommodate the clinical staffing and workload for existing beneficiaries, outpatient functions to be relocated from USNH and the increase in beneficiaries expected as a result of the relocation of military units to Guam as part of the Defense Policy Review Initiative (DPRI).

CURRENT SITUATION:

The existing Branch Medical Clinic was constructed in 1952 as a Bachelor Enlisted Quarters and was converted to medical use. The 1,204 square meter two story facility includes clinic spaces located on the first level and preventative medicine and occupational health functions on the second level. Clinic spaces include exam rooms, X-ray, offices, pharmacy, lab, administration and support spaces. Only minor finish remodeling such as painting and carpeting has been done since the facility was constructed. The facility is not equipped with an automatic fire suppression sprinkler system and is not accessible to people with disabilities.

The existing Branch Dental Clinic was constructed in 1955 and contains approximately 844 square meters housing six general dental treatment rooms, a small prosthetic lab and support spaces. The functional layout of the spaces is typical of the 1950's and cannot accommodate current dental clinic procedures and design criteria. Patient, staff and visitor traffic must mix in the primary corridor, which is also used as a return air plenum. These conditions violate current codes and criteria. The facility is not equipped with an automatic fire suppression sprinkler system and is not accessible to people with disabilities.

IMPACT IF NOT PROVIDED:

The existing facilities cannot accommodate the additional beneficiaries projected to relocate to Guam as a result of DPRI. There are no accredited civilian medical facilities on Guam, so there are no opportunities to outsource medical care. The existing facilities also cannot accommodate the transfer of outpatient functions from USNH. Failure to transfer outpatient functions from existing facilities at USNH Guam will negatively impact the construction of the fiscal year 2010 MILCON Project P008A to replace USNH Guam, because existing outpatient facilities there will not be able to be demolished.

12. Supplemental Data:

A. Estimated Design Data:

1. Status:

(A) Date design or Parametric Cost Estimate started	05/2008
(B) Date 35% Design or Parametric Cost Estimate complete	03/2009

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 06 JUL 2011

3. Installation(SA) and Location/UIC: N61755 NAVBASE GUAM JOINT REGION MARIANAS, GUAM	4. Project Title Apra Harbor Medical Clinic

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	55010	PJ006	(b) (5)

(C) Date design completed	10/2010
(D) Percent completed as of September 2008	10%
(E) Percent completed as of January 2009	25%
(F) Type of design contract	Design Bid Build
(G) Parametric Estimate used to develop cost	No
(H) Energy Study/Life Cycle Analysis performed	No
2. Basis:	
(A) Standard or Definitive Design	No
(B) Where design was previously used	
3. Total cost (C) = (A) + (B) = (D) + (E):	
(A) Production of plans and specifications	(b) (5)
(B) All other design costs	(b) (5)
(C) Total	(b) (5)
(D) Contract	(b) (5)
(E) In-house	(b) (5)
4. Contract award:	08/2011
5. Construction start:	10/2011
6. Construction complete:	08/2013

B. Equipment associated with this project which will be provided from other appropriations:

JOINT USE CERTIFICATION:

The Director Land Use and Military Construction Branch, Installations and Logistics Department, Headquarters Marine Corps certifies that this project has been considered for joint use potential. Unilateral Construction is recommended. This Facility can be used by other components on an as available basis; however, the scope of the project is based on Department of the Navy requirements.

Activity POC: (b) (6) Phone No: (b) (6)

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Apra Wharf I	Apra Wharf I

Apra Harbor Warf Improvement, Inc 1 of 2

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 16 DEC 2009

3. Installation(SA) and Location/UIC: N61755 NAVBASE GUAM JOINT REGION MARIANAS, GUAM	4. Project Title Apra Harbor Wharf Improvement, Inc 1 of 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	15220	P204	127,033

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost($000)
APRA HARBOR WHARF IMPROVEMENT, INC 1 OF 2	LS			139,230
TANGO WHARF BERTH T-1 THRU T-3 CC15220	LS			(62,340)
UNIFORM WHARF BERTHS U1 & U2 CC15220	LS			(55,750)
BUILT-IN EQUIPMENT	LS			(5,640)
SPECIAL COSTS	LS			(14,710)
OPERATION & MAINTENANCE SUPP INFO (OMSI)	LS			(790)
SUPPORTING FACILITIES				5,380
PAVING AND SITE IMPROVEMENTS	LS			(4,130)
ENVIRONMENTAL MITIGATION	LS			(1,250)
SUBTOTAL				144,610
CONTINGENCY (5%)				7,230
TOTAL CONTRACT COST				151,840
SIOH (6.2%)				9,410
SUBTOTAL				161,250
DESIGN/BUILD - DESIGN COST				5,780
TOTAL REQUEST ROUNDED				167,030
TOTAL REQUEST				167,033

10. Description of Proposed Construction:

Project provides infrastructure, wharf improvements, and utilities to allow cold iron berthing for "extended" transient ships, primarily, the Amphibious Readiness Group (ARG) and its combatant escort ships. Project requirements include the following:

Wharf Strengthening - Provide structural improvements to compensate for the lost foundation support and the increased soil loading. Improvements will strengthen each wharf to resist seismic and typhoon forces; provide cathodic protection system for strengthened wharves; repair voids detected beneath the wharf deck; restore sheet piling, structural system, and wharf face to usable condition; and provide new concrete wharf operations deck at both wharves.

Provide new concrete utilities trenches at the wharves to hold potable water, sewer, steam, compressed air, demineralized water, and bilge oily waste lines. Partially replace Bilge Oily Waste Transfer System (BOWTS) with new manifold and ship connection risers at predetermined locations on the wharves. Remove deficient and deteriorated sewer collection system, install new ship connection risers and cap remaining exposed lines. Install new trench drains, storm drain lines, treatment tanks, and outfalls to prevent surface runoff in the harbor. The existing steam distribution lines will be removed and new ship connection risers shall be installed. Remove deficient and deteriorated water

distribution system and cap remaining exposed lines. Install new ship connection risers and fire hydrants. Install new low pressure compressed air system and risers to provide compressed air distribution at the wharves. Install new demineralized water system to ship connection riser. Provide new secondary power distribution systems. Construct new ductline between existing communications Manholes 2-11 and 3169-1. The ductline will contain four 100mm (4") ducts for copper and fiber optic cables and a 50mm (2") duct for cable television cables. Provide new cable hut at the head of Uniform Wharf for the distribution of the communication system. Extend ductline from Manhole 3169-1 along Tango and Uniform Wharves. Provide cables to new communications and cable television outlet cabinets at all power mounds.

Ship Fendering System. Provide new 1830 mm x 3657 mm(6 ft. x 12 ft.) foam filled fenders with chains, plates, submarine backing plates, and hardware for ship berthing at Tango, and Uniform Wharves.

The project will conform to anti-terrorism/force protection standards and follow LEED and Federal Energy Acts compliance criteria for design, development, and construction of the project.

Under separate agreement, the Government of Japan will provide for utility system upgrades to the BOWTS, sewer, water (demineralized, potable, fire protection), steam systems and the primary electrical system including substations.

11. Requirement: 9388 m **Adequate:** 476 m **Substandard:** 5,438 m

PROJECT:

Provide structural repairs and upgrades at Tango and Uniform wharves. Wharf decks will be replaced, wharf faces will be restored, and new fender systems will be provided. This project also provides new communications lines and secondary power distribution systems at the wharves, provides a small portion of other utilities infrastructure on the wharves, and only includes concrete utilities trenches to hold distribution systems for steam, compressed air, potable water, demineralized water, sewer, and bilge oily waste system.

(Current Mission)

REQUIREMENT:

The project will provide shoreside adequate wharf structure to support berthing for the CG, DDG, JHSV, LSD, LHD, and LPD Class ships which will support the relocated US Marine Corps (USMC) troops. (New Mission)

As part of the Agreed Implementation Plan (AIP) between the U.S. government and Government of Japan (GOJ), approximately 8,000 U.S. Marines will be relocating to Guam. To support the USMC relocation to Guam, embarkation operations involving an ARG and its escorts will take place at Apra Harbor. The embarkation operations on average could take about six

days to accomplish, and are expected to occur two or more times a year. Also, Joint High Speed Vessels (JHSVs) are required to transport Marines within theater, and for off-island training.

The mission of Commander US Naval Forces, Marianas (COMNAVMARIANAS) is to provide operational, fuel resupply, ordnance, and other logistic support to units of the Pacific Fleet, operational forces of the Seventh Fleet, and units of the Fifth Fleet transiting the area to the Persian Gulf or other points west of Guam. Adequate shore side utilities and mooring facilities are required to provide the necessary waterfront utility and cold iron berthing services for the ARG, its escorts, and JHSVs.

The current wharf utility infrastructure at these wharves cannot meet the Commander Pacific Fleet (COMPACFLT) requirements for the ARG, its escorts, and the JSHVs. Existing wharf infrastructure cannot provide adequate berthing support. Existing depths at Sierra and Tango are insufficient to berth CGs and DDGs. Major structural repairs are required at Uniform to repair earthquake damage and make it a usable berthing space for the JHSVs.

CURRENT SITUATION:

Guam is strategically located as the westernmost U.S. territory to serve as a forward deployment base and logistics hub for sea, land, and air forces operating in the Western Pacific and Asia. Due to the relocation of Marines to Guam, cold iron bething must be provided for an ARG, its escorts, and JHSVs. These ships transport USMC troops and equipment from Guam to mission areas. The Apra Harbor berthing plan places the ARG, its escorts, and the JHSVs at Victor, Sierra, and Uniform Wharves located in the northwestern quadrant of Inner Apra Harbor. Based on planned ship loadings, there is a shortfall of available general purpose berthing slips at Inner Apra Harbor. All general purpose berthing assets are substandard due to inadequate hotel services and/or structural deficiencies.

Uniform Wharf has not been in operation since 1993 after sustaining severe earthquake damage to its structure and pavement. Victor, Sierra, and Tango Wharves provide critical berthing space in Apra Harbor. Deterioration of the existing utilities requires that repairs and renovations be made to the existing systems to provide continued service.

This project will correct the following specific deficiencies:

Wharf Structure. Uniform Wharf is out of service due to the damage sustained from the earthquake and needs to be constructed to current standards. Sierra and Tango wharves are inadequate to resist seismic loads required by current UFC loadings, and soil loading due to increased dredge depth. Cathodic protection system is required for corrosion protection of the wharf steel sheet piles and tiebacks.

The existing BOWTS at Victor Wharf does not have adequate capacity to accommodate the

requirements of the ARG, escorts, and JHSVs. The collection system does not extend beyond Victor Wharf, so ships at Uniform will have to discharge BOW into barges, which are then taken to Victor wharf for off-loading. This operation is manpower intensive, increases the risk of spills, and may experience delays when Victor is occupied. Existing sewer system is deteriorated and in need of repairs. Steam service is needed and does not exist at Uniform Wharf. Existing potable water system is deteriorated and cannot meet ship loading demand and fire fighting requirements. Compressed air service does not exist at either of the wharves. Existing communications and electrical power systems do not meet requirements. Existing lighting does not provide required illumination levels to meet AT/FP requirements. Fire alarm and detection systems do not meet current fire protection requirements. Existing ship fendering systems are deteriorated and inadequate.

IMPACT IF NOT PROVIDED:

If this project is not constructed, the wharf and wharf utilities will continue to deteriorate and will only provide limited waterfront services. The restricted capacity will continue to limit maintenance of ships and wharf efficiencies, as shipboard boilers, engines, and generators must remain in operation to provide the required ships services. Full and efficient use of the limited berthing space at Inner Apra Harbor would not be realized. The result of not constructing the project may impact the Marine Corps embarkation operations, require longer ship-inport time and would compromise the ability of COMAVMARIANAS to sustain readiness of units of the Pacific Fleet.

12. Supplemental Data:

A. Estimated Design Data:

1. Status:	
(A) Date design or Parametric Cost Estimate started	08/2008
(B) Date 35% Design or Parametric Cost Estimate complete	06/2009
(C) Date design completed	02/2010
(D) Percent completed as of September 2008	0%
(E) Percent completed as of January 2009	15%
(F) Type of design contract	Design Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	Yes
2. Basis:	
(A) Standard or Definitive Design	Yes
(B) Where design was previously used	n/a
3. Total cost (C) = (A) + (B) = (D) + (E):	
(A) Production of plans and specifications	$3,064
(B) All other design costs	$2,043
(C) Total	$5,107
(D) Contract	$4,596
(E) In-house	$511
4. Contract award:	06/2010
5. Construction start:	08/2010

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 16 DEC 2009

3. Installation(SA) and Location/UIC: N61755 NAVBASE GUAM JOINT REGION MARIANAS, GUAM	4. Project Title Apra Harbor Wharf Improvement, Inc 1 of 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	15220	P204	127,033

6. Construction complete: 06/2013

B. Equipment associated with this project which will be provided from other appropriations:

JOINT USE CERTIFICATION:

The Director Land Use and Military Construction Branch, Installations and Logistics Department, Headquarters Marine Corps certifies that this project has been considered for joint use potential. Unilateral construction is recommended. This facility can be used by other components on an as available basis; however, the scope of the project is based on Department of the Navy requirements.

Authorization and Appropriation Summary

	Authorization	Appropriation	Auth for Approp.
FY 2010 Approved by Congress	$167,033K	$127,033K	$127,033K
FY 2011 Request	$0K	$40,000K	$40,000K

Activity POC: (b) (6) [redacted] (b) (6) [redacted]

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Apra Wharf II	Apra Wharf II

Apra Harbor Warf Improvement, Inc 2

1. Component NAVY	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date 15 APR 2011

3. Installation(SA) and Location/UIC: N61755 NAVBASE GUAM JOINT REGION MARIANAS, GUAM	4. Project Title Apra Harbor Wharf Improvement - Inc 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	15220	P204A	39,105

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost($000)
APRA HARBOR WHARF IMPROVEMENT - INC 2	LS			139,230
TANGO WHARF BERTH T-1 THRU T-3 CC15220	LS			(62,340)
UNIFORM WHARF BERTHS U1 & U2 CC15220	LS			(55,750)
BUILT-IN EQUIPMENT	LS			(5,640)
SPECIAL COSTS	LS			(14,710)
OPERATION & MAINTENANCE SUPP INFO (OMSI)	LS			(790)
SUPPORTING FACILITIES				5,380
PAVING AND SITE IMPROVEMENTS	LS			(4,130)
ENVIRONMENTAL MITIGATION	LS			(1,250)
SUBTOTAL				144,610
CONTINGENCY (5%)				7,230
TOTAL CONTRACT COST				151,840
SIOH (6.2%)				9,410
SUBTOTAL				161,250
DESIGN/BUILD - DESIGN COST				5,780
SPENDING PLAN ADJUSTMENT	LS			-895
TOTAL REQUEST ROUNDED				166,135
TOTAL REQUEST				166,138

10. Description of Proposed Construction:

Project provides infrastructure, wharf improvements, and utilities to allow cold iron berthing for "extended" transient ships, primarily, the Amphibious Readiness Group (ARG) and its combatant escort ships. Project requirements include the following:

Wharf Strengthening - Provide structural improvements to compensate for the lost foundation support and the increased soil loading. Improvements will strengthen each wharf to resist seismic and typhoon forces; provide cathodic protection system for strengthened wharves; repair voids detected beneath the wharf deck; restore sheet piling, structural system, and wharf face to usable condition; and provide new concrete wharf operations deck at both wharves.

Provide new concrete utilities trenches at the wharves to hold potable water, sewer, steam, compressed air, demineralized water, and bilge oily waste lines. Partially replace Bilge Oily Waste Transfer System (BOWTS) with new manifold and ship connection risers at predetermined locations on the wharves. Remove deficient and deteriorated sewer collection system, install new ship connection risers and cap remaining exposed lines. Install new trench drains, storm drain lines, treatment tanks, and outfalls to prevent surface runoff in the harbor. The existing steam distribution lines will be removed and

1. Component NAVY	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date 15 APR 2011

3. Installation(SA) and Location/UIC: N61755 NAVBASE GUAM JOINT REGION MARIANAS, GUAM	4. Project Title Apra Harbor Wharf Improvement - Inc 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	15220	P204A	39,105

new ship connection risers shall be installed. Remove deficient and deteriorated water distribution system and cap remaining exposed lines. Install new ship connection risers and fire hydrants. Install new low pressure compressed air system and risers to provide compressed air distribution at the wharves. Install new demineralized water system to ship connection riser. Provide new secondary power distribution systems. Construct new ductline between existing communications Manholes 2-11 and 3169-1. The ductline will contain four 100mm (4") ducts for copper and fiber optic cables and a 50mm (2") duct for cable television cables. Provide new cable hut at the head of Uniform Wharf for the distribution of the communication system. Extend ductline from Manhole 3169-1 along Tango and Uniform Wharves. Provide cables to new communications and cable television outlet cabinets at all power mounds.

Ship Fendering System. Provide new 1830 mm x 3657 mm(6 ft. x 12 ft.) foam filled fenders with chains, plates, submarine backing plates, and hardware for ship berthing at Tango, and Uniform Wharves.

The project will conform to anti-terrorism/force protection standards and follow LEED and Federal Energy Acts compliance criteria for design, development, and construction of the project.

11. Requirement: 9388 m **Adequate:** 476 m **Substandard:** 5,438 m

PROJECT:

Provide structural repairs and upgrades at Tango and Uniform wharves. Wharf decks will be replaced, wharf faces will be restored, and new fender systems will be provided. This project also provides new communications lines and secondary power distribution systems at the wharves, provides a small portion of other utilities infrastructure on the wharves, and only includes concrete utilities trenches to hold distribution systems for steam, compressed air, potable water, demineralized water, sewer, and bilge oily waste system.

(New Mission)

REQUIREMENT:

The project will provide shoreside adequate wharf structure to support berthing for the CG, DDG, JHSV, LSD, LHD, and LPD Class ships which will support the relocated US Marine Corps (USMC) troops. (New Mission)

As part of the Agreed Implementation Plan (AIP) between the U.S. government and Government of Japan (GOJ), approximately 8,000 U.S. Marines will be relocating to Guam. To support the USMC relocation to Guam, embarkation operations involving an ARG and its escorts will take place at Apra Harbor. The embarkation operations on average could take about six days to accomplish, and are expected to occur two or more times a year. Also, Joint High Speed Vessels (JHSVs) are required to transport Marines within theater, and for off-island training.

1. Component NAVY	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date 15 APR 2011

3. Installation(SA) and Location/UIC: N61755 NAVBASE GUAM JOINT REGION MARIANAS, GUAM	4. Project Title Apra Harbor Wharf Improvement - Inc 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	15220	P204A	39,105

The mission of Commander US Naval Forces, Marianas (COMNAVMARIANAS) is to provide operational, fuel resupply, ordnance, and other logistic support to units of the Pacific Fleet, operational forces of the Seventh Fleet, and units of the Fifth Fleet transiting the area to the Persian Gulf or other points west of Guam. Adequate shore side utilities and mooring facilities are required to provide the necessary waterfront utility and cold iron berthing services for the ARG, its escorts, and JHSVs.

The current wharf utility infrastructure at these wharves cannot meet the Commander Pacific Fleet (COMPACFLT) requirements for the ARG, its escorts, and the JSHVs. Existing wharf infrastructure cannot provide adequate berthing support. Existing depths at Tango are insufficient to berth CGs and DDGs. Major structural repairs are required at Uniform to repair earthquake damage and make it a usable berthing space for the JHSVs.

CURRENT SITUATION:

Guam is strategically located as the westernmost U.S. territory to serve as a forward deployment base and logistics hub for sea, land, and air forces operating in the Western Pacific and Asia. Due to the relocation of Marines to Guam, cold iron bething must be provided for an ARG, its escorts, and JHSVs. These ships transport USMC troops and equipment from Guam to mission areas. The Apra Harbor berthing plan places the ARG, its escorts, and the JHSVs at Victor, Sierra, and Uniform Wharves located in the northwestern quadrant of Inner Apra Harbor. Based on planned ship loadings, there is a shortfall of available general purpose berthing slips at Inner Apra Harbor. All general purpose berthing assets are substandard due to inadequate hotel services and/or structural deficiencies.

Uniform Wharf has not been in operation since 1993 after sustaining severe earthquake damage to its structure and pavement. Victor, Sierra, and Tango Wharves provide critical berthing space in Apra Harbor. Deterioration of the existing utilities requires that repairs and renovations be made to the existing systems to provide continued service.

This project will correct the following specific deficiencies:

Wharf Structure. Uniform Wharf is out of service due to the damage sustained from the earthquake and needs to be constructed to current standards. Sierra and Tango wharves are inadequate to resist seismic loads required by current UFC loadings, and soil loading due to increased dredge depth. Cathodic protection system is required for corrosion protection of the wharf steel sheet piles and tiebacks.

The existing BOWTS at Victor Wharf does not have adequate capacity to accommodate the requirements of the ARG, escorts, and JHSVs. The collection system does not extend beyond Victor Wharf, so ships at Uniform will have to discharge BOW into barges, which are then taken to Victor wharf for off-loading. This operation is manpower intensive, increases the risk of spills, and may experience delays when Victor is occupied. Existing sewer

system is deteriorated and in need of repairs. Steam service is needed and does not exist at Uniform Wharf. Existing potable water system is deteriorated and cannot meet ship loading demand and fire fighting requirements. Compressed air service does not exist at either of the wharves. Existing communications and electrical power systems do not meet requirements. Existing lighting does not provide required illumination levels to meet AT/FP requirements. Fire alarm and detection systems do not meet current fire protection requirements. Existing ship fendering systems are deteriorated and inadequate.

IMPACT IF NOT PROVIDED:

If this project is not constructed, the wharf and wharf utilities will continue to deteriorate and will only provide limited waterfront services. The restricted capacity will continue to limit maintenance of ships and wharf efficiencies, as shipboard boilers, engines, and generators must remain in operation to provide the required ships services. Full and efficient use of the limited berthing space at Inner Apra Harbor would not be realized. The result of not constructing the project may impact the Marine Corps embarkation operations, require longer ship-inport time and would compromise the ability of COMAVMARIANAS to sustain readiness of units of the Pacific Fleet.

12. Supplemental Data:

A. Estimated Design Data:

1. Status:

(A) Date design or Parametric Cost Estimate started	08/2008
(B) Date 35% Design or Parametric Cost Estimate complete	06/2009
(C) Date design completed	02/2010
(D) Percent completed as of September 2009	0%
(E) Percent completed as of January 2010	15%
(F) Type of design contract	Design Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	Yes

2. Basis:

(A) Standard or Definitive Design	Yes
(B) Where design was previously used	n/a

3. Total cost (C) = (A) + (B) = (D) + (E):

(A) Production of plans and specifications	$3,064
(B) All other design costs	$2,043
(C) Total	$5,107
(D) Contract	$4,596
(E) In-house	$511

4. Contract award:	08/2010
5. Construction start:	09/2010
6. Construction complete:	06/2013

B. Equipment associated with this project which will be provided from other appropriations:

JOINT USE CERTIFICATION:

1. Component NAVY	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date 15 APR 2011

3. Installation(SA) and Location/UIC: N61755 NAVBASE GUAM JOINT REGION MARIANAS, GUAM	4. Project Title Apra Harbor Wharf Improvement - Inc 2

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	15220	P204A	39,105

The Director Land Use and Military Construction Branch, Installations and Logistics Department, Headquarters Marine Corps certifies that this project has been considered for joint use potential. Unilateral construction is recommended. This facility can be used by other components on an as available basis; however, the scope of the project is based on Department of the Navy requirements.

Authorization and Appropriation Summary

	Authorization ($000)	Auth of Approp. ($000)	Appropriation ($000)
FY 2010 Approved by Congress	167,033	127,033	127,033
FY 2011 Approved by Congress	0	40,000	39,105
Total	167,033	167,033	166,138

Activity POC: (b) (6) [redacted] Phone No: (b) (6) [redacted]

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Apra Embark Facility	Apra Embark Facility

Apra Harbor Embark Operations

1. Component NAVY	FY 2013 MILITARY CONSTRUCTION PROGRAM	2. Date 12 APR 2010

3. Installation(SA) and Location/UIC: N61755 NAVBASE GUAM JOINT REGION MARIANAS, GUAM	4. Project Title APRA HARBOR EMBARK OPERATIONS

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	15310	P600	(b) (5)

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost (b) (5)
APRA HARBOR EMBARK OPERATIONS	LS			(b) (5)
CARGO STAGING AREA CC15310 (134,549SF)	m2	12,500	(b) (5)	(b) (5)
EMBARKATION OPERATIONS FACILITIES CC15620 (2,443SF)	m2	227	(b) (5)	(b) (5)
PUMP STATION BUILDING CC89009 (1,561SF)	m2	145	(b) (5)	(b) (5)
UTILITY BUILDING CC89009 (603SF)	m2	56	(b) (5)	(b) (5)
VEHICLE WASH RACKS CC21455	EA	12	(b) (5)	(b) (5)
ANTI-TERRORISM/FORCE PROTECTION	LS			(b) (5)
BUILT-IN EQUIPMENT	LS			(b) (5)
SPECIAL COSTS	LS			(b) (5)
OPERATION & MAINTENANCE SUPP INFO (OMSI)	LS			(b) (5)
LEED AND EPACT 2005 COMPLIANCE	LS			(b) (5)
SUPPORTING FACILITIES				(b) (5)
PAVING AND SITE IMPROVEMENTS	LS			(b) (5)
ELECTRICAL UTILITIES	LS			(b) (5)
MECHANICAL UTILITIES	LS			(b) (5)
ENVIRONMENTAL MITIGATION	LS			(b) (5)
LEED & FEDERAL ENERGY ACTS COMPLIANCE	LS			(b) (5)
ENVIRONMENTAL REMEDIATION	LS			(b) (5)
SUBTOTAL				(b) (5)
CONTINGENCY (5%)				(b) (5)
TOTAL CONTRACT COST				(b) (5)
SIOH (6.2%)				(b) (5)
SUBTOTAL				(b) (5)
DESIGN/BUILD - DESIGN COST				(b) (5)
TOTAL REQUEST ROUNDED				(b) (5)
TOTAL REQUEST				(b) (5)
EQUIPMENT FROM OTHER APPROPRIATIONS (NON ADD)				(b) (5)

10. Description of Proposed Construction:

EARTHWORK AND PAVEMENT

All paved surfaces are proposed to be constructed of concrete pavement of sufficient capacity to accommodate the 70-ton M1A1 Abrams Tank and M88 HRV, and the possibility of using permeable pavement in non-washdown areas is factored into the project cost estimate. Built-in equipment includes individual vacuum units at each prewash/vacuum station, a

high-volume air compressor with distribution lines to the pre-wash/vacuum stations and trailer stations, a 620 kPa (90 psi) cold water hookup at the top wash stations, high-pressure hot water washers at each undercarriage station, a 100kVA emergency generator for emergency lighting, and conduit for a Closed-Circuit Television (CCTV) system. This project constructs a facility to be used for embarkation and debarkation by the Third Marine Expeditionary Force (III MEF) on ships at Naval Station Guam in Apra Harbor. The Embarkation Facility consists of wash and inspection areas, a bio-secure holding area, a wash water recycling
and a storm water retention and infiltration basin. The facility includes an Embarkation Operations Building (192 m2) for controlling the processing and flow of vehicles and trailers, and an Entry Control Building (18.5 m2) for cargo check-in. Other buildings include a Utility Building (55.5 m2) for the emergency generator and electrical switchgear, a Pump Station Building (145.5 m2) for wash water, and a United States Department of Agriculture (USDA) Inspection Building (16.5 m2). The buildings are proposed to be single story and of reinforced concrete masonry unit construction on pile or mat foundations. The project will include all necessary site improvements and support facilities to meet the mission of III MEF Vehicle/Trailer Wash and Inspection Area.

The vehicle/trailer wash area allows for the initial queuing and checking in of approximately 20 vehicles (4 with trailers) at a time at the entrance to the facility. A separate confined fueling/defueling pad is proposed to be sited near the entrance of the facility for a fuel truck. The facility consists of 12 vehicle wash lanes, each consisting of a pre-wash/vacuum station with compressed air, top wash station and an undercarriage wash and inspection station. At least one of the lanes can service tracked vehicles with sufficient clearance to accommodate the removal of the engine pack with the M88 Heavy Recovery Vehicle (HRV). Trailers will be detached from the vehicles then washed and inspected separately at one of 6 trailer stations.

WASH WATER SYSTEM

Wash water from the vehicle and cargo wash facilities will be recycled, with return water passing through a sedimentation basin and oil/water separator, then into a storage chamber for reuse later. Should a significant rain event occur during wash down operations and the water level within the wash water system exceed the wash water storage chamber capacity, a high-flow bypass will allow excess storm water to travel to a hydrodynamic separator and then proceed to the infiltration basin. When the facility is not in use, storm water will be sent directly to the hydrodynamic separator and into the infiltration basin.

The recycle water desilting basin and storage chambers will be covered to prevent birds or animals from entering the chamber as well as prevent algae growth. The Marines will need to contract with the Naval Base Guam BOS Contractor to remove, sterilize, and dispose of all solid wastes collected inside the Desilting Basin and the OWS, per Base HAZ-MAT & USDA requirements. Typical USDA sterilization requirements for this type of solid waste

include collecting the waste within 48 hours and then steam heating the waste at 250 degrees Fahrenheit for 30 minutes.

EARTHWORK AND PAVEMENT

All paved surfaces are proposed to be constructed of concrete pavement of sufficient capacity to accommodate the 70-ton M1A1 Abrams Tank and M88 HRV, and the possibility of using permeable pavement in non-washdown areas is factored into the project cost estimate. Built-in equipment includes individual vacuum units at each prewash/vacuum station, a high-volume air compressor with distribution lines to the pre-wash/vacuum stations and trailer stations, a 620 kPa (90 psi) cold water hookup at the top wash stations, high-pressure hot water washers at each undercarriage station, a 100kVA emergency generator for emergency lighting, and conduit for a Closed-Circuit Television (CCTV) system.

CARGO STAGING AREA (0.75 acres)

The cargo staging area allows for the washing and inspecting of ISO containers, palcons, palletized break-bulk, wooden crates, quadcons and other mobile loaded cargo. An Entry Control Building will be stationed at the entry/exit of the cargo staging area and queuing for up to 10 vehicles will be available. Hydro-washing when needed and inspection of cargo will be part of the cargo processing procedure with 4 wash/inspection stations programmed for this area. Cargo will be loaded/off-loaded and transported within the facility via forklift. An automated cargo measurement system pad (equipment purchased through other sources) can be located in the cargo staging area.

USDA INSPECTION AREA (0.25 acres)

Prior to moving into the bio-secure holding area, all vehicles, trailers and cargo will pass through a USDA controlled area for final inspection. Brown Tree Snake sniffing dogs will be located in this area, brought in via mobile kennels, and the USDA Inspection Building will have an air-conditioned cool down station for the dogs.

BIO-SECURE AREA (2.0 acres)

A bio-secure holding area is needed to keep out the Brown Tree Snake and other invasive plants and animals from being transported on items cleared subsequent to wash and inspection. The area will have the capacity to hold 118 vehicles/trailers and 245 pieces of cargo, the complement of a LHD, and be surrounded by a smooth finish concrete wall shaped to prohibit the Brown Tree Snake and other unwanted species from entering the bio-secure area. There will be separate entry and exit points into the bio-secure area with snake-proof roll or swing gates.

SUPPORTING FACILITIES

Site improvements consist of a new concrete frontage road adjacent to Harbor Drive and a concrete access road to the Marine Headquarters Building/Victor Wharf, with concrete track crossing across Harbor Drive at the headquarters entrance. The Project also widens Harbor Drive from Marine Corps Drive to the northern most access of the Embarkation Complex, and will most likely consist of AC pavement pending the results and recommendations of the geotechnical investigation. The project improves the existing drainage system along Harbor Drive with vegetated bio-swales. The storm water collection system, servicing portions of the site not connected to the wash water recycling system, passes through a hydrodynamic separator before entering the retention/percolation basin. The project anticipates remediating approximately 4 ha (9.8 acres) of potentially contaminated soil at a former bioremediation site associated with the diesel fuel spill at the Orote Power Plant.

MECHANICAL UTILITIES

The fire and potable water system includes a looped 300mm water line connecting to existing water mains running along Harbor and Sumay Drives. Sanitary sewer lines are anticipated to run from the Embarkation Operation Building, the Entry Control Building, and the USDA Inspection Building restrooms to the existing sewer force main.

ELECTRICAL AND COMMUNICATIONS

The existing 13.8kV line that runs along Harbor Drive via Underground/Overhead lines are anticipated to provide electrical service for the complex and connect via a 500 KVA transformer adjacent to the Utility Building. The utility building houses the switch gear, emergency generator, and crossover gear. The project configures the complex to allow for the use of Marine Corps tactical generator to augment the existing generator for expanded capacity during contingency situations. Outside communications consist of voice, data, and CCTV cabling. The project provides brackets for Radio Frequency Interrogators on or at the Embarkation Operations facility and the Entry Control facility to track vehicles and cargo. The project provides for communications consisting of voice and data for the Embarkation Operations facility, the entry control building, and USDA Inspection facility.

SITE LIGHTING

Operational Area lighting will be provided for the entire site of the Embark Operations facility. Area lighting will consist of floodlights mounted on high mast lighting poles. Floodlights will utilize high pressure sodium (HPS) lamps and be marine service rated. Poles will be located along the perimeter fence of the facility as to avoid possible interference with the operations of the facility. Additional task lighting (working-level lighting) via horizontal oriented, pole mounted light fixtures and pedestal mounted light fixtures shall be provided at each wash station to improve illumination and reduce shadows

on vehicle sides. Task lighting shall also be provided at other areas where vehicles may be subjected to inspection.

OPERATIONS AND MAINTENANCE

The project provides for Technical Operations and Maintenance Support Information (OMSI) manuals on all required systems as well as documentation in geospatial and other digital data. Special Costs include Post Construction Award Service (PCAS). The project incorporates sustainable design features in the design, development, and construction of the project in accordance with Executive Order 13123 and other directives.

ENVIRONMENTAL MITIGATION

Terrestrial mitigation is required for Section 7 ESA compliance. Required actions are biosecurity, brown treesnake eradication efforts, and habitat conservation. Cultural resources mitigation is required for Section 106, National Historic Preservation Act compliance. Cultural resources mitigation cost is for historic structures mitigation.

11. Requirement: **Adequate:** **Substandard:**

PROJECT:

This project will construct the following embarkation operations support facilities: 1) Cargo Staging Area, 2) Container (Embarkation) Operations Buildngs, 3) Vehicle Wash Platforms, and 4) Miscellaneous Utility and Pump Station Buildings.

(New Mission)

REQUIREMENT:

On October 29, 2005, the Security Consultative Committee (SCC) approved the document, "U.S.-Japan Alliance: Transformation and Realignment for the Future," which outlined initiatives on roles, missions, and capabilities of U.S. and Government of Japan (GOJ) forces. Also in 2005, GOJ and U.S. officials signed the Agreed Implementation Plan (AIP). The agreements outline a realignment of Marine Corps elements to reduce the U.S. military footprint in Okinawa, including the relocation of forces out of Japan. The AIP described the U.S.-GOJ agreed upon Marine Corps elements that would be relocated, which are referred to as the AIP requirements. The total estimate of relocating military personnel was 8,000 plus dependents.

A Guam Joint Military Master Plan (GJMMP) was developed to provide a single Joint Military Master Plan for Guam that focuses on: the relocation of U.S. Marine Corps (USMC) forces from Okinawa, Japan; and incorporating requirements for new USN platforms; and future U.S. Air Force (USAF) and USA missions as appropriate. The GJMMP forms the baseline for the

1. Component NAVY	FY 2013 MILITARY CONSTRUCTION PROGRAM	2. Date 12 APR 2010

3. Installation(SA) and Location/UIC: N61755 NAVBASE GUAM JOINT REGION MARIANAS, GUAM	4. Project Title APRA HARBOR EMBARK OPERATIONS

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	15310	P600	(b) (5)

Military Construction (MILCON) programming and facility and utility designs.

Relocation of USMC forces to Guam will result in frequent embarkation operations at NAVBASE Guam in Apra Harbor to support amphibious transportation of Guam based Marines and transiting amphibious forces for potential contingency, humanitarian or exercise operations in the Pacific Theater. Cargo Staging Area and Vehicle Wash Platform facilities are required to support USMC embarkation of 230 vehicles and 555 pieces of cargo.

CURRENT SITUATION:

There are no Marines presently stationed on Guam. The majority of the Department of Defense (DOD) Class I and II properties including airfield and wharves on Guam are owned by the Navy and Air Force. Limited surplus shore facilities are available but are within small footprints in various locations which inhibit any large scale usage for this relocation effort. Additionally, most of these surplus facilities require extensive upgrades/modification for adequate permanent type use. Therefore, proposed facilities to support the relocation of more than 8,000 Marines and their dependents will have to be new construction.

IMPACT IF NOT PROVIDED:

This project is part of the relocation of USMC from Okinawa to Guam. Units/activities will not vacate their current facilities until new replacement facilities in Guam have been completed, inspected and accepted. Failure to complete this project on time will jeopardize meeting the bilateral (USG and GOJ) agreed target date.

12. Supplemental Data:

A. Estimated Design Data:

1. Status:

(A) Date design or Parametric Cost Estimate started	03/2010
(B) Date 35% Design or Parametric Cost Estimate complete	01/2012
(C) Date design completed	12/2012
(D) Percent completed as of September 2011	10%
(E) Percent completed as of January 2012	35%
(F) Type of design contract	Design Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	Yes

2. Basis:

(A) Standard or Definitive Design	No
(B) Where design was previously used	NA

3. Total cost (C) = (A) + (B) = (D) + (E):

(A) Production of plans and specifications	(b) (5)
(B) All other design costs	
(C) Total	(b) (5)
(D) Contract	(b) (5)
(E) In-house	(b) (5)

4. Contract award: 09/2011

1. Component NAVY	FY 2013 MILITARY CONSTRUCTION PROGRAM	2. Date 12 APR 2010

3. Installation(SA) and Location/UIC: N61755 NAVBASE GUAM JOINT REGION MARIANAS, GUAM	4. Project Title APRA HARBOR EMBARK OPERATIONS

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	15310	P600	(b) (5)

5. Construction start: 03/2013

6. Construction complete: 03/2015

B. Equipment associated with this project which will be provided from other appropriations:

Equipment Nomenclature	Procuring Approp	FY Approp or Requested	Cost($000)
Collateral Equipment	O&MMC		

JOINT USE CERTIFICATION:

The (CERTIFYING OFFICIAL) certifies that this project has been considered for joint use potential. (TYPE OF CONSTRUCTION RECOMMENDED)is recommended. (UNILATERAL STATEMENT, if Unilateral Construction is selected)

Activity POC: (b) (6) Phone No: (b) (6)

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Working Dog Relocation	Working Dog Relocation

Military Working Dog Relocation, Apra Harbor

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 16 DEC 2009

3. Installation(SA) and Location/UIC: N61755(AG) NAVBASE GUAM (AGANA) JOINT REGION MARIANAS, GUAM	4. Project Title Military Working Dog Relocation, Apra Harbor

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	73076	P1003	14,000

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost($000)
MILITARY WORKING DOG RELOCATION, APRA HARBOR (5,264SF)	m2	489		8,040
ADMIN SUPPORT BLDG CC73076 (2,583SF)	m2	240	7,870.94	(1,890)
KENNEL CC73076 (2,680SF)	m2	249	7,035.16	(1,750)
RELOCATE HAZMAT LOCKER	LS			(60)
INFORMATION SYSTEMS	LS			(140)
ANTI-TERRORISM/FORCE PROTECTION	LS			(60)
BUILT-IN EQUIPMENT	LS			(930)
SPECIAL COSTS	LS			(2,210)
OPERATION & MAINTENANCE SUPP INFO (OMSI)	LS			(60)
LEED AND EPACT 2005 COMPLIANCE	LS			(940)
SUPPORTING FACILITIES				4,080
SPECIAL FOUNDATION FEATURES	LS			(650)
PAVING AND SITE IMPROVEMENTS	LS			(1,580)
ANTI-TERRORISM/FORCE PROTECTION	LS			(20)
ELECTRICAL UTILITIES	LS			(760)
MECHANICAL UTILITIES	LS			(1,070)
SUBTOTAL				12,120
CONTINGENCY (5%)				610
TOTAL CONTRACT COST				12,730
SIOH (6.2%)				790
SUBTOTAL				13,520
DESIGN/BUILD - DESIGN COST				480
TOTAL REQUEST ROUNDED				14,000
TOTAL REQUEST				14,000
EQUIPMENT FROM OTHER APPROPRIATIONS (NON ADD)				(484)

10. Description of Proposed Construction:

Primary Facilities: The project will replace the Military Working Dog (MWD) facilities displaced due to the siting of the embarkation area at Apra Harbor in order to accommodate the relocation of US Marines from Okinawa to Guam. The project is comprised of a dog kennel for nine military working dogs (includes both indoor and outdoor runs), four quarantine runs, two tack rooms, bulk storage area, food storage area, food preparation area, administration space for thirteen personnel, bathroom, locker room, veterinary exam area, multi-purpose conference/break area, outdoor dog wash, circulation space, and a mechanical equipment room and exterior enclosure for dehumidification equipment, and

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 16 DEC 2009

3. Installation(SA) and Location/UIC: N61755(AG) NAVBASE GUAM (AGANA) JOINT REGION MARIANAS, GUAM	4. Project Title Military Working Dog Relocation, Apra Harbor

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	73076	P1003	14,000

relocating the existing explosive/haz mat locker (Golan 10 locker). The project is a single story MWD facility constructed of reinforced concrete and/or concrete masonry unit buildings with seismic upgrades, pile foundation, and with all components such as exterior walls, windows, roofing, mechanical and electrical systems compatible with the Guam environment and COMNAVMAR design standards. The project provides for electrical and mechanical systems including fire alarm and fire monitoring/ control panels, information systems, energy management control systems, plumbing, fire protection systems, and heating, ventilation, and air conditioning systems. Information systems include telephone and data. The kennels will have a central dehumidification system that controls indoor environment to meet the Code of Federal Regulations (CFR), 9 CFR "Chapter 1 Part 3 Animal and Animals Products Standards regarding temperature and humidity." Technical operating manuals will be included. Project includes AT/FP building and site measures to include: the required standoff distances from parking, roadways, and existing inhabited buildings in the area, mass notification system and physical security equipment including intrusion detection system and CCTV for the GOLAN 10 locker and the drug storage area. This project will be designed to comply with the Energy Policy Act of 2005 (EPAct).

Supporting facilities: Work includes site and building utility connections (water/fire, sanitary and storm sewers), electrical, communications voice and data, LAN, and Cable Television (CATV). Paving and site improvements include a perimeter fence 8-foot high chain link fence with 3-strands of straight wire along the perimeter of the working dog site with a 20-foot wide service gate for vehicular access for food deliveries to the kennels and other access requirements into the working dog compound. Include a perimeter fence for the GOLAN 10 HAZ/MAT area at the 30-foot arc setback with a gate for vehicular access, and fencing around the obedience training course, exercise and break areas. Landscaping will include built in concrete obstacle equipments, with grass lawns and hedges between the exercise/break/obedience training courses to prevent the working dogs from distracting each other during training. Project also includes paved parking, fire access lanes, fire hydrant, sidewalks connecting all the facilities, earthwork (fill/grading). Special costs include radon mitigation (for support areas).

11. Requirement: 687 m2 **Adequate:** 0 m2 **Substandard:** 0 m2

PROJECT:

Project will replace MWD kennel facility displaced due to the siting of the embarkation area at Apra Harbor in order to accommodate the relocation of US Marines from Okinawa to Guam.

(Current Mission)

REQUIREMENT:

Adequate facilities to accommodate the nine Navy Military Working Dogs displaced due to the siting of the Marines' Embarkation Area as part of the effort to relocate US Marines from Okinawa to Guam.

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 16 DEC 2009

3. Installation(SA) and Location/UIC: N61755(AG) NAVBASE GUAM (AGANA) JOINT REGION MARIANAS, GUAM	4. Project Title Military Working Dog Relocation, Apra Harbor

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	73076	P1003	14,000

CURRENT SITUATION:

The existing MWD kennels are located within the security compound at NAVBASE Guam. The dogs occupy only 800 SF (74 m2) or less than half their requirement. Facility is being displaced due to the siting of the embarkation area at Apra Harbor.

IMPACT IF NOT PROVIDED:

This project is part of the relocation of USMC relocation from Okinawa to Guam. The MWD facility must be moved due to the siting of the embarkation area at Apra Harbor

12. Supplemental Data:

A. Estimated Design Data:

1. Status:

(A) Date design or Parametric Cost Estimate started	08/2008
(B) Date 35% Design or Parametric Cost Estimate complete	01/2009
(C) Date design completed	06/2009
(D) Percent completed as of September 2008	0%
(E) Percent completed as of January 2009	35%
(F) Type of design contract	Design Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	Yes

2. Basis:

(A) Standard or Definitive Design	Yes
(B) Where design was previously used	n/a

3. Total cost (C) = (A) + (B) = (D) + (E):

(A) Production of plans and specifications	$527
(B) All other design costs	$352
(C) Total	$879
(D) Contract	$791
(E) In-house	$88

4. Contract award:	01/2010
5. Construction start:	03/2010
6. Construction complete:	03/2011

B. Equipment associated with this project which will be provided from other appropriations:

Equipment Nomenclature	Procuring Approp	FY Approp or Requested	Cost($000)
Collateral Equipment (various)	O&MMC	2011	245
PSE Equip (Haz Mat Storage Locker)	O&MMC	2011	160
PSE Equipment (Kennel)	O&MMC	2011	79

JOINT USE CERTIFICATION:

The Director Land Use and Military Construction Branch, Installations and Logistics Department, Headquarters Marine Corps certifies that this project has been considered for

1. Component NAVY	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date 16 DEC 2009

3. Installation(SA) and Location/UIC: N61755(AG) NAVBASE GUAM (AGANA) JOINT REGION MARIANAS, GUAM	4. Project Title Military Working Dog Relocation, Apra Harbor

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
0216496M	73076	P1003	14,000

joint use potential. Unilateral construction is recommended. This facility can be used by other components on an as available basis; however, the scope of the project is based on Department of the Navy requirements.

Activity POC: (b) (6) [redacted] Phone No: (b) (6) [redacted]

TRAINING

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
KD Ranges - LFTRC	KD Ranges - NWF LFTRC

NW Field Live-Fire Training Range Complex

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROGRAM	2. Date 15 MAY 2014

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title NW Field Live-Fire Training Range Complex

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	17550	P715	(b) (5) [redacted]

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost($000)
NW FIELD LIVE-FIRE TRAINING RANGE COMPLEX	LS			(b) (5) [redacted]
KD RIFLE RANGE CC17550	LS			
KD PISTOL RANGE CC17570	LS			
MODIFIED RECORD FIRE RANGE CC17532	LS			
NON-STANDARD SMALL ARMS RANGE CC17502	LS			
RANGE MAINTENANCE BUILDING CC17310 (5,716SF)	m2	531	(b) (5) [redacted]	
KD RIFLE/PISTOL RANGE ADMIN BUILDING CC17310 (3,638SF)	m2	338	(b) (5) [redacted]	
RANGE OBSERVATION TOWERS CC17935	EA	2	(b) (5) [redacted]	
BUILT-IN EQUIPMENT	LS			
SPECIAL COSTS	LS			
OPERATION & MAINTENANCE SUPP INFO (OMSI)	LS			
LEED AND EPACT 2005 COMPLIANCE	LS			
SUPPORTING FACILITIES				
SITE PREPARATIONS	LS			
PAVING AND SITE IMPROVEMENTS	LS			
ELECTRICAL UTILITIES	LS			
MECHANICAL UTILITIES	LS			
ENVIRONMENTAL MITIGATION	LS			
SUBTOTAL				
CONTINGENCY (5%)				
TOTAL CONTRACT COST				
SIOH (6.2%)				
SUBTOTAL				
DESIGN/BUILD - DESIGN COST				
TOTAL REQUEST ROUNDED				
TOTAL REQUEST				
EQUIPMENT FROM OTHER APPROPRIATIONS (NON ADD)				

10. Description of Proposed Construction:

Constructs a Live-Fire Training Range Complex (LFTRC) at Northwest Field (NWF), Andersen Air Force Base (AAFB), Guam. LFTRC will consist of four small arms firing ranges: 25 firing point (FP) Known Distance (KD) Pistol Range, 50 FP KD Rifle Range, 16 FP Modified Record Fire Range, and 25 FP Non-Standard Small Arms Range. Other facilities that support the small arms ranges include a Range Maintenance Building, KD Rifle/Pistol Range

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROGRAM	2. Date 15 MAY 2014

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title NW Field Live-Fire Training Range Complex

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	17550	P715	(b) (5)

Administration Building and Range Observation Towers which will be placed along the cliff-line to provide a line of sight for range clearance procedures. Facilities will be pre-cast concrete or cast-in place concrete low-rise facilities with slab on grade foundations, windows, reinforced concrete roofing, mechanical, electrical and information systems appropriate to Guam earthquake and environmental conditions.

Additional structures in support of the four small arms ranges include a target factory/storage building, ready storage facilities, pit control room, ammunition breakdown facilities, brass and pallet storage areas, range control towers, protective and impact berms, bullet catchment systems, covered bleachers and range specialties.

Information systems include basic telephone, computer network, fiber optic, and security and fire alarm infrastructure.

This project will provide Anti-Terrorism/Force protection (AT/FP) features and comply with AT/FP regulations, and physical security mitigation in accordance with DoD Minimum Anti-Terrorism Standards for Buildings.

Built-in equipment consists of radon mitigation systems and bleachers at each ranges.

Special costs include Post Construction Award Services (PCAS), Guam gross receipt taxes (GRT), geospatial surveys and mapping, and archaeological monitoring costs.

Facility Electronic Operations and Maintenance Support Information (eOMSI) is included in this project.

Sustainable design principles will be included in the design and construction of the project in accordance with Executive Order 13423 and other laws and Executive Orders. Facilities will meet LEED ratings and comply with the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. Low Impact Development will be included in the design and construction of this project as appropriate.

Site preparation includes clearing/grubbing, grading, earthwork, and temporary erosion and soil control.

Paving and site improvements include roadways, parking, driveways, sidewalks, hydroseeding, 7' high ungulate fencing, security gate and gate house, storm water drainage systems and retention ponds (LEED-LID), green waste facility, monitoring wells, and signs. In addition, Route 3A which provides access into the LFTRC will be rehabilitated.

Electrical utilities consist of primary and secondary underground electrical distribution, outside lighting, pad mounted transformers, and communications distribution (including a communications tower in support of Enterprise Land Mobile Radio System (ELMR)). An Area

Distribution Node (ADN) facility (including communication racks, interior cable trays, exterior cable trays, and a grounding and lightning protection system) will be provided.

Mechanical utilities consist of domestic and fire protection water distribution and sanitary sewer system (including a septic tank and effluent disposal basin).

Environmental mitigation includes natural and cultural resource mitigation (to include direct and programmatic mitigations required by the Record of Decision, Biological opinion, and Programmatic Agreement) and unexploded explosive ordnance (UXO)/munitions and explosives of concern (MEC) mitigation.

Facilities will be designed to meet or exceed the useful service life specified in the DoD UFC. Facilities will incorporate features that provide the lowest practical life cycle cost solutions satisfying the facility requirements with the goal of maximizing energy efficiency.

11. Requirement: 535 m2 **Adequate:** 0 m2 **Substandard:**

PROJECT:

Constructs a LFTRC with four new small arms ranges consisting of a 25 FP KD Pistol Range, 50 FP KD Rifle Range, 16 FP Modified Record Fire Range, 25 FP Non-Standard Small Arms Range, rifle/pistol range administrative building, range maintenance building, observation towers, utilities, IT/Communication line to Naval Computer and Telecommunications Station (NCTS) Finegayan Building #112, roadways, and reconstruction of existing Route 3A.

(New Mission)

REQUIREMENT:

As part of the 2005 Alliance Transformation and Realignment for the Future (ATARA) and AIP between the United States and Government of Japan (GOJ), USMC forces will be relocated to Guam to reduce their footprint in Okinawa. This relocation will require the development of ranges to meet individual and annual qualification training requirements, Military Occupational Specialty (MOS) training, and Integrated Small Unit Training. Marine Corps Order (MCO) 3574.2K outlines the Marine Corps policy and requirements for annual marksmanship training including initial qualification and re-qualification with the service rifle and the M9 service pistol. This Order also identifies the Individual Training Standards (ITS) that are required. Range requirements were determined based on the anticipated throughput of USMC and other services for marksmanship and sustainment training and the total number of weeks ranges would be available on Guam (approximately 39 firing weeks). These ranges are critical for sustainment level marksmanship training and will ensure the combat readiness and marksmanship proficiency for USMC personnel stationed on Guam.

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROGRAM	2. Date 15 MAY 2014

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title NW Field Live-Fire Training Range Complex

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	17550	P715	(b) (5) [redacted]

CURRENT SITUATION:

Currently, Guam does not have sufficient KD range capacity to accommodate anticipated sustainment level marksmanship throughput requirements as a result of USMC active duty personnel relocating to Guam.

IMPACT IF NOT PROVIDED:

Weapons training and qualification are essential components of Marine readiness. As part of the agreement between the United States and GOJ, USMC forces will be relocated to Guam; and these ranges will need to be constructed as part of the relocation. If the training ranges are not constructed, the agreement between the two countries will be compromised.

12. Supplemental Data:

A. Estimated Design Data:

1. Status:

(A) Date design or Parametric Cost Estimate started	02/2014
(B) Date 35% Design or Parametric Cost Estimate complete	05/2014
(C) Date design completed	08/2016
(D) Percent completed as of September 2014	30%
(E) Percent completed as of January 2015	35%
(F) Type of design contract	Design Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	Yes

2. Basis:

(A) Standard or Definitive Design	No
(B) Where design was previously used	N/A

3. Total cost (C) = (A) + (B) = (D) + (E):

(A) Production of plans and specifications	(b) (5) [redacted]
(B) All other design costs	
(C) Total	
(D) Contract	
(E) In-house	
4. Contract award:	03/2016
5. Construction start:	06/2016
6. Construction complete:	09/2018

B. Equipment associated with this project which will be provided from other appropriations:

Equipment Nomenclature	Procuring Approp	FY Approp or Requested	Cost
C4I	PMC	2018	(b) (5) [redacted]

1. Component NAVY	FY 2016 MILITARY CONSTRUCTION PROGRAM	2. Date 15 MAY 2014

3. Installation(SA) and Location/UIC: N41557 US NAVSUPACT ANDERSEN GUAM JOINT REGION MARIANAS, GUAM	4. Project Title NW Field Live-Fire Training Range Complex

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ([redacted]
	17550	P715	[redacted]

Collateral Equipment	O&MMC	2018	[redacted]
Electronic Security System	O&MMC	2018	[redacted]
Targeting System	PMC	2018	[redacted]

JOINT USE CERTIFICATION:

The Regional Commander or Installation Management Claimant certifies that this project has been considered for joint use potential. Unilateral Construction is recommended. This Facility can be used by other components on an as available basis; however, the scope of the project is based on Department of the Navy requirements.

Activity POC: [redacted] Phone No: [redacted]

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Machine Gun Range	Machine Gun Range

Northwest Field MG Range LFTRC

BUDGET ESTIMATE SUMMARY SHEET

P- XXX **FY - 2020**

TITLE:	NORTHWEST FIELD MG RANGE LFTRC	DATE OF ESTIMATE:	7-Feb-14
LOCATION:	NORTHWEST FIELD, GUAM	DATE ESCALATED TO:	Oct-21
PREPARED BY:	MARFORPAC	ESCALATION FACTOR:	1.096
		AREA COST FACTOR:	2.32

DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT COST	ESCALATED COST	COST TRANSFER TO 1391 ($000)
NORTHWEST FIELD MG RANGE LFTRC					(b) (5)
MACHINE GUN RANGE	LS	1	(b) (5)	(b) (5)	(b) (5)
Covered Bleachers (enclosure)	EA	1			
Control Tower	EA	1			
Ammunition Breakdown	m2	9			
SPECIAL COSTS	LS	1			
PCAS	EA	0.01			
GRT	EA	0.04			
LEED AND EPACT 2005 COMPLIANCE (INSIDE)	LS	1			
Energy Control System	m2	883			
Renewable Energy Systems	m2	883			
SUPPORTING FACILITIES					
SITE PREPARATION	LS	1			
Clear and Grub	HA	32			
Earthwork	m3	1,450,000			
MECHANICAL UTILITIES	LS	1			
Sanitary Sewer (8-in)	m	1,900			
Sewer Manhole	EA	16			
ELECTRICAL UTILITIES	LS	1			
Electrical Distribution System, Primary	m	1,500			
Electrical Distribution System, Secondary	m	500			
Communication Distribution	m	1,500			
PAVING AND SITE IMPROVEMENTS	LS	1			
AC Paved Road - Range Access	m2	4,927			
Gravel Road/Shoulder	m2	2,340			
Side Walks and Ramps	m2	1,000			
Landscaping	m2	4,500			
Fencing - Ungulate 4' High	m	1,500			
Observation Tower	EA	1			
Storm Drainage - Swales	m	1,500			
Stormwater Retention Pond (LEED-LID)	EA	1			
Target Rail Carriage System	m	1,200			
Stationary Infantry Target Emplacements	EA	240			
Movebale Target Emplacements	EA	240			
Gravel Parking Lots	m2	500			
ENVIRONMENTAL MITIGATION	LS	1			
Biological Resources	LS	1			
UXO/MEC	HA	32			
Cultural Resources	LS	1			
SUBTOTAL					(b) (5)

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
BSTF	BSTF

BSTF

BSTF
Requirements Document

Category Code Number:

Operational Trainer Facility: 171-35

Project Scope:

TECG Administrative Spaces	3,250 GSF
TECG Operations Room	721 GSF
TECG Intel Room	467 GSF
III MEF Red Cell Room	1,071 GSF
Training Audience – Conference Room	583 GSF
Training Audience – JRC/JVB Cell	1,768 GSF
Training Audience – TSCIF	893 GSF
Training Audience – Current Ops Watch Floor	2,410 GSF
Training Audience – Fires Cell	2,321GSF
Training Audience – FOPS/OPT Cell	1,252 GSF
Training Audience – Civil Affairs Cell	889 GSF
Training Audience – Logistics Cell	889 GSF
Training Audience – Plans Cell	1,252 GSF
Training Audience – Communication Cell	461 GSF
Training Audience – Techcon Cell	461 GSF
White Cell Control Room	3,749 GSF
White Cell Response Cell Bay	4,772 GSF
White Cell OPFOR Room	954 GSF
White Cell Simulation/Embark Work Bay	2,350 GSF
Auditorium	3,749 GSF
Storage	952 GSF
Restrooms	2,500 GSF
Elevators/Stairwells	1,000 GSF
Mechanical/Utility /Server Rooms	8,000 GSF
TOTAL	**46,987 GSF**

Other requirements:

POV Parking (200 Spaces x 35 SY)	7,000 SY
Other Pavement/Staging Areas (CCN 451-10)	3,000 SY

Note: Parking and other external pavement requirements will be further refined. Space requirements for restrooms, elevators, stairwells, and mechanical, utility, and server rooms will be refined during the design process.

1) TECG Administrative Space:

Requirements are generated from the Table of Organization and the criteria presented in United Facilities Criteria (UFC) 2-000-05N for Category Code Number (CCN) 610-10 Administrative Office.

Per UFC, gross floor area for administrative functions can be calculated using 162.5 square feet per building occupant. This methodology includes requirements for special purpose and support spaces (defined as conference rooms, vending areas, coffee messes).

20 Administrative personnel x 162.5 GSF = 3,250 GSF

Included in this space is a conference room capable of accommodating up to 10 personnel.

Subtotal	3,250 GSF

Note: Space for other personnel permanently assigned to TECG (within the T/O) that were not captured under this function are separately indentified as required within the spaces listed and described below.

2) TECG Operations Room

Scope consists of workspaces (typically cubicles) for the TECG Operations Section including common conference table type work areas to layout maps and support products during exercise support product development.

Per the UFC, the detailed planning, programming, and asset evaluation factors presented in Sections 61010-3 through 61010-8 and the miscellaneous space allowances presented in Sections 61010-9.1 through 61010-9.5 were used as a basis for requirements determination.

Ops Chief x 90 NSF =	90 NSF
Contractors (4) x 60 NSF =	240 NSF
Work Tables (3) x 72 NSF=	216 NSF
File Area (10) x 6 NSF=	60 NSF
Subtotal	606 NSF x 1.19 = 721 GSF

3) TECG Intel Room

Space consists of workspaces (typically cubicles) for the TECG Intel Section.

Administrative PN (4) x 90 NSF =	360 NSF
File Area (8) x 4 NSF=	32 NSF
Subtotal	392 NSF x 1.19 = 467 GSF

4) III MEF Red Cell Room

Private Offices (2) x 150 NSF =	300 NSF
Admin (8) x 60 NSF =	480 NSF
File Area (10) x 6 NSF=	60 NSF
Open Storage (6’ x 10’)	60 NSF
Subtotal	900 NSF x 1.19 = 1,071 GSF

5) Training Audience – Conference Room

Conference room must accommodate up to 14 personnel with an additional 20 personnel in the audience. Space requirements are determined through section 61010-9.2 of UFC 2-000-05N using CCN 610-10.

150 NSF x (10 NSF x 34) =	490 NSF
Subtotal	490 NSF x 1.19 = 583 GSF

5) Training Audience – Joint Reception Area, (JRC)/JVB Cell

Service Counter x 50 NSF=	50 NSF
Reception Area (10NSF x 20 PN) =	200 NSF
ECP (4) x 50 NSF=	200 NSF
JVB ECP (8) x 50 NSF=	400 NSF
JRC ECP (4) x 50 NSF=	200 NSF
JRA (16) tables x 16 NSF=	256NSF
OCE Offices (2) x 90=	180 NSF
Subtotal	1,486 NSF x 1.19 = 1,768 GSF

6) Training Audience – TSCIF

Personnel (10) x 60 NSF=	600 NSF
Conference Room=	150 NSF
Subtotal	750 NSF x 1.19 = 893 GSF

7) Training Audience – Current Ops Watch Floor

Due to the type of workspaces required for this space, requirements are based on Table 171-1 for modified academic with office desks under CCN 171-20 per UFC 2-000-05N.

45 PN x 45 NSF=	2,025 NSF
Subtotal	2,025 NSF x 1.19 = 2,410 GSF

8) Training Audience – Fires Cell

Due to the type of workspaces required for this space, requirements are based on Table 171-1 for modified academic with office desks under CCN 171-20 per UFC 2-000-05N.

35 PN x 45 NSF=	1,575NSF
Conference Table	375 NSF
Subtotal	1,950 NSF x 1.19 = 2,321 GSF

9) Training Audience – FOPS/OPT Cell

Due to the type of workspaces required for this space, requirements are based on Table 171-1 for modified academic with office desks under CCN 171-20 per UFC 2-000-05N.

20 PN x 45 NSF=	900 NSF
Office Supply Storage=	80 NSF
Conference Table (1) =	72 NSF
Subtotal	1,052 NSF x 1.19 = 1,252 GSF

10) Training Audience – Civil Affairs Cell

Due to the type of workspaces required for this space, requirements are based on Table 171-1 for modified academic with office desks under CCN 171-20 per UFC 2-000-05N.

15 PN x 45 NSF=	675 NSF
Conference Table (1) =	72 NSF
Subtotal	747 NSF x 1.19 = 889 GSF

11) Training Audience – Logistics Cell

Due to the type of workspaces required for this space, requirements are based on Table 171-1 for modified academic with office desks under CCN 171-20 per UFC 2-000-05N.

15 PN x 45 NSF=	675 NSF
Conference Table (1) =	72 NSF
Subtotal	747 NSF x 1.19 = 889 GSF

12) Training Audience – Plans Cell

Due to the type of workspaces required for this space, requirements are based on Table 171-1 for modified academic with office desks under CCN 171-20 per UFC 2-000-05N.

20 PN x 45 NSF=	900 NSF
Conference Table (1) =	72 NSF
Office Supply Storage=	80 NSF
Subtotal	1.052 NSF x 1.19 = 1,252 GSF

13) Training Audience – Communication Cell

Due to the type of workspaces required for this space, requirements are based on Table 171-1 for modified academic with office desks under CCN 171-20 per UFC 2-000-05N.

7 PN x 45 NSF=	315 NSF
Conference Table (1) =	72 NSF
Subtotal	387 NSF x 1.19 = 461 GSF

14) Training Audience – Techcon Cell

7 PN x 45 NSF=	315 NSF
Conference Table (1) =	72 NSF
Subtotal	387 NSF x 1.19 = 461 GSF

15) White Cell Control Room

Due to the type of workspaces required for this space, requirements are based on Table 171-1 for modified academic with office desks under CCN 171-20 per UFC 2-000-05N.

70 PN x 45 NSF=	3,150 NSF
Subtotal	3,150 NSF x 1.19 = 3,749 GSF

16) White Cell Response Cell Bay

Due to the type of workspaces required for this space, requirements are based on Table 171-1 for modified academic with office desks under CCN 171-20 per UFC 2-000-05N. Requirements for “gamers” were based on Table 17110-1.

10 PN x 45 NSF=	450 NSF x 5 = 2,250 NSF
16 PN x 22 NSF=	352 NSF x 5 = 1,760 NSF
Subtotal	4,010 NSF x 1.19 = 4,772 GSF

17) White Cell OPFOR Room

Due to the type of workspaces required for this space, requirements are based on Table 171-1 for modified academic with office desks under CCN 171-20 per UFC 2-000-05N. Requirements for “gamers” were based on Table 17110-1.

10 PN x 45 NSF=	450 NSF
16 PN x 22 NSF=	352 NSF
Subtotal	802 NSF x 1.19 = 954 GSF

18) White Cell Simulation/Embark Work Bay

TECG Admin (5) PN x 60 NSF=	300 NSF
Contractors (9) x 60 NSF=	540 NSF
Work Stations (20) x 45 NSF=	900 NSF
Workbench (3) x 45 NSF=	135 NSF
Pallet Break Down Area=	100 NSF
Subtotal	1,975 NSF x 1.19 = 2,350 GSF

19) Auditorium

Space requirements are based on Section 61010-9.2 of UFC 2-000-05N using CCN 610-10.

150 NSF x (10 NSF x 300) =	3,150 NSF
Subtotal	3,150 NSF x 1.19 = 3,749 GSF

20) Storage

Racks (40) x 12 NSF=	480 NSF
Box Storage (20) x 16 NSF=	320 NSF
Subtotal	800 NSF x 1.19 = 952 GSF

Category Code Number:

Applied Instruction Building: 171-20

Project Scope:

MISTC Administrative Spaces	2,600 GSF
Combat Operations Center (COC) Training Room	1,652 GSF
Classrooms	2,364 GSF
Support Spaces	1,496 GSF
TOTAL	**8,112 GSF**

Other Requirements:

POV Parking (100 Spaces x 35 SY)	3,500 SY
External Training Area / Pavement (CCN 451-10)	3,000 SY

Note: Parking and other external pavement requirements will be further refined.

1) MISTC Administrative Space:

Requirements are generated from the Table of Organization and the criteria presented in United Facilities Criteria (UFC) 2-000-05N for Category Code Number (CCN) 610-10 Administrative Office.

Per UFC, gross floor area for administrative functions can be calculated using 162.5 square feet per building occupant. This methodology includes requirements for special purpose and support spaces (defined as conference rooms, vending areas, network closets, elevators, bathrooms, coffee messes). The MISTC T/O was provided March 2011 by the Director, MISTC Okinawa.

16 Administrative personnel x 162.5 GSF = 2,600 GSF

Subtotal 2,600 GSF

2) Combat Operations Center (COC) Training Room

The COC training classroom is used for both academic and applied instruction utilizing all forms of equipment associated with a Marine Corps Combat Operations Center (COC) Capability set version 3 (Regiment size) and version 4 (Battalion size). This classroom must be large enough to support the setup of two 305 tents (approximately 23' x 27') with aisle space. High ceilings are required as well as bay doors for vehicle access.

Combat Operations Center (COC) is designed to provide centralized Command and Control (C2) operational facilities to collect, process, and disseminate tactical data for the commander and staff of a Marine battalion or squadron. The COC provides the commander with a Common Operational Picture (COP) and tactical data and communications assets needed to plan and conduct operations in an expeditionary combat environment. The system enables analytical and intuitive decision-making with a modular and scalable equipment set consisting of a common module Operational Facility (OPFAC), C2 system, visual displays, and software.

305 Tent (2) x 621 NSF= 1,242 NSF

Subtotal 1,242 NSF x 1.33 = 1,652 GSF

3) Classrooms

Classroom requirements are based on the Average On-Board methodology presented in Figure 171-1 of UFC 2-000-05N.

Course Title	DD	AF	S	AI	Student AOB	NSF per Student	Requirement
C2PC/JTCW	4.5	30	30	900	16.2	21	340
Intel/Ops Server Version 1	5	10	10	100	2	22	44
FBCB2 Blue Force Tracking Op	4	30	30	900	14.4	21	302
FBCB2 Unit Level Maintenance	5	12	15	180	3.6	22	79
JADOCS Operator	5	12	20	240	4.8	22	106
AFATDS Operator	5	12	10	120	2.4	22	53
JADOCS Administrator	5	6	10	60	1.2	22	26
EMT Operator	5	4	20	80	1.6	22	35
Sharepoint Level 1	1	24	25	600	2.4	22	53
Sharepoint Level 2	2	24	25	600	4.8	22	106
Sharepoint Level 3	2	12	10	120	.96	22	21
BAT Operator	2	24	10	240	1.92	22	42
BCS3 Operator	3	12	10	120	1.44	22	32
TCPT Operator	2.5	12	20	120	1.2	22	26
Information Management	5	2	30	60	1.2	22	26
CLC2S Operator	2	12	20	240	1.92	22	42
COC Equipment Course	3	6	20	120	1.44	22	32
Watch Officer/Watch Chief	5	24	20	480	9.6	22	211

Subtotal 1,576 NSF x 1.5 = 2,364 GSF

4) Support Spaces

Support spaces consist of a student break area and training aid/office supply storage.

Student Break Area 20 PN x 6 NSF=	120 NSF
Instructor Lounge=	450 NSF
Storage Racks (20) x 12 NSF=	240 NSF
Safe (2) x 9 NSF=	18 NSF
Bulk Storage (6) x 12 NSF =	72 NSF
Training Aid Storage (30) x 1.5 NSF=	45 NSF
Lab Area (4) stations x 45 NSF=	180 NSF
Subtotal	1,125 NSF x 1.33 = 1,496 GSF

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
USFW Replacement	USFW Replacement

USFW HQ Facility

BFRL ITEM DETERMINATION SHEET
NAVMC10915(11-72) SN: 0000-006-4680

DRAFT

DATE PREPARED: 26-Jan-12

From:
To: Commandant of the Marine Corps (Code LFF)

NOMENCLATURE	CATEGORY CODE	UNIT OF MEASURE
USFW HQ FACILITY	610-73	SF

DETERMINATION OF REQUIREMENTS: *(If additional space is needed, use plain sheet of paper)*

SPECIFIC AREA

A replacement facility for the USFW HQ Building is required for the operation of the Northwest Field Machine Gun Range. Requirements need to be coordinated and vetted with USFW; however until those negotiations occur, the assumed requirmeent is a replacement of the exisitng facility. The existing facility is composed of the folloiwing functions and square footage:

Headquarters Facility (225 FT x 145 FT)=		31,900	GSF
Visitor Center (100 FT x 60 FT)=		6,000	GSF
USFW HQ Facility		37,900	GSF
Total Requirement:	SAY	**38,000**	GSF

See attached for calculation of requirements.

TOTAL REQUIREMENT FOR CATEGORY CODE
38,000 SF (3531 m2)

MOBILIZATION STATEMENT

SIGNATURE:

CO REVIEW ACTION

EVALUATION

DATE

ESTABLISHED REQUIREMENT

SIGNATURE:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Eng and Brdg Cmplx	Eng and Bridge Complex

Engineering Pit and Bridge Training Complex

1. Component	FY 2013 MILITARY CONSTRUCTION PROGRAM	2. Date
NAVY (for USMC)		19 AUG 2010

3. Installation and Location/UIC: N61755	4. Project Title
MARINE CORPS BASE, FINEGAYAN, GUAM	Engineering Pit & Training Complex

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	179-31	P-870	(b) [redacted]

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
Engineering Pit & Training Complex				(b) [redacted]
Engineering Pit & Training Complex	HEC	1.62	(b) (5) [redacted]	(5) [redacted]
Medium / Heavy Equipment Training Area	HEC	.80		
Panel Bridge Area	HEC	.40		
Floating Bridge Site	HEC	.40		
Covered Classroom / Bleachers	M2	268		
Head Facility	LS	1		
Special Costs & Technical Operating Manuals	LS	1		
SUPPORTING FACILITIES				(b) (5) [redacted]
Electrical Utlities	LS			
Mechanical Utilities	LS			
Environmental Mitigation	LS			
Environmental Mitigation	LS			
LID Compliance	LS			
SUBTOTAL				(b) (5) [redacted]
CONTINGENCY (20.0%)				
TOTAL CONTRACT COST				
SIOH (6.2%)				
SUBTOTAL				
Design Build – Design Cost (4%)				
TOTAL REQUEST				
TOTAL REQUEST (ROUNDED)				
EQUIPMENT FROM OTHER APPROPRIATIONS				(TBD)
*Equipment from other appropriations will be determined at a later date.				

(Continued On DD 1391C…)

1. Component NAVY (for USMC)	FY 2013 MILITARY CONSTRUCTION PROGRAM	2. Date 19 AUG 2010
3. Installation and Location/UIC: N61755 MARINE CORPS BASE FINEGAYAN, GUAM		
4. Project Title Engineering Pit & Training Complex		7. Project Number P-870

(…continued)

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

PRIMARY FACILITY: Construct a Medium/Heavy Equipment Training Area (Engineering Pit), a Panel Bridge Area (Dry Bridge), and a Floating Bridge Site (Wet Bridge). Supporting structure for the training complex include low-rise 75 pn covered classroom structure and a low-rise 100 pn bleachers/head facility building. Project to include an area designed to train personnel in the operation of combat earthmoving equipment and installation of pre-fabricated bridging. These are two separate functions but their facility requirements for open areas are similar. The medium/heavy equipment training area is similar to a permanent construction site. The grading and earthmoving operations require storm water runoff sediment control as well as dust control. The panel bridge erection training requires an area to erect bridge sections over a dry trench. The floating bridge site requires an area to erect bridge sections over a wet stream or pond area. The engineering pit & training complex includes clearing and grubbing the site, grading and drainage to route the storm water runoff to the retention pond. A bio-retention basin (also retention pond) shall be a vegetated depression that collects runoff and facilitate collected water infiltration into the ground. A water pump station shall be added in conjunction with the retention pond and wet bridge in order for the collected water to be utilized as a mitigating measure for dust control. Water and power utilities are being extended to the site. Site lighting has been provided for night operations.

The project provides construction designed in compliance with current Unified Facilities Criteria (UFC) including Anti-Terrorism/Force Protection (AT/FP) requirements. The design of the facility will meet the Marine Corps Base Guam Installation Appearance Plan and the NAVFAC MAR Common Components Study.

The project will also construct support facilities, which include site grading, drainage, environmental mitigation, and utility systems.

Project also includes Operation and Maintenance Support Information (OMSI). Geospatial and other digital data will be provided as part of the OMSI documentation for this construction. The project also provides for Post Construction Award Services (PCAS).

Information infrastructure systems will not be included in this facility.

Emergency power is not required to be provided for this facility.

The facility is not required to be designed to meet Leadership in Energy and Environmental Design (LEED) Silver Rating.

SUPPORTING FACILITY: The project will also construct support facilities, which include site improvements, electrical and mechanical systems, environmental mitigation and workforce logistics.

This project provides for special construction features for Low Impact Development (LID) for storm drainage, and a Storm Water Pollution Prevention Plan (SWPPP) in accordance with UFC 3-210-10 Low Impact Development.

The project provides for site improvements consisting of security fencing and gates, paved roads and bus/shuttle drop off area, sidewalks (with non-slip surface), curbs, gutters, and supporting facility. Storm water drainage improvements include grassed swales and the permeable earthen and grassed pits and basins—Medium / Heavy Equipment Training Area, Panel Bridge Area, Floating Bridge Site—comprising most of the facility.

(…continued)

The project will provide paving for bus/shuttle turnaround drop off. No requirement for POV parking stalls.

Electrical systems include new lines and meters for primary and secondary electrical distribution, exterior site and building lighting and a step-down transformer. Emergency power is not required to be provided for this facility.

Mechanical systems include new lines and meters for water utilities, sanitary sewer utilities, and a storm drainage system. Cathodic protection will be required if steel underground piping is used. This project includes connection to the utility infrastructure, potable water, electric power, sanitary sewage, storm drainage, etc.) as provided by the Guam Utilities & Site Improvements projects.

The project provides mitigation for cultural and environmental resources impacted by construction of the new MCB Guam. Cultural resource mitigation (specifically archaeological monitoring) is required for Section 106, National Historic Preservation Act compliance. Workforce Logistics will support the housing, feeding, medical care, transportation, and security of the off-island workforce coming to Guam. The cost for all these provisions will be shared among all the new facilities planned for Guam.

SCOPE:
The project scope is derived from UFC 2-000-05N, Facility Planning for Navy and Marine Corps Shore Installations (formerly known as P80), for category code numbers 179-20, 179-22, and 179-31.

PROJECT:
This project constructs a Medium/Heavy Equipment Training Area (Engineering Pit), a Panel Bridge Area (Dry Bridge), and a Floating Bridge Site (Wet Bridge) at the Finegayan area of Marine Corps Base, Guam, for training of engineering units relocating from various sites in Okinawa, Japan.

REQUIREMENT:
An engineering pit is required to allow units to train in the operation and exercise of construction equipment in a manner similar to situations found on deployments. A wet and dry bridging complex is required to allow training in the construction of panel and floating bridges. MARFORPAC estimates the dig pit will be used on a daily basis and the wet and dry gaps on a quarterly basis. Training will take place during the day, but some operations may be conducted at night.

CURRENT SITUATION:
There are no existing training facilities of this type on Guam**.**

IMPACT IF NOT PROVIDED:
This project is part of the relocation of USMC from Okinawa to Guam and is part of the suite of training facilities required to support the USMC training program on Guam. Without this facility, the Marines will not be able to meet their individual training requirements..

1. Component NAVY (for USMC)	**FY 2013 MILITARY CONSTRUCTION PROGRAM**	2. Date 19 AUG 2010

3. Installation and Location/UIC: N61755
MARINE CORPS BASE FINEGAYAN, GUAM

4. Project Title	7. Project Number
Engineering Pit & Training Complex	P-870

(…continued)

A. Estimated Design Data:

1. Estimated Design Data:

(A)	Date Design Start (PCE Authorized)	
(B)	Date 35% Design or Parametric Cost Estimate Completed	
(C)	Date Design Completed	
(D)	Percent Completed as of	
(E)	Percent Completed as of	
(F)	Type of Design Contract	Design/Build
(G)	Parametric Estimate used to develop cost	Yes
(H)	Energy Study/Life-Cycle Analysis Performed	No

2. Basis:

(A)	Standard of Definitive Design	No
(B)	Where design was previously used	N/A

3. Total Cost (C) = (A) + (B) or (D) + (E)

(A) Production of Plans and Specifications
(B) All other Design Costs
(C) Total
(D) Contract
(E) In-House

4. Construction Award:

5. Construction Start:

6. Construction Complete:

B. Equipment associated with this project which will be provided from other appropriations:

Major Equipment	Funding Source	Funding Year	Installation Start-End Mo/Yr	Shakedown Start/End Mo/Yr	IOC Date Mo/Yr	Cost (000)

None

Activity POC: (b) (6) [redacted] Phone No.: (b) (6) [redacted]

JOINT USE CERTIFICATION:
The Director Land Use and Military Construction Branch, Installations and Logistics Department, Headquarters Marine Corps certifies that this project has been considered for joint use potential. Unilateral Construction is recommended. This Facility can be used by other components on an as available basis; however, the scope of the project is based on Marine Corps requirements.

Attachments:

( ) 1. Budget Estimate Summary Sheet
( ) 2. Economic Analysis
( ) 3. Site Plan
( ) 4. Facility Planning Documents/P-80 Calculations

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
CBRNE Training	CBRNE Training

Gas Chamber

1. Component	FY 2013 MILITARY CONSTRUCTION PROGRAM	2. Date
NAVY (for USMC)		19 AUG 2010

3. Installation and Location/UIC: N61755	4. Project Title
MARINE CORPS BASE, FINEGAYAN, GUAM	Gas Chamber

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	172-30	P-871	(b) (5) [redacted]

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
Gas Chamber				(b) (5) [redacted]
Gas Chamber (1,825 SF)	M2	170	(b) (5) [redacted]	
Special Costs & Technical Operating Manuals	LS	1		
Anti-Terrorism/ Force Protection	LS	1		
EPACT & LEED Compliance	LS	1		
SUPPORTING FACILITIES				(b) (5) [redacted]
Electrical Utlities	LS			
Mechanical Utilities	LS			
Paving and Site Improvements	LS			
Earthwork	LS			
Environmental Mitigation	LS			
Anti-Terrorism / Force Protection	LS			
LEED, LID, EPAct Compliance	LS			
SUBTOTAL				
CONTINGENCY (20.0%)				
TOTAL CONTRACT COST				
SIOH (6.2%)				
SUBTOTAL				
DESIGN BUILD – DESIGN COST (4%)				
TOTAL REQUEST				
TOTAL REQUEST (ROUNDED)				
EQUIPMENT FROM OTHER APPROPRIATIONS				
*Equipment from other appropriations will be determined at a later date.				

10. DESCRIPTION OF PROPOSED CONSTRUCTION:

PRIMARY FACILITY: Construct a one-story building to function as a chemical warfare, gas chamber training facility. The Gas Chamber provides a facility for training personnel in the use of protective masks and the effects of chemical warfare. The building will contain two gas chambers. During training conditions, these gas chambers will create a hostile environment as trainers release gas agents into the room(s). The facility is designed to accommodate 20 trainees at one time, 10 in each gas chamber. Individual entrance and exit vestibules are located adjacent to each gas chamber for controlled access and circulation once inside the facility.

The building shall be constructed of reinforced concrete with walls, flooring, foundation, windows, roofing

(Continued On DD 1391C…)

(…continued)

to accommodate a gas chamber. The project provides mechanical, electrical and information systems appropriate to Guam earthquake and environmental conditions. The building shall follow Tear Gas Training Facility Standard Design for 10 Trainees prepared by U.S. Army Corps of Engineers, Omaha District. The building shall be designed to meet applicable Unified Facilities Criteria (UFC) including appropriate Anti-Terrorism/Force Protection (AT/FP) requirements. Facilities will be equipped with automatic fire sprinklers and exhaust system.

Project also includes Operation and Maintenance Support Information (OMSI). Geospatial and other digital data will be provided as part of the OMSI documentation for this construction. The project also provides for Post Construction Award Services (PCAS).

Sustainable design features will be integrated into the design, development and construction of the project in accordance with applicable Energy Policy Act 2005, 2007 Energy Independence and Security Act (EISA), 2007 Executive Order 13423, 2009 Executive Order 13514 and Assistant Secretary of the Navy Installations & Environment (ASN I&E) memorandum dated 4 August 2006. The project will be designed to meet or exceed Leadership in Energy and Environmental Design (LEED) Silver Rating.

Design of the facility will comply with the Marine Corps Base Guam Installation Appearance Plan and the NAVFAC MAR Common Components Study.

SUPPORTING FACILITY: The project will also construct support facilities, which include site improvements, electrical and mechanical systems, environmental mitigation and workforce logistics.

This project provides for special construction features for Low Impact Development (LID) for storm drainage, and a Storm Water Pollution Prevention Plan (SWPPP) in accordance with UFC 3-210-10 Low Impact Development and other environmental laws and regulations.

Site preparation includes excavation/finished grading, clearing and grubbing, and site cleanup.

The project provides for site improvements consisting of paved roads and parking, sidewalks (with non-slip surface), curbs, gutters, landscaping, and supporting facility EPACT LEED features including pedestrian and bicycling features and storm water drainage improvements. Pedestrian and bicycling features include bike rack, benches and trash enclosure. Storm water drainage improvements include standard 6-inch concrete curbs, standard two-foot-wide concrete gutters, drywell catch basins, cisterns, tree box filter planters, infiltration trenches, grassed swales, and bio-retention basins.

The project will construct 18 parking stalls for non-organizational parking, bus/shuttle turn-around, and access road into the site. Facility shall include perimeter fencing and entrance gate into site.

Electrical systems include new lines and meters for communications (telephone), primary and secondary electrical distribution, exterior site and building lighting and a step-down transformer**.** Emergency power is not required for this facility.

Mechanical systems include new lines and meters for water utilities and a storm drainage system. Cathodic protection will be required if steel underground piping is used. This project includes connection to the utility infrastructure, (potable water, electric power, storm drainage, etc.) as provided by the Guam Utilities & Site Improvements projects.

The project provides mitigation for cultural and environmental resources impacted by construction of the

(…continued)

new MCB Guam. Cultural resource mitigation (specifically archaeological monitoring) is required for Section 106, National Historic Preservation Act compliance. Environmental mitigation is required for radon gas (including soil barriers, monitoring and venting) because radon gas is known to be naturally occurring on Guam. Clearance for munitions and explosives of concern (MEC) is not required for this project.

Workforce Logistics will support the housing, feeding, medical care, transportation, and security of the off-island workforce coming to Guam. The cost for all these provisions will be shared among all the new facilities planned for Guam.

11. REQUIREMENT:

SCOPE: The project scope is derived from UFC 2-000-05N, Facility Planning for Navy and Marine Corps Shore Installations (formerly known as P80), for category code number 172-30, and follows the Tear Gas Training Facility Standard Design for 10 Trainees prepared by U.S. Army Corps of Engineers, Omaha District.

PROJECT:
This project constructs a Gas Chamber Building in the Finegayan area of Marine Corps Base, Guam, for training of combat units relocating from various sites in Okinawa, Japan.

REQUIREMENT: A standard design Tear Gas Training Facility is required to train Marines to operate under chemical attacks, including how to put on personal protective gear in a hostile environment.

CURRENT SITUATION: There are no existing training facilities of this type on Guam.

IMPACT IF NOT PROVIDED: This project is part of the relocation of USMC from Okinawa to Guam and is part of the suite of training facilities required to support the USMC training program on Guam. Without this facility, the Marines will not be able to meet their individual training requirements..

ADDITIONAL: Economic Alternatives Considered:

A. Status Quo: The US and Japanese governments have bilaterally agreed to relocate the Marines from Okinawa to Guam. Status Quo will jeopardize the bilateral agreement. This is not a viable alternative.

B. Renovation/Modernization: There are no existing facilities of this type at Finegayan. This is not a viable alternative.

C. New Construction: This alternative is the recommended course of action.

D. Other Alternatives: No other alternatives were considered for this project.

E. Analysis Results: Since there are no other alternatives than new construction, the new construction alternative is recommended for funding.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Ind Combat Skills Trng	Individual Combat Skills Training

Individual Combat Skills Training

1. Component	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date
USMC		APR 08

3. Installation and Location/UIC:	4. Project Title
FINEGAYAN, GUAM	INDIVIDUAL COMBAT SKILLS TRAINING

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	179-XX	USMC #1	(b) (5) [redacted]

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
PRIMARY FACILITY				(b) (5) [redacted]
Obstacle Course	EA	1.00	(b) (5) [redacted]	
Hand to Hand Combat Pit	EA	1.00		
Leadership Reaction Course	EA	1.00		
Gas Chamber	SF	4000		
Rappelling Training Area	EA	1.00		
Covered Mess	SF	3,800		
Environmental Mitigation	EA	1.00		
LEED Silver Rating and EPAct05	SF	7800		
OMSI	EA	1.00		
PCAS	EA	1.00		
Anti-Terrorism / Force Protection	LS			
Building Information Systems	LS			
SUPPORTING FACILITIES				
Electric Service	LF	750		
Water, Sewer, & Gas	LF	3050		
Storm Drainage	LF	500		
Site Improvement/Demolition	SY	8700		
Information Systems	LS			
ESTIMATED CONTRACT COST				
CONTINGENCY (10%)				
SUBTOTAL				
SIOH (6.2%)				
DESIGN/BUILD-DESIGN COST (4%)				
PROJECT COST				
PROJECT COST (ROUNDED)				
EQUIPMENT FROM OTHER APPROPRIATIONS				

(Continued On DD 1391C…)

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date APR 08
3. Installation and Location/UIC: FINEGAYAN, GUAM		
4. Project Title INDIVIDUAL COMBAT SKILLS TRAINING		7. Project Number USMC #1

(…continued)

10. Description of Proposed Construction

Project constructs training facilities to support individual use of gas masks, an obstacle course, a rappelling tower, and a leadership reaction course. The gas mask training facility consists of a single story CMU building on spread footings or mat foundation with concrete floor and standing seam metal roof. The facility includes a 15LF x 40LF (600SF) gas chamber and a 30LF x 50LF (1500SF) classroom space, 300SF office, 300SF mechanical room, 300SF audio visual room and 1000SF toilet and shower facility. A RADON extraction system is included for the Gas Chamber Training Facility. The obstacle course consists of a two lane outdoor complex of wooden obstacles that are approximately 30LF wide and 300LF long that require individuals to hop, climb, crawl and pull over to complete the course. The obstacle course tests speed, strength and coordination. The rappel tower shall be a concrete facility with a 60LF rappel capability, 20LF climbing wall, a 4th-story room with outside wall breach capability and a helicopter platform. The leadership reaction course is an outdoor complex consisting of a 17 station challenge course. The Hand-to-Hand Combat Training Pit consists of a sand filled area with an impermeable liner and drainage system. The covered Mess Facility consists of a concrete floor, wooden structure and standing seam metal roof. Administrative telephone and internet connectivity are required for the gas mask training facility. Telephone capabilities are required for the other training facilities to support health and safety requirements. Support facilities include extension of water and power utilities to the site and project related site improvements such as sidewalks, exterior lighting and seeding. A new pump station and force main shall discharge sewage collected on site to a sanitary line on Bullard Ave.

LEED Silver Certification is included for the Gas Chamber Training facility and Covered Mess facility. Sustainable design will be integrated into the design development, and construction of the project in accordance with Executive Order 13123 and other directives. The facilities associated with the Gas Chamber Training Facility will comply with the Federal Energy Policy Act of 2005.

Funding for Technical Operating Manuals for the Gas Chamber Training facility has been included in this project.

AT/FP setbacks and construction measures shall be incorporated into the design and construction of these facilities.

Environmental mitigation has been added to the project. Two percent of the primary facility cost has been added to the project cost for environmental mitigation. Environmental studies are being performed in the NEPA process and will define specific mitigation required. The Environmental Impact Statement (EIS) will be complete in 2009.

11. Requirement:

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date APR 08
3. Installation and Location/UIC: FINEGAYAN, GUAM		
4. Project Title INDIVIDUAL COMBAT SKILLS TRAINING		7. Project Number USMC #1

(…continued)

NOTES:

SCOPE: The project scope was derived using the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces & similar facilities at other Marine activities. These facilities provide critical elements for supporting Combat Skills Training.

PROJECT: This project constructs a Gas Mask Training Facility, an Obstacle Course, a Rappelling Facility, a Leadership Reaction Course, a Hand-to-Hand Combat Training Area, and a covered Mess Facility to support Combat Skills Training.

REQUIREMENT: All Marines are required by MCO 1510.90 Common Skills to use a gas chamber annually as part of their individual training. 8000 Marines are scheduled to move to Guam and will use this facility. The gas chamber is designed based on similar facilities observed at MCB Camp Pendleton The size of the gas chamber is sufficient to train platoon-level units (~ 50 Marines) over the course of a two hour period. The Obstacle Course supports physical fitness training, a daily part of Marine Corps training and will be utilized by platoon-size (~ 50 Marines) or company-size (~ 200 Marines) units to improve combat skills. The Obstacle Course was patterned after examples currently in use at Camp Pendleton. The Rappel Tower and Leadership Reaction Course are anticipated to be used on a weekly basis as directed by unit commanders to enhance physical conditioning, build teamwork and develop leadership skills. The facilities for Finegayan have been designed to accommodate small unit leader training (squad-size (~ 12 Marines) to platoon-size (~ 50 Marines)), as directed by the Commanding Officer; consequently throughput varies depending on the training plans developed by individual commanders. The Rappel Tower and Leadership Reaction Course were patterned after facilities currently used by the U.S. Marine Corps and the U.S. Army. All of these Common Skills-type facilities would be built to the current specification whether there are 900 Marines using them or 9,000. A covered mess area has been provided to support the training since there is no dining facility in close proximity to the training facilities.

CURRENT SITUATION: There are no facilities on Guam or CNMI that can provide this critical combat skills training.

IMPACT IF NOT PROVIDED: Physical fitness and combat skills/leadership training are essential components of Marine readiness. If these facilities are not constructed, the activity will not be able to effectively train Marines in Individual Combat and leadership skills. Consequently, the ability to sustain readiness may be seriously compromised.

ADDITIONAL: Economic Alternatives Considered:

A. Status Quo: This alternative was considered but rejected. The training must be performed and there are no existing facilities that can be used to satisfy the combat and leadership skills requirement

B. Renovation/Modernization: There are no existing facilities to renovate.

C. Lease: There are no suitable private facilities on the island that can be leased to satisfy the requirements of this project.

D. New Construction: This alternative is the recommended course of action.

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date APR 08

3. Installation and Location/UIC:
FINEGAYAN, GUAM

4. Project Title	7. Project Number
INDIVIDUAL COMBAT SKILLS TRAINING	USMC #1

(…continued)

BUDGET ESTIMATE SUMMARY SHEET: Attached

A. Estimated Design Data:

1. Status:

(A) Date Design Start (Design Authorization)	Jul 2008
(B) Date Design 35% Complete (RFP for Design Build)	Feb 2009
(C) Date design completed	Sep 2010
(D) Percent completed as of September (2008)	0%
(E) Percent completed as of January (2009)	0%
(F) Type of design contract	Design Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	No

2. Basis:

(A) Standard or Definitive Design	No
(B) Where design was previously used	N/A

3. Total cost (C) = (A) + (B) = (D) + (E):

(A) Production of plans and specifications	(b) (5) [redacted]
(B) All other design costs	
(C) Total	
(D) Contract	
(E) In-house	
4. Contract award:	Mar 2010
5. Construction start:	Sep 2010
6. Construction complete:	Jan 2012

Major Equipment	Funding Source	Fund Year	Installation Start-End Mo/Yr	Shakedown Start-End Mo/Yr	IOC Date Mo/Yr	Cost
Furniture	O&M	FY11	10/2011-12/2011	11/2011-12/2011	01/2012	(b) (5) [redacted]
Audio/Visual Equipment	O&M	FY11	10/2011-12/2011	11/2011-12/2011	01/2012	
Training Equipment	O&M	FY11	10/2011-12/2011	11/2011-12/2011	01/2012	

JOINT USE CERTIFICATION:
The Regional Commander certifies that this project has been considered for joint use potential. Joint Use is recommended.

Activity POC: TBD Phone No:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
TIN Base Camp I	Tinian Base Camp I

1500/3000 Man Base Camp (Phase One)

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date APR 2008

3. Installation and Location/UIC: TINIAN, CNMI	4. Project Title 1500/3000 MAN BASE CAMP (Phase One)		
5. Program Element	6. Category Code 721-50	7. Project Number USMC #13A	8. Project Cost ($000) (b) (5)

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
1500/3000 MAN BASE CAMP (Phase One)				(b) (5)
Dining Facility	SF	13,500.00		
Medical Clinic	SF	3,000.00	(b) (5)	
Classroom	SF	9,760.00	(b) (5)	
Fire Station/Security Office	SF	13,500.00	(b) (5)	
Refueler Pad	SY	9,261.00	(b) (5)	
Organizational Storage	SF	10,000.00	(b) (5)	
Hazardous Waste Storage Building	SF	240.00	(b) (5)	
Concrete Aprons for POL, HAZMAT	SY	11,421.00	(b) (5)	
Access Control Facility	SF	400.00	(b) (5)	
Cold Storage Warehouse	SF	2,000.00	(b) (5)	
Kennel	SF	1,300.00	(b) (5)	
Range Operations & Maintenance	SF	10,000.00	(b) (5)	
EW Emitter Pad	SY	70.00	(b) (5)	
Armory	SF	575.00	(b) (5)	
Latrines (12)	SF	10,800.00	(b) (5)	
Hutments Surge Area	SY	16,800.00	(b) (5)	
Hutments Company Ops Surge Area	SY	1,800.00	(b) (5)	
Standby Generator –DFAC/ Medical / Fire / Cold Storage	LS			
Special Costs	SF	61,760.00	(b) (5)	
LEED Certification	SF	52,735.00		
OMSI	LS			
PCAS	EA			
Environmental Mitigation	LS			
Anti-Terrorism / Force Protection	LS			
Building Information Systems	LS			
SUPPORTING FACILITIES				
Electrical Utilities	LS			
Mechanical Utilities	LS			
Paving, Walks, Curbs, & Gutters	LS			
Storm Drainage	LS			
Site Imp(6025)/Demo(0)	LS			
Information Systems	LS			
Anti-Terrorism / Force Protection	LS			
ESTIMATED CONTRACT COST				
CONTINGENCY (10%)				
SUBTOTAL				
SIOH (6.2%)				
DESIGN/BUILD-DESIGN COST (4%)				
PROJECT COST				
PROJECT COST (ROUNDED)				
EQUIPMENT FROM OTHER APPROPRIATIONS				

(Continued On DD 1391C…)

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date APR 2008
3. Installation and Location/UIC: TINIAN, CNMI		
1500/3000 MAN BASE CAMP (Phase One)		7. Project Number USMC #13A

(…continued)

10. Description of Proposed Construction

This project constructs a Base Camp for 1,500 with expansion capability to support up to 3,000 Marines (3 Battalions). The project is divided into two phases. Phase one constructs the essential facilities required to operate the camp. Phase two constructs the remaining elements found in a Base Camp. Phase one buildings include a Dining Facility, a Medical Clinic, Classrooms, Fire Station/Security facility, Organizational Storage, Hazardous Waste Storage, Access Control Facility, Cold Storage Warehouse, a Kennel, a Range Operations and Maintenance building, an Armory, and Latrines. Building construction is anticipated to include mat foundations, radon barrier, concrete floors, CMU walls, and standing seam metal roofs. Facilities shall replicate austere field operations or advanced base facilities but must also be substantial enough to withstand typhoon wind loads and seismic level 4 conditions. Each critical facility (dining, medical, fire station/security and cold storage warehouse) shall have backup power generation to

(…continued)

maintain operational capabilities in emergency situations. Construction includes concrete pads for Hutments/surge and Company Operations area, POL/HAZMAT area, an EW Emitter, and Refueler containment.

Project includes Technical Operating Manuals.

Applicable portions of the project will be designed to meet LEED Certification. Silver LEED certification is the goal but may be hard to achieve on this type facility. Maximum LEED checklist points possible shall be achieved during design.

Environmental mitigation funding has been identified as a percentage of the primary facility cost to respond to issues identified during the NEPA process.

Information systems include wiring for local area network (LAN), fiber optics, telephone, public address, cable television, and intrusion detection system for the camp buildings.

The project provides for design for Anti-terrorism Force Protection (AT/FP) features and complies with AT/FP regulations and physical security in compliance with Military Handbook 1024/1 Unified Facilities Criteria (UFC) 4-101-01 DOD Minimum Anti-Terrorism Standards for Buildings.

The project provides for special costs for typhoon conditions and seismic level 4 earthquake zone.

SUPPORTING FACILITIES:

Electrical Utilities shall be extended to the camp from a Tinian private power source. Camp construction includes electrical distribution, communications distribution to the buildings, perimeter fence and camp lighting, switch gear, and transformers. The project also includes back up generation for critical facilities.

Mechanical Utilities include water and sanitary sewer. Water utilities include an offsite well rehabilitation and water treatment system, water line extension to the camp, water storage tank, water pump station, camp water distribution system with fire hydrants for fire protection. Sanitary utilities include a camp sewage collection system, a sewage pump station, force main, and off site package sewage treatment plant. An island sanitary treatment system is planned to be constructed. During design of the project the camp may be able to connect to the proposed system if available. Project assumes the worst case scenario for budget purposes.

Paving and site improvements provide for camp parking, roads, sidewalks, landscaping, and concrete pads for POL/HAZMAT, EW Emitter, and Refueler containment. The parking is required to support operational vehicles. Personnel deployed for training will not have personal vehicles.

The project provides for site preparation including clearing and grubbing, site grading, storm drainage and site clean-up. The storm drainage includes collection inlets, underground piping, and a oil water separator.

The project provides Anti-terrorism Force Protection (AT/FP) setbacks and construction features and shall comply with AT/FP regulations and physical security. The design shall be in compliance with Military Handbook 1024/1 and Unified Facilities Criteria (UFC) 4-101-01 DOD Minimum Anti-Terrorism Standards for

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date APR 2008

3. Installation and Location/UIC:
TINIAN, CNMI

1500/3000 MAN BASE CAMP (Phase One)	7. Project Number USMC #13A

(…continued)

Major Equipment	Funding Source	Fund Year	Installation Start-End Mo/Yr	Shakedown Start-End Mo/Yr	IOC Date Mo/Yr	Cost
Collateral Equipment	OPN	2012				(b) (5)
Dining/Medical/Fire						
Security/Storage/Armory						
Range Operations / Classroom						
Armory						

A table of allowance for equipment and vehicles has been developed for this training complex by MARFORPAC.

JOINT USE CERTIFICATION:
The Regional Commander certifies that this project has been considered for joint use potential. Joint Use is recommended.

Activity POC: Phone No:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
TIN Aviation Landing	Tinian Aviation Landing Practice

North Field Helicopter Operations

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date APR 2008

3. Installation and Location/UIC: N61755 TINIAN	4. Project Title NORTH FIELD HELICOPTER OPERATIONS

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	111-15	USMC #19	(b) (5)

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
PRIMARY FACILITY				(b) (5)
Fuel Containment	SY	1244.00	(b) (5)	
Environmental Mitigation	EA	1.00	(b) (5)	
SUPPORTING FACILITIES				
ESTIMATED CONTRACT COST				
CONTINGENCY (10%)				
SUBTOTAL				
SIOH (6.2%)				
DESIGN/BUILD-DESIGN COST (4%)				
PROJECT COST				
PROJECT COST (ROUNDED)				
EQUIPMENT FROM OTHER APPROPRIATIONS				

10. Description of Proposed Construction

This project constructs a fuel bladder containment consisting of a concrete pad, berm / curb, and piped collection system in support of Marine helicopter training. The bermed area is to provide fuel containment for any potential fuel spills resulting from expeditionary refueling operations. The project provides for site preparation and site clean-up. A fire protection system will be needed to support fueling operations. The water system improvements in USMC #23 Tinian Infrastructure Upgrade will provide the water source.

Environmental mitigation funding has been identified as a percentage of the primary facility cost to respond to issues identified during the NEPA process.

(Continued On DD 1391C…)

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date APR 08
3. Installation and Location/UIC: N61755 TINIAN		
4. Project Title NORTH FIELD HELICOPTER OPERATIONS		7. Project Number USMC #19

(…continued)

NOTES:

SCOPE: This project scope was derived using the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. North Field, Tinian requires an environmentally safe expeditionary refueling capability. A fuel bladder containment area shall be constructed to protect the environment from fuel spills during helicopter refueling operations. The facility is sized for the bladders used during expeditionary refueling operations.

PROJECT: This project constructs a concrete fuel bladder containment facility.

REQUIREMENT:
Realistic night operations with night vision goggles and air crew refueling operations are a critical training element for helicopter pilots and crew. The bladder containment facility provides an environmentally safe helicopter expeditionary refueling training capability to an existing runway.

CURRENT SITUATION: There are no facilities on Tinian currently configured to provide this critical training.

IMPACT IF NOT PROVIDED: If this project is not constructed, the Marines will not be able to effectively train in required expeditionary refueling and flight skills. Consequently, the ability to sustain readiness will be seriously compromised.

ADDITIONAL: Economic Alternatives Considered:

A. Status Quo: This alternative was considered but rejected. The training must be performed.

B. Renovation/Modernization: This project is an improvement to existing infrastructure.

C. Lease: There are no suitable private facilities on the island that can be leased to satisfy the requirements of this project.

D. New Construction: This alternative is not the recommended course of action.

E. Other Alternatives: None.

F. Analysis Results: There is no viable alternative to analyze.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
TIN Ammo Storage	Tinian Ammo Storage

Ammunition Storage

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date MAY 2008

3. Installation and Location/UIC: TINIAN, CNMI	4. Project Title AMMUNITION STORAGE

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	421-22	USMC #14	(b) (5) [redacted]

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
AMMUNITION STORAGE				(b) (5) [redacted]
Igloo HE Magazine	SF	24,000.00	(b) (5) [redacted]	
Earth cover for Igloos	CY	7920.00		
Lightning Protection System	EA	6.00		
Security System	EA	6.00		
Concrete Igloo Pads	SY	1,066.00		
Segregation Facility	SF	1500		
Ordnance Operations Building	SF	1,000.00		
Access Control Facility	SF	100		
Special Costs	SF	29,000.00		
Environmental Mitigation	EA	1.00		
OMSI	EA	1.00		
PCAS	EA	1.00		
LEED Certification	LS			
Building Information Systems	LS			
SUPPORTING FACILITIES				
Electrical Utilities	LS			
Mechanical Utilities	LS			
Paving, Walks, Curbs, & Gutters	LS			
Storm Drainage	LS			
Site Improvements	LS			
Information Systems	LS			
Security Fence	LS			
ESTIMATED CONTRACT COST				
CONTINGENCY (10%)				
SUBTOTAL				
SIOH (6.2%)				
DESIGN/BUILD-DESIGN COST (4%)				
PROJECT COST				
PROJECT COST (ROUNDED)				
EQUIPMENT FROM OTHER APPROPRIATIONS				

(Continued On DD 1391C)

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date MAY 2008
3. Installation and Location/UIC: TINIAN, CNMI		
4. Project Title AMMUNITION STORAGE		7. Project Number USMC #14

(…continued)

10. Description of Proposed Construction

This project constructs an ammunition supply point for storage and distribution of ordnance used on the combined arms ranges on Tinian. Construction consists of six 40 ft x 100 ft earth covered Hyman igloo magazines, a 1500 SF segregation facility, a 1000 SF ordnance operations building, an access control facility, and associated lightning protection and security systems. Building construction shall be concrete floors, CMU walls and standing seam metal roofs and shall be provided with electrical and mechanical systems. Special costs include mat foundations and radon barriers. Electrical utilities include extending power and communications to the facilities and exterior lighting. Mechanical utilities include extending water to the site for fire protection and potable uses. A sanitary sewer line shall connect the segregation and Ordnance Operation buildings with the base camp sewer system. Paving and site improvements provide for parking, roads, sidewalks, and perimeter security fencing. The site preparation includes clearing and grubbing, fill, grading and drainage, seeding disturbed areas and site clean-up.

Environmental mitigation funding has been identified as a percentage of the primary facility cost to respond to issues identified during the NEPA process. A Phase II Historic Archeology Data Recovery effort has been identified as a requirement to investigate potential Japanese farmsteads.

Project includes Technical Operating Manuals for the facilities and security systems.

Facilities will be designed to meet LEED Certification.

The project provides special costs for typhoon wind loads and seismic level 4 earthquake zone.

SCOPE: This project scope was derived using the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. Project provides an ammunition storage point servicing the combined arms training ranges on Tinian. Facilities are based on operational requirements for an ammunition storage point. Ammunition storage requirements are based on table of allowances provided by III MEF.

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date MAY 2008
3. Installation and Location/UIC: TINIAN, CNMI		
4. Project Title AMMUNITION STORAGE		7. Project Number USMC #14

(…continued)

PROJECT: Construct six 40 x 100 Hyman earth covered igloo high explosive magazines, a 1,500 SF segregation facility, 1,000 SF operations building, road network, security systems, fencing and supporting facilities.

REQUIREMENT:
The firing ranges on Tinian will need ammunition storage facilities to operate. The allowance table provided by III MEF requires four magazines of this size to meet storage and segregation requirements. One additional magazine has been added for storage of munitions from other countries and one for material being returned to inventory for a total of six magazines.

CURRENT SITUATION: There are no facilities on Tinian to provide this storage capability.

IMPACT IF NOT PROVIDED: If this project is not executed, the Marines will fail to effectively train in Combat skills. Consequently, the ability to sustain readiness will be seriously compromised.

ADDITIONAL: Economic Alternatives Considered:

A. Status Quo: This alternative was considered but rejected. The training must be performed and there are no existing facilities to store ordnance.

B. Renovation/Modernization: There are no existing facilities to renovate.

C. Lease: There are no suitable private facilities on the island that can be leased to satisfy the requirements of this project.

D. New Construction: This alternative is the recommended course of action.

E. Other Alternatives: None.

F. Analysis Results: There is no viable alternative to analyze.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Dr Convoy Course	Convoy Course

Driver/Convoy Course

BUDGET ESTIMATE SUMMARY SHEET

J-725 FY16

TITLE: DRIVER/CONVOY COURSE
INSTALLATION: ANDERSEN SOUTH GUAM
LOCATION: ANDERSEN AB, GUAM

PREPARED BY: NAVFAC PACIFIC

AUGUST 2013

DATE ESCALATED TO: OCT 2016
DESIGN STATUS: ACTIVITY 1391
ESCALATION FACTOR: 1.06110

AREA COST FACTOR: 2.32

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST	COST TRANSFERRED TO 1391 Sum (Rnd, 10K)
DRIVER/CONVOY COURSE	LS	--	(b) (5) [redacted]	(b) (5) [redacted]	(b) (5) [redacted]
WHEELED VEHICLE DRIVER'S COURSE	M2	14,674			
Earthwork	M3	38700			
Gravel Road	M2	1815			
Gravel Road/Shoulder	M2	12859			
Structures & Obstacles	LS	--			
SPECIAL COSTS	LS	--			
Post Construction Award Services	EA	0.010			
Guam Gross Receipts Tax	EA	0.04166			
SUPPORTING FACILITIES	LS	--			
SITE PREPARATION					
Clear/Grub	HA	6.7			
Contaminated Soil Mitigation	M3	1197			
PAVING AND SITE IMPROVEMENTS	LS	--			
AC Paved Road	M2	3823			
Gravel Parking Lot	M2	630			
Landscaping	M2	33700			
Entry Gate/Flag Pole	EA	2			
ENVIRONMENTAL MITIGATION	LS	--			
UXO/MEC Mitigation	HA	6.6			
Cultural Resource Mitigation	LS	1			
Natural Resource Mitigation	LS	1			
SUBTOTAL					(b) (5) [redacted]

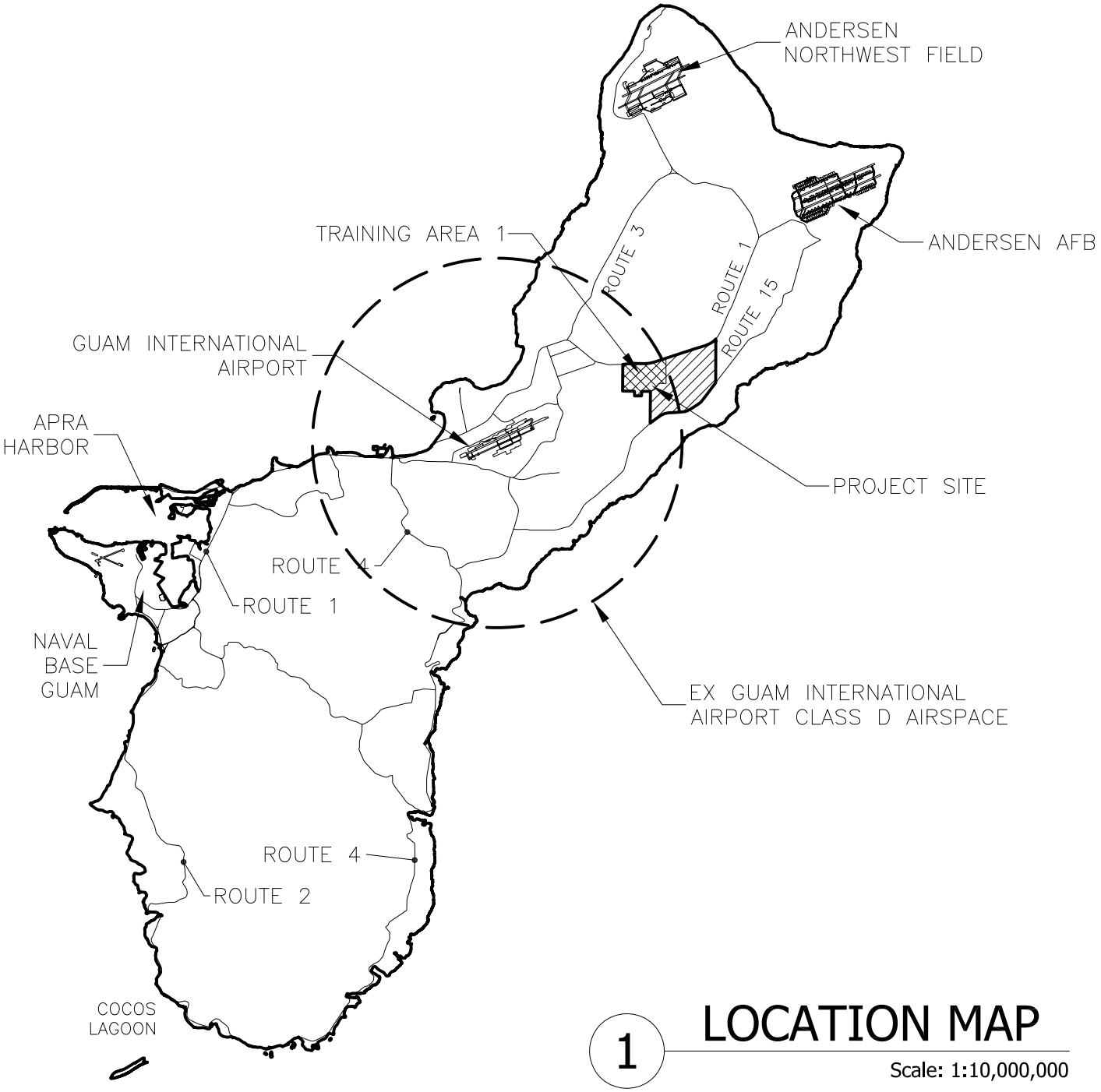
CONTINGENCIES 5%	(b) (5) [redacted]
TOTAL CONTRACT COST	
SIOH 6.2%	
SUBTOTAL	
TOTAL REQUEST	
TOTAL REQUEST (ROUNDED)	

1. COMPONENT		2. DATE
USMC	FY 2015 MILITARY CONSTRUCTION PROGRAM	19 SEPTEMBER 2013

3. INSTALLATION AND LOCATION

ANDERSEN SOUTH, GUAM

4. PROJECT TITLE	5. PROJECT NUMBER
DRIVER AND CONVOY COURSE	J-725



1 LOCATION MAP

Scale: 1:10,000,000

NORTH

0 500,000 1,000,000m

SCALE: 1:10,000,000

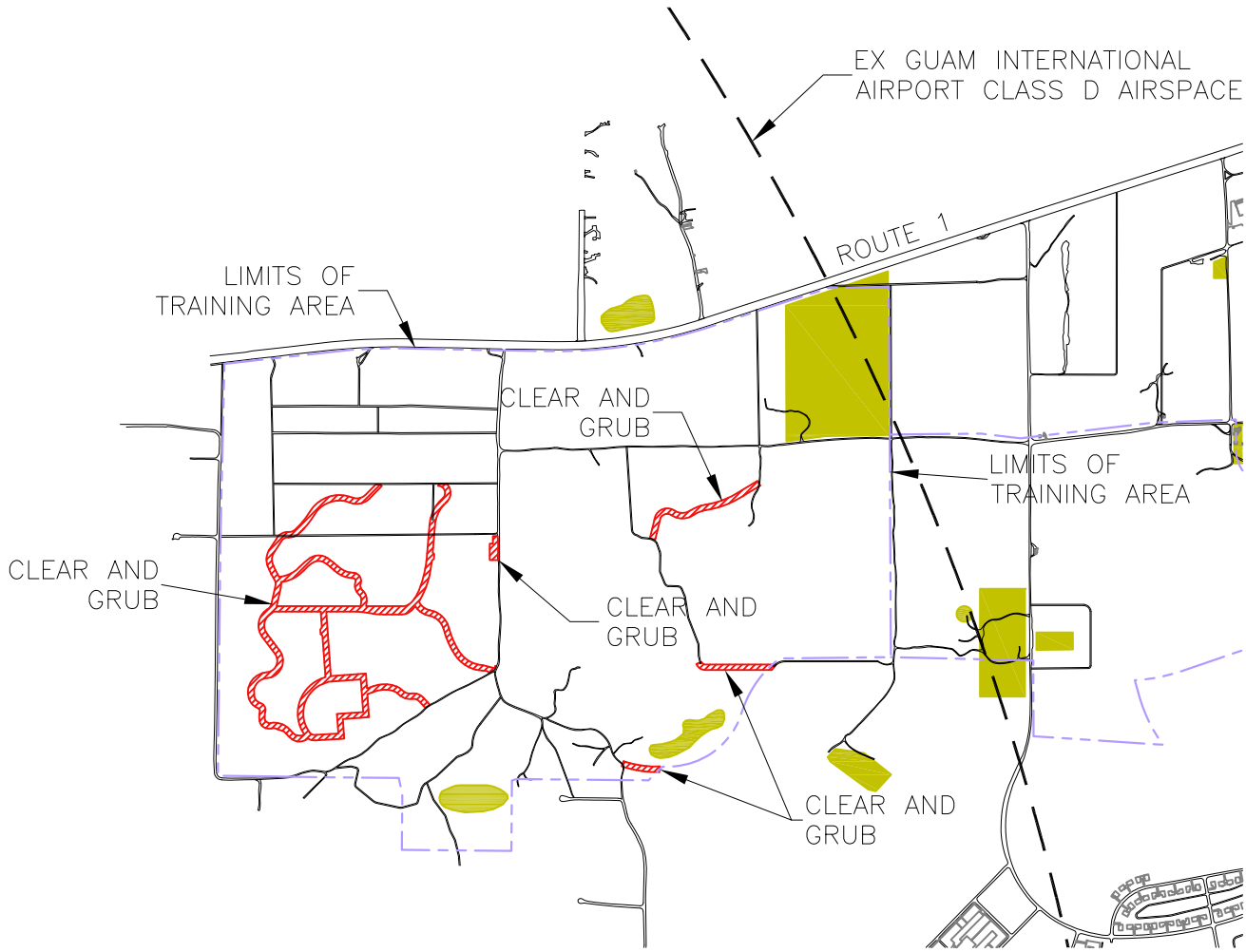
DD FORM 1 DEC 76 1391c

1. COMPONENT		2. DATE
USMC	FY 2015 MILITARY CONSTRUCTION PROGRAM	NOVEMBER 2013

3. INSTALLATION AND LOCATION

ANDERSEN SOUTH, GUAM

4. PROJECT TITLE	5. PROJECT NUMBER
DRIVER AND CONVOY COURSE, TRAINING AREA 1	J-725



LEGEND

CLEAR AND GRUB

EX ROAD

TRAINING AREA

IRP/AOC SITES

NORTH

0100 500

SCALE: 1:20000

2

TRAINING AREA 1 SITE PREPARATION

Scale: 1:20,000

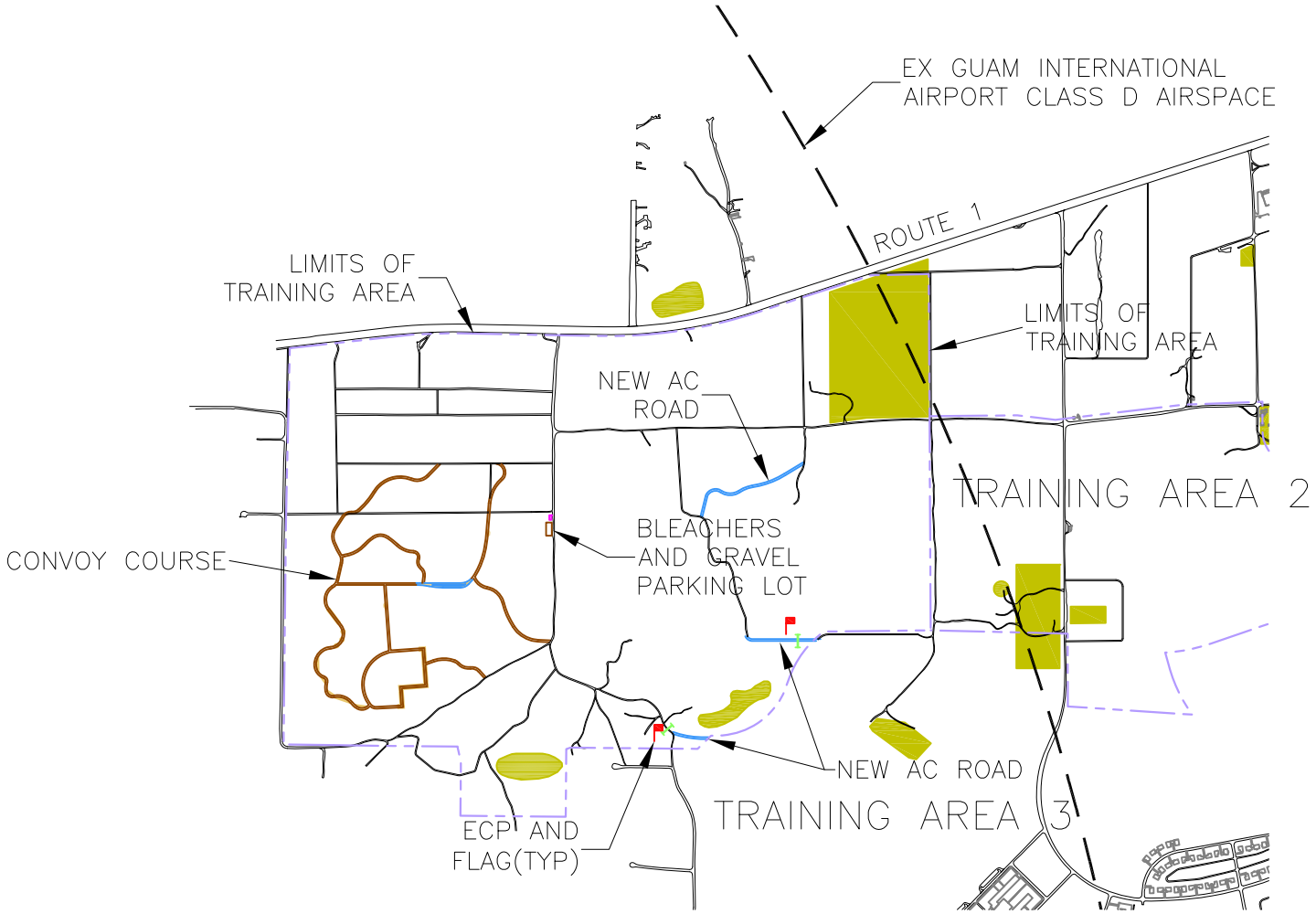
DD FORM 1 DEC 76 1391c

1. COMPONENT		2. DATE
USMC	FY 2015 MILITARY CONSTRUCTION PROGRAM	NOVEMBER 2013

3. INSTALLATION AND LOCATION

ANDERSEN SOUTH, GUAM

4. PROJECT TITLE	5. PROJECT NUMBER
DRIVER AND CONVOY COURSE, TRAINING AREA 1	J-725



LEGEND

GRAVEL ROAD

AC ROAD

EX ROAD

TRAINING AREA

IRP/AOC SITES

0100 500

SCALE: 1:20000

NORTH

3

TRAINING AREA 1 SITE PLAN

Scale: 1:20,000

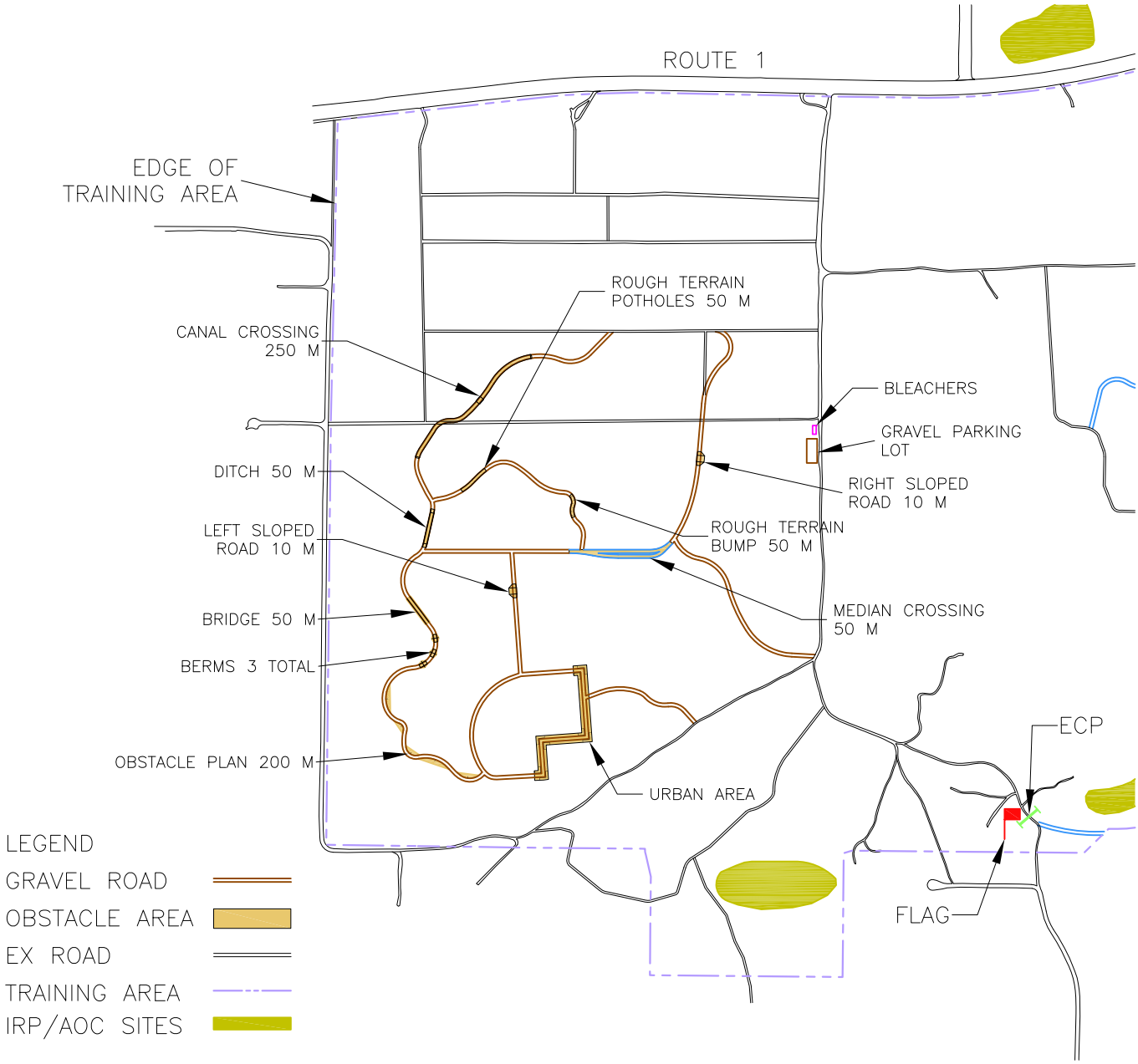
DD FORM 1 DEC 76 1391c

1. COMPONENT		2. DATE
USMC	FY 2015 MILITARY CONSTRUCTION PROGRAM	NOVEMBER 2013

3. INSTALLATION AND LOCATION

ANDERSEN SOUTH, GUAM

4. PROJECT TITLE	5. PROJECT NUMBER
DRIVER AND CONVOY COURSE, TRAINING AREA 1	J-725



0 50 250

SCALE: 1:10000

4 CONVOY COURSE

Scale: 1:10,000

NORTH

DD FORM 1 DEC 76 1391c

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Urban Combat Trng	Urban Combat Training

Urban Combat Skills Training Courses

BUDGET ESTIMATE SUMMARY SHEET

J-755 FY16

TITLE: URBAN COMBAT SKILLS TRAINING COURSES AUGUST 2013
INSTALLATION: ANDERSEN SOUTH GUAM
LOCATION: ANDERSEN AB, GUAM DATE ESCALATED TO: OCT 2016
DESIGN STATUS: ACTIVITY 1391
PREPARED BY: NAVFAC PACIFIC ESCALATION FACTOR: 1.06110

AREA COST FACTOR: 2.32

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST	COST TRANSFERRED TO 1391 Sum (Rnd, 10K)
URBAN COMBAT SKILLS TRAINING COURSES	LS	--	(b) (5) [redacted]	(b) (5) [redacted]	(b) (5) [redacted]
RANGE OPERATIONS CENTER (ROC)	M2	509			
WAREHOUSE	M2	929			
OTHER URBAN COMBAT SKILLS STRUCTURES	LS	--			
Urban Mout	M2	7,968			
Embassy	M2	765			
Grenade Range	M2	19,877			
Live Fire Closte Quarters Building	M2	648			
Breacher House	M2	73			
BUILT-IN-EQUIPMENT	LS	--			
ROC Raised Flooring Premium	M2	150			
SPECIAL COSTS	LS	--			
Post Construction Award Services	EA	0.010			
Guam Gross Receipts Tax	EA	0.04166			
LEED & EPACT 2005(Inside)	LS	--			
Commissioning - Enhanced	M2	1,438			
Chillers & Cooling Towers	M2	1,438			
SUPPORTING FACILITIES	LS	--			
SITE PREPARATION	LS	--			
Clear/Grub	HA	44.6			
Earthwork	M3	185,600			
Contaminated Soil Mitigation	M3	8,200			
PAVING AND SITE IMPROVEMENTS	LS	--			
AC Paved Road	M2	4,620			
Gravel Road/Shoulder	M2	17,930			
AC Paved Parking (48 Stalls)	M2	3,040			
Gravel Parking (72 Stalls)	M2	1,950			
Demolish AC Pavement	M2	17,780			
Demolish Concrete Sidewalk	M2	3,215			
Landscaping	M2	354,062			
Perimeter Fencing	M	14,187			
ELECTRICAL UTILITIES	LS	--			
Electrical Distribution System, Primary	M	4,000			
Electrical Distribution System, Secondary	M	500			
Area Lighting	EA	60			
Exterior Communication Off-Site (Inside Perimeter Fence)	M	9,600			
Exterior Communication Off-Site (Outside Perimeter Fence)	M	18,800			
Exterior Communication On-Site	M	4,500			
ADN Facility	M2	167			
Communication Tower	EA	1			
MECHANICAL UTILITIES	LS	--			
Water Distribution	M	356			
Sanitary Sewer	M	310			
ENVIRONMENTAL MITIGATION	LS	--			
UXO/MEC Mitigation	HA	45.2			
Cultural Resource Mitigation	LS	1			
Natural Resource Mitigation	LS	1			

BUDGET ESTIMATE SUMMARY SHEET

J-755 FY16

TITLE: URBAN COMBAT SKILLS TRAINING COURSES AUGUST 2013
INSTALLATION: ANDERSEN SOUTH GUAM
LOCATION: ANDERSEN AB, GUAM
DATE ESCALATED TO: OCT 2016
DESIGN STATUS: ACTIVITY 1391
PREPARED BY: NAVFAC PACIFIC
ESCALATION FACTOR: 1.06110

AREA COST FACTOR: 2.32

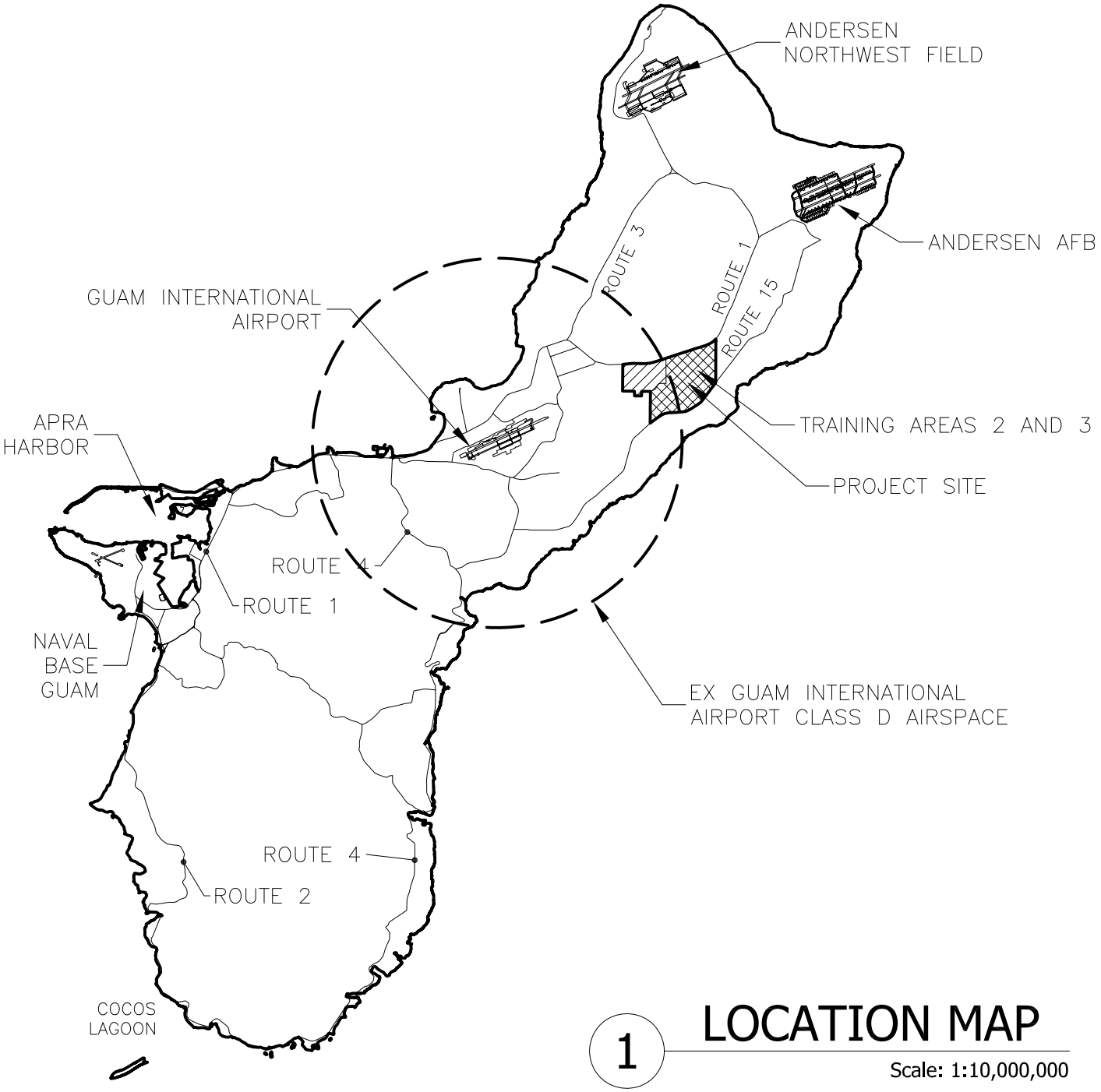
DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST	COST TRANSFERRED TO 1391 Sum (Rnd, 10K)
DEMOLITION	LS	--	--	(b) (5)	(b) (5)
Demolish Buildings	M2	9,540	(b) (5)	(b) (5)	
SUBTOTAL					
CONTINGENCIES 5%					(b) (5)
TOTAL CONTRACT COST					
SIOH 6.2%					
SUBTOTAL					
TOTAL REQUEST					
TOTAL REQUEST (ROUNDED)					

1. COMPONENT		2. DATE
USMC	FY 2015 MILITARY CONSTRUCTION PROGRAM	19 SEPTEMBER 2013

3. INSTALLATION AND LOCATION

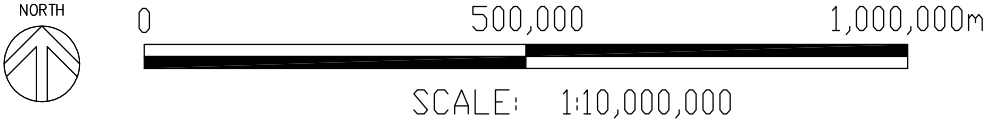
ANDERSEN SOUTH, GUAM

4. PROJECT TITLE	5. PROJECT NUMBER
URBAN COMBAT SKILLS TRAINING COURSES	J-755



1 LOCATION MAP

Scale: 1:10,000,000



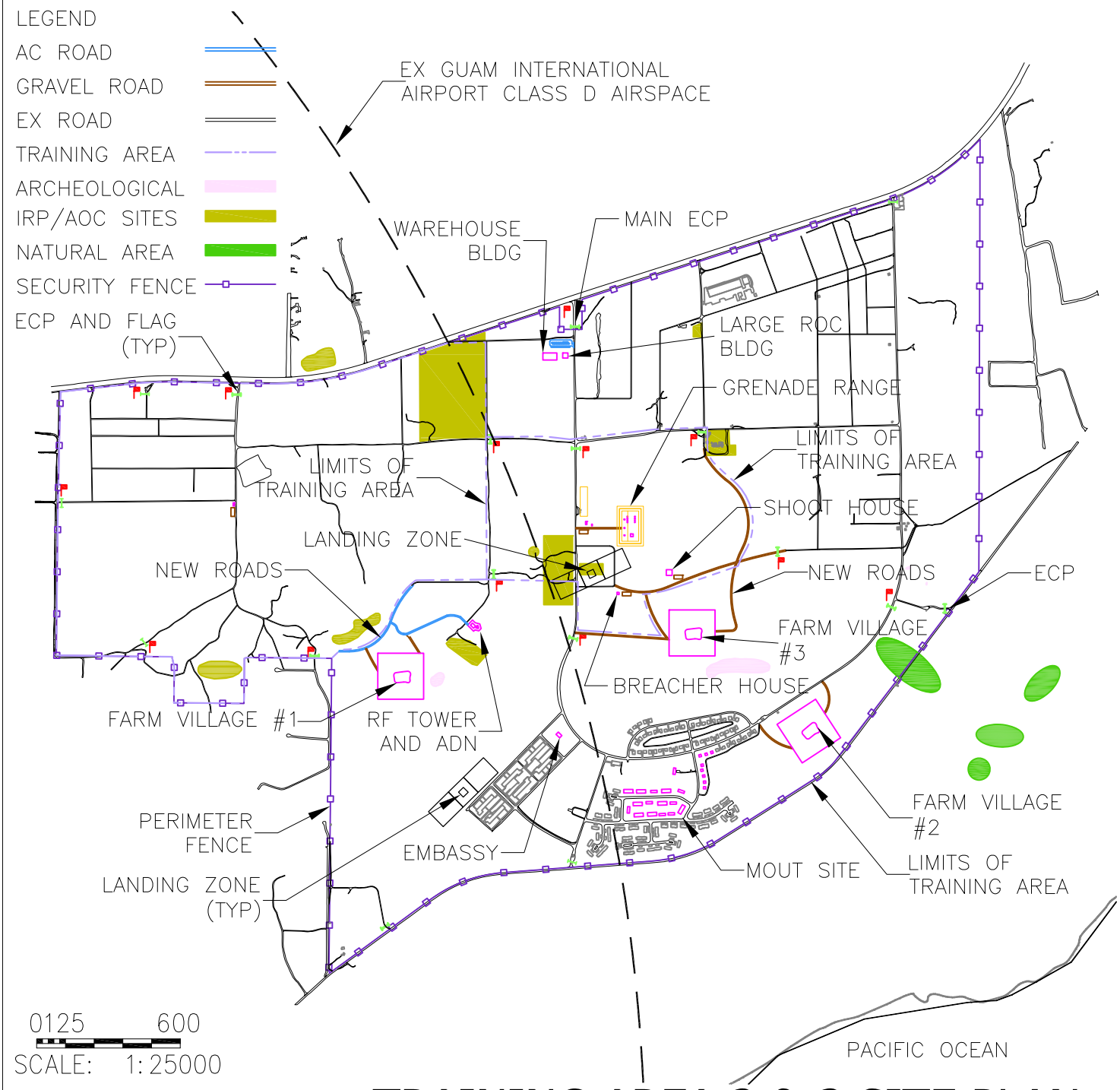
DD FORM 1 DEC 76 1391c

1. COMPONENT		2. DATE
USMC	FY 2015 MILITARY CONSTRUCTION PROGRAM	NOVEMBER 2013

3. INSTALLATION AND LOCATION

ANDERSEN SOUTH, GUAM

4. PROJECT TITLE	5. PROJECT NUMBER
URBAN COMBAT SKILLS TRAINING COURSES, TRAINING AREAS 2 & 3	J-755



TRAINING AREA 2 & 3 SITE PLAN

2

Scale: 1:25,000

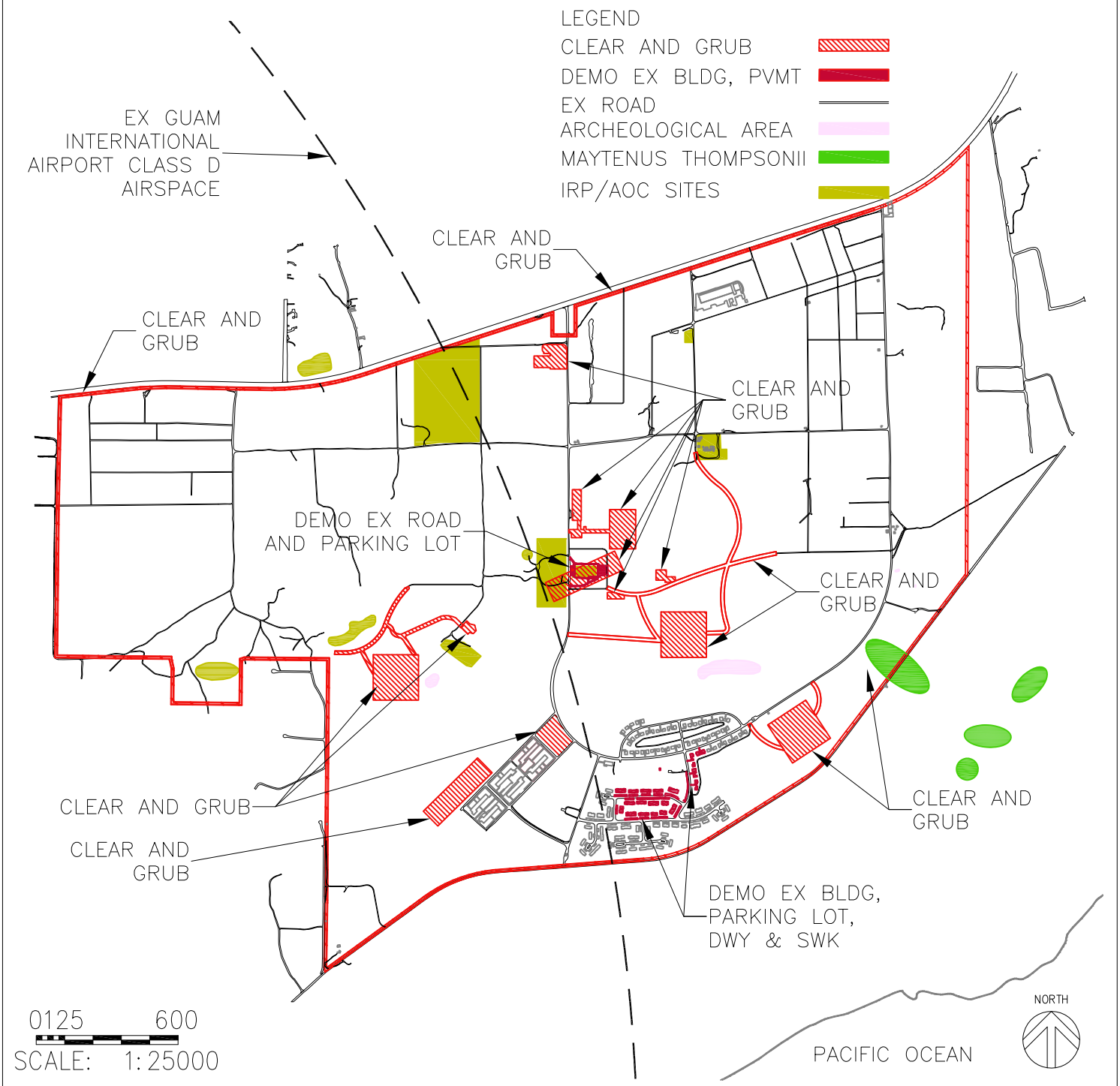
DD FORM 1 DEC 76 1391c

1. COMPONENT		2. DATE
USMC	FY 2015 MILITARY CONSTRUCTION PROGRAM	19 SEPTEMBER 2013

3. INSTALLATION AND LOCATION

ANDERSEN SOUTH, GUAM

4. PROJECT TITLE	5. PROJECT NUMBER
URBAN COMBAT SKILLS TRAINING COURSES, TRAINING AREAS 2 & 3	J-755



3 TRAINING AREA 2 & 3 DEMOLITION PLAN

Scale: 1:25,000

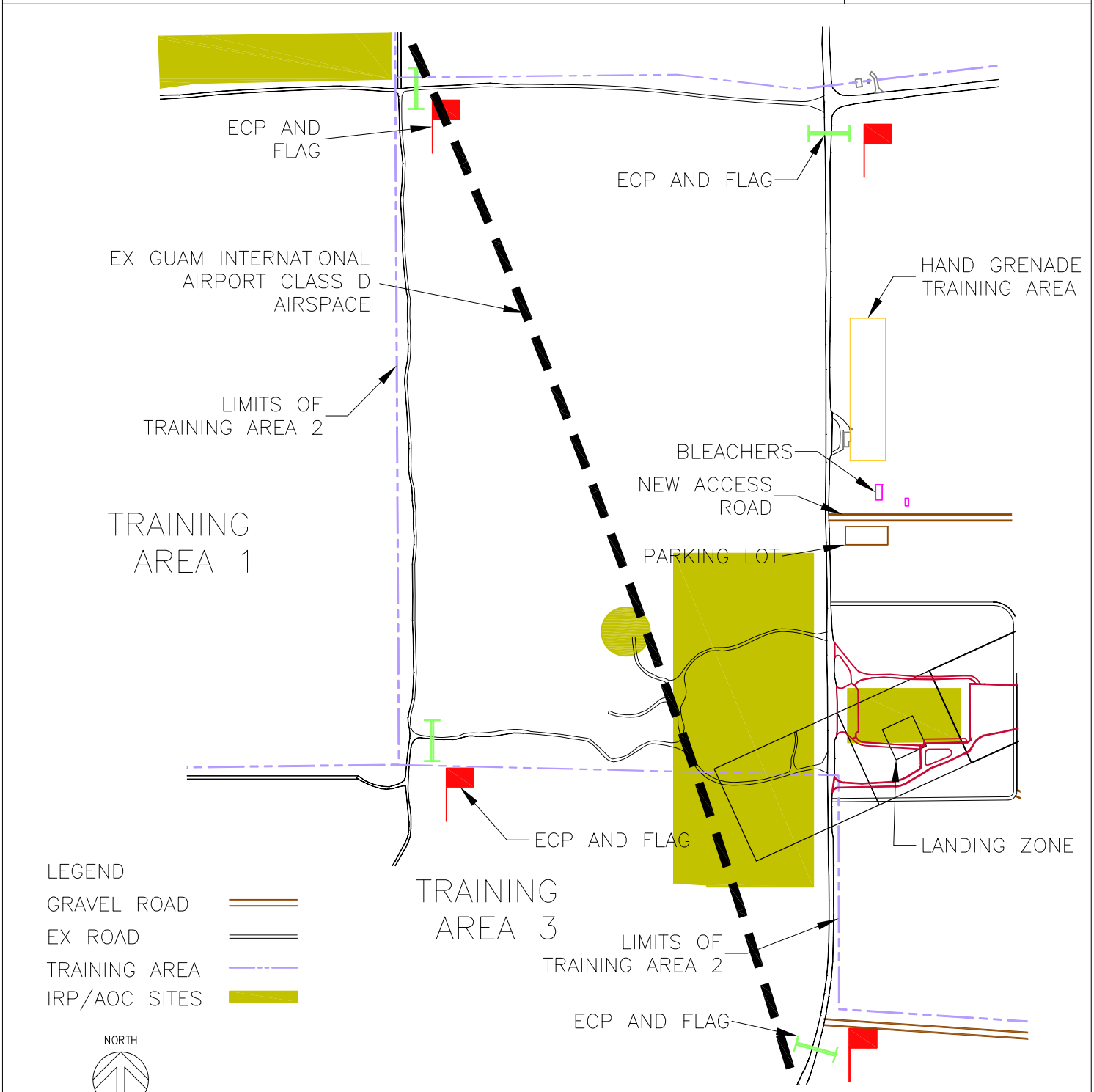
DD FORM 1 DEC 76 1391c

1. COMPONENT		2. DATE
USMC	FY 2015 MILITARY CONSTRUCTION PROGRAM	19 SEPTEMBER 2013

3. INSTALLATION AND LOCATION

ANDERSEN SOUTH, GUAM

4. PROJECT TITLE	5. PROJECT NUMBER
URBAN COMBAT SKILLS TRAINING COURSES, TRAINING AREAS 2 & 3	J-755



4

TRAINING AREA 2 SITE PLAN

Scale: 1:5,000

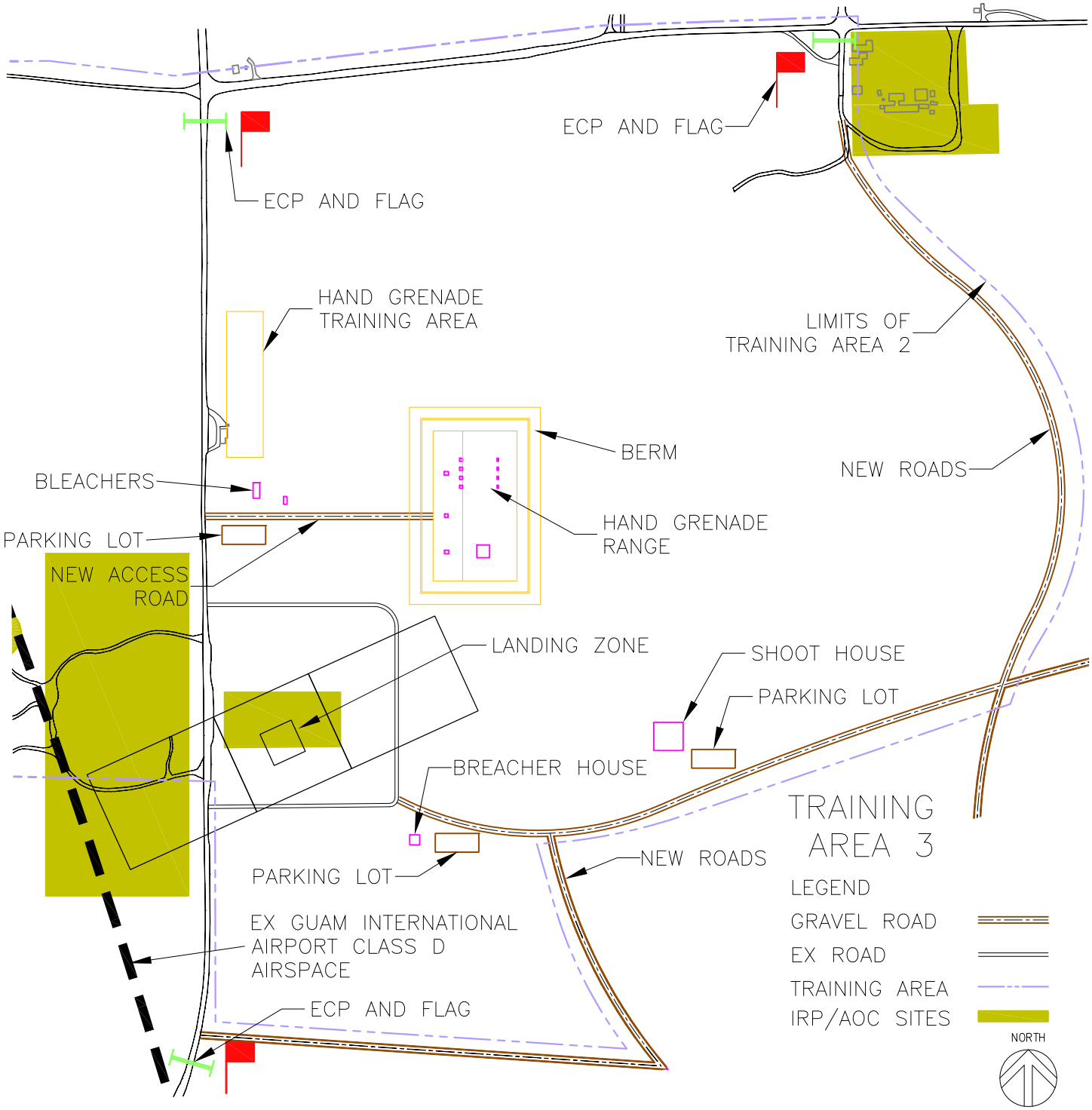
DD FORM 1 DEC 76 1391c

1. COMPONENT		2. DATE
USMC	FY 2015 MILITARY CONSTRUCTION PROGRAM	19 SEPTEMBER 2013

3. INSTALLATION AND LOCATION

ANDERSEN SOUTH, GUAM

4. PROJECT TITLE	5. PROJECT NUMBER
URBAN COMBAT SKILLS TRAINING COURSES, TRAINING AREAS 2 & 3	J-755



0 25 125

SCALE: 1:5000

5

TRAINING AREA 2 SITE PLAN CONT.

Scale: 1:5,000

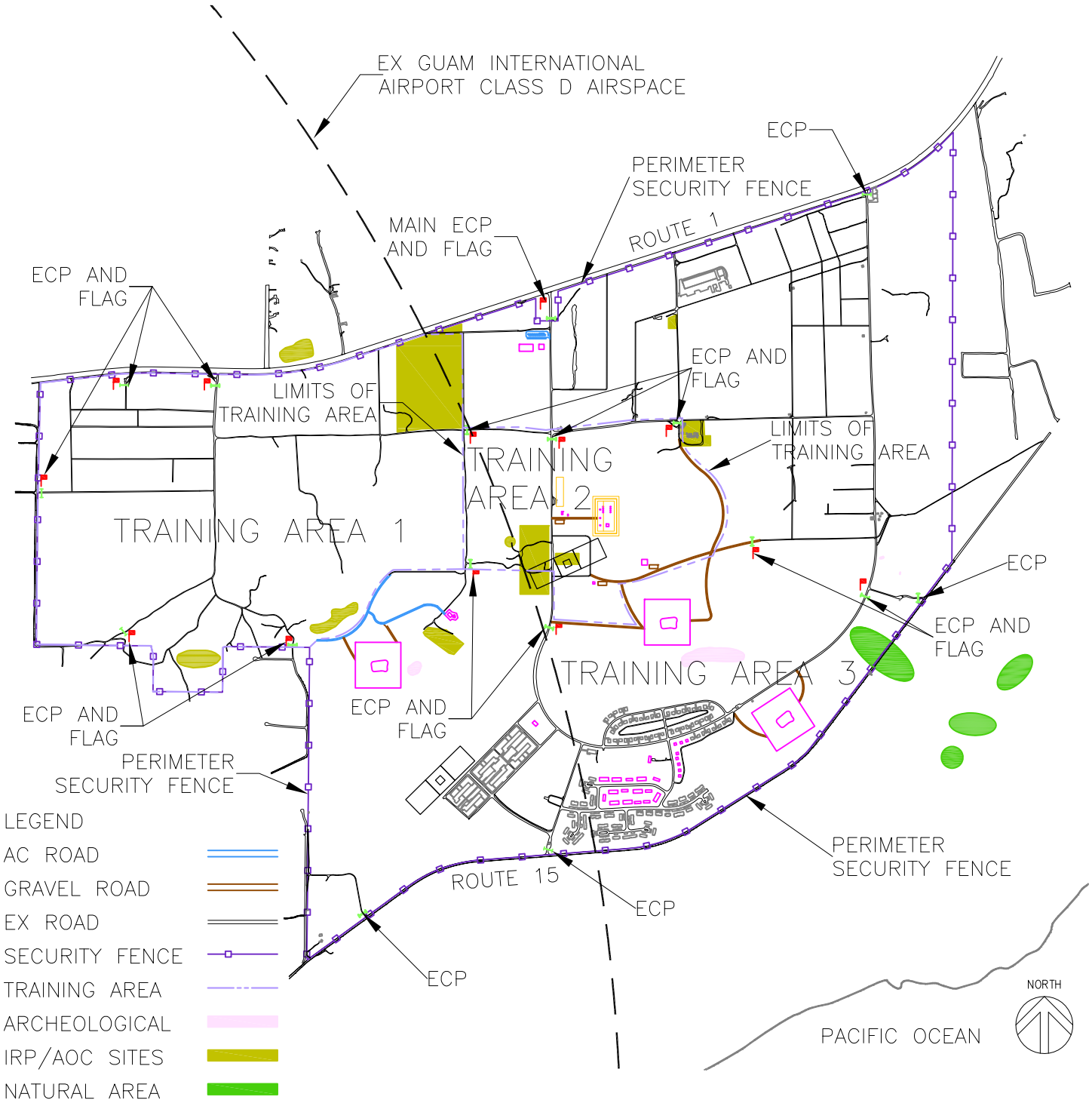
DD FORM 1 DEC 76 1391c

1. COMPONENT		2. DATE
USMC	FY 2015 MILITARY CONSTRUCTION PROGRAM	19 SEPTEMBER 2013

3. INSTALLATION AND LOCATION

ANDERSEN SOUTH, GUAM

4. PROJECT TITLE	5. PROJECT NUMBER
URBAN COMBAT SKILLS TRAINING COURSES, TRAINING AREAS 2 & 3	J-755



6

TRAINING AREA 2 & 3 FENCE PLAN

Scale: 1:25,000

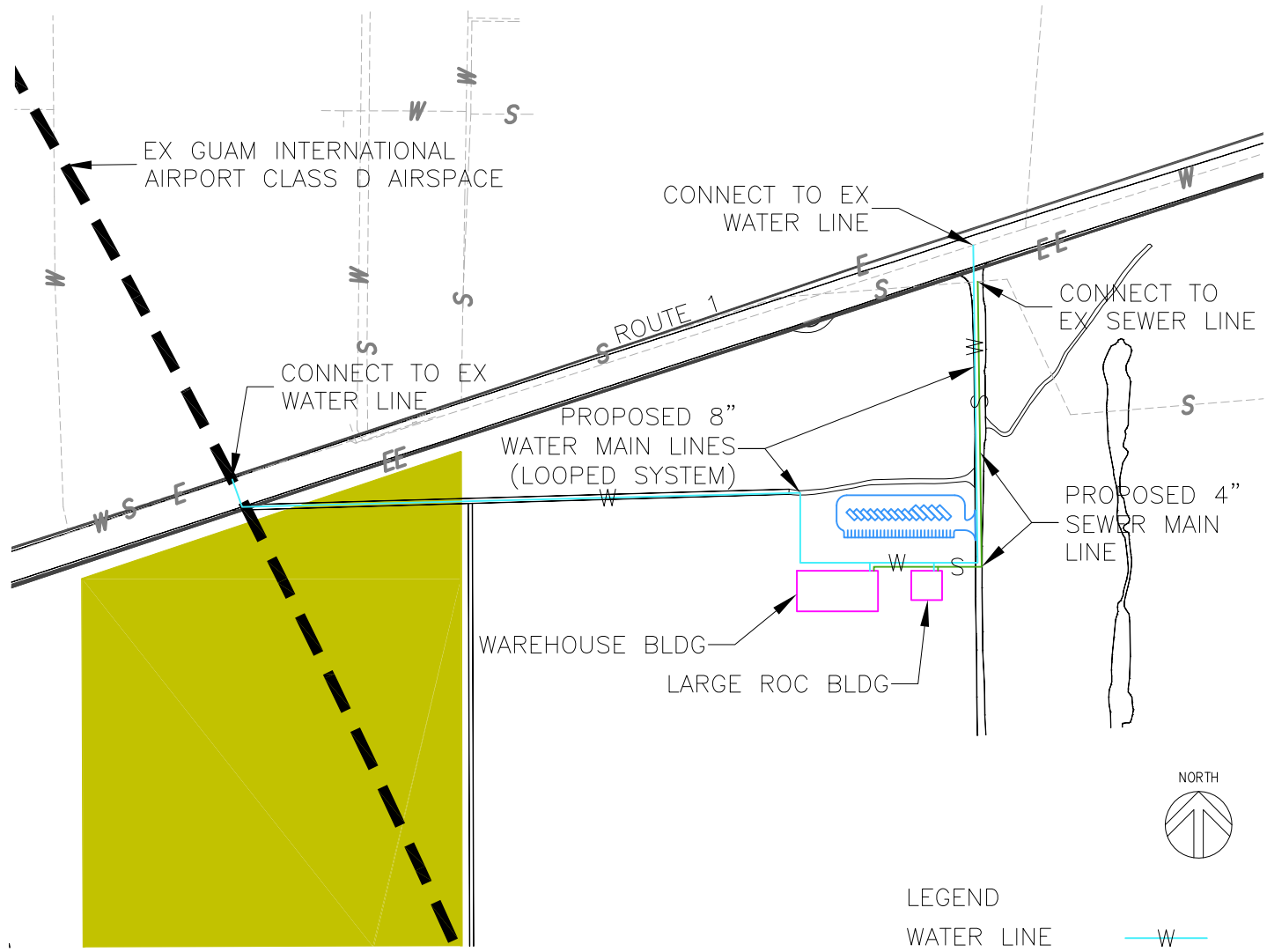
DD FORM 1 DEC 76 1391c

1. COMPONENT		2. DATE
USMC	FY 2015 MILITARY CONSTRUCTION PROGRAM	NOVEMBER 2013

3. INSTALLATION AND LOCATION

ANDERSEN SOUTH, GUAM

4. PROJECT TITLE	5. PROJECT NUMBER
URBAN COMBAT SKILLS TRAINING COURSES, TRAINING AREAS 2 & 3	J-755



LEGEND

WATER LINE	W
EX WATER LINE	W
SEWER LINE	S
EX SEWER LINE	S
EX ELEC LINE	E
EX ROAD	

0 25 125

SCALE: 1:5000

7

TRAINING AREA 2 & 3 UTILITY PLAN

Scale: 1:5,000

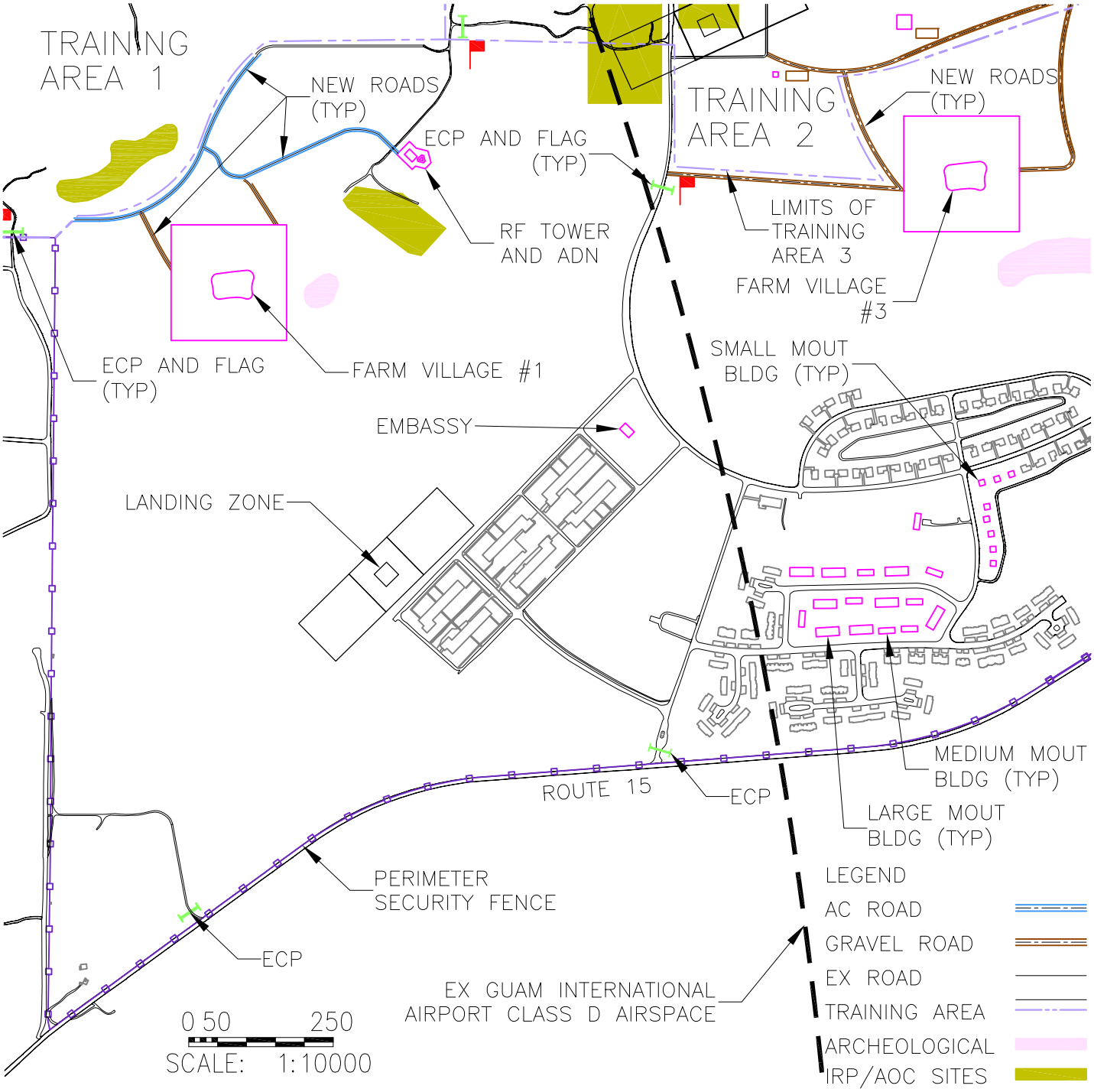
DD FORM 1 DEC 76 1391c

1. COMPONENT		2. DATE
USMC	FY 2015 MILITARY CONSTRUCTION PROGRAM	NOVEMBER 2013

3. INSTALLATION AND LOCATION

ANDERSEN SOUTH, GUAM

4. PROJECT TITLE	5. PROJECT NUMBER
URBAN COMBAT SKILLS TRAINING COURSES, TRAINING AREAS 2 & 3	J-755



8

TRAINING AREA 3 SITE PLAN

Scale: 1:10,000

NORTH

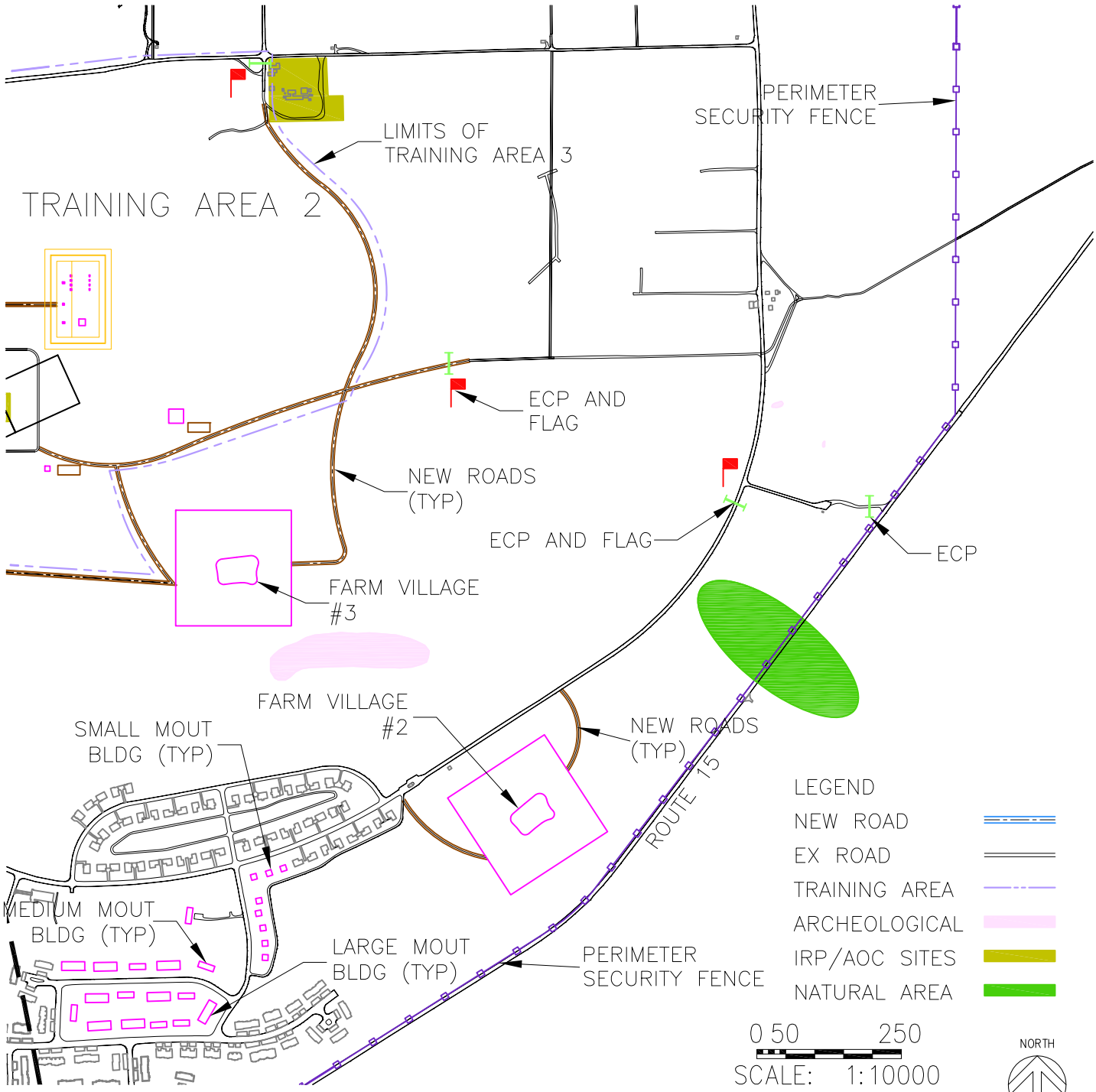
DD FORM 1 DEC 76 1391c

1. COMPONENT		2. DATE
USMC	FY 2015 MILITARY CONSTRUCTION PROGRAM	NOVEMBER 2013

3. INSTALLATION AND LOCATION

ANDERSEN SOUTH, GUAM

4. PROJECT TITLE	5. PROJECT NUMBER
URBAN COMBAT SKILLS TRAINING COURSES, TRAINING AREAS 2 & 3	J-755



9

TRAINING AREA 3 SITE PLAN CONT.

Scale: 1:10,000

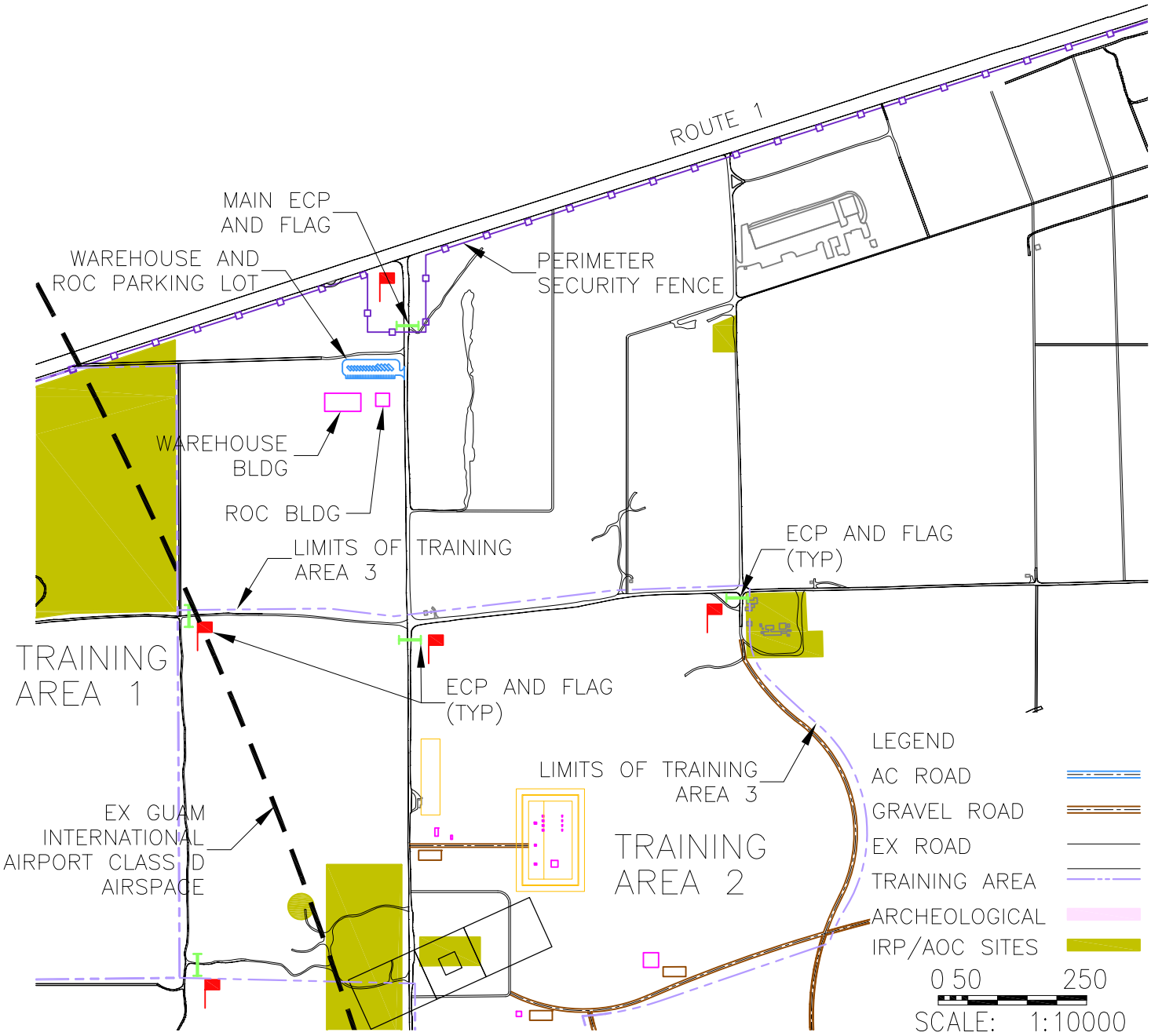
DD FORM 1 DEC 76 1391c

1. COMPONENT		2. DATE
USMC	FY 2015 MILITARY CONSTRUCTION PROGRAM	NOVEMBER 2013

3. INSTALLATION AND LOCATION

ANDERSEN SOUTH, GUAM

4. PROJECT TITLE	5. PROJECT NUMBER
URBAN COMBAT SKILLS TRAINING COURSES, TRAINING AREAS 2 & 3	J-755



10

TRAINING AREA 3 SITE PLAN CONT.

Scale: 1:10,000

NORTH

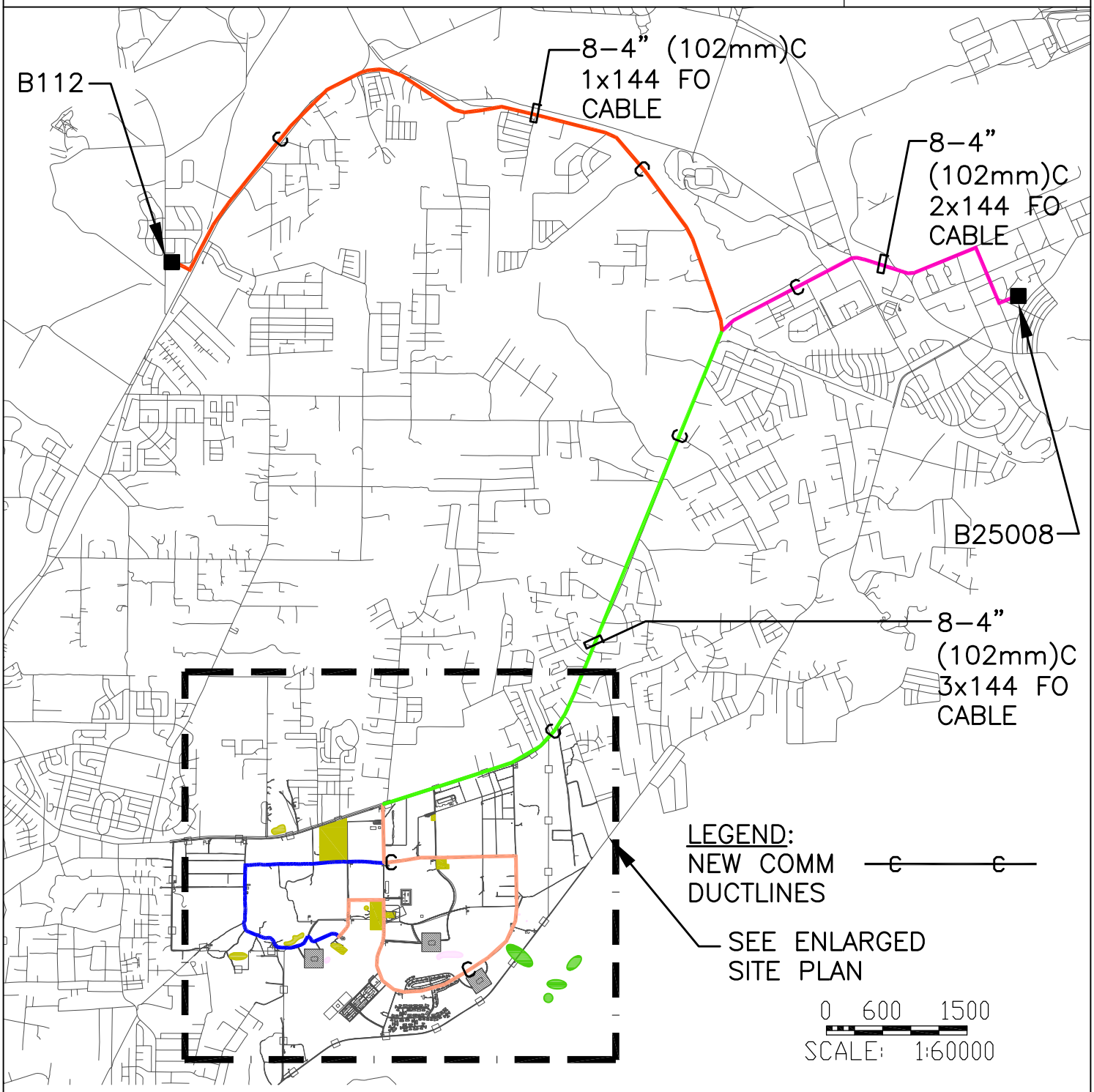
DD FORM 1 DEC 76 1391c

1. COMPONENT		2. DATE
USMC	FY 2015 MILITARY CONSTRUCTION PROGRAM	22 NOV 2013

3. INSTALLATION AND LOCATION

ANDERSEN SOUTH, GUAM

4. PROJECT TITLE	5. PROJECT NUMBER
URBAN COMBAT SKILLS TRAINING COURSES	J-755



10

OVERALL COMM DISTRIBUTION SITE PLAN

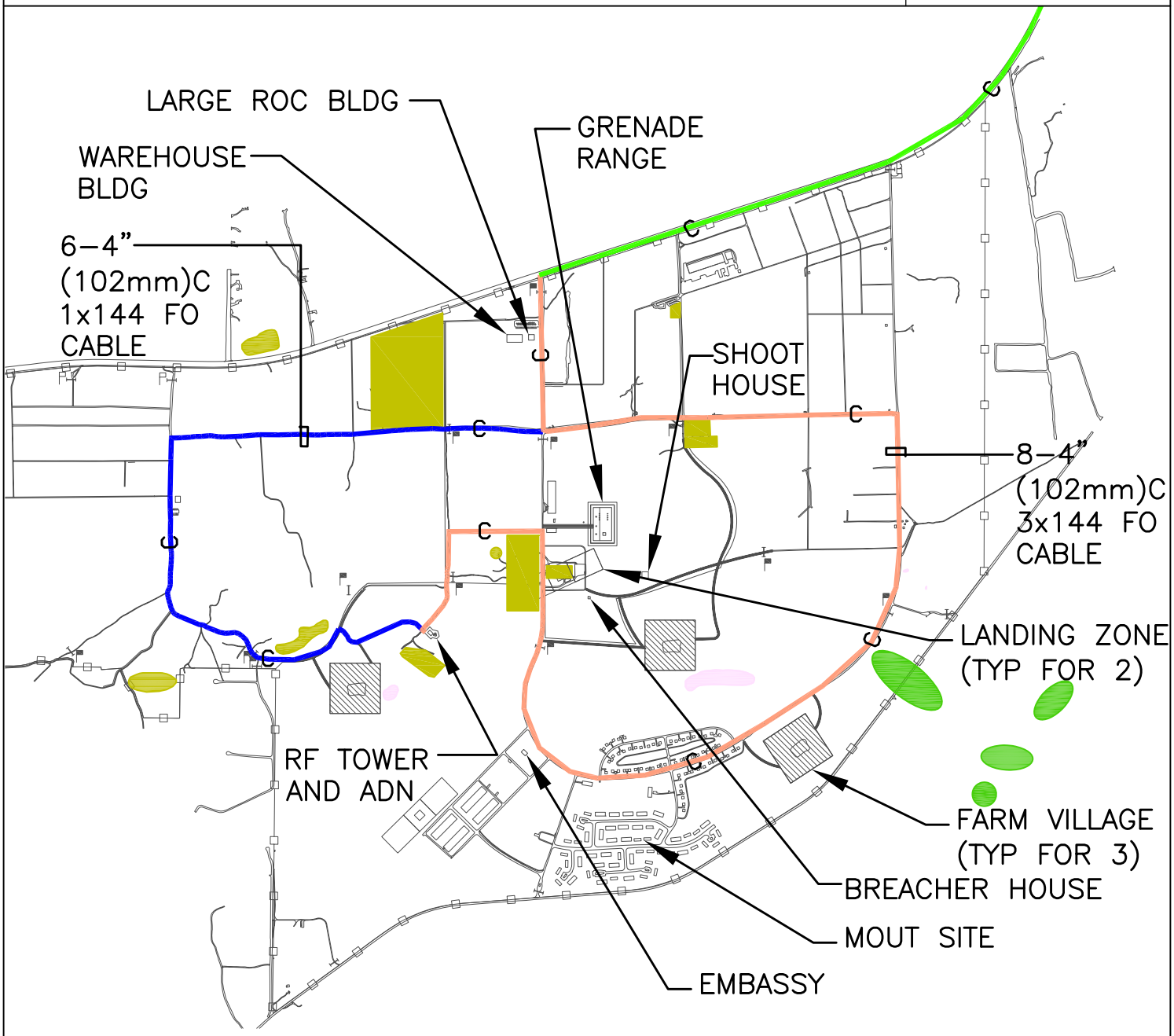
Scale: 1:60000

DD FORM 1 DEC 76 1391c

1. COMPONENT		2. DATE
USMC	FY 2015 MILITARY CONSTRUCTION PROGRAM	22 NOV 2013

3. INSTALLATION AND LOCATION
ANDERSEN SOUTH, GUAM

4. PROJECT TITLE	5. PROJECT NUMBER
URBAN COMBAT SKILLS TRAINING COURSES	J-755



LEGEND:
NEW COMM DUCTLINES

0 240 600
SCALE: 1:24000

11 COMM DISTRIBUTION SITE PLAN

Scale: 1:24000

DD FORM 1 DEC 76 1391c

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Tin Infr Upgrades - Biosec	Tinian Infr Upgrades - Biosecurity

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date MAY 08

3. Installation and Location/UIC: N61755 TINIAN, CNMI	4. Project Title INFRASTRUCTURE UPGRADES

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	800-00	USMC #23	(b) (5)

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost (b) (5)
PRIMARY FACILITY				(b) (5)
Road Surface Rehabilitation	SY	114,667.00	(b) (5)	
New Road	LF	109,333.00		
Electric Circuit for Training Area	SF	49,635.00		
Training Area Fire Protection System	SF	92,851.00		
Security Fence & Patrol Road	LS			
Access Control Facility (3EA)	SF	840.00		
Environmental Mitigation	LS			
PCAS	LS			
Building Information Systems	LS			
SUPPORTING FACILITIES				
Paving, Walks, Curbs, & Gutters	LS			
Site Improvements	LS			
ESTIMATED CONTRACT COST				
CONTINGENCY (10%)				
SUBTOTAL				
SIOH (6.2)				
DESIGN/BUILD-DESIGN COST (4%)				
PROJECT COST				
PROJECT COST (ROUNDED)				
EQUIPMENT FROM OTHER APPROPRIATIONS				

10. Description of Proposed Construction

This project provides essential infrastructure upgrades on Tinian to support all the proposed training related construction. Infrastructure upgrades include rehabilitating existing paved roads, providing new paved roads, extending the power distribution and communication systems, providing a fire protection system, and providing a security fence with access control points. The road network must be repaired, expanded, and

(Continued On DD 1391C…)

(…continued)

rerouted around the new range facilities to provide unimpeded access to the entire area when ranges are in use and provide access to the beach landing area. The road rehabilitation shall include resurfacing existing deteriorated roads. New roads include clearing, grubbing, grading and drainage, stone base and paved surface course. The beach landing area requires blasting rock to provide the access road. The proposed electrical distribution system and communication systems are being connected to an existing Commonwealth Utilities Corporation system and extended to each of the new ranges using direct burial underground ducts. A fire protection system is provided to reduce the potential impact of fires at the firing ranges. An existing well shall supply a fire water storage tank. A pump station shall supply the fire water distribution system and fire hydrants. A chain link security fence and patrol road across the width of the island will provide limited access to the range area. Access control facilities shall be located where the security fence crosses primary roads.

Environmental mitigation funding has been identified as a percentage of the primary facility cost to respond to issues identified during the NEPA process.

SCOPE: This project scope was derived using the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. The project provides critical backbone infrastructure required to support Combat Skills Training and other requirements on Tinian.

PROJECT: This project provides critical infrastructure upgrades. Project reconstructs and realigns roadways, extends an electrical / communication distribution system with underground network, provides a fire protection system, provides security fencing and access control points.

REQUIREMENT:
The Tinian combined arms training complex will not be able to function without an infrastructure system to support it.

CURRENT SITUATION: The existing infrastructure system was constructed in a wartime scenario in the 1940s and has not been improved.

IMPACT IF NOT PROVIDED: If this project is not Constructed the Marines will not have the basic infrastructure to support training requirements. Consequently, the ability to sustain readiness will be seriously compromised.

ADDITIONAL: Economic Alternatives Considered:

A. Status Quo: This alternative was considered but rejected. The area requires improvement and local funding is not sufficient to support this requirement.

B. Renovation/Modernization: In some instances this is the preferred option.

(…continued)

C. Lease: There are no suitable private facilities on the island that can be leased to satisfy the requirements of this project.

D. New Construction: This alternative is recommended course of action for utility systems.

E. Other Alternatives: None.

F. Analysis Results: There is no viable alternative to analyze.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
TIN VOA Relocation	Tinian VOA Relocation

Voice of America Relocation

1. Component	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date
USMC		APR 08

3. Installation and Location/UIC:	4. Project Title
TINIAN/SAIPAN/ROTA, CNMI	VOICE OF AMERICA RELOCATION

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	132-10	USMC #24	(b) (5) [redacted]

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost (b) (5)
VOICE OF AMERICA FACILITY (VOA)			(b) (5) [redacted]	(b) (5) [redacted]
Land Purchases	AC	115.00		
New VOA Building	SF	39,000.00		
New Fuel Tank	GA	50,000.00		
Relocate Generator	KW	3.00		
Relocate VOA Towers	LS			
Environmental Mitigation	EA	1.00		
PCAS	EA	1.00		
SUPPORTING FACILITIES				
Electrical Utilities	LS			
Mechanical Utilities	LS			
Paving, Walks, Curbs, & Gutters	LS			
Site Improvements	LS			
Security Fencing	LF	34,500.00		
Demolition - Building	SF	33,750.00		
Demolish - Fuel Tanks	SF	314.00		
ESTIMATED CONTRACT COST				
CONTINGENCY (10%)				
SUBTOTAL				
SIOH (6.2%)				
DESIGN/BUILD-DESIGN COST (4%)				
PROJECT COST				
PROJECT COST (ROUNDED)				
EQUIPMENT FROM OTHER APPROPRIATIONS				

(Continued On DD 1391C…)

(…continued)

10. Description of Proposed Construction

This project relocates Voice of America (VOA) from within the proposed Combined Arms Live Fire Training Area and the Surface Danger Zone (SDZ) of several other ranges on Tinian. A new site has not been selected for the VOA relocation. The Marpi area of Saipan is a potential site however the new VOA facility could be located elsewhere in the Mariana Islands. The project purchases 115 acres of land for the relocation of the VOA facility and constructs a new 39,000 SF VOA building to replace the existing maintenance complex on Tinian. The building construction includes spread footings, concrete floors, CMU walls, and standing seam metal roof. The project relocates existing antennas, transmission equipment, and power generators to the new site. New fuel tanks with containment are being constructed to replace the existing tanks on the current site. The project provides the foundations and pads for the antennas and equipment. Demolition includes all existing VOA facilities (buildings and fuel tanks) on Tinian.

Project does not include preparation of Technical Operating Manuals.

Environmental mitigation funding has been identified as a percentage of the primary facility cost to respond to issues identified during the NEPA process.

The project provides for special costs for typhoon wind loads and seismic level 4 earthquake zone.

SUPPORTING FACILITIES:

Electrical utilities include extending power and communications to the facility. Mechanical utilities include extending water to the site for potable uses / fire protection and facility connection to sanitary sewer. Paving and site improvements provide for parking, roads, sidewalks, landscaping, and security fencing around perimeter with access gates. The project provides for site preparation including clearing and grubbing, grading and drainage, and site clean-up.

NOTES:

SCOPE: The project completely relocates the Voice of America transmission systems, operations and maintenance complex on Tinian to another Marianas island. The project scope was derived based on land and facility requirements for the existing VOA facility on Tinian.

PROJECT: The project constructs a new maintenance and operations complex and relocates antennas and transmission equipment to the new site. Existing facilities are

REQUIREMENT: This project scope supports the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. Requirement to relocate VOA is

(…continued)

a result of the VOA facility location within the Combined Arms Live Fire Training Area and the Surface Danger Zones (SDZs) of several proposed ranges. There is no ability to mitigate this issue without moving the antennas, transmission equipment and maintenance complex.

CURRENT SITUATION: VOA currently operates several transmission systems on Tinian. Development of combined arms training ranges on Tinian and their associated Surface Danger Zones will encumber the VOA operations.

IMPACT IF NOT PROVIDED: If this project is not constructed, combined arms ranges can not be constructed.

ADDITIONAL: Economic Alternatives Considered:

A. Status Quo: This alternative was considered but rejected. The training must be performed and VOA must be relocated.

B. Renovation/Modernization: There are no existing facilities to renovate.

C. Lease: There are no suitable private facilities on the island that can be leased to satisfy the requirements of this project.

D. New Construction: This alternative is the recommended course of action.

E. Other Alternatives: None.

F. Analysis Results: There is no viable alternative to analyze.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Battle Sim Center	Battle Simulation Center

Battle Command and Simulation Training Center

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date APR 08

3. Installation and Location/UIC: FINEGAYAN, GUAM	4. Project Title BATTLE COMMAND AND SIMULATION TRAINING CENTER

5. Program Element	6. Category Code 171-35	7. Project Number USMC #3	8. Project Cost ($000) (b) (5) [redacted]

9. COST ESTIMATES

Primary Facility			(b) (5) [redacted]	(b) (5) [redacted]
Battle Command and Training	SF	53,200.00		
Simulators	SF	97,037.00		
Covered Training Area	SF	9,000.00		
Special Costs	SF	20,774.00		
LEED Rating	SF	150,237.00		
OMSI	EA	1.00		
PCAS	EA	1.00		
Environmental Mitigation	EA	1.00		
Anti-Terrorism / Force Protection	LS			
Building Information Systems	LS			
Support Facilities				
Electric Service	LS			
Water, Sewer, & Gas	LS			
Paving, Walks, Curbs, & Gutters	LS			
Storm Drainage	LS			
Site Imp/Demo	LS			
Information Systems	LS			
Anti-Terrorism / Force Protection	LS			
ESTIMATED CONTRACT COST				
CONTINGENCIES (10%)				
SUBTOTAL				
SIOH (6.2%)				
DESIGN/BUILD - DESIGN COST (4.0%)				
PROJECT COST				
PROJECT COST (ROUNDED)				
EQUIPMENT FROM OTHER APPROPRIATIONS				

10. Description of Proposed Construction

This project constructs a 150,237 SF Battle Command Center, Command Center Training, and Simulation Training Center. Construction consists of a pile foundation, concrete floor slabs, structural frame, masonry walls and a standing seam metal roof. Building systems include a Radon barrier /extraction system, Shielding, IDS, SCIF, and Fire Suppression. Information systems include wiring for local area network (LAN), several classified and unclassified network systems, fiber optics, telephone, public address, and cable television. These systems require an uninterruptible power supply system. The facility includes

(Continued On DD 1391C...)

(…continued)

dedicated simulator spaces, classrooms, operational administrative spaces and two command centers. Classroom spaces include a Battalion size Classroom for 800 students with a concrete floor and garage door to provide vehicle access. The Simulation Center spaces include administration and other training support spaces with dedicated spaces for each simulator. The Command Centers and some simulator spaces will have raised flooring to support changes in equipment configuration. The facility will have a large computer server to support many classified and unclassified network systems. A 9000 SF outdoor covered training area with associated open area for antenna installation is required to support Command Center training scenarios. The training area shall be a concrete slab on spread footings with a wood structure, and standing seam metal roof.

The project incorporates sustainable design features into the design, development, and construction of the project in accordance with the Energy Policy Act 2005, Executive Order 13123, and Assistant Secretary of the Navy Installations and Environment memo dated 4 August 2006. The project will be designed to meet LEED Silver Certification

Operation & Maintenance Support Information (OMSI) manuals shall be provided

Environmental mitigation has been added to the project. Environmental studies are being performed in the NEPA process and will define specific mitigation required. The Environmental Impact Statement (EIS) will be complete in 2009.

The project includes Anti-Terrorism Force Protection (AT/FP) features and shall comply with Unified Facilities Criteria (UFC) 4-101-01 DOD Minimum Anti-Terrorism Standards for Buildings, dated 22 January 2007. Physical security shall be in compliance with Military Handbook 1024/1,

The Training Center shall comply with Americans with Disabilities Act (ADA) regulations.

Area is subject to severe typhoon winds and earthquakes. Building is located in Seismic Zone IV. Seismic design for buildings UFC 3-31-04 & Structural Load Data UFC 3-310-01 shall be used during design.

SUPPORTING FACILITIES:

Electrical systems include communications, electrical distribution, exterior lighting, unit substation, transformer, common bank, an equipment yard, and an energy management system.

Mechanical systems include water and sanitary sewer utility extension to the site.

Paving and site improvements provide for parking, roads, curbs and gutters, sidewalks, fencing, landscaping, and storm drainage.

The project provides for site preparation including demolition of pavement, clearing and grubbing, excavation, fill, and site clean-up.

The project provides for additional AT/FP with security fencing, barrier and gates as well as outside communication lines for telephone, fiber optics, and LAN.

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date APR 08
3. Installation and Location/UIC: FINEGAYAN, GUAM		
4. Project Title BATTLE COMMAND AND SIMULATION TRAINING CENTER		7. Project Number USMC #3

(…continued)

NOTES:

SCOPE: The project scope was derived using the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces and UFC 2-000-05N NAVFAC Planning Criteria for Navy and Marine Corps Facilities (P-80) with the Industrial Engineering method detailed in NAVFACINST 11010.44E for category codes 143-65 Command Center and 171-35 Operational Trainer Facility. The Battle Command and Simulation Training Center provides critical elements in supporting Combat Skills Training.

PROJECT: This project constructs a new Battle Command Center, Command Training Center, Simulator Training Center, supporting Covered Training area and project related site improvements. The facility is part of a world-wide distributed training complex of centers providing integrated training as well as simulated system training for individual Marines.

REQUIREMENT:
Adequate simulation training and support facilities are required to prepare Marines for wartime situations. Training in the HMMWV Egress Trainer (HEAT), Multi-Purpose Supporting Arms Trainer (MSAT), Mine Resistant Armor Protected Vehicle Trainer (MRAP), Medium Tactical Vehicle Replacement Operator driver Simulator (MTVR-ODS), Tactical Engagement Simulation Systems (TESS), Indoor Simulated Marksmanship Trainer Enhanced (ISMT (FATS)), Deployable Virtual Training Environment Lab (DVTE), Marine Air-Ground Task force Tactical Warfare Simulator (MTWS), Modular Amphibious Egress Trainer (MAET), MAGTF Training System Support (MTSS) and support spaces are required in the Training Area. The provision of two identical Battle Command Training Center spaces allows for training to occur simultaneously with operations.

This project is required to support the Marine move from Japan to Guam as well as the “Grow the Force” initiative. It supports the low density, high demand capabilities that are constantly requested and are the capabilities that the joint force needs to support wartime requirements.

CURRENT SITUATION: There are no facilities on Guam to provide this critical training.

IMPACT IF NOT PROVIDED: If this project is not constructed, the Marines will not be effectively trained in Combat and Command skills. Consequently, the ability to sustain readiness will be seriously compromised.

ADDITIONAL: Economic Alternatives Considered:
A. Status Quo: This alternative was considered but rejected. The training must be performed and there are no existing facilities for this use.

B. Renovation/Modernization: There are no existing facilities to renovate.

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date APR 08

3. Installation and Location/UIC:
FINEGAYAN, GUAM

4. Project Title	7. Project Number
BATTLE COMMAND AND SIMULATION TRAINING CENTER	USMC #3

(…continued)

BUDGET ESTIMATE SUMMARY SHEET: Attached

A. Estimated Design Data:

1. Status:

(A) Date design start (Design Authorization)	Jul 2008
(B) Date 35% Design Complete (RFP for Design Build)	Feb 2009
(C) Date design completed	
(D) Percent completed as of September 2008	0%
(E) Percent completed as of January 2009	0%
(F) Type of design contract	Design Build
(G) Parametric Estimate used to develop cost	Yes
(H) Energy Study/Life Cycle Analysis performed	No

2. Basis:

(A) Standard or Definitive Design	No
(B) Where design was previously used	NA

3. Total cost (C) = (A) + (B) = (D) + (E):

(A) Production of plans and specifications	(b) (5)
(B) All other design costs	(b) (5)
(C) Total	(b) (5)
(D) Contract	(b) (5)
(E) In-house	(b) (5)

4. Contract award:	Mar 2010
5. Construction start:	Sep 2010
6. Construction complete:	Jul 2012

B. Equipment associated with this project which will be provided from other appropriations:

Major Equipment	Funding Source	Fund Year	Installation Start-End Mo/Yr	Shakedown Start-End Mo/Yr	IOC Date Mo/Yr	Cost
Simulators	OPN	2010	Jul 2012	2013	2013	(b) (5)
Computer Servers	OPN	2012	Jul 2012	2013	2013	(b) (5)
Collateral Equipment	OPN	2012	Jul 2012	Aug 2012	Aug 2012	(b) (5)

JOINT USE CERTIFICATION:
The Regional Commander certifies that this project has been considered for joint use potential. Joint Use is recommended.

Activity POC: Phone No:

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
TIN Multipurpose Range	Tinian Multipurpose Range Complex

Automated Multi-Purpose Range

1. Component USMC	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date APR 2008

3. Installation and Location/UIC: TINIAN, CNMI	4. Project Title AUTOMATED MULTI-PURPOSE RANGE

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	175-82	USMC #15	(b) (5)

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost (b) (5)
AUTOMATED MULTI-PURPOSE RANGE				(b) (5)
MK19 & M240G /.50 cal Machine Gun Range	LN	4	(b) (5)	
Support Buildings	SF	4,370.00	(b) (5)	
Range Support Building	SF	150	(b) (5)	
Ammunition Storage	SF	120	(b) (5)	
Range Observation Tower	SF	100	(b) (5)	
General Instruction Building	SF	1000	(b) (5)	
Covered Mess	SF	1000	(b) (5)	
Enclosed Bleachers	SF	1800	(b) (5)	
Latrine	SF	200	(b) (5)	
OMSI	EA	1.00	(b) (5)	
PCAS	EA	1.00	(b) (5)	
LEED Certification	LS			
Environmental Mitigation	LS			
Anti-Terrorism / Force Protection	LS			
SUPPORTING FACILITIES				
Electrical Utilities	LS			
Mechanical Utilities	LS			
Site Improvements	LS			
Information Systems	LS			
ESTIMATED CONTRACT COST				
CONTINGENCY (10%)				
SUBTOTAL				
SIOH (6.2%)				
DESIGN/BUILD-DESIGN COST (4%)				
PROJECT COST				
PROJECT COST (ROUNDED)				
EQUIPMENT FROM OTHER APPROPRIATIONS				

(Continued On DD 1391C…)

(…continued)

10. Description of Proposed Construction

This project constructs a multi-purpose live-fire range for .50 Cal. machine guns, M240G, and MK19 weapons systems. The machine gun range will consist of four 100 meter wide lanes, 1,100 meters long with the capability of expanding to 2,000 meters for LAV-25 and M1A1 Tank range training. The MK19 range overlays the machine gun range with two 200 meter lanes that extend to 1,500 meters. The range will be fully bermed, have right and left markers, a safety flagpole, and automated target system emplacements. The targets will be established at varying distances in each lane. The range will have a combination of automated stationary targets, moving infantry targets, automated stationary armored targets and moving armored targets. Construction for the target systems will consist of the target emplacements and control conduit. The target system will be purchased separately as equipment from other appropriations. The range supporting buildings include an observation tower, ammunition storage building, range operations and storage building, a general instruction building, a covered mess facility, enclosed bleachers, and latrine constructed as part of the range complex. Climate control will be required for control equipment and personnel. A RADON barrier and vent system shall be provided on appropriate supporting buildings.

OMSI manuals shall be developed to operate and maintain the range.

Provisions for LEED Silver Certification are included in the cost estimate.

Environmental mitigation funding has been identified as a percentage of the primary facility cost to respond to issues identified during the NEPA process. Cultural resource issues are addressed by burying any resources with two feet of fill material.

Antiterrorism and Force Protection issues have been identified in the cost estimate.

Facilities shall be designed to withstand typhoon wind loads and a seismic level 4 earthquake zone.

SUPPORTING FACILITIES:

Electrical & communication service shall be extended to the site to support operation of the target systems, target control system and range operation support buildings. A public address system is being provided for range operation. Water shall be extended to the site for fire protection and potable uses. Site preparation includes clearing, grubbing, grading, and draining the site. Project related site improvements include roads for site access, two feet of fill to protect any cultural resources in the area, seeding disturbed areas and site cleanup.

1. Component USMC	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date APR 2008
3. Installation and Location/UIC: TINIAN, CNMI		
4. Project Title AUTOMATED MULTI-PURPOSE RANGE		7. Project Number USMC #15

(…continued)

NOTES:

SCOPE: The project scope was derived using MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. This Multi Purpose Live Fire Range is based on criteria set forth in NAVMC 3500.87 "Infantry Training and Readiness Manual". The range provides critical elements for supporting Combat Skills Training to the Marines and other services on Guam or CNMI.

PROJECT: This project constructs a new multi-purpose automated target range. The range will consist of four lanes with automated stationary and moving targets. Supporting buildings include an observation/control tower, range operations facility, ammunition breakdown facility, a general instruction facility, covered mess, enclosed bleachers, and latrine.

REQUIREMENT: This project scope supports the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. It supports the low density, high demand capabilities that are constantly requested and are the capabilities that the joint force needs to support wartime requirements. The design and layout for this range was derived from the criteria set forth in NAVMC 3500.87 "Infantry Training and Readiness Manual". MARFORPAC estimates these ranges will be used on a daily basis, both day and night. The range will support as many as 186 M240G medium machine gun crews, 18 M2 .50 cal. heavy machine gun crews and 18 MK19 machine gun crews from the three infantry battalion equivalents qualifying twice yearly. This will be the only range on Guam or CNMI that provides targets for MK19s at 1,500 meters, a specific requirement. Additionally an unknown number of machine gun crews from non-infantry MOSs will use this range for familiarization firing. The range is used to train and test individual Marines and machine gun crews on the skill necessary to zero weapons, detect, identify, engage and defeat stationary and moving infantry and vehicle / armor targets in a tactical array. The targets are fully automated and the event specific target scenario is computer driven and scored for the range operations center. The range operating system is fully capable of providing immediate performance feedback to the using shooters. Because of the range layout in support of machine gun training it also possesses capabilities to support moving and stationary armor targets for LAV 25, tank and EFV (when EFV is fielded).

CURRENT SITUATION: There are no facilities on Tinian to provide this critical training.

1. Component USMC	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date APR 2008
3. Installation and Location/UIC: TINIAN, CNMI		
4. Project Title AUTOMATED MULTI-PURPOSE RANGE		7. Project Number USMC #15

(…continued)

IMPACT IF NOT PROVIDED: If this project is not constructed, the Marines will not be able to effectively train in Combat skills. Consequently, the ability to sustain readiness will be seriously compromised.

ADDITIONAL: Economic Alternatives Considered:

A. Status Quo: This alternative was considered but rejected. The training must be performed and there are no existing facilities for this use.

B. Renovation/Modernization: There are no existing facilities to renovate.

C. Lease: There are no suitable private facilities on the island that can be leased to satisfy the requirements of this project.

D. New Construction: This alternative is the recommended course of action.

E. Other Alternatives: None.

F. Analysis Results: There is no viable alternative to analyze.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
TIN Mortar & Arty	Tinian Mortar and Artillery

Mortar and Artillery Firing Points

1. Component	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date
USMC		APR 2008

3. Installation and Location/UIC:	4. Project Title
TINIAN, CNMI	MORTAR AND ARTILLERY FIRING POINTS

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	176-70	USMC #18	(b) (5) [redacted]

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost (b) (5) [redacted]
MORTAR AND ARTILLERY FIRING POINTS				(b) (5) [redacted]
Field Artillery Fire Range	FP	4.00	(b) (5) [redacted]	
120 MM Mortar Range	FP	3.00		
60 and 81 MM Mortar Range	FP	1.00		
Environmental Mitigation	EA	1.00		
SUPPORTING FACILITIES				
ESTIMATED CONTRACT COST				
CONTINGENCY (10%)				
SUBTOTAL				
SIOH (6.2%)				
DESIGN/BUILD-DESIGN COST (4%)				
PROJECT COST				
PROJECT COST (ROUNDED)				

10. Description of Proposed Construction

This project prepares firing point (FP) areas for three ranges, two mortar ranges with four firing points (60/81MM 1FP & 120MM 3FP) and one artillery range with four firing points. The major construction elements associated with this project are clearing and grubbing, grading and surface drainage, establishment of fixed firing points with ground markings, right and left range markers, and safety flagpoles. Project USMC 23, Infrastructure Upgrades, provides access roads to the firing points. The project also extends water to the impact area.

Environmental mitigation funding has been identified as a percentage of the primary facility cost to respond to issues identified during the NEPA process.

(Continued On DD 1391C...)

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date APR 2008

3. Installation and Location/UIC: N61755
TINIAN, CNMI

4. Project Title	7. Project Number
MORTAR AND ARTILLERY FIRING POINTS	USMC #18

(…continued)

Technical operation manuals are not required for this project.

LEED Silver Certification guidelines can not be met for this type facility.

Anti-Terrorism / Force Protection features are not required for this type of facility

NOTES:

SCOPE: Project was derived using the Marianas Training Concept Plan. Artillery and Mortar Ranges were sited maximizing distances within the geographical constraints on Tinian

PROJECT: This project constructs designated firing points for a 60/81 MM mortar range (1FP), a 120 MM mortar range (3FP) and a field artillery range (4FP).

REQUIREMENT:
The artillery indirect fire range is estimated by MARFORPAC to be used weekly for day and night training by artillery batteries (~125 Marines) and is configured so the howitzers will fire into the central, dudded, impact area. It is organized into four Artillery Firing Areas (AFA) using the terrain available. The configuration of the terrain on Tinian, the organization of the other live fire ranges, and the location of the dudded impact area dictate the location of the AFAs. With four AFAs the artillery units will have the ability to conduct required training that includes calls for fire and battery displacement. This capability does not exist on Guam or elsewhere in CNMI. Two mortar ranges are also provided in this project one range to support the nine 60mm mortars and eight 81mm mortars found in each infantry battalion. MARFORPAC estimates these ranges will be used day and night on a weekly basis. Due to the nature of the weapons they cannot be fired over the heads of troops and are therefore confined to a single range site. The 60/81MM mortars fire into their own dudded impact area. The 120MM mortar range will accommodate the yet-to-be-delivered mortar which may be fired over the head of troops. The 120MM mortar range is organized into four Mortar Firing Areas (MFA) to allow for weapons displacement training. The 120MM Mortar range fires into the central, dudded, impact area.

This project scope supports the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. It supports the low density, high demand capabilities that are constantly requested and are the capabilities that the joint force needs to support wartime requirements. Tinian will support this mission with Individual, Company and Battalion level live-fire and maneuver ranges. These mortar and artillery ranges are an integral element of that range complex.

CURRENT SITUATION: The 60/81MM mortar range is an inactive range that will be put back into use. The other two proposed indirect firing locations are new.

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date APR 2008
3. Installation and Location/UIC: N61755 TINIAN, CNMI		
4. Project Title MORTAR AND ARTILLERY FIRING POINTS		7. Project Number USMC #18

(…continued)

IMPACT IF NOT PROVIDED: If this project is not constructed, the Marines will not be able to effectively train in mortar and artillery Combat skills. Consequently, the ability to sustain readiness will be seriously compromised.

ADDITIONAL: Economic Alternatives Considered:

A. Status Quo: This alternative was considered but rejected. The training must be performed and there are no existing facilities available on Tinian or in the Marianas.

B. Renovation/Modernization: One inactive mortar range will be placed back into use.

C. Lease: There are no suitable private facilities on the island that can be leased to satisfy the requirements of this project.

D. New Construction: This alternative is the recommended course of action for two of the ranges.

E. Other Alternatives: None.

F. Analysis Results: There is no viable alternative to analyze.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
High Hazard Impact Area	High Hazard Impact Area

Stationary Target Range

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date APR 08

3. Installation and Location/UIC: TINIAN	4. Project Title STATIONARY TARGET RANGE

5. Program Element	6. Category Code 176-50	7. Project Number USMC #21	8. Project Cost ($000) (b) (5)

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
STATIONARY TARGET RANGE				(b) (5)
Range	FP	2	(b) (5)	
Support Buildings	SF	4,350.00		
Range Support Building	SF	150	(b) (5)	
Ammunition Storage	SF	100	(b) (5)	
Range Observation Tower	SF	100	(b) (5)	
General Instruction Building	SF	1000	(b) (5)	
Covered Mess	SF	1000	(b) (5)	
Enclosed Bleachers	SF	1800	(b) (5)	
Latrine	SF	200	(b) (5)	
Environmental Mitigation	LS			
OMSI	LS			
PCAS	LS			
LEED Certification	LS			
Anti-Terrorism / Force Protection	LS			
Building Information Systems	LS			
SUPPORTING FACILITIES				
Electrical Utilities	LS			
Mechanical Utilities	LS			
Site Improvements	LS			
Information Systems	LS			
ESTIMATED CONTRACT COST				
CONTINGENCY (10%)				
SUBTOTAL				
SIOH (6.2)				
DESIGN/BUILD-DESIGN COST (4%)				
PROJECT COST				
PROJECT COST (ROUNDED)				
EQUIPMENT FROM OTHER APPROPRIATIONS				

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`1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date APR 08
3. Installation and Location/UIC: TINIAN		
4. Project Title STATIONARY TARGET RANGE		7. Project Number USMC #21

(…continued)

10. Description of Proposed Construction

This project prepares two firing points for a stationary target range to support tank, LAV 25, TOW, Javelin, and artillery direct fire. The major construction elements associated with this project is clearing and grubbing, site grading and surface drainage, establishment of fixed firing points with ground markings, right and left range markers, safety flagpoles, and a public address system. This range requires a clear line of sight between the firing points and the impact area. The project provides the clearing, grubbing and grading required for direct line of sight. The range supporting buildings include an observation tower, ammunition storage building, range operations and storage building, a general instruction building, a covered mess facility, enclosed bleachers, and latrine constructed as part of the range complex. The buildings shall typically have spread footings, concrete floors, CMU walls and standing seam metal roofs. Supporting facilities include extension of an access road to the site as well as water and power utility systems to the firing points / buildings. Water distribution includes fire hydrants for fire protection. Project USMC 23, Infrastructure Upgrades, provides utilities to the proposed connection points. Information systems include wiring for local area network (LAN) and telephone connection to Tinian range control.

Environmental mitigation funding has been identified as a percentage of the primary facility cost to respond to issues identified during the NEPA process.

OMSI manuals shall be developed to operate and maintain the range.

Provisions for LEED Certification are included in the cost estimate.

Anti - Terrorism and Force Protection issues have been identified in the cost estimate.

Facilities shall be designed to withstand typhoon wind loads and a seismic level 4 earthquake zone.

11. Requirement: Adequate: 0 Substandard: 0

Category Code:	Requirement	UM	Adequate	Substandard	Inadequate	Deficit/

`1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date APR 08
3. Installation and Location/UIC: TINIAN		
4. Project Title STATIONARY TARGET RANGE		7. Project Number USMC #21

(…continued)

NOTES:

SCOPE: Project was derived using the Marianas Training Concept Plan. This project provides two designated firing points to provide a basic capability for target engagement at realistic ranges for tanks, LAV 25, artillery (direct fire), TOW and Javelin weapons systems. The range layout plan supports the training requirements and surface danger zones for these weapons.

PROJECT: This project constructs a Stationary Target Range with supporting buildings and utility connections.

REQUIREMENT:
This project scope supports the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. It supports the low density, high demand capabilities that are constantly requested and are the capabilities that the joint force needs to support wartime requirements. These two firing ranges are laid out as single firing point ranges with a direction of fire into the central, dudded, impact area. MARFORPAC estimates these ranges will be used weekly. The range provides a basic capability for target engagement at realistic ranges for tanks, LAV 25, artillery (direct fire), practice TOW and Javelin weapons systems. The range does not have moving or automated targets and may be used day or night.

CURRENT SITUATION: There are no ranges of this type on Tinian or in the Marianas.

IMPACT IF NOT PROVIDED: If this project is not constructed, the Marines will not be able to effectively train in tank, LAV 25, artillery (direct fire), TOW and Javelin weapons system combat skills. Consequently, the ability to sustain readiness will be seriously compromised.

ADDITIONAL: Economic Alternatives Considered:

A. Status Quo: This alternative was considered but rejected. The training must be performed and there are no existing facilities.

B. Renovation/Modernization: There are no existing ranges of this type on Tinian or in the Marianas.

C. Lease: There are no suitable private facilities on the island that can be leased to satisfy the requirements of this project.

D. New Construction: This alternative is the recommended course of action.

E. Other Alternatives: None.

F. Analysis Results: There is no viable alternative to analyze.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
TIN Co. Fire & Mvmt	Tinian Company Level Live Fire

Company Level Live-Fire and Movement Range

1. Component USMC	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date MAY 2008

3. Installation and Location/UIC: TINIAN, CNMI	4. Project Title COMPANY LEVEL LIVE-FIRE AND MOVEMENT RANGE

5. Program Element	6. Category Code 177-30	7. Project Number USMC #17	8. Project Cost ($000) (b) (5) [redacted]

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
COMPANY LEVEL LIVE-FIRE AND MOVEMENT RANGE				(b) (5) [redacted]
Range	EA	1	(b) (5) [redacted]	
Support Facilities	SF	4,370.00		
Range Support Building	SF	150		
Ammunition Storage	SF	120		
Range Observation Tower	SF	100		
General Instruction Building	SF	1000		
Covered Mess	SF	1000		
Enclosed Bleachers	SF	1800		
Latrine	SF	200		
LEED Certification	LS			
Environmental Mitigation	EA	1.00		
OMSI	LS			
PCAS	EA	1.00		
Anti-Terrorism / Force Protection	LS			
SUPPORTING FACILITIES				
Electrical Utilities	LS			
Mechanical Utilities	LS			
Site Improvements	LS			
Information Systems	LS			
ESTIMATED CONTRACT COST				
CONTINGENCY (10%)				
SUBTOTAL				
SIOH (6.2%)				
DESIGN/BUILD-DESIGN COST (4%)				
PROJECT COST				
PROJECT COST (ROUNDED)				
EQUIPMENT FUNDED BY OTHER APPROPRIATION				

(Continued On DD 1391C…)

1. Component USMC	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date MAY 2008
3. Installation and Location/UIC: TINIAN, CNMI		
4. Project Title COMPANY LEVEL LIVE-FIRE AND MOVEMENT RANGE		7. Project Number USMC #17

(…continued)

10. Description of Proposed Construction

This project constructs a company sized live-fire and movement range. The range construction includes site clearing and grubbing, grading, earth berms, paved access drive, right and left markers, a safety flagpole, public address system, automated target system emplacements and supporting buildings. The targets will be established in tactically oriented defensive positions throughout the range. The range will have a combination of automated stationary infantry targets, moving infantry targets, automated stationary armored targets and moving armored targets. Construction for the target systems will consist of the target emplacements and control conduit. The target system will be purchased separately as equipment from other appropriations. The range supporting buildings include an observation tower, ammunition storage building, range operations and storage building, a general instruction building, a covered mess facility, enclosed bleachers, and latrine constructed as part of the range complex. Building construction shall have spread footings, concrete floors, CMU walls and standing seam metal roofs. Climate control will be required for control equipment and personnel. A RADON barrier and vent system shall be provided on appropriate supporting buildings. The project extends power and communications to the site from existing Commonwealth Utility Corporation systems off site. A fire protection water line shall be extended from the fire protection line being constructed buy the Infrastructure Upgrade project. Water shall be extended to the site for potable purposes from the Base Camp project potable water distribution system. Sanitary sewer shall be extended to the Base Camp sewer system. Site improvements include grading, surface drainage, paved access drive, sidewalks, seeding disturbed areas and site cleanup.

Project includes Technical Operating Manuals for the target control systems and range support buildings.

Environmental mitigation funding has been identified as a percentage of the primary facility cost to respond to issues identified during the NEPA process.

Project shall comply with LEED Certification requirements.

Antiterrorism measures have been included in the scope and cost estimate.

The project provides special costs for typhoon wind loads and seismic level 4 earthquake zone.

1. Component USMC	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date MAY 2008
3. Installation and Location/UIC: TINIAN, CNMI		
4. Project Title COMPANY LEVEL LIVE-FIRE AND MOVEMENT RANGE		7. Project Number USMC #17

(…continued)

NOTES:

SCOPE: This project was derived using the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. The scope provides a live-fire weapons range with fire and movement space for company-sized training exercises. The range is patterned (depth and width) after Range 400 located at MCAGCC, 29 Palms, CA. The recommended site requires relocation of Voice of America (VOA) transmission facilities. Another project funds the VOA relocation.

PROJECT: This project constructs a company level live-fire and movement range with automated targets and associated control systems. Supporting buildings include an observation/control tower, range operations facility, ammunition breakdown facility, a general instruction facility, covered mess, enclosed bleachers and latrine.

REQUIREMENT:
This project scope supports the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. The range supports the low density, high demand capabilities that are constantly requested and are the capabilities that the joint force needs to support wartime requirements. Tinian will support the joint force wartime mission requirements with Individual, Squad, Platoon, Company, and Battalion level live-fire and movement ranges. This company level live-fire maneuver range is an integral element of that range complex. This range is defined as a "fire and movement" range and is loosely patterned (depth and width) after Range 400 located at MCAGCC, 29 Palms, CA. MARFORPAC estimates this range will be used on a weekly basis by infantry company-sized units (~ 200 Marines). This range provides both day and night live fire training whereby infantry troops maneuver against automated target systems placed in tactically oriented defensive positions. This capability does not exist on Guam or elsewhere in CNMI. The range is sufficient in size to provide maneuver space for two infantry platoons to advance against individual objectives and culminates with an attack against a representative company-sized objective. It is used to train and test dismounted infantry companies on the skills necessary to conduct tactical movement techniques, detect, identify, engage and defeat stationary and moving infantry targets and armor targets in a tactical array. The event specific target scenario is computer driven and scored from the range operations center (control tower). The range operating system is fully capable of providing immediate performance feedback to the using participants.

CURRENT SITUATION: There are no facilities on Tinian to provide this critical training.

IMPACT IF NOT PROVIDED: If this project is not constructed, the Marines will not be able to effectively train in Combat skills. Consequently, the ability to sustain readiness will be seriously compromised.

ADDITIONAL: Economic Alternatives Considered:

A. Status Quo: This alternative was considered but rejected. The training must be performed and there are no existing facilities for this use.

B. Renovation/Modernization: There are no existing facilities to renovate.

C. Lease: There are no suitable private facilities on the island that can be leased to satisfy the requirements of this project.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
TIN SArms & MG Ranges	Tinian Sm Arms & Mach Gun Ranges

Small Arms and Machine Gun Ranges

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date MAY 08

3. Installation and Location/UIC: N61755 TINIAN	4. Project Title SMALL ARMS AND MACHINE GUN RANGES

5. Program Element	6. Category Code 175-00	7. Project Number USMC #20	8. Project Cost ($000) (b) (5)

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
SMALL ARMS AND MACHINE GUN RANGE COMPLEX				(b) (5)
Known Distance Pistol Range (20A)	FP	25	(b) (5)	
Known Distance Rifle Range (20B)	FP	50	(b) (5)	
M16 Range (20C)	FP	4	(b) (5)	
BZO Range (20D)	FP	25	(b) (5)	
M249 SAW Range (20E)	LN	12	(b) (5)	
AT4 Range (20F)	LN	4	(b) (5)	
M203 Range (20G)	LN	4	(b) (5)	
Support Buildings	SF	30,450	(b) (5)	
Range Support Building	SF	1,050	(b) (5)	
Ammunition Storage	SF	700	(b) (5)	
Range Observation Tower	SF	700	(b) (5)	
General Instruction Building	SF	7,000	(b) (5)	
Covered Mess	SF	7,000	(b) (5)	
Enclosed Bleachers	SF	12,600	(b) (5)	
Latrine	SF	1,400	(b) (5)	
Environmental Mitigation	LS			
OMSI	LS			
PCAS	LS			
LEED Certification Rating	LS			
Anti-Terrorism / Force Protection	LS			
SUPPORTING FACILITIES				
Electrical Utilities	LS			
Mechanical Utilities	LS			
Site Improvements	LS			
Information Systems	LS			
ESTIMATED CONTRACT COST				
CONTINGENCY (10%)				
SUBTOTAL				
SIOH (6.2%)				
DESIGN/BUILD-DESIGN COST (4%)				
PROJECT COST				
PROJECT COST (ROUNDED)				
EQUIPMENT FROM OTHER APPROPRIATIONS				

(Continued On DD 1391C…)

(…continued)

10. Description of Proposed Construction

Construct seven range complex in support of Individual Combat Skills for III MEF to include a 25 firing point Known Distance Pistol Range, a 50 firing point Known Distance Rifle Range, a 25 firing point BZO Range, a 4 firing point M16 Range, a 12 lane M249 SAW Range, a 4 lane AT4 Range, and a 4 lane M203 Range. The Pistol Range is a new range and requires clearing & grubbing, grading and drainage, fill, construction of earth berms, right and left side markers, public address system, safety flagpole, and target stands. The firing line will be covered and the entire range will be baffled. There will be a range operation and storage building, an instruction building, an observation tower, ammunition storage, a covered mess facility, enclosed bleachers, and latrines. The Known Distance Rifle Range and BZO Range are new ranges and require clearing, grading and drainage, fill, construction of earth berms, right and left side markers, public address system, safety flagpole and target stands. Supporting buildings for the Rifle and BZO Range include an observation tower, an ammunition storage building, range operations and storage building, an instruction building, a covered mess, enclosed bleachers and latrine facilities. The M16, M249, AT4, and M203 Ranges are new ranges and require clearing, grading and drainage, fill, right and left side markers, access roads, public address systems, safety flagpoles and target emplacements with power/control utilities. Supporting buildings for the M16, M249, AT4, and M203 Ranges include observation towers, ammunition storage and range operations buildings, instruction and storage buildings, covered messes, enclosed bleachers and latrine facilities. Supporting buildings shall have spread footings, Radon barriers, concrete floors, CMU walls, and standing seam metal roofs. Supporting facilities include power, communication and fire protection water utility extension to the site and project related site improvements and site clean-up. Electrical distribution shall be provided as required for the operation and control of the target systems and range facilities. A fire protection system consisting of water distribution lines to fire hydrants shall be provided for the ranges. No sanitary sewers are anticipated, latrines shall have holding tanks. Utility connections shall be made to utility lines provided by the Infrastructure Upgrade project. Information systems include wiring for local area network (LAN), fiber optics, telephone, public address, cable television.

Environmental mitigation funding has been identified as a percentage of the primary facility cost to respond to issues identified during the NEPA process.

LEED Certification has been included for the project.

ATFP setbacks and construction measures shall be incorporated into the design and construction of the range facilities.

(…continued)

NOTES:

SCOPE: This project scope was derived using MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. These facilities provide critical elements for supporting Combat Skills Training of 8,000 Marines and other services moving to Guam. These ranges support combined small arms training which occurs at the Squad, Company, and Battalion level on other larger ranges on Tinian. Ranges are designed and laid out based upon requirements of the marksmanship order 3574.2K and the anticipated throughput of Marines, JSDF forces, U.S. Army forces and estimated "other Services". The standard USMC KD Rifle Range and KD Pistol range designs are proposed. The Battle Sight Zero (BZO) range design is based on the marksmanship order and USMC ranges found at other installations. The AT4 and M249 range were laid out based on the criteria cited in the NAVMC 3500.87 "Infantry Training and Readiness Manual" and Training Circular (TC) 25-8 "Training Ranges"

PROJECT: This project constructs a Small Arms and Machine Gun Range Complex of seven ranges.

REQUIREMENT:
This project is required to support the move from Okinawa to Guam as well as the “Grow the Force” initiative. It supports the low density, high demand capabilities that are constantly requested and are the capabilities that the joint force needs to support wartime requirements. Tinian will support this mission with Individual, Company, and Battalion level live-fire and maneuver ranges. These ranges are an integral element of the Tinian range complex.

Marine Corps Order 3574.2K, dated 01 August 2007, establishes the requirements for the Marine Corps Combat Marksmanship Program. It is the basis for design and throughput of these "qualification" ranges. MARFORPAC estimates these ranges will be used on a daily (M-F) basis, they are designed and laid out based upon requirements of the marksmanship order and the anticipated throughput of Marines, JSDF forces, U.S. Army forces and estimated "other Services". The total number requiring use of a Known Distance (KD) rifle range is estimated at 13,000. (this number is based on AIP + and other personnel estimates with up to 3000 present on Tinian at any one time). The range designs are derived from the marksmanship order and are the standard USMC KD Rifle Range designs to be found throughout the Marine Corps. A rifle range of this design and capability does not exist elsewhere on Guam or in CNMI. KD Pistol range layouts are also based on standard USMC designs. However there are some unknown factors at work regarding the throughput requirements for KD Pistol ranges. A recent USMC Directive indicated that only Colonels and General officers will be armed with the pistol and therefore required to qualify with it. The marksmanship order does not implement this policy and MCB Camp Pendleton, MCB

1. Component USMC	FY 2010 MILITARY CONSTRUCTION PROGRAM	2. Date MAY 08
3. Installation and Location/UIC: N61755 TINIAN		
4. Project Title SMALL ARMS AND MACHINE GUN RANGES		7. Project Number USMC #20

(…continued)

Hawaii and MCB Camp Butler continue to qualify Marines with the pistol per past/current requirements. Since this issue is in flux the KD Pistol ranges have been created based on throughput requirements consistent with the number of Marines previously required to qualify with the service pistol. The Battle Sight Zero (BZO) range design is based on the marksmanship order and USMC ranges found at other installations; and the number of firing points is derived from the number of annual shooters who will use this range along with a time factor (Marines spend only a single day at the BZO range). The M203 range, estimated to be used daily by MARFORPAC, was laid out and designed based on the criteria found in NAVMC 3500.87 "Infantry Training and Readiness Manual" and Training Circular (TC) 25-8 "Training Ranges" to support the 81 Marines in each of the three infantry battalion equivalents which are armed with the M203 and are required to qualify twice a year. The range is used to train and test individual Marines on the skills necessary to engage and defeat stationary target emplacements with the 40mm grenade launcher, and provides sufficient capacity to meet all training requirements. Three infantry battalion equivalents, plus forward deployed Marine Expeditionary Units (MEU) are expected to use this range on an annual basis. This capability does not exist on Guam or elsewhere in CNMI. The AT4 and MK153 SMAW range capability does not exist on Guam or elsewhere in CNMI. This range was laid out and designed based on the criteria cited in the NAVMC and TC above to support the AT4 and MK153 SMAW gunners in the three infantry battalion equivalents and the forward deployed MEUs who are required to qualify twice a year. The range is used to train and test individual Marines and assault teams on the skills necessary to engage and defeat stationary and moving armor targets with the two weapons systems.

CURRENT SITUATION: There are no small arms ranges on Tinian.

IMPACT IF NOT PROVIDED: If this project is not constructed, the activity will not be able to effectively train Marines in Combat Skills. Consequently, the ability to sustain readiness may be seriously compromised.

ADDITIONAL: Economic Alternatives Considered:

A. Status Quo: This alternative was considered but rejected. The training must be performed and there are no existing facilities.

B. Renovation/Modernization: There are no existing facilities to improve.

C. Lease: There are no suitable private facilities on the island that can be leased to satisfy the requirements of this project.

D. New Construction: This alternative is the recommended course of action.

E. Other Alternatives: None.

F. Analysis Results: There is no viable alternative to analyze.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
TIN Comb. Arms Fire	Tinian Combined Arms Training

Combined Arms Live Fire Training Area

1. Component USMC	FY 2012 MILITARY CONSTRUCTION PROGRAM	2. Date APR 2008

3. Installation and Location/UIC: TINIAN, CNMI	4. Project Title COMBINED ARMS LIVE FIRE TRAINING AREA

5. Program Element	6. Category Code 177-30	7. Project Number USMC #16	8. Project Cost ($000) (b) (5)

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
COMBINED ARMS LIVE_FIRE TRAINING AREA				(b) (5)
Fire and Movement Range	EA	1	(b) (5)	
Support Facilities	SF	4,370.00		
Range Support Building	SF	150		
Ammunition Storage	SF	120		
Range Observation Tower	SF	100		
General Instruction Building	SF	1000		
Covered Mess	SF	1000		
Enclosed Bleachers	SF	1800		
Latrine	SF	200		
LEED Certification	SF	1,270.00		
OMSI	EA	1.00		
PCAS	EA	1.00		
Environmental Mitigation	LS			
Anti-Terrorism / Force Protection	LS			
Building Information Systems	LS			
SUPPORTING FACILITIES				
Electrical Utilities	LS			
Mechanical Utilities	LS			
Site Improvements	LS			
Information Systems	LS			
ESTIMATED CONTRACT COST				
CONTINGENCY (10%)				
SUBTOTAL				
SIOH (6.2%)				
DESIGN/BUILD-DESIGN COST (4%)				
PROJECT COST				
PROJECT COST (ROUNDED)				
EQUIPMENT FROM OTHER APPROPRIATIONS				

(Continued On DD 1391C…)

1. Component USMC	FY 2012 MILITARY CONSTRUCTION PROGRAM	2. Date APR 2008
3. Installation and Location/UIC: TINIAN, CNMI		
4. Project Title COMBINED ARMS LIVE FIRE TRAINING AREA		7. Project Number USMC #16

(…continued)

10. Description of Proposed Construction

This project constructs a battalion sized live-fire and movement range. The range construction includes site clearing and grubbing, grading, earth berms, paved access drive, right and left markers, a safety flagpole, public address system, automated target system emplacements and supporting buildings. The automated targets will be established in tactically oriented defensive positions throughout the range. Construction for the target systems will consist of the target emplacements, power connection and control conduit. The target system will be purchased separately as equipment from other appropriations. The range supporting buildings include an observation tower, ammunition storage building, range operations and storage building, a general instruction building, a covered mess facility, enclosed bleachers, and latrine constructed as part of the range complex. Building construction shall be spread footings, concrete floors, CMU walls and standing seam metal roofs. Climate control will be required for control equipment and personnel. A RADON barrier and vent system shall be provided on appropriate supporting buildings. The project extends power and communications to the site from existing systems off site. Information systems include wiring for local area network (LAN) connection to the Tinian Range Control Facility, fiber optics, telephone, and cable television. A fire protection water line shall be extended from the fire protection line being constructed by the Infrastructure Upgrade project. Water shall be extended to the site for potable purposes from the Base Camp project potable water distribution system. Sanitary sewer shall be extended to the Base Camp sewer system. Site improvements include grading, surface drainage, paved access drive, sidewalks, seeding disturbed areas and site cleanup.

Project includes Technical Operating Manuals for the target control systems and range support buildings.

Environmental mitigation funding has been identified as a percentage of the primary facility cost to respond to issues identified during the NEPA process.

Project shall comply with LEED Certification requirements.

Antiterrorism measures have been included in the scope and cost estimate.

The project provides special costs for typhoon wind loads and seismic level 4 earthquake zone.

1. Component USMC	FY 2012 MILITARY CONSTRUCTION PROGRAM	2. Date APR 2008
3. Installation and Location/UIC: TINIAN, CNMI		
4. Project Title COMBINED ARMS LIVE FIRE TRAINING AREA		7. Project Number USMC #16

(…continued)

SCOPE: This project was derived using the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. The scope provides a live-fire weapons range with fire and movement space for battalion-sized training exercises. The live fire training area is similar to a company level range patterned after Range 400 located at MCAGCC, 29 Palms, CA. only larger. The battalion range has been configured to the space available on Tinian. The recommended site requires relocation of Voice of America (VOA) transmission facilities. Another project funds the VOA relocation.

PROJECT: This project constructs a battalion level live-fire and movement range with automated targets and associated control systems. Supporting buildings include an observation/control tower, range operations facility, ammunition breakdown facility, a general instruction facility, covered mess, enclosed bleachers, latrine and supporting utilities.

REQUIREMENT:
This project scope supports the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. It supports the low density, high demand capabilities that are constantly requested and are the capabilities that the joint force needs to support wartime requirements. Tinian will support this mission with Individual, Company and Battalion level live-fire and maneuver ranges. This battalion level live-fire maneuver range is an integral element of that range complex. This range combines live fire with maneuver and is similar in many respects to the company-level live fire and movement range but on a larger scale. It is projected to be used quarterly by MARFORPAC training units up to battalion size (~ 900 Marines), it provides both day and night live fire training whereby infantry troops maneuver against automated target systems placed in tactically oriented defensive positions. The range is sufficient in size to provide maneuver space for two infantry companies to advance against individual objectives and culminates with an attack against a representative battalion-sized objective. It is used to train and test dismounted infantry battalions on the skills necessary to conduct tactical movement techniques, detect, identify, engage and defeat stationary and moving infantry targets as well as stationary and moving armor targets in a tactical array. The event specific target scenario is computer driven and scored from the range operations center (control tower). The range operating system is fully capable of providing immediate performance feedback to the using participants. There is no specific range design in Training Circular (TC) 25-8 "Training Ranges" for a range of this size and magnitude. TC 25-1 "Training Land" identifies the space required to train a "Task Force" (infantry battalion reinforced) in the offense at 68 sq km, however the amount of land available and suitable for this type of training on Tinian is limited to approximately 48 sq km. The live fire training area has been configured to the space available. This capability is not available on Guam or elsewhere in CNMI.

CURRENT SITUATION: There are no facilities on Tinian to provide this critical training.

IMPACT IF NOT PROVIDED: If this project is not constructed, the Marines will not be able to effectively train in Combat skills. Consequently, the ability to sustain readiness will be seriously compromised.

ADDITIONAL: Economic Alternatives Considered:

A. Status Quo: This alternative was considered but rejected. The training must be performed and there are no existing facilities for this use.

B. Renovation/Modernization: There are no existing facilities to renovate.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Landing Beach - CNMI	Landing Beach - CNMI

Tipalao Landing Beach

1. Component USMC	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date APR 2008

3. Installation and Location/UIC:	4. Project Title
NAVBASE, GUAM	CNMI LANDING BEACH

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	159-30	USMC #11	(b) (5)

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
PRIMARY FACILITY				(b) (5)
AAV and LCAC Landing Area	AC	7.89	(b) (5)	
Dead Coral Mitigation	AC	9.75	(b) (5)	
SUPPORTING FACILITIES				
ESTIMATED CONTRACT COST				
CONTINGENCY (10%)				
SUBTOTAL				
SIOH (6.2%)				
DESIGN/BUILD-DESIGN COST (4%)				
PROJECT COST				
PROJECT COST (ROUNDED)				
FUNDING FROM OTHER APPROPRIATIONS				

10. Description of Proposed Construction

The project constructs a beach landing for AAV and LCAC watercraft training on Guam. Construction includes 7.89 acres of beach clearing and grading to optimize the beach slope for watercraft landings, a retaining wall and 9.75 acres of dead coral removal and mitigation. Primary cost factor is for dead coral mitigation estimated to be $1.026 million per acre based on previous dead coral mitigation efforts. The process to mitigate impacts on coral reefs is reforestation. Reforestation requires acquisition of land as well as the cost to reforest the land. Dead coral mitigation is required for AAV operations only.

SUPPORTING FACILITIES: None.

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1. Component USMC	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date APR 2008
3. Installation and Location/UIC: NAVBASE, GUAM		
4. Project Title CNMI LANDING BEACH		7. Project Number USMC #11

(…continued)

SCOPE: The project scope was derived using the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces and similar beach landings for AAV and LCAC watercraft training at other Marine bases.

PROJECT: The project constructs a beach landing for AAV and LCAC watercraft training. The project acquires and forests the land required for dead coral mitigation.

REQUIREMENT: This project scope supports the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. The project provides a critical training area required for beach landing craft operators that supports amphibious warfare training requirements for III MEF and CTF 76. The beach landing supports relocation of III MEF AAV units from Japan to Guam.

CURRENT SITUATION: There are no dedicated facilities on Guam or CNMI to provide this critical amphibious warfare training.

IMPACT IF NOT PROVIDED: If this project is not constructed, the Marines can not provide critical amphibious warfare training using landing crafts on Guam. Consequently, the ability to sustain readiness will be seriously compromised.

ADDITIONAL: Economic Alternatives Considered: N/A

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
TIN Base Camp Ph II	Tinian Base Camp II

1500/3000 Man Base Camp (Phase Two)

1. Component USMC	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date APR 2008

3. Installation and Location/UIC:	4. Project Title
TINIAN, CNMI	1500/3000 MAN BASE CAMP (Phase Two)

5. Program Element	6. Category Code	7. Project Number	8. Project Cost ($000)
	721-50	USMC #13B	(b) (5) [redacted]

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
1500/3000 MAN BASE CAMP (Phase Two)				(b) (5) [redacted]
Barracks	SF	72,000.00	(b) (5) [redacted]	
Administrative Facility	SF	11,300.00		
Chapel	SF	3,000.00		
Exchange Service Outlet	SF	7,000.00		
Vehicle Maintenance Shop	SF	3,840.00		
Deadline Shop	SF	360.00		
Concrete Apron for Org Storage	SY	3,570.00		
Gen Purpose Storage Facility (2)	SF	36,000.00		
Wash Platform	EA	1.00		
Oil Storage Building	SF	240.00		
Laundry Building	SF	19,600.00		
Multipurpose Athletic Field	EA	5.00		
Consolidated Activities Center	SF	15,000.00		
Pavilion	SF	800		
Special Costs	SF	148,140.00		
LEED Certification	SF	167,740.00		
OMSI	EA	1.00		
PCAS	EA	1.00		
Environmental Mitigation	LS			
Anti-Terrorism / Force Protection	LS			
Building Information Systems	LS			
SUPPORTING FACILITIES				
Electrical Utilities	LS			
Mechanical Utilities	LS			
Paving, Walks, Curbs, & Gutters	LS			
Information Systems	LS			
ESTIMATED CONTRACT COST				
CONTINGENCY (10%)				
SUBTOTAL				
SIOH (6.2%)				
DESIGN/BUILD-DESIGN COST (4%)				
PROJECT COST				
PROJECT COST (ROUNDED)				
EQUIPMENT FROM OTHER APPROPRIATIONS				

(Continued On DD 1391C…)

(…continued)

10. Description of Proposed Construction

This project constructs a Base Camp for 1,500 with expansion capability to support up to 3,000 Marines (3 Battalions). The project is divided into two phases. Phase I constructs the essential facilities required to operate the camp. Phase Two includes the following elements: Barracks, an Administrative Facility, a Chapel, an Exchange Service Outlet, a Vehicle Maintenance Shop, a Deadline Shop, a concrete apron for Organizational Storage, a General Purpose Storage Facility, a Wash Platform, an Oil Storage Building, Laundry Buildings, Athletic Fields, a Consolidated Activities Center and a Pavilion. The camp buildings shall have mat foundations, concrete floors, CMU walls, and standing seam metal roofs. Facilities will replicate a typical forward operating location but must be substantial enough to withstand typhoon wind loading and seismic IV conditions. .

Project includes Technical Operating Manuals.

(…continued)

Applicable portions of the project will be designed to meet LEED Certification. Silver LEED certification is the goal but may be hard to achieve on this type facility. Maximum LEED checklist points possible shall be achieved during design.

Environmental mitigation funding has been identified as a percentage of the primary facility cost to respond to issues identified during the NEPA process.

Information systems include wiring for local area network (LAN), fiber optics, telephone, public address, cable television, and intrusion detection system shall be provided to appropriate camp facilities.

The project provides for design for Anti-terrorism Force Protection (AT/FP) features and complies with AT/FP regulations and physical security in compliance with Military Handbook 1024/1 Unified Facilities Criteria (UFC) 4-101-01 DOD Minimum Anti-Terrorism Standards for Buildings.

SUPPORTING FACILITIES:

Electrical utilities include electrical distribution, communications to the buildings, transformers, and connection to facilities.

Mechanical utilities include extending water and sanitary lines from the phase I water distribution and sanitary collection systems to the facilities.

Paving and site improvements provide for concrete aprons, sidewalks, landscaping, and the AT/FP setback requirement.

1. Component USMC	FY 2011 MILITARY CONSTRUCTION PROGRAM	2. Date APR 2008
3. Installation and Location/UIC: TINIAN		
1500/3000 MAN BASE CAMP (Phase Two)		7. Project Number USMC #13B

(…continued)

NOTES:

SCOPE: This project scope was derived from the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. The camp provides a living complex for up to 3 battalions of personnel while performing Company level training on Tinian. This is phase two of a two phase project.

PROJECT: This project constructs a 1500/3,000 Man Base Camp to support Marine training requirements on the Island of Tinian.

REQUIREMENT:
The Island of Tinian is the site of Company and Battalion live-fire and maneuver ranges in the Mariana Combined Arms Training Center. This remote island does not have the infrastructure to support training at the planned level. A living area to support up to 3,000 Marines is required. This camp complex is envisioned to be similar to what Marines operate from in a contingency situation.

This project scope supports the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. The camp provides direct support to the major Marianas Combined Arms Training Center.

CURRENT SITUATION: There are no facilities on Tinian to provide this level of housing.

IMPACT IF NOT PROVIDED: If this project is not constructed, the proposed training ranges in other projects will not be able to be used on a continuous basis.

ADDITIONAL: Economic Alternatives Considered: None.

PROJECT REQUIREMENTS

Rainbow Chart Name	Appendix D Name
Lease - Pagan	Lease - Pagan

Pagan Lease Research Project

Pagan Lease Research Project

BLUF

- Based on our research the ROM cost for the Pagan Land Lease with Royalties range from (b) to (b)
- Uncertainties are in the following areas:
  - Quantity of pozzolan deposits on Pagan
  - Market price of the pozzolan deposits
  - Varying rates of royalties paid for pozzolan deposits
- If greater accuracy is needed, a lease valuation consulting study, along with the appropriate mineral analysis will be required closer to the purposed undertaking (start process to awarding studies in mid-FY16 for lease negotiations in FY18).

FOUO – DELIBERATIVE PROCESS – PRE-DECISIONAL-DO NOT RELEASE

CNMI Pagan Island

- **It is anticipated that [redacted] rental value would exceed [redacted] existing leaseholds in the CNMI due to the presence of pozzolan deposits (type of volcanic ash used as a strengthening material in the processing of cement):** [redacted]
  - Mining firms have [redacted] and recently expressed interest in obtaining permits to mine the pozzolan deposits; however, recent court orders have delayed mining.
  - A report determined the tonnage of pozzolan deposits was 11.9 million [redacted] tonnes. This was prepared for the Secretary of the Department of Public Lands, CNMI in 2007. However, various articles indicate 100 – 200 million metric tonnes and that a new study is required to determine the amount.

Analysis of ROM Data for Pozzolan

ROM Ranges Pozzolan Value to CNMI at 12% Royalty		
(b) (5)	(b) (5)	Metric Tonnes of Pozzolan
$ (b)	$ (b)	Per Metric Ton
$ (b) (5)	$ (b) (5)	Total Sale Amount
$ (b) (5)	$ (b) (5)	12% Royalty

ROM Ranges Pozzolan Value to CNMI at 25% Royalty		
(b) (5)	(b) (5)	Metric Tonnes of Pozzolan
$ (b)	$ (b)	Per Metric ton
$ (b) (5)	$ (b) (5)	Total Sale Amount
$ (b) (5)	$ (b) (5)	25% Royalty

- **11,900,000 metric tonnes of pozzolan was used as it was the only available figure from a credible study.**
- **With the lack of comparable data to support the analysis of the price per metric ton, varying estimated rates of (b) (China markets) and (b) (US markets) were used to reflect the fluctuating market prices.**
  - Because the cement industry is so competitive, corporations and end users seldom publish their costs.
- **With the lack of comparable data to support the analysis of royalties, varying estimated rates of 12% and 25% that are typically applied to mineral rights of gas and oils were used.**

Analysis of ROMs

ROMs Totals w/Land Lease			
$	(b) (5)	ROM Land Lease w/12% Royalty w/	(b Per Metric Ton
$	(b) (5)	ROM Land Lease w/12% Royalty w/	(b Per Metric Ton
$	(b) (5)	ROM Land Lease w/25% Royalty w/	(b Per Metric Ton
$	(b) (5)	ROM Land Lease w/25% Royalty w/	(b Per Metric Ton

- **ROM Land Lease (b) (5)) is for the entire of island of Pagan approx. 11,800 acres.**
- **A report prepared for the Secretary of the Department of Public Lands, CNMI in 2007 analyzed the potential exploitation of natural pozzolan from Pagan Island.**
  - Attempts in the study to obtain shipping costs and delivered prices for cement and/pozzolan, were unsuccessful.
  - Indicated that there are significant capital investments to develop the project on an island with no infrastructure and located considerable distance from major markets.
- **In order to verify the ROMs and assumptions, a lease valuation consulting study, along with the appropriate mineral analysis will be required closer to the purposed undertaking (start process to awarding studies in mid-FY16 for lease negotiations in FY18).**

Back Up

Back up

CNMI Pagan Island Varying Data

- The Saipan Tribune reported that in April 2012 Japanese investors said they are interested in leasing for 10 to 15 years roughly 2,000 hectares of public land on the island to mine what they consider "best quality" pozzolan. The article also mentioned at least 100 million metric tons of pozzolan vice the 11.8 million from the report.
- The Pacific Island Report on Oct 2016 indicated that the pozzolan mining permit issues have been resolved by the local court and that there's a need to conduct an updated study on the value and quantity of the minerals, as the previous studies may no longer be valid.

FOUO – DELIBERATIVE PROCESS – PRE-DECISIONAL-DO NOT RELEASE

PROJECT REQUIREMENTS

Rainbow Chart Name

Pagan HSV Pier

Appendix D Name

Pagan HSV Pier

HSV Pier

1. Component USMC	FY 2012 MILITARY CONSTRUCTION PROGRAM	2. Date MAY 2008

3. Installation and Location/UIC: PAGAN, CNMI	4. Project Title HSV PIER

5. Program Element	6. Category Code 151-20	7. Project Number USMC #25	8. Project Cost ($000) (b) (5)

9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost ($000)
HSV PIER				(b) (5)
HSV Pier at Red Beach	SY	4,000.00	(b) (5)	
Live Coral Mitigation	AC	5.50	1(b) (5)	
PCAS	EA	1.00	(b) (5)	
Environmental Mitigation	EA	1.00	(b) (5)	
SUPPORTING FACILITIES				
Landing Beach Grading	SY	7,300.00	(b) (5)	
Equipment Transfer Road	SY	800.00		
ESTIMATED CONTRACT COST				
CONTINGENCY (10%)				
SUBTOTAL				
SIOH (6.2%)				
DESIGN/BUILD-DESIGN COST (4%)				
PROJECT COST				
PROJECT COST (ROUNDED)				
EQUIPMENT FROM OTHER APPROPRIATIONS				

10. Description of Proposed Construction

This project constructs a 4,000 SY floating pier at Red Beach on the uninhabited Island of Pagan to support HSV vessels during expeditionary exercises. The length of berthing required is 300 feet. The main pier structure is anticipated to be constructed off-site and towed to the island for final installation on mooring spuds supported on piles and pile caps. The floating pier shall exit to a road on shore using service ramps from a quay wall. The floating pier concept has been developed and tested by the Naval Facilities Engineering Command Engineering Service Center. There will be no utilities constructed to support the pier. The project also cuts an access lane through a live coral reef and clears and grades Green Beach to support AAV beach landings

(Continued On DD 1391C…)

1. Component USMC	FY 2012 MILITARY CONSTRUCTION PROGRAM	2. Date MAY 2008
3. Installation and Location/UIC: PAGAN, CNMI		
4. Project Title HSV PIER		7. Project Number USMC #25

(…continued)

Environmental mitigation funding has been identified as a percentage of the primary facility cost to respond to issues identified during the NEPA process.

NOTES:

SCOPE: This project scope supports the MARFORPAC Pacific Training Architecture Concept Plan for achieving and sustaining readiness of regionally deployed forces. It provides capability to move goods and supplied directly from a small vessel to the shore.

PROJECT: Construct new pier structure on Red Beach with 300 feet of berthing on the uninhabited Island of Pagan and clear and grade Green Beach and Red Beach for landings.

REQUIREMENT: The pier structure and a landing beach are required to support expeditionary training on Pagan, CNMI.

CURRENT SITUATION: There is no pier structure, harbor facility or designated area for beach landings on this remote island.

IMPACT IF NOT PROVIDED: If this project is not constructed, MAGTF level training may be compromised.

ADDITIONAL: Economic Alternatives Considered:

A. Status Quo: This alternative was considered but rejected. The training must be performed and a pier structure constructed

B. Renovation/Modernization: There are no existing facilities to renovate.

C. Lease: There are no suitable private facilities on the island that can be leased to satisfy the requirements of this project.

D. New Construction: This alternative is the recommended course of action.

E. Other Alternatives: None.

F. Analysis Results: There is no viable alternative to analyze.