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MARINE CORPS ORDER 11000.12

From: Commandant of the Marine Corps
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Subj: REAL PROPERTY FACILITIES MANUAL, FACILITIES PLANNING AND PROGRAMMING

Ref: (a) MCO 5215.1K
(b) MCO 5400.54
(c) UFC 2-100-01
(d) MCO P11000R.20 W/CH 1
(e) DoDI 4165.14, "Real Property Inventory (RPI) and Forecasting," January 17, 2014
(f) MCO 11000.22
(g) SECNAV M-5210.1
(h) 5 U.S.C. 552a
(i) SECNAVINST 5211.5E

Encl: (1) Reference List for Encl (2)
(2) Facilities Planning Manual

1. Situation

a. This Order represents a significant rewrite and incorporates the policy revisions set forth in references (a) and (b).

b. This Order substantively establishes new Marine Corps requirements for sustainable planning and facilities master planning consistent with reference (c) and related publications and follow-on Department of Defense (DoD) guidance.

c. This Order acknowledges the operational capability of Marine Corps Installations Command (MCICOM), Training and Education Command (TECOM), and the regional commands Marine Corps Installations (MCI) East, MCI National Capital Region (NCR), MCI West, and MCI Pacific set forth in reference (b).

d. This Order provides overarching guidance to Marine Forces Reserve (MFR) and will be referenced in MFR policies and guidance on facilities management; however, specific processes and internal roles and responsibilities related to MFR are provided in reference (d).

e. Enclosure (1) provides the references for Enclosure (2), the Marine Corps Facilities Planning Manual (FPM). Enclosure (2) augments the policy provided in this Order, and expands on the Marine Corps Facility Planning and Programming System (MCFPPS). Enclosure (2) shall be regarded as an authoritative expansion of policy established in this Order.

2. Cancellation. MCO P11000.12C W/CH 1.

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3. Mission. To provide decision makers and stakeholders with policy and procedural guidance on sustainable facilities planning to cost-effectively support Marine Corps readiness and quality of life. Subsequently, this Order accomplishes the following:

a. Updates the policy guidance pertaining to the incorporation of the Marine Corps Facilities Planning and Programming System (MCFPPS) as the official Marine Corps facilities planning system.

b. Incorporates the policy changes published in references (b), (f) and (g) for adherence to the MCFPPS process.

c. Identifies the roles and responsibilities of the Assistant Deputy Commandant (ADC) for Installations and Logistics (I&L) Facilities (LF)/Commander, Marine Corps Installations Command (ADC, I&L(LF)/COMMCICOM); Training and Education Command (TECOM); Commander Marine Corps Forces Command (COMMARFORCOM); Commander Marine Corps Forces Pacific Command (COMMARFORPAC); MCI regions; and USMC installations during the execution of the MCFPPS process.

d. Mandates integration of facilities planning efforts with other installation and regional planning initiatives and processes, such as encroachment control planning, environmental planning, joint land use planning, integrated land use planning, natural and cultural resources planning, sustainability planning, energy planning, transportation management planning, and range management planning.

4. Execution. All Marine Corps facilities planning shall adhere to the planning guidance published in this Order, and detailed in Enclosure (2). Specifically, all facilities planning shall refer to this Order and Enclosure (2) as the official guidance, relevant to all applicable aspects of planning and programming.

a. Commander’s Intent and Concept of Operations

(1) Commander’s Intent. This Order establishes the Deputy Commandant (DC), Installations & Logistics (I&L) as the principal Marine Corps advocate for the implementation of the MCFPPS and compliance with federal and DoD policy on facilities planning. Sustainable facilities planning will enable installation Commanders to provide correctly sized and sited facilities to adequately support missions while reducing the costs of operating and sustaining installations.

(2) Concept of Operations

(a) The MCFPPS process, including master planning, is under the direction of ADC, I&L (LF)/COMMCICOM, who will exercise approval authority and responsibility for the execution of the MCFPPS program and sustainable facilities planning within the Marine Corps. Marine Corps readiness, effectiveness, and responsiveness depend upon the availability and condition of its material assets. The Facilities Planning Process supports the readiness of Combatant Commands and Marine Corps Forces (MARFOR) by ensuring that the Marine Corps adequately identifies requirements for its current and future missions, and has the land and facilities available at the right time in the right place to support those requirements.

(b) To ensure compliance with reference (e) and that the vision and content are consistent with the goals of the larger Marine Corps enterprise, Installation Master Plans shall be submitted to the ADC, I&L (LF)/COMMCICOM for review and approval.

(c) ADC, I&L (LF)/COMMCICOM shall provide overall direction and guidance, establish (or approve) military priorities, direct actions necessary to coordinate programs, and make and promulgate decisions.

b. Essential Tasks

(1) ADC, I&L (LF)/COMMCICOM

(a) Provide policy guidance and interpretation, technical assistance and expertise, and facilitate decision making by Commandant of the Marine Corps (CMC) and his staff.

(b) Coordinate facilities planning actions between the regions and higher headquarters.

(c) Provide a guidance letter with the latest updates on both project submission policies, facilities planning, and updated guidance for programming projects prior to the annual Military Construction (MILCON) submission cycle.

(2) MARFORCOM; MARFORPAC; MCI East; MCI National Capital Region (NCR); MCI West; MCI Pacific; and TECOM

(a) Ensure installations and sites under their authority conform to the policies outlined in this Order and Enclosure (2) and ensure that facilities planning products are kept current and technically accurate. The Commanding Generals of the MCICOM regions and TECOM have been delegated approval authority for many requirements from ADC, I&L (LF)/COMMCICOM, to include approval of Basic Facilities Requirements (BFRs) that conform to established criteria. BFRs that vary from these criteria require approval by ADC, I&L (LF)/COMMCICOM.

(b) Implement Marine Corps, Department of the Navy (DON) and DoD guidance regarding installation master planning across the regions. Ensure installations incorporate approved land use, conservation, environmental compliance, encroachment control, and mission sustainment policies into facilities planning activities.

(c) Liaise between operational forces and facilities personnel to provide facilities in accordance with the MCFPPS and sustainable planning principles.

(d) Seek regional solutions for support, especially where land, facilities, and resources are limited.

(e) In concert with installation Community Plans and Liaison Officers (CPLOs), regional Government and External Affairs (GEA) personnel, and facilities staff, coordinate with off-base communities, state and regional stakeholders, and non-governmental organizations to ensure the long-term ability of installations to support their missions.

(f) Provide facilities support essential to the mission, operations, and ancillary functions of assigned units and personnel in accordance with the MCFPPS.

(g) Coordinate development of master plans with other DoD services, federal agencies, and external stakeholders (e.g., National Capital Planning Commission for MCI NCR), as appropriate and required to comply with region-specific planning requirements.

(3) Installation Commanders. Installation Commanders have overall authority and responsibility to manage and assign facilities aboard their installation and shall:

(a) Receive four (4) hours of Master Planning training during the initial year of their assignment as installation Commander, per reference (e). This training is performed as part of the planning responsibilities, and is to be funded by the installation, unless a centrally funded course is available.

(b) Ensure that supporting planning documents are current and that development conforms to the approved installation master plan. As the installation personnel loading changes, the requirements should be updated and entered into planning document databases (e.g. facilities, activity and planning modules). Current documentation is also required to support DD 1391 Forms for new construction and renovation projects.

(c) Ensure that installation Facilities Support Requirement (FSR) planning documents are updated annually in coordination with the Total Force Structure Division (TFSD), and provided to ADC, I&L/COMMCICOM for validation as a part of MILCON submissions. Installation Commanders shall ensure that units validate TFSD projections at least once per year so that all facilities planning actions are based upon accurate data.

(d) Ensure that Real Property records and the facilities assets data in the internet Naval Facilities Asset Data Store (iNFADS) system for the installation are regularly updated and maintained. Updates should be completed annually, at a minimum, in conformance with reference (g).

(e) Develop, and maintain an installation planning process that identifies current and future uses for land and facilities, as well as identifies under-utilized and excess capacity facilities for the installation. Input shall be solicited from assigned units and installation stakeholders to ensure the process optimizes the mission capabilities and operations for the installation within operational, environmental, and fiscal constraints. This process, which can include the establishment of an Installation Planning Board (IPB), will utilize and inform the various planning tools, to include the FSR, training and land use/regulating plans, environmental planning documents, encroachment control plans (ECPs), and the installation Master Plan.

(f) Oversee development and maintenance of Facility Planning Documents (FPDs) to include all facilities requirements, deficiencies, excesses, and planned courses of actions for the installation. These documents shall be updated prior to Master Plan updates.

(g) Develop and maintain appropriate facilities plans required for mobilization support for the installation. These plans should be updated regularly and no plans should be more than five years old. When updated, these plans shall be forwarded through the region to ADC, I&L (LF)/COMMCICOM, using appropriate security classification methods, for comment and approval.

(h) Ensure that databases containing facilities data (e.g., iNFADS) are reviewed at least annually, and updated as needed, to verify accuracy, and ensure integration with all planning and geospatial products and modules.

(i) Ensure that all facilities are sited in compliance with Marine Corps and DoD policy, particularly with respect to training and operational needs, land use policies, site approvals, conservation, encroachment control/mission sustainment, Air Installation Compatible Use Zone/Range Compatible Use Zone (AICUZ/RCUZ), and protection of human health and the environment. The Master Plan shall be updated at least once every five years as an installation responsibility and submitted for review and approval to ADC, I&L (LF)/COMMCICOM. Submittal shall require regional review and endorsement letter; additionally, MCI regional Commanders shall determine whether or not COCOM, MEF or MARFOR endorsement letters are required.

(j) Conduct site approvals.

(4) Installation Facilities Planners. Installation Facilities Planners are responsible under the installation Commander to implement the MCFPPS, as outlined in this Order and Enclosure (2), locally by:

(a) Complying with the policies of this Order, and managing and updating facilities planning documents in accordance with the references.

(b) Updating the installation Facilities Support Requirements (FSR) planning documents in coordination with TFSD, and providing them to ADC, I&L (LF)/COMMCICOM for validation as a part of MILCON submissions. Generating BFRs based upon this loading. Assisting units in validating TFSD projections at least once per year so that all facilities planning actions are based upon accurate data.

(c) Reviewing databases containing facilities data (e.g. Internet Navy Facility Asset Data Store [iNFADS]) at least annually, and updating as needed, to verify accuracy, and ensure integration with all planning and geospatial products and modules.

(d) Receiving and maintaining up-to-date training as a Facilities Planner through appropriate facilities management courses. Facilities planners must pursue continuing education related to planning skills and policies of 32 credit hours every two years, in accordance with reference (d). This training is performed as part of the planning responsibilities, and is to be funded by the installation.

(e) Assisting assigned units and tenants with developing facilities requirements, providing appropriate buildings and training areas to meet those requirements, and developing appropriate plans to ensure the long-term capability to support future missions.

(f) Assisting installation operation and training staff with developing training areas, land and airspace, where feasible, and incorporating those requirements into the Installation Master Plan.

(g) Prepare site approval documents.

(5) Tenant Commands Aboard USMC Installations

(a) Comply with the policies of the installation commander, particularly with respect to facilities, land use, and environmental compliance.

(b) Obtain site approval from the installation Commander for all building, equipment, interim relocatable facilities, and training device lay-down regardless of funding source. Site approval will be in accordance with the Master Plan and variances granted, as appropriate, by the installation Commander and/or the Installation Planning Board, should one exist. Deviations from the approved Master Plan will require ADC, I&L (LF)/COMMCICOM review and approval.

(c) Ensure that the data on projected personnel and equipment loading for the installation is accurate and appropriately used to calculate facilities requirements. The base loading figures shall be validated annually by the unit and submitted to the installation commander when changes become officially approved by higher headquarters.

(d) Coordinate with installation Facilities Planners to develop requirements based upon approved base or installation personnel loading figures. This joint effort will create projects for new or restored facilities, or demolition of facilities that are no longer required due to mission or force structure change, and will estimate the recurring costs to meet future mission requirements in an affordable manner.

(e) Coordinate with installation Facilities Planners to ensure compliance with support agreements, Service policies, and criteria.

(6) Activity Commanders

(a) Ensure that all levels of command involved with facilities planning are aware of the base loading to be supported.

(b) Provide the FSR to supported units and tenants as the basis and guidance to acquire, use, and return real property.

(7) Funding responsibilities

(a) Installations, MARFORCOM Headquarters, and stand-alone sites are funded by MCICOM for operations and management. Funding of the operations and maintenance of databases containing facilities data, inspection and documentation of facilities conditions, preparation of project documents to include facilities planning documents, environmental analyses to include National Environmental Policy Act (NEPA) documents (when the installation is the action proponent), and Master Plan updates is the responsibility of the installation. Training of facilities planners is also the responsibility of the installation in order to ensure that planning staff has necessary and current skills.

(b) MCICOM may provide supplemental funding, as it becomes available, for training, planning studies, and BFR and Master Plan updates. An annual data call for planning requirements will be sent to the regions and installations and the requests for funds will be prioritized by MCICOM. These funds are intended to supplement local funding when unforeseen requirements must be analyzed. They are not intended for routine updates of documents. Installations may prepare these requests during the quarter preceding the next fiscal year, in anticipation of the data call. ADC, I&L (LF)/COMMCICOM will consider whether to exercise incremental completion of a master plan, depending on availability of funding and the installations successfully executing a part or component of the master plan.

c. Coordinating Instructions. Comply with the intent and content of this Order inclusive of Enclosure (2). The terms “shall”, and “will”, and “must” as used in the Order are directive and require compliance. Words such as “may” and “can” are advisory.

5. Administration and Logistics

a. Recommendations concerning the revisions contained in this Order are encouraged and should be submitted to ADC, I&L (LF)/COMMCICOM via the appropriate chain of command.

b. Records created as a result of this Order shall be managed according to National Archives and Records Administration approved dispositions to ensure proper maintenance, use, accessibility and preservation, regardless of format or medium.

c. The generation, collection or distribution of personally identifiable information (PII) and management of privacy sensitive information shall be in accordance with the Privacy Act of 1974, as amended, per references (h) and (i). Any unauthorized review, use, disclosure or distribution is prohibited.

d. Department of Defense (DD) forms mentioned in this Order with instructions are located at http://www.dtic.mil/whs/directives/infomgt/forms/index.htm, and Navy/Marine Corps (NAVMC) forms mentioned in this Order with instructions are available at https://navalforms.documentservices.dla.mil.

6. Command and Signal

a. Command. This Order is applicable to the Marine Corps Total Force with the following exceptions:

(1) Activities occupying space in commercial or General Services Administration (GSA) buildings; while these principles of planning are appropriate, the policies of GSA will apply.

(2) Overseas bases planned for post-Mobilization-day use; these facilities should be addressed under the overall mobilization and operations plans as approved by the Combatant Commanders. The installation Master Plan should incorporate the appropriate mobilization and operational plans.

(3) Planning and programming of requirements for bachelor, transient, and family housing; these requirements are addressed under reference (f). Other principles of site and space management for housing apply, to include incorporating its requirements and future plans into the installation Master Plan.

(4) Real Property construction programmed, budgeted, and financed with funds from appropriations for research, development, test, and evaluation.

(5) CMC has delegated sole responsibility for management of facilities occupied by the Marine Forces Reserve (MARFORRES) to Commander, Marine Forces Reserve (COMMARFORRES). For those facilities, COMMARFORRES shall coordinate with ADC, I&L (LF) to ensure that MARFORRES planning activities are reflective of the needs of the Marine Corps Total Force.

b. Signal. This Order is effective the date signed.

B. H. WOOD
Assistant Deputy Commandant for
Installations and Logistics

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Enclosure 1

References for Facilities Planning Manual

(a) NAVFAC P-72
(b) 42 U.S.C. 4321-4347
(c) EO 12114
(d) MCO P5090.2A
(e) USMC NEPA Manual
(f) MCO 5311.1
(g) UFC-2-000-05N
(h) MCO P11000.14
(i) MCO P11000.7D
(j) UFC 1-200-01
(k) NAVFAC P-442
(l) MCO 11000.5
(m) NAVFAC P-73
(n) NAVFAC P-78
(o) DoDI 4165.70
(p) MCO P11000.22
(q) UFC 2-100-01
(r) MCO 11010.11
(s) Executive Order 12512
(t) MCO 11000.25
(u) DoD Memorandum on Installation Master Planning (May 28, 2013)
(v) NAVFACINST 11010.45
(w) UFC 4-010-01
(x) MCO 5530.14
(y) UFC 3-201-02
(z) EO 12372
(aa) DoDD 4165.61
(ab) MCO 11011.22B
(ac) OPNAVINST 11010.36
(ad) MCO 3550.13
(ae) MCO P10150.1
(af) OPNAVINST 11110.2
(ag) 10 U.S.C. 2854
(ah) MCO P11000.9C
(ai) MCO 11210.2
(aj) MCO P1700.27B
(ak) DoDI 1015.10
(al) DoDI 1015.15
(am) DoDD 1015.6
(an) DoD Regulation 1330.17-R
(ao) DoDI 4165.56
(ap) COMUSPACOM Instruction 11010.2
(aq) COMUSFORCESJAPAN Instruction 32-1002
(ar) Article VI of the “Treaty of Mutual Cooperation and Security between the United States and Japan” (June 19, 1960)
(as) DoDD 4270.5
(at) 10 U.S.C. 2807
(au) "DoD Environmental Policy Concerning Pollution Abatement at Federal Facilities Outside the United States," (September 11, 1980)
(av) DoDD 5154.4
(aw) UFC 3-310-04
(ax) NISTIR 6762
(ay) NAVSEA OP-5

(az) UFC 3-600-01
(ba) 42 U.S.C. 4151-4157
(bb) Uniform Federal Accessibility Standards (UFAS), Federal Standard 795, DoD adopted May 8, 1985
(bc) SECNAVINST 11011.46A
(bd) Marine Corps Acquisition Procedures Supplement, 2010 Edition
(be) DODI 4170.11
(bf) MCO 5400.54
(bg) 10 U.S.C. 2245a
(bh) 16 U.S.C. 470 et seq.

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Chapter 1

Introduction

1. Objective. This enclosure:

a. Describes the steps of the facilities planning and programming process—Marine Corps Facility Planning and Programming System (MCFPPS)—and the planning products produced.

b. Assigns roles and responsibilities of the users at the appropriate installation level.

c. Seeks to strengthen the effectiveness of the installation and region planning staff in implementing the MCFPPS and providing sustainable planning and design services to the installations and regions.

d. Discusses the formulas for developing facilities requirements to increase efficiency and reduce costs.

e. Recognizes that professional judgment and application of planning techniques are necessary to make Marine Corps installations high-quality places to live, operate and conduct training. Accordingly, seeks to foster knowledge and application of these planning concepts on a consistent basis across the Marine Corps.

2. Layout of this Manual. This enclosure, also referred to as the Facilities Planning Manual, is intended to provide users with a logical flow of information regarding the facilities planning process, taking the reader from the process of determining requirements, to evaluating assets, to determining alternatives, and eventually to programming projects. Each chapter describes planning concepts and best practices, planning procedures, and defines tasks by roles and responsibilities. All acronyms and abbreviations are listed in Appendix A for the user’s reference. Other appendices provide copies of relevant forms, recommended outlines for the Installation Master Plan, Area Development Plans (ADPs) and Comprehensive Plan, and lists of maps/figures for these plans.

a. Concurrently, this Manual also serves as a comprehensive reference guide for detailed planning practices. Examples and instructions for preparing the planning products are located in the appendices.

b. This enclosure should be considered a living document, with updates added, as appropriate and necessary, to ensure that it adequately captures emerging requirements and practices.

Chapter 2

Facilities Planning Overview

1. Facilities Planning Overview

a. Planning is the process by which a detailed scheme, program, or method is developed in order to accomplish an objective or goal. For installations, planning is the process of providing for the efficient use and orderly development of real estate and facility resources in response to assigned missions, functions, and tasks.

b. The military readiness, effectiveness, and responsiveness of the Marine Corps depend upon the availability and condition of its material assets. These assets include not only the Marine Corps' personnel and equipment, but also its land and facilities. The Marine Corps' inventory of vehicles, aircraft, weapons systems, land, and facilities represents a deliberate mix of equally important capital assets. It is important that land and facilities be accorded the same commitment, concern, and support as other war fighting systems.

2. Facilities Planning Goal. Mission readiness is the goal of the facilities planning process. The installation master plan and its component plans provide specific direction to support the mission in the short-term (5-years), as well as more general direction regarding long-term objectives for the installation.

3. Warfighting and Facilities Planning. The Marine Air-Ground Task Force (MAGTF) recognizes the importance of facilities and infrastructure, designating installations as the "5th Element" of the MAGTF. Installations provide the infrastructure and support services for non-deployed Marines and Navy staff that allow the MAGTF elements to prepare, deploy, win battles, and redeploy. Installations are among the platforms that Marines deploy from to enter battle. Marine Corps installations also are dedicated to the efforts of making and training Marines, sustaining equipment, supporting the logistics of warfighting, and caring for families.

a. This 5th Element is guided by the following principles:

(1) Sustain the foundation of Combat Readiness.

(2) Support Operating Forces first.

(3) Instill and reflect the Marine Corps Ethos.

(4) Focus on innovation and the future.

b. The MCFPPS determines the individual facilities required to accomplish assigned missions, efficiently utilizes existing assets, and plans for eventual facility disposals and acquisitions. Like the other MAGTF elements, infrastructure and facilities must be built and maintained to effectively support the mission of the war fighter.

c. The following strategies will assist in supporting the mission:

(1) Basing Strategy. Installations should:

(a) Primarily support Marine Expeditionary Forces (MEF); Support non-MEF missions, to include training and logistics bases, which aid the warfighter but are not part of the MEF organization.

(b) Be close to ports of embarkation.

(c) Be right-sized but flexible to accommodate contingencies.

(d) Be owned by the Marine Corps where possible, but acknowledge and exploit regional assets or joint-basing potential.

(e) Support the Reservist by fostering Marine Corps culture while acknowledging their roles in the community at large.

(2) Training Strategy. Training, Ranges, and Maneuvering Space support:

(a) Operational readiness and the ability to train as a MAGTF. Compatible land use to improve operational efficiencies while reducing costs.

(b) Training with modern weapons and new technologies, not simply the capability to mass units.

(c) The need to create buffers around ranges, both to minimize impact on outside communities and to accommodate the training of more powerful weapons systems.

(d) Joint and inter-agency collaboration to reduce redundant capabilities and share resources where possible.

(e) Expanded simulation to improve training effectiveness.

(3) Encroachment Strategy. Encroachment must be addressed proactively by:

(a) Developing dynamic land use plans for the individual installation and influencing land use plans for the region.

(b) Fully integrating stewardship of natural and cultural resources with installation mission requirements.

(c) Creating partnerships with the communities around our installations to foster mutual aid, good will, and working relationships, balancing operational requirements with sensitivity to the concerns of the community.

(d) Active involvement in local, regional, and national issues that affect the installation.

(4) Facilities Asset Management. Base Management is key to efficient operations, and comprises:

(b) Creating and maintaining installations unparalleled in capability and efficiency.

(c) Developing and maintaining mission-driven, fully supportive infrastructure.

(d) Focusing business processes to better serve the needs of the users.

(5) Quality of Life. Installations should support a high quality of life and provide services that promote Marine Corps culture/ethos by:

(a) Focusing on community and family services.

(b) Providing support for quality medical care.

(c) Improving workplace and residential quality-of-life.

Chapter 3

Marine Corps Facilities Planning Process System

1. Definition. The MCFPPS is the prescribed system to plan, program, budget, and execute all functions sequentially to acquire facilities for the Marine Corps in accordance with the Future Year Defense Plan (FYDP) as well as to dispose of all excess facilities, including real estate. The FYDP is the program and financial plan for the DoD as approved by the Secretary of Defense (SECDEF) and arrays cost data, manpower, and force structure over a five-year period (force structure for an additional three years). The MCFPPS determines the facilities required to accomplish assigned missions, efficiently exploits existing assets, and plans for eventual facility disposals and acquisitions.

2. Objective of the MCFPPS. The objective of the MCFPPS is to provide facilities support to the mission in a timely manner, creating value to the installation for the short- and long-term, best utilizing existing assets and making sustainable, cost-effective facility decisions to enhance the efforts of assigned units. This takes place as the installation balances facility requirements and manages facility assets through sustainment, acquisition (e.g., construction, leases), conversion, rehabilitation, or disposal.

3. Planning Effort. The planning effort of the MCFPPS translates data contained in a Facilities Support Requirements (FSR) document into BFR as categorized by reference (a). By comparing these basic requirements with existing and prospective assets, the planner can identify facility deficiencies and surpluses and develop a plan to meet the objectives of the MCFPPS.

4. Programming Effort. The programming effort of the MCFPPS involves developing the plan into a phased and prioritized program within the framework of established budgets and other constraints across the FYDP. The objective of the programming effort is to successfully implement the plan.

5. Five-Step Planning Cycle. The MCFPPS consists of five principal steps (see Figure 3-1 and refer to Appendix B for reference).

a. Step 1: Developing Facility Requirements

(1) The first step of the planning cycle is to determine which facilities are required to carry out the mission. The FSR document is updated by the installation planner to accurately reflect the projected base loading (personnel and equipment) for the budget year thru the FYDP. The FSR updates are based upon the latest information reflected in the Total Force Structure Management System (TFSMS) database, aircraft, equipment, and vehicles, information from other Services for their units on Marine Corps bases, and the various tenants and contractors who are not part of the Authorized Strength Report (ASR). BFRs are then developed for each category of building. BFRs are the result of an analysis of projected mission and base loading, operational considerations, activity and surrounding community conditions, and sound professional judgment. BFRs are intended to capture the minimum facilities requirements necessary for efficient operations, and are not directly constrained by anticipated funding levels, or individual operational priorities.

(2) Inefficiencies in existing facilities that will be used for the foreseeable future may require an increase in the BFR to reflect the inability of the assets to satisfy the requirement under current criteria until more efficient spaces become available.

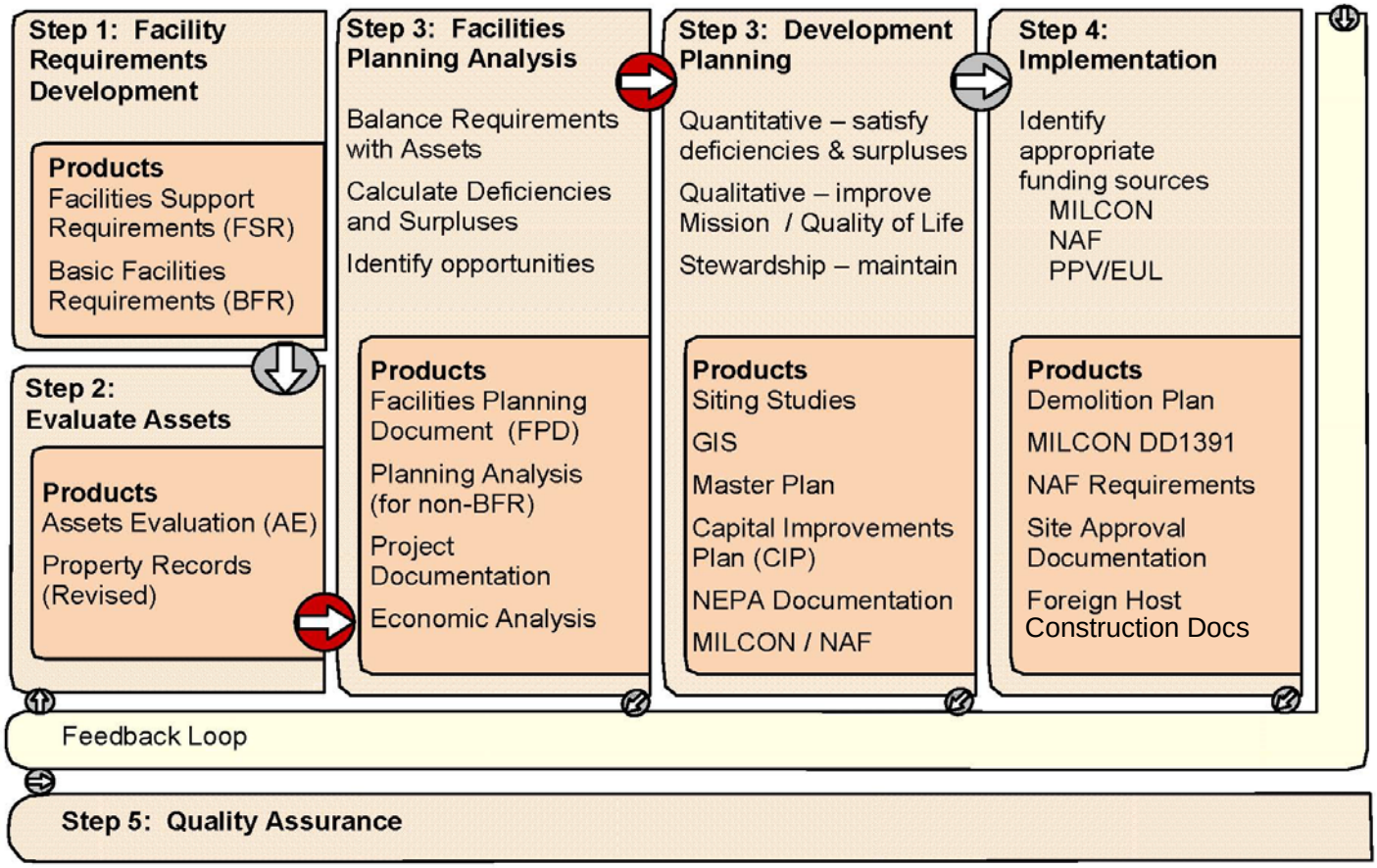


Figure 3-1.--Five-Step Planning Cycle.

b. Step 2: Evaluating Existing Assets. The Assets Evaluation (AE) step involves inspecting and evaluating an installation's facility assets. Facilities are evaluated for their existing physical condition, functional adequacy, compliance with applicable safety and siting criteria, and their potential for alternative use. Facility dimensions, area, uses, and users are confirmed. The on-site evaluation is called the AE and may be used in conjunction with an in-depth Facilities Evaluation to update the real property records in the internet Naval Facilities Assets Data Store (iNFADS), the DON database of record for owned and leased land and facilities. These inspections and updates are carried out on a regular basis, as determined by Marine Corps Installations Command (MCICOM) GF-2 policies. At a minimum, the facility condition should be updated each time an AE is performed under the centrally managed program led by Headquarters Marine Corps (HQMC) LF/MCICOM GF, typically every three years.

c. Step 3: Perform Planning Analysis. The third step of the MCFPPS involves comparing requirements to existing assets, assessing facilities for continued use, identifying surpluses and deficiencies, developing a plan to address those surpluses and deficiencies, and creating comprehensive planning documents. The analysis should address issues such as land use compatibility and conservation, operational and environmental considerations, and development constraints, considering alternative ways to meet the requirements. The final product of this step is the Master Plan and its component plans, which show the future-state of the installation resulting from the planning process. The analysis should also include recommendations for sites available for compatible development to meet requirements that would be consistent with the objectives and goals of the Master Plan.

d. Step 4: Implement the Plan

(1) Implementation is the process of prioritizing, identifying proper funding sources, and executing elements of the Master Plan. The master planning process includes the development of the planning action justification and project documentation for the implementation and execution of the planning solutions. The process typically identifies a list of proposed projects that are designated by funding type (e.g. Military Construction (MILCON), Non-Appropriated Funds (NAF) construction, and Facility Restoration and Modernization Projects/Operations & Maintenance funded Special Projects); although, the term "implementation" does not always imply actual construction, and other funding and implementation mechanisms should be considered before pursuing a MILCON solution. The MILCON Team Planning and Programming Process (MTP3) ensures valid and appropriate construction projects are submitted to higher headquarters and Congress for approval.

(2) Lastly, implementation also involves site approval and completion of appropriate environmental planning analyses and documentation, per references (b) and (c) for the projects in the Master Plan. MILCON funds may not be executed prior to completion of environmental planning analyses and issuance of a final decision document. Environmental planning should be considered and integrated with the Master Plan process as early as possible. Ideally, Master Plan development and environmental planning analysis should occur at the same time in a mutually informative development process. An Environmental Assessment or Environmental Impact Statement on an installation Master Plan that adequately addresses the potential for environmental effects can eliminate the need for subsequent analyses and documentation for construction projects evaluated in the Master Plan. After the approval of a Master Plan environmental planning document, subsequent projects can "tier" off of that analysis, allowing the action sponsor to focus the analysis of individual projects." See reference (d), Chapter 12, and reference (e) for additional guidance.

e. Step 5: Validate Planning Decisions/Quality Assurance. Validation occurs throughout the planning and programming process. Validation entails reviewing data and products for accuracy and clarity, as well as larger, system-wide reporting of MCFPPS results for users. The planning system and its separate phases are evaluated on how well they improve efficiency or mission capability. The final documentation resulting from a project is recorded on a Form DD 1354 and then entered into the iNFADS system. This data becomes the basis for updating the records and reviewing steps one through four in the cycle, verifying that the assets effectively meet the mission.

6. Feedback. Underlying each of these steps is a continual feedback process. As significant elements change, revisions and quality checks should be performed. Feedback is critical to a successful planning process. At any given time, there may be changing requirements, new assets either coming on-line, being renovated or converted to support a new tasking, or being taken off-line by transferring to another user or demolished. Facilities may be under design, or under construction using MILCON or other funding sources. As missions change, an influx of new units occurs, or systems are added to or subtracted from the installation, a planner will find himself/herself at various places within the cycle.

7. Planning Products Overview. Among the many planning products, there are several that are addressed within this Manual:

a. The FSR document lists the approved base loading that is the basis for planning actions. Chapter 4 addresses the FSR.

b. BFRs calculate the quantities of a specific asset needed to support the mission. The BFR also documents the facility requirement, tied to the specific units, to better manage the allocation of assets. The BFR is addressed in Chapter 4.

c. Facilities Planning Documents (FPD) are computer-generated reports of planning actions for specific categories of facilities (CAT Codes). These documents summarize the requirements; show the individual assets and sizes by condition, and note the installation's plans to minimize the surplus or deficiencies. The FPDs act as a facilities balance sheet, showing proposed disposition of existing assets, plans to acquire or remove assets, and the resulting quantities following all proposed actions. The FPDs are addressed in Chapter 6.

d. Installation Master Plans provide a graphic and narrative display of the future development or redevelopment of the installation, its capability for supporting the long-term mission, and the proposed path of future actions to sustain, manage and, as necessary, improve the lands and facilities on the installation. The Master Planning process and contents of the Master Plan are discussed in Chapter 7.

e. Site Approval documents are required for any new facilities asset placed on the installation. No military construction, building modifications, renovations, alterations, improvements, major equipment installations, training device lay-down or installation, or changes to land use are allowed, regardless of funding source, without the installation Commanding Officer and/or the Installation Planning Board granting site approval. Site approval is based on an understanding of long-term planning goals and objectives, sustainability, and known constraints. The site approval process is described in Chapter 7.

f. When MILCON is required to meet future needs, installations will submit proper MILCON project documents. These and other construction funding documentation are addressed within Chapter 8, along with the process for obtaining interim facilities.

Chapter 4

Facilities Requirements Development

1. Introduction – Developing Facility Requirements

a. Facility planning begins with the translation of assigned missions into facilities requirements. The facilities planning process is often initiated at HQMC, which is constantly developing improved means for accomplishing the current missions, new missions, and adjusting to new constraints assigned to the Marine Corps. Improved means to achieve current missions may include the acquisition of new weapons systems or the adoption of new techniques, tactics and procedures.

b. The DoD can also assign new missions to the Marine Corps to address emerging threats and properly allocate resources within the Department. Constraints levied by the DoD, DON, and Federal and local laws can also alter Marine Corps facility requirements. These factors may yield changes to manpower and equipment loading, thereby forcing installations to revise their facilities planning data.

2. DOTMLPF/C Process

a. Headquarters Marine Corps (HQMC), through its various departments, develops fully integrated Marine Corps war-fighting capabilities, as well as new initiatives such as force structure changes. Major elements of the Marine Corps enterprise affected by such initiatives include Doctrine, Organization, Training and Education, Materiel, Leadership, Personnel, Facilities, and Cost (DOTMLPF/C) (Appendix C). The elements of HQMC under whose purview these elements fall are often referred to as the “pillars” of the DOTMLPF/C process. Potential issues related to the implementation of new initiatives are evaluated by each pillar to enable Marine Corps decision-makers to understand the associated impacts and costs.

b. The DOTMLPF/C process is used to source solutions to new mission requirements by changing doctrine, organization, training and education, materiel, leadership, personnel, and/or facilities as needed. Changes to any of these seven pillars can affect the rest of the pillars. See reference (f) for details. The DOTMLPF/C process provides a checklist of issues that each of the “pillars” must address.

3. Total Force Structure Management System (TFSMS) Database

a. The official source of personnel and equipment loading throughout the Marine Corps is the TFSMS database. Personnel information not conforming to this database cannot be used to program construction projects. Changes to force structure requirements are officially documented within the TFSMS database. This database is currently accessible to all manpower departments on each installation. Facilities planners may also request an account to access TFSMS from the TFSD. Both personnel and equipment are identified for all installations in the forms of the Table of Organization (T/O) and Table of Equipment (T/E).

b. For updates to equipment not requiring DOTMLPF/C review, Marine Corps Systems Command (MCSC) staffs the proposed changes throughout HQMC to assess impacts. ADC, I&L (LF) will identify all known new facilities requirements resulting from equipment changes and will pass the information on to the installations. As noted above, the approved T/E data is available in the TFSMS database.

4. Base Loading/Facilities Support Requirements (FSR)

a. The aggregated T/Os and T/Es of all units and organizations aboard an installation form the foundation of the installation loading plan. The official base loading description is the FSR, which is used as the basis for all personnel and equipment requirements/future planning and programming actions, to include new or revised BFRs, Master Plans, and military construction project documents. Installation planners are responsible for updating the FSR to reflect projected base loading.

b. The FSR is a projection designed to coincide with the DoD FYDP and provide validity to the required facilities of an activity's MILCON program, rather than a count of the current population. The FSR focuses on peace time conditions and is not intended to reflect increases due to mobilization plans. Surge conditions and special circumstances are addressed in the Marine Corps Mobilization Management Plan. The FSR information is essential to provide the basis for all facility requirements (especially housing and Morale, Welfare, and Recreation (MWR) facilities) and to provide the basic data for preparation of the Bachelor Housing Spreadsheet. The FSR is the only base loading document to be used to determine BFRs.

5. FSR Components.

a. Included in the FSR are sections that identify the personnel base loading plan, by budget year, for the FYDP as derived from the TFSMS database, equipment loading plan derived from MCSC (also in the TFSMS database) and from reports of new or replacement items by their FIR lists, student loading from TECOM, and aircraft loading (including training devices) from the Marine Corps Aviation Plan (AVPLAN).

b. In preparing the FSR, the planner should be aware of loadings that are on an upswing/downswing (e.g., if a unit is transitioning from 200 down to 50 personnel over four years, the BFR should look at the proposed end-state, rather than the high point). The resulting BFRs should be looking at the proposed "steady-state" rather than a peak or valley condition.

c. FSRs should also document other units that contribute to the overall population projections, as well as the number of contractors, other Services, dependents, and retirees that utilize installation facilities and services, and any other tenants on the installation as documented by formal agreements). Sudden manpower changes not covered by the TFSMS database should be validated by ADC, I&L (LF)/Commander MCICOM (COMMCICOM) before they are used as the basis for planning actions. Additional components include:

(1) Student Loading. Student loading data comes from Marine Corps Combat Development Command (MCCDC) and TECOM. This data may be arranged into four-month (or more) increments; however, planners should look at the sustained peak load over a six-week timeframe, rather than an instantaneous peak loading that doesn't last very long. If more specific data is required, the installation shall coordinate with the resident school house.

(2) Retirees, Family Housing, and Dependents. The installation, along with the rest of the region, needs to determine the anticipated loading of Retirees and dependents, with family housing and dependent school requirements based upon their personnel loading reports and local historical data. Where more than one installation supports a regional population, Marine Corps Installations (MCI) regional commands shall allocate that population among the installations to avoid dual-counting.

(3) Contractors

(a) Contractors supporting functions that have formerly been performed by military or civilian employees should be allotted the same amount of space unless the contract specifies otherwise. If the contract is written that the installation will provide space, this must be endorsed by the installation commander and then recorded in the FSR and BFR calculations. Authorized space shall be justified by official program of record documents or by verification of official Program Manager Memoranda for the Record.

(b) Contract writers must first coordinate with the installation facilities planning branch to ensure that the installation will be able to provide the spaces and obtain written endorsement from the regional MCI and MCICOM (GF) before obligating the installation to provide space. Since it takes about five years between the initial plan and the procurement of new facilities, the contracting officer shall not promise facilities, services, or a site without first confirming availability from the regional MCI or MCICOM (GF). Given space constraints on USMC installations, as a rule, ADC, I&L (LF)/COMMCICOM, discourages providing space to contractors.

(4) AVPLAN. For installations supporting aviation assets, the AVPLAN update will provide the type and number of aircraft assigned, the introduction timeframe, and the training equipment delivery schedule. The AVPLAN is published by Deputy Commandant for Aviation, Plans and Policies Branch (DC Aviation (APP)).

(5) Navy Loading. The DON TFSD Structure official, located at MCCDC, shall provide the loading for Navy units aboard USMC installations.

(6) Other Tenants. For all other base loading figures, the installation shall provide documentation that verifies that the personnel are authorized by a program of record or official agreement via the MCI regional Commander. To that end, other Services (i.e., Navy units, Reserves), Service agencies such as banks and restaurants, and other Government agencies such as the Federal Aviation Administration (FAA), Department of Justice (DOJ), or the Federal Bureau of Investigation (FBI) present on the installation, even if they have their own facilities, contribute to the overall loading of the installation and need to be accounted for in the FSR.

(7) Equipment Changes. New or replacement equipment (or equipment that is currently on-board but going away) should also be listed in an "***equipment changes***" section. This would include data from the Facilities Impact Report (FIR) that assesses the impacts of proposed new equipment, any other weapons systems, and other major changes that will impact facilities or infrastructure (the FIR is discussed later in this chapter). The FSR should also address any major Information Technology (IT) plans or joint information environment plans that could drive facilities projects.

(8) FSR Input. All input to the FSR shall be referenced in the FSR "notes" section and, if applicable, the above items shall be provided as attachments to the FSR. Loading from TFSMS and the AVPLAN should be referenced but not attached to the FSR.

(9) Base loading. Base loading should be summarized and reported in the format of: Officer (USMC), Officer (Other), Enlisted (USMC), Enlisted (Other), Unit Deployment Program (UDP) subtraction (for pools of rotating units that are typically not on base at the same time), Federal Employees (Appropriated), NAF employees, Contractors, Military Spouses not assigned to base, Military Dependents,

Retirees (population allocated to installation), and other tenants on base (to include all others not fitting into above categories).

6. Installation Actions. The FSR information is verified and updated by the installation planner as the basis for facilities planning actions. Installation Commanding Officers shall ensure that all levels of command involved with facilities planning are aware of the base loading to be supported. Installation Commanding Officers shall also provide the FSR to the supported units and tenants for verification as the basis and guidance to acquire, use, and dispose of real property. Finally, the installation shall forward the FSR to HQMC LF/MCICOM via the appropriate regional MCI (or TECOM) for their use to validate BFRs and information on DD 1391 forms.

7. Non-USMC Unit Actions. Loading for non-USMC units and equipment must be provided by the appropriate agencies and should be certified as valid for any planning actions by their parent command. Non-USMC tenant personnel will need to be identified as part of the base loading. However, the TFSMS does not track non-USMC units. The non-USMC population data shall be provided directly by those units and/or their headquarters to determine the official projected loading, and recorded in the FSR.

8. FSR Update Requirement. FSRs shall be updated annually and are considered invalid more than one year beyond the approval date. Installations will update and forward FSRs to ADC, I&L (LF)/COMMCICOM via the appropriate regional MCI (or TECOM) for validation prior to the submission of DD Form 1391, FY__ Military Construction Project Data for new projects. ADC, I&L (LF)/COMMCICOM will then review and return the validated FSR to the installation for their records.

9. Mobilized Units. The FSR focuses on peace time conditions and is not intended to reflect increases due to mobilization plans. Surge conditions and special circumstances related to war-fighting support shall be calculated separately under a classified mobilization plan.

10. Unit Deployment Program (UDP). For those units participating in the UDP, they will be noted on the FSR as part of the UDP pool, as well as the deployment cycle (i.e., the length of time and the number of units in the rotation—do not identify specific dates of deployments). Units that deploy for less than six-month cycles will not be flagged. The Deputy Commandant (DC) for Plans, Policies, and Operations (PP&O) directs the structure, deployment, and employment of the Marine Corps Forces. If there are multiple UDP units on an installation there will be opportunities to rotate units into vacant facilities rather than building redundant facilities/infrastructure.

11. Additional FSR Information. The FSR incorporates data produced by several commands and divisions of the Marine Corps, and occasionally, other services. FSRs shall include all relevant information in a summary format, taking into account the following:

a. Beginning in August 2014, the FSR will no longer be prepared and published by HQMC LF/MCICOM; instead, it will be created and updated by the installations. A template for FSRs is provided in Appendix D.

b. For installations that have special areas, the installation shall depict which units and the loading for each special area. Units that are split over several areas and have facilities in more than one area shall provide the personnel and equipment split for each special area. This allows separate BFRs to support the needs of that special area, rather than have assets from other locations that

are not reasonably available to that unit counting against their requirements. The total loading for each special area shall be split out separately and reported along with the entire base loading summary. BFRs shall be calculated separately for these areas, where appropriate; however, requirements for family housing and other base-wide assets shall be calculated by aggregating the populations of the entire installation unless the area is outside the typical commuting distance.

c. HQMC LF/MCICOM will provide data produced by various HQMC commands, division and branches needed to complete the FSR to the MCIs or appropriate intermediate command only if an automated system or otherwise readily accessible means of acquiring the information is not available. Since all installations have access to the TFSMS database, this will happen only in rare occasions.

12. TFSMS Information

a. The TFSMS generated reports must be verified by the installation Commander to ensure that any proposed changes in the form of formal Table of Organization/Equipment Change Request (TOECR) were accurately incorporated into the TFSMS database.

b. The TFSMS database has T/O and T/E data for each unit in the Marine Corps, which can be used for specific requirements. Following the publication by MCCDC of the ASR, the T/Os are updated twice per year, typically in February and August. The T/Es are updated as required. The FSR shall summarize the T/O and T/E for every unit or detachment aboard the installation.

c. In situations where the TFSMS unit data differs from the local data, the TFSMS is the database of record. These discrepancies shall be addressed via the appropriate chain of command, division or branch that produced the data. The discrepancies shall be annotated in the FSR, along with the action taken to address the discrepancy.

13. Basic Facility Requirements and Facilities Planning Document

a. The installation planners use the personnel and equipment loading information from the FSR to update the BFRs, which translate the data into square feet (SF) requirements. The BFR is usually generated by the installation planner, but may require the assistance of NAVFAC and/or A/E contracting firms, on a reimbursable basis, if the installation planners cannot provide the BFR in a timely manner.

b. The installation planners will later balance the BFRs against existing assets within the Facilities Planning Document (FPD) to identify square footage surpluses and deficiencies. (Note: The BFR and FPD are discussed in more detail later in this chapter). The FPD will further identify means to satisfy deficiencies or reallocate surplus property to meet other needs. It is vital that the MCI regions take a regional look at facilities requirements to ensure the most effective means of satisfying the mission within existing constraints.

c. MCI regions should also look at assets, identified as deficits and surpluses in the FPDs, to see if the region can meet the requirement. A regional economic analysis may show the best facilities solution.

14. Planning for Current Missions. New facility requirements for the current missions are generated from different sources, to include: changes to the equipment, changes to the unit’s size or mission, or updated criteria.

15. Equipment Changes. Emerging technology is constantly providing the Marine Corps with improved weapons and equipment that make the performance of the current mission safer and more effective. This emerging technology also replaces older weapons and equipment that have surpassed their usefulness. Equipment changes that support the current missions evolve from several different sources in HQMC. The major sources are listed below, however, any sponsor of new or replacement equipment must coordinate with HQMC LF to assess the facilities impacts resulting from the fielding of this equipment, to include affected spaces, utilities loading, structural upgrades, or potential secondary effects. Proponents of this equipment should contact HQMC LF to assess possible facilities impacts.

a. Marine Corps Systems Command (MCSC). MCSC has cognizance over new technologies and equipment that is introduced to the Marine Corps. Other services may manage equipment acquisitions that are fielded to USMC units. These programs should be identified in the FSR by listing the equipment, personnel, and noting any facilities projects or improvements that will be needed to support the introduction of this equipment.

b. Aviation Combat Element (ACE). For installations hosting aviation assets, the DC, Aviation will perform similar functions in planning the upgrade or new mission of units supporting the Marine Corps tactical ACE. Naval Air Systems Command (NAVAIRSYSCOM) typically acquires new aircraft and weapons systems and works with DC Aviation to ensure the systems will have the necessary support prior to their arrival. The USMC lead is managed through DC Aviation (APP). The approved AVPLAN provides the proposed lay down for all aircraft, training systems, and aviation units across the Marine Corps.

c. Training and Education Command (TECOM). TECOM, located within MCCDC at Marine Corps Base (MCB) Quantico, VA has cognizance over all USMC training, range requirements, range certification, and range safety. Recommendations for new (non-aviation) training devices, weapons training systems, classes, and ranges should be verified through TECOM. Proponents of this equipment should contact HQMC LF for an assessment of potential facilities impacts.

16. Equipment Introduction

a. MCSC’s mission is to serve as the Commandant's principal agent for acquisition and sustainment of systems and equipment used by the Operating Forces to accomplish their war fighting mission. MCSC leads the equipment introduction processes and works with HQMC LF/MCICOM to assess the impacts of the new or updated equipment. HQMC LF/MCICOM acts as the liaison between MCSC and the regions/installations via the FIR process. MCSC provides information on proposed fielding of new equipment to HQMC LF/MCICOM; HQMC LF/MCICOM then sends it to the regions and installations to assess facilities and environmental impacts and then coordinates the response back to MCSC. Identified impacts should be documented in the acquisition plan as well.

b. When the DOTMLPF/C working group identifies a need for a material solution to accomplish a new or changing mission, MCSC will be assigned to acquire the new equipment that fits the new requirement. The T/E can be viewed on the TFSMS website. Equipment changes that drive a facilities requirement are to be annotated in the FSR by the installation and referenced in the calculation of requirements.

(1) The Facilities Impact Report (FIR) Process was designed/implemented in FY11 to communicate installation facility and environmental-related impacts (primarily construction projects and requirements for interim relocatable facilities) to MCSC, during their equipment fielding life-cycle management process,

so that the MCSC program office could better assess equipment supportability and budgetary requirements. The FIR Process was designed to better integrate the efforts of MSCS logisticians and facilities planners, through HQMC LF/MCICOM, in order to ensure that potential facilities and environmental impacts resulting from the fielding of new equipment are identified in a timely fashion and properly mitigated.

(2) Although the FIR Process is still being refined, currently MCSC forwards a FIR Application and Fielding Plan to HQMC LFF/MCICOM GF, which is reviewed and forwarded to the regions and installations for their response/impact report.

c. For all other sponsors of new equipment, the impacts to facilities must be assessed to ensure the timely support at the installation. Proponents of new equipment, regardless of funding source, should contact HQMC LF/MCICOM to assess the potential facilities impacts. Sufficient lead time, (typically 9-36 months, depending upon the system); will be required to ensure any necessary improvements and environmental planning can be completed in time to support the Initial Operational Capability (IOC).

17. PP&O – Universal Needs Statement (UNS)/Urgent Universal Needs Statement (UUNS)

a. PP&O is responsible for coordinating the development and execution of service plans and policies related to the structure, deployment, and employment of Marine Corps forces.

b. When a unit needs a new capability to perform its current mission, it sends a UNS or an UUNS to PP&O. PP&O then validates this UUNS through the DOTMLPF/C and presents its recommendations to the Capabilities Development Board and Marine Corps Requirements Oversight Council (MROC) for approval. During the DOTMLPF/C process facilities impacts will be assessed by HQMC LF.

c. With the availability of commercial off the shelf (COTS) products, acquisitions of this type can be fielded almost immediately, leaving no time for facility or environmental planning. HQMC LF/MCICOM identifies UUNS that will create facility or environmental impacts, advises PP&O of the impacts, and provides the installation planners with information so that mitigation plans can be developed, and appropriate environmental planning analyses completed. As part of their assessment, HQMC LF/MCICOM may task MCI regions for assistance to determine the impacts at affected installations.

18. Manpower Changes

a. As new or changing mission requirements are identified, MCCDC will employ the DOTMLPF/C process to adjust the forces for the new mission requirements. MCCDC’s mission is to develop fully integrated Marine Corps war-fighting capabilities; including doctrine, organization, training and education, materiel, leadership, personnel, and facilities; to enable the Marine Corps to field combat-ready forces. A change to any of the DOTMLPF/C pillars can drive a facilities requirement, and will be reflected in the TFSMS database. At the DOTMLPF/C process, facilities and infrastructure impacts will be assessed by HQMC LF.

b. New equipment with improved technology also can dictate the amount of people necessary to accomplish the mission. New equipment can also change the supporting unit’s manpower requirements, create new supporting organizations, or do away with units that are no longer necessary. In a similar manner, functions that

have traditionally been performed by the military may be transferred to civilian or contract personnel, thus making Marine billets available for war-fighting missions.

c. In some cases, the functional requirement may not change, but the transfer from military to civilian would affect total Marine population, billeting, and Marine Corps Community Services (MCCS) requirements. TFSD is responsible for approving all changes to manpower. The approved Force Structure may be retrieved via TFSMS at each installation for users with approved access. The approved structure provides the basis for the base loading, taking into account deployment schedules and other unit criteria.

d. Manpower changes that drive a facilities requirement should be annotated in the FSR by the installation. An increase of Marines in one unit or location to fill a new mission often dictates a reduction somewhere else. Upon review of the database, if unit size appears to be incorrect, the local planner and the unit may contact TFSD to resolve the discrepancies.

19. Storage

a. Storage requirements will be generated from several sources. Unit supply is typically handled by the unit logistics office, and should be updated by the unit and verified up their chain of command. The T/E has some of the storage requirements. Personal property storage is calculated locally, as a function of the unit's war-fighting capability. The need for storage of personal items during deployment is also calculated locally and should be accommodated by the installation.

b. Many installation staffs have Navy Supply officers who are tasked with supporting the war-fighting capabilities, as well as the day-to-day operations. HQMC (LP) and Logistics Command (LOGCOM) ensure the Marine Corps have the necessary supplies to meet operational commitments. Aviation supply is typically sourced from NAVAIRSYSCOM for aircraft parts. The Defense Logistics Agency (DLA) supplies materials and fuels. The ammunition storage requirements are generated by the Naval Operations Logistics Support Center, Mechanicsburg, PA. All proposed quantities of storage should be verified at the local unit level as well as from the higher headquarters.

20. Training and Readiness. When the DOTMLPF/C working group identifies a need for a training solution to accomplish a new or changing mission, TECOM is assigned to design the curriculum, which in turn will define the facilities requirements. TECOM publishes the Training Input Plan (TIP) which can be viewed on TECOM's website. An example of a TIP is shown in Appendix D. The installation will annotate the FSR with the Student loading. Changes to training range requirements are not annotated in the FSR but are addressed in the project planning supporting documents.

21. Miscellaneous Planning Elements that Drive Requirements

a. Many other factors driven from outside influences that are not annotated in the FSR or BFR create facilities requirements. Existing and future Federal and local building codes and requirements pertain to Marine Corps facilities, and some initiatives (for example Anti-Terrorism or Physical Security measures), can create new facilities requirements. Environmental constraints and Encroachment concerns may also affect facilities requirements.

b. World and National political realities can change the need for and location of troops, which may translate into substantial facilities requirements. These

types of projects mainly lead to engineered solutions rather than planned solutions. For example, Physical Security requirements may drive a main gate upgrade project that would not have been derived from the FSR. In these cases, the BFR should reference the revised criteria or the recommendations of a vulnerability assessment. Base Realignment and Closure (BRAC) proposals may also affect some installations. Since planning for BRAC often occurs independently of HQMC LF/MCICOM it is necessary that all iNFADS data be kept accurate and complete.

22. Calculating the Base Facility Requirement (BFR)

a. Many of the annual changes to the Marine Corps structure annotated in the FSR, when combined together, drive changes to facilities requirements. Updating the BFRs from the FSR and updating the FPDs is the critical first step in Facilities Planning.

b. The BFR is a discrete listing, by individual category codes, of the essential facility requirements at an activity to perform its missions, tasks, and workload for that category. The BFR List (BFRL) for an activity will consist of the aggregate of all BFRL Item Determination Sheets (form NAVMC 10915). The BFR is a planning reference point for all actions within the MCFPPS.

(1) Requirement

(a) A BFR is a calculation of the facility or projected requirement by Category Code Number (CCN), aggregated at the special area, installation, command, or regional level (see BFR Worksheet example in Appendix D, Figure E-2). The BFRs are based on basic planning criteria and modified to accommodate site specific or unit specific loading requirements. BFRs shall quantify the contributed requirements from each involved unit, and shall then combine into a single requirement total.

(b) The individual sub-requirement may be useful in determining allocation of the resources amongst many users.

(2) Space Criteria. BFRs are developed using the space criteria annotated in reference (g), but may also be developed by using space criteria that have been developed based on the experience of users, non-Marine Corps facilities, or Congressional guidance. All proposed criteria must be justified prior to approval (please refer to forthcoming BFR regional approval section).

23. UFC-2-000-05N (formerly NAVFAC P-80) and Other Requirements Planning Criteria

a. The Marine Corps uses DON planning criteria. Reference (g) is the revised name for the NAVFAC P-80, but this document is often still referred to as the “P-80”. There is a DoD effort to unify criteria among the Services wherever possible under the UFC.

b. Chapter I of reference (g) contains the introduction, general information, technical guidelines, criteria application guidance, and definition of terms. It is a valuable source of data on how to find correct sources.

c. Chapter II of reference (g) contains specific criteria for various facility types. The information in Chapter II is in category code sequence corresponding to reference (a).

d. Weapon System introduction documents, provided by the contract and provided to the Program Manager may also include up-to-date facilities requirements and may

justify space beyond that published in the UFCs. The justification for the additional space should be provided within the BFR as an excerpt attached to the document. When this outside criteria is the basis for additional space, the BFRs must be provided to HQMC LF/MCICOM for approval.

(1) Space Allowed within the Criteria. A fundamental aspect of the criteria included in UFC-2-000-05N is that an activity is not automatically "entitled" to the facility allowance, or even the facility type itself, simply because it is listed in the publication. The majority of the criteria provide maximum allowances for a particular population range. Based on engineering analysis and judgment, a smaller facility than shown in the UFC-2-000-05N may be sufficient to meet the activity's needs. Individual requirements must be tailored to suit the specific circumstances. The planner must analyze the need to accommodate a particular function and develop the requirements to most economically satisfy the unit's mission requirements. These requirements may or may not fit the maximum established by reference (g).

(2) Space Required to Support Mission. The BFR covers the entire functional category of use, such as administrative office, general warehouse, or public works shop and provides justification for the total space needed for the functional use. Through these calculations, BFRs establish guidelines for the facilities needed to efficiently perform the mission.

e. There are two types of BFRs—planning BFRs and project BFRs. Project BFRs are based upon the most recent FSR data in support of a MILCON or facilities project. Planning BFRs are the remaining requirements that are not associated with a project. Planning BFRs are updated on at least a five-year cycle and support space allocation and Master Planning.

f. A planner from the installation, region, or a consultant can complete BFRs. Planning BFRs should be updated every five years or more frequently when there is a significant new mission loading change, or when acquiring additional space by construction, renovation, or conversion. Project BFRs are prepared in support of a project document and are reviewed at HQMC LF/MCICOM. Approval from MCI regions, TECOM, or MCICOM is based upon the correct application of criteria. Appendix D provides a checklist of items to consider when approving a BFR.

24. BFRs and FSR Data

a. Installation facility planners use the FSR to update the BFRs, which translates the data into physical space requirements (e.g. SF). The BFR is typically generated by the installation planner, but may require the assistance of a regional planner or NAVFAC if the installation planners cannot produce the BFR in a timely manner. Project BFRs shall be based upon current FSR data and will not be approved if the FSR is more than 12 months older than the BFR.

b. Many of the annual changes to the Marine Corps structure annotated in the FSR seem minimal in scope, but when aggregated, can create significant shifts in facilities requirements.

25. BFR Regional Approval. Project BFRs may be approved by MCI regional Commanders as long as they comply with the procedures outlined in this Manual (see BFR Worksheet example in Appendix D, Figure D-2) and conform to accepted criteria, such as UFC 2-000-5N. For those BFRs that do not conform and for any installations not under the command of a MCI regional Commander, Project BFRs shall be submitted to HQMC LF/MCICOM for approval. Planning BFRs are approved by the installation Commander and are not tied to near-term projects.

26. BFRs Not Requiring Approval

a. BFRs to be used for planning purposes only, in categories where there is no plan for construction or renovation, do not require HQMC LF/MCICOM approval but are approved by the installation Commander on a five-year cycle. These planning BFRs account for the facilities inventory and are suitable for managing space and long-range planning. Detailed project BFRs, prepared in support of project documents, require approval by the MCI region, TECOM, or HQMC LF/MCICOM, and are reviewed as part of the project validation.

b. Additionally, reference (a) lists the category codes that do not require BFRs. Those BFRs, while not required, may be created to track inventory and can be approved locally. MILCON requirements for these category codes shall be justified by other official documents, such as infrastructure studies for roads or utilities, environmental planning documentation, AICUZ reports that recommend improvement to mitigate noise impacts, and other official recommendations that are documented and verifiable. For many training ranges, utilities, and infrastructure requirements, where a BFR is not required per references (a) and (g), a separate justification must be provided that systematically identifies the means for calculating the requirements. These other atypical requirements in support of projects shall be documented and endorsed by MCI regional Commanders, and are approved by HQMC LF/MCICOM.

27. BFR and iNFADs

a. Copies of all BFRs shall be uploaded to iNFADS as attachments to the FPD. For those project BFRs that are approved by regional MCI Commanders, the uploaded copy shall include the signature and date of approval. Notification to HQMC LF/MCICOM shall be provided on a monthly basis, summarizing those BFRs that were approved. This listing shall identify the installation, special area, category code, and approval dates; however, the actual BFR worksheet does not need to be provided since it is attached to the FPD.

b. TECOM may approve BFRs for those installations under their cognizance, but must forward copies of approved BFRs to HQMC LF/MCICOM for review and input into iNFADS. Additional information on preparing BFRs may be found in the NAVFAC portal Business Management System (BMS).

28. Unit BFR Calculation

a. In many cases, it is useful to calculate the various requirements of a single unit, creating a unit BFR report that covers multiple category codes. This is especially helpful when a unit is introduced to the installation or is moving to another site. The unit BFR report does not take the place of project BFRs, but when provided along with the individual BFRs the unit BFR provides a useful summary of actions needed to support the new unit. The contributions from that unit, however, would only be reported on the aggregate BFR for each category within iNFADS.

b. There is no need to break out the individual contributions by each unit for base-wide community facilities requirements as these requirements are determined by the total population, vice unit by unit Once BFRs are approved, either by HQMC LF/MCICOM or by the appropriate MCI, they shall be attached to the corresponding FPDs and entered into iNFADS.

29. BFR and Space Management. Because the BFR aggregates the total space under each category, it becomes imperative that installations provide break-outs of the

contribution of each unit for operational spaces. Where spaces are consolidated (for example, community facilities like exchanges or gymnasiums), there is no need to parse space contributions for each unit on base. The break-outs assist efforts to manage facility assets efficiently. Surplus spaces in one facility can detract from the availability of space provided to another user unless the rationale is clearly documented. By consolidating units into appropriate spaces, the remaining users can receive their full allotment of space. Furthermore, occupying surplus space increases the operating costs on the installation, which ultimately reduces the availability of funds for other war-fighting requirements.

30. BFR Policy and Instructions. BFRs are submitted on form NAVMC 10915. In the case where more than one page is needed, only the first page should use this form with the following pages on plain paper. Where there are more than two pages, the front shall be the summary of all pages and the details shall be on page two and beyond with the title and category code at the top of each page. Reference (g) usually provides the basis for calculating requirements, based upon the latest FSR.

31. Additional Information

a. Improvements to infrastructure or utility systems that are of MILCON scope will require an engineering study to justify the project. These studies may be performed in-house by qualified subject matter experts, or by qualified consultants. Utilities studies, traffic and transportation studies, Integrated Vulnerability Assessments (IVA), and other studies provide technical justification for facilities projects. In the case of those systems, the study will serve in the place of the BFR; however, the requirements should be entered into iNFADS with references listed under “General Notes”.

b. Identify MILCON projects with a specific project number, rather than a placeholder such as “P-XXX.” This will reduce confusion when project documents are prepared and submitted and the project is entered into the MILCON Requirements List (RL).

c. Provide the date and the sources of all data so that the requirements may be readily verified and updated. Identify the date of the FSR that the BFR is based on.

d. The form NAVMC 10915 does not give a lot of room for detail—for projects serving multiple users or buildings use additional pages; the expanded explanation will benefit future projects when the scope receives scrutiny.

e. For categories that support several distinct units, the BFR shall break out the space allocated to each unit as subtotals. These subtotals are useful for space management and for project justification, where only a portion of that BFR is to be built. The BFR shall be broken out to the smallest unit that is self-sufficient, usually either the battalion/squadron or the company level. The summary total of all units shall be reported on the front sheet of NAVMC 10915. For categories that support the entire community, there is no benefit to separating the individual spaces.

f. Planning BFRs are approved by the local commander and are used for those categories that are static, covered by an existing BFR, and where no changes to the criteria or improvements (MILCON-sized repairs, conversions, expansions, etc.) or military construction are anticipated. Where the unit size has not changed more than 5% since approved and the BFR has been approved within the last five years, the requirement should not require update.

g. For Project BFRs that do not deviate from established criteria, the MCI regions have authority to approve the BFR. They shall send a copy of the approved BFR to the installation. MCI regions approve BFRs using the checklist in Appendix D and guidance from HQMC LF/MCICOM. For installations that do not fall under an MCI region or TECOM, or where the requirement is justified but exceeds the criteria, the BFR shall be submitted to HQMC LF/MCICOM for approval.

h. Unique to installations in Japan, the installation Commanding Officer has the authority to approve BFRs that comply with established criteria. Notification of all approved BFRs shall be provided to HQMC LF/MCICOM and the approved BFRs shall be attached to the iNFADS FPD for that category by the installation.

i. BFRs are used both for justifying project scopes and for space management of existing buildings. Units that have greatly increased or reduced their requirements are candidates for new BFRs and possible reassignment of buildings. The installation Commanding Officer has the authority to assign buildings and the responsibility to manage spaces. This is to ensure that excess spaces held by one user do not reduce those available to other units. As a management function, it may be necessary within the planning process for the installation Commanding Officer to reassign buildings in lieu of new construction.

j. Where a requirement is satisfied by one installation as a regional asset used by several installations, the total BFR is held by that host, noting within the requirement all those installations are included. Supported installations should list the BFR at 0 SF for planning purposes, with the note that the space is being provided at the regional level.

k. In the case of an installation needing to utilize inefficient adequate or substandard buildings for the foreseeable future, the BFR may temporarily need to exceed the criteria for those spaces. This can be approved by HQMC LF/MCICOM on a case-by-case basis. The installation must provide detailed justification for exceeding the calculated requirement. This will include an analysis showing the calculations based upon the criteria and a building-by-building assessment of those spaces that exceed the requirement, their actual capacity, and the rationale for using each building. The assessment must also show that there are no other available options, that the layout of each building cannot feasibly be improved, and that there are no better uses for these buildings that would utilize the current layouts. This may be offered as justification for the BFR exceeding the criteria. Approval of those planning or project BFRs must come from HQMC LF/MCICOM, via the regional MCI.

Chapter 5

Asset Evaluation (AE)

1. Introduction

a. An Asset Evaluation (AE) is an assessment of an installation's physical facility assets. This on-site evaluation is used to update and verify data in iNFADS. The primary purpose of an AE is to validate key information on the real property asset, including uses and functional adequacy. An AE is not a condition inspection; rather, it focuses on evaluating the functionality of a space and its suitability for a specific purpose.

b. Evaluating and managing existing Marine Corps assets serves two purposes: (1) evaluating assets allows the Marine Corps to maintain an accurate inventory; and (2) responsibly managing assets allows the Marine Corps to eliminate facility deficiencies and surpluses. These processes are dependent and interrelated; a planner cannot determine existing facility deficiencies or surpluses unless existing assets are properly evaluated and an accurate inventory is maintained.

c. This Chapter will be split into two main parts: Evaluating Assets-Maintaining an Accurate Facilities Inventory and Managing Assets-Planning Actions that Eliminate Facility Deficiencies and Surpluses. The result of this analysis will be recorded within iNFADS, and the facilities planner will assign proposed actions to remedy deficiencies or dispose of surpluses. As detailed in the prior chapter, the FPD is prepared for each relevant CCN of the facilities being affected by the AE and the remedies.

2. Evaluating Assets: Maintaining an Accurate Facilities Inventory

a. Having current information on existing assets allows the Marine Corps to maintain an accurate inventory of existing facility assets and is essential to the rest of the facility planning process. The method of gathering this information is through an AE. The AE is a collaborative effort between planners, engineers, facility occupants and others and typically involves an on-site inspection. Data collected and verified in an AE includes the facility use/function, user or occupant, condition, dimensions, siting adequacy, and other relevant facility characteristics. An AE may reveal the need to expand, convert, renovate or dispose of a facility, or could show that the facility has excess space usable for another facility requirement. This will be discussed in the latter half of the chapter.

b. AEs should be conducted at regular intervals to ensure that inventory data is accurate. Not all facilities on an installation need to be inspected as part of every AE, as age and/or type of facility and the date of the last AE may determine whether a given facility needs to be evaluated. Additionally, AEs may be conducted when a specific need arises or as part of a regular Master Plan, BFR or FPD update.

c. Utilities usually are evaluated separately from an AE due to the specific technical knowledge required to inspect the various installation utility systems. Utilities should be inspected and evaluated regularly by the appropriate installation public works personnel or as part of a broader utility upgrade or assessment study.

(1) Sources of Existing Data

(a) AEs begin by identifying sources of existing data. The data is then evaluated to determine its accuracy and completeness. This section of the Manual identifies some of the common sources of data on existing assets, and discusses several methods that planners can use to effectively evaluate the existing assets.

(b) Accurate evaluation of existing assets requires the use of several data tools and corporate databases available to the planner. The following sections list database sources that are commonly used in the AE process, and should be consulted by the planner. Appendix E illustrates the AE process.

(2) iNFADS and the Real Property Inventory (RPI). When conducting any planning activities related to existing facilities, planners should consult iNFADS first as it contains the majority of information on existing facilities and is the database of record for all RPI data. iNFADS is used to record condition information with engineering deficiency codes, facility use data, facility measurement data and, most importantly, facility requirements data.

(a) Modules. iNFADS is split into several different modules. The Facilities module and the Planning module contain the facility data discussed above pertinent to the AE process. The Facilities module contains Property Record Card data, and is a repository of information on facility condition, use, date of construction, major renovations and historic status (whether the facility is eligible for or listed on the National Register of Historic Places). The Planning module contains FPD by CCN and holds the BFR data as well as data on quantity of existing assets. The FPD data in the Planning module helps a planner determine whether existing facilities are appropriately sized for the current mission or if they have a space deficiency or surplus. In addition, iNFADS has extensive report capabilities that provide useful outputs for the planner to refer to on an AE walk-through.

(b) Installation Commanding Officer Responsibility. The installation Commanding Officer has the responsibility to ensure that data in iNFADS is kept up-to-date with current information from the activity planner/engineer’s AEs. Ultimately, the planner is responsible for maintaining and managing iNFADS and the RPI, especially the planning actions. Reference (h) provides guidance and procedures for RPI matters and NAVFAC P-78 provides technical instructions. iNFADS is hosted by the NAVFAC Information Technology Center (NITC), Port Hueneme, CA and can be accessed through the NAVFAC Portal. A current user will need to sponsor each new user when they use the Portal the first time.

(c) Property Records. Useful information may also be contained in Property Records (see Appendix D). The Property Records are found primarily in iNFADS and provide a wealth of information on a specific facility including condition, measurements, plant value, construction date and type, among other information. Installations may still have some property record information in hardcopy that may provide historical property data on older facilities. However, the information is likely to be very out of date, so the planner should use caution when using this information. If possible, data on the property card should be verified by examining as-built drawings to ensure that the facility’s dimensions have been properly recorded.

(3) Facilities Condition Assessments Systems. The Marine Corps uses various Sustainment Management Systems (SMS) to conduct facilities condition assessments and determine a facility's condition. These include BUILDER (for building assessments), PAVER (for airfield, road and pavement assessments), and RAILER (for rail assessments). These SMS' are web-based systems that provide information on facility condition at the asset component or system level. They are designed to help commanders, planners, and other decision makers objectively evaluate and monitor the quality of existing facilities assets on Marine Corps installations. These systems allow planners to identify those facility types that are in poor condition. Facilities Condition Assessment systems are intended to provide a general evaluation of various types of facilities across the entire installation, along with projected dollar requirements to replace or renovate facilities based on standard estimating methodology.

(4) Engineering Evaluation (EE) and Existing Facilities Worksheets. The EE and the Existing Facilities Worksheets are the tools that facility planners and public works staff traditionally use to evaluate and record the condition of assets. The Marine Corps uses the BUILDER program to capture facility condition assessments. The purpose and functioning of BUILDER is explained in more detail in reference (i). However, a few installations may still use and refer to hardcopy EE worksheets. These hardcopy documents may be a source of existing information but should be consulted only if current and accurate. Likewise, MAXIMO and Commanding Officers Readiness Reporting System (CORRS) data, if recent, may also provide satisfactory building condition information. For the most up-to-date policy on building evaluations, please contact MCICOM (GF-2).

(5) Other Sources of Data. A facility's mission may be constrained by more than just its physical condition. Installation planning staff should consider installation Master Plans, feasibility studies, traffic studies, environmental studies, and other planning documents as sources of data on land use and constraints, including natural and cultural resources, hazardous waste sites, Explosives Safety Quantity Distance (ESQD) arcs, Anti-Terrorism and Physical Security stand-off distances and building requirements, potential electromagnetic radiation hazards, and airfield noise and safety relevant to evaluating a facility. Common AE factors and planning constraints will be examined later in this chapter.

d. Asset Evaluation (AE) Factors

(1) Identifying the facility's ability to meet its mission is a key process in ensuring that Marine Corps units can meet their mission essential tasks. A facility that is adequately sized, well maintained, and suitable to the unit acts as a force multiplier in helping the Marines in that facility meet their mission.

(2) To fully understand current conditions, an installation planner or engineer should gather data and evaluate the following factors: Use/Users, Category Code, Construction Type, Facility Condition and Deficiency Codes, Location, Safety Criteria and Functional Adequacy. The end result of this evaluation needs to be measured in readiness ratings under CORRS (quality and quantity) and Q (quality) for USMC and Office of the Secretary of Defense (OSD) required reports. Under certain circumstances facilities may not need to be evaluated, such as in the case where a facility has been out-granted and the installation does not expect to take back occupancy of it in the near term, or facilities that are scheduled for demolition. Data collected on the above factors should be used to update the appropriate data elements in iNFADS and the Facilities Condition Assessments Systems.

(a) AE Factor: Use and Users. The use and users of a facility determines in large part the facility requirement, and is essential information in preparing BFRs and FPDs. The planner should confirm the activity or activities that occupy the facility by verifying the Unit Identification Code (UIC). Identify all users and the projected timeframe of their needs, including those not previously associated with the facility. Over time, a facility may not be the right fit for its current user, due to changes in size or mission, and another facility may be more appropriate.

(b) AE Factor: Category Code Numbers (CCNs). Facilities are identified by CCNs that provide a general overview of the types of activities that the facility accommodates. The planner should identify all uses by category code, including those not documented in previous studies. Spaces occupied by supporting functions, such as corridors, toilets, mechanical equipment rooms, etc., or functions that are under 200 SF of the building, are to be assigned to the primary category code. In the case of a multiple function building or, where there are several unique codes, the supporting or common spaces shall be proportionally allocated among the various uses/category codes. Conflicting uses should be identified, and opportunities for consolidation of similar functions should be noted. Consider related facility CCNs that would be affected by a proposed planning action. Refer to NAVFAC P-72 for a list of CCNs and their descriptions.

(c) AE Factor: Functional Adequacy. Facilities should be assessed as to how well they enable the functions within them to be performed, and whether their current and planned use is a good match for their location or type of construction. Planners should specifically look at space configuration, access to spaces, material flow, equipment clearances, etc. This information can assist in space planning, as the building that poorly serves its existing occupant may be highly suitable for a different unit. To understand the mission(s) of the unit(s) assigned to a facility and determine whether a facility is functionally adequate, planners should first query the appropriate databases and review the property record card for the facility. Planners' interviews with the facility's occupants during this process may also reveal additional information on the suitability of their building. In cases where a unit or organization occupies more than one facility, understanding the unit or organization's larger mission is crucial in determining whether the complex of facilities is providing maximum functionality and is properly configured and how facilities are sited relative to each other.

(d) AE Factor: Space Requirement

1. It is crucial that the installation planner evaluate the occupant's space usage within a given facility and compare the quantity of space used to the quantity of space allowed for the unit on the BFR. An installation planner may discover that the facility's occupant or an operational unit is utilizing more space than their BFR allows, or that the building configuration is not a good match with the current user. In this circumstance the installation planner should carefully note the discrepancy in space used versus space allowed by the BFR. Discrepancies should be noted on the facility planning document in iNFADS so that surplus facilities or spaces within a facility can be managed appropriately.

2. Similarly, an organization may be using less space than the BFR allows but still is able to adequately perform the mission. In this case the BFR should be revised to reflect only the space required to adequately perform the mission. Conversely, if a facility's lack of space appears to be hindering the mission, the planner should examine the BFR and UFC-2-000-05N (former NAVFAC P-80) and consider revising the BFR to increase the space allowance. An increased space

allowance may require the planner to seek an expansion or a larger facility for the function.

(e) AE Factor: Construction Type. The type of construction is an important consideration in evaluating a facility for appropriate and effective current and future use. The planner should verify the type of facility construction and assess whether the facility is of permanent, semi-permanent, or temporary construction, defined by reference (j), General Building Requirements as follows:

1. Permanent: A building constructed with a highly durable exterior; structural framing of substantial building materials such as reinforced masonry, concrete, or steel; finished interior (where normally applicable); and expected to be useful for its designed function with minimum maintenance for a period of 25 or more years.

2. Semi-Permanent: A building constructed with a moderately durable exterior; structural framing of substantial building materials such as masonry, concrete, or steel; interior finished or unfinished; and expected to be useful for its function with moderate or high maintenance for 25 years, but not fewer than 10 years.

3. Temporary: A building constructed with a nondurable exterior; structural framing of lesser grades, such as wood or light gauge steel; nonexistent or low-grade interior finishes; and expected to provide minimum facilities for five years without regard to the degree of maintenance.

(f) AE Factor: Deficiency Codes

1. Performing a thorough AE should also reveal the deficiencies of the facility structure, systems, compliance with building code, etc. Codes corresponding to facility deficiencies are listed in Appendix F. Determining which Deficiency Codes apply may require the skill of an engineer or historic architect (for historic buildings) with expertise in inspecting various building systems. Their evaluation may find alternative means of mitigating deficiencies in a way that respects the building features, design, and function.

2. Deficiency codes must be entered in iNFADS for all substandard or inadequate facilities. The AE should focus on identifying only those deficiency codes related to planning actions rather than maintenance issues, since the Public Works Department's (PWD) Annual Inspection Survey (AIS) will identify maintenance items that typically do not affect the suitability or use of a facility in the long term.

(g) AE Factor: Facility Condition. The physical condition of a facility is an important consideration in evaluating that facility for appropriate and effective current and future use. The facility assets are entered on the Property Record Cards in iNFADS under three basic condition standards. All conditions relate to the adequacy of the facility for its current use. A facility may be deemed inadequate or adequate or substandard solely because of its current or proposed use. It is not necessary to evaluate the condition of temporary or relocatable facilities that have been leased; however, purchased relocatables (whether Class 2 or Class 3), shall require evaluation.

1. Adequate: An adequate facility is fully capable of supporting its current use without modifications or repairs that normally require approval and funding beyond the authority of the installation's Commanding Officer (consult HQMC

LF/MCICOM for current funding thresholds). This means the facility should be within the limits and restrictions of planning criteria, satisfy structural, electrical and mechanical criteria, and does not conflict with building codes, operational requirements or safety restrictions. Facilities that require an operational waiver that will expire must be identified as inadequate and a replacement shall be identified.

2. Substandard

a. A substandard facility is capable of supporting its current use, but requires modifications or repairs that require approval and funding beyond the authority of the installation's Commanding Officer to make the facility adequate for its function. A substandard facility can be made adequate through economically feasible repairs or renovation. A facility is substandard if deterioration will result in deficiencies projected within the next five years, given the current and projected maintenance levels.

b. A substandard facility can be converted or re-designated to another functional use if it can be economically justified. This may result in the facility being considered adequate for its new use. A facility coded as substandard should not be considered for total replacement. Only under unusual circumstances, and only when supported by an economic analysis, should total replacement be considered.

3. Inadequate

a. An inadequate facility cannot be made adequate for its present use through "economically justifiable means." It is, however, possible to make an inadequate facility adequate or substandard for a use other than the current one.

b. The fine line that separates a substandard facility from an inadequate one lies in the interpretation of "economically justifiable means". As a general guideline, when the rehabilitation of a facility will cost in excess of 75 percent of the cost for equivalent new construction, such a facility should be classified inadequate. Conversely, a facility that can be made adequate for its present use by rehabilitation at less than 75 percent of the cost for new construction should be classified substandard.

c. If a proposed repair project's cost is greater than $7.5M the project is subject to approval by the Assistant Secretary of the Navy (ASN) Energy, Installations, and Environment (E, I&E) and notification to Congress. Repairs to facilities listed or eligible for listing on the National Register of Historic Places, if completed consistent with Secretary of the Interior (SOI) standards for repairs and renovations, may not need to complete Section 106 consultation if following SOI standards, although State Historic Preservation Office (SHPO) would still need to be notified. MCO 5090.2A, Chapter 8 "Cultural Resources Management" should be consulted if a planned action will affect any property listed or eligible for listing on the National Register of Historic Places.

d. Deficiencies that prohibit, or will prohibit, the use of the facility for its designated function within the next five years due to expected deterioration will be cause for the facility to be coded as inadequate. The degree and nature of deficiencies will determine whether the facility can or cannot be made adequate for other uses.

(h) AE Factor: Safety Criteria and other Planning Constraints

1. Siting of facilities must be done in accordance with the installation Master Plan. Specifically, siting must be in compliance with all applicable air operations, safety and noise criteria as well as ordnance and electromagnetic radiation hazards safety criteria. These criteria are sensitive to either a change in operations at the origin point (flight paths, types of aircraft, frequency of flights, types and amounts of ordnance, etc.) or a change in use at the potentially affected facility (uninhabited to inhabited, low to high density concentration of people, road realignments, etc.). The planner should also evaluate the site to ensure that it complies with the force protection criteria contained in UFC 4-010-01 and criteria contained in other UFC documents.

2. In addition, the planner should work with installation environmental personnel and the CPLO to determine if any environmental or encroachment constraints exist. For example, presence of endangered species, cultural resources, safety and noise sensitivities, contaminated soil or knowledge of community development pressures may affect the ability of a facility and its occupants to conduct the mission. Constraints placed on a facility by environmental or encroachment concerns may be considered a deficiency and should be noted during the evaluation and in the iNFADS system.

3. AEs are an important part of the larger planning process and allow the planner to understand the suitability of an installation's facilities to meet its mission. In some cases an AE will reveal that a facility cannot meet its mission for one or more reasons or that a facility is not properly sized for its mission. Section II discusses options and actions available to the planner to correct and manage facility planning issues.

3. Managing Assets: Actions that Eliminate Facility Deficiencies and Surpluses

a. After facilities have been properly evaluated based on the condition and functional suitability measures above, and the corporate data systems, such as iNFADS and the Facilities Condition Assessments Systems have been updated, installation planners should examine the facility inventory and AE data. Particular attention should be given to balance the use and space requirement data, to determine which facilities are deficient and which are surplus or underutilized. This section discusses the planning actions in iNFADS that satisfy facility deficiencies and surpluses. Chapter 6 discusses the process of planning for facility requirements in more depth. This planning analysis process should be conducted before submitting a project for a new facility.

b. All planning actions should reflect the current funding environment and the priority of the specific action. If the current funding environment makes it likely that the project will not receive funding, then another planning action may be more appropriate. Planning alternatives other than MILCON, such as special projects for renovation/repair, joint DoD use, joint community use, or privatization offer definite advantages including the potential for more rapid execution. Additionally, preparation of an economic analysis is required prior to a MILCON project getting funded.

(1) Eliminating Surpluses: Acquisition Planning Actions

(a) Acquisition planning actions are those actions proposed in iNFADS that seek to satisfy one or more identified facilities deficiencies. The types of acquisition planning actions available to an installation planner are discussed below. Implementation of any acquisition planning action normally involves an

expenditure of funds, and should only be recommended when absolutely necessary. When acquisition of additional facilities is necessary, economic analysis of all options should help determine which type of action to pursue. The funds needed to implement acquisition planning actions may come from various sources. Installations and regions should explore all possible funding options, since the resources of each specific funding source are limited.

(b) The funding sources that may be available include annual Operations and Maintenance, Special Projects, Unfunded MILCON (including Emergency Construction, Restoration of Damaged Facilities, and Contingency Construction), and Funded MILCON (including UMC and regular MILCON). Each program has specific qualifying criteria, funding limitations, and approval authorities. See Chapter 8 for a discussion of each of these funding sources.

(2) Renovation or Modification. The process of correcting physical or functional deficiencies to restore a facility to complete adequacy for its existing use is known as *renovation*. Renovations will restore a substandard facility to full adequacy, while *modification* will simply alter an already adequate, substandard, or inadequate facility. On FPDs, "RENOV" and "MODIFY" are the planning actions shown. These planning actions are generally identified by the project number of the associated project. Renovation can only be used for a substandard facility, as it implies an upgrading of condition to adequate. An inadequate facility, by definition, cannot be renovated. An inadequate facility can, however, be converted to another use (category code) and then be renovated to upgrade its condition if it was substandard for the new use.

(3) New Construction. The FPD reflects new construction as "CONSTR" and includes the project number of the MILCON, NAF, or special project. While new construction is the most commonly used method for satisfying facility requirements, all other options must be explored first to determine if other alternatives are feasible. A conversion or reassignment of a surplus facility at the installation or at another installation may fulfill the requirement.

(a) It is crucial that planners make an effort to coordinate with region staff to ensure that available facilities do not exist at another installation that could meet the facility requirement. Ultimately, an economic analysis should determine whether an operation can be efficiently and economically served by a facility somewhere else in the region.

(b) If needed, installation planners should not hesitate to propose new construction just because the new facility will be smaller than an existing inadequate facility. Buildings with improved efficiency can better support the warfighter than retaining oversized expensive facilities.

(4) Lease. Fee purchase of real property (land and permanent improvements attached to land) is not always required to satisfy Marine Corps real estate requirements. These requirements can sometimes be satisfied by using other federally-owned property or by acquiring so-called "lesser interests" in private property. Use of real property controlled by other federal agencies can be obtained through host-tenant real estate agreements, public land withdrawals, or permits. Use of private property can be obtained under leases or easements.

(a) The Marine Corps acquires these lesser interests when it is unnecessary or impractical to purchase fee ownership. For example, a lease would be used to satisfy a short-term space requirement, and an easement would be used to run Marine Corps utility lines across private property. FPD planning actions to acquire nearby leased facilities or the use of facilities owned by other DOD or

federal agencies are recorded as "LEASE". This procedure permits non-Marine Corps owned assets that are, by definition not in iNFADS, to be used for facilities planning purposes.

(b) Relocatables

1. FPD planning actions to reflect use of Interim Relocatable Facilities (IRF) (Class 3) to satisfy requirements depend upon the purpose and plan for using the IRF. IRFs used for a specialized purpose such as avionics maintenance vans should always be classified as "CL3-U" (Class 3 - Use). If the IRF has been purchased and is being used as interim facility solution, then "CL3-U" (Class 3 - Use) is also the FPD planning action shown. If the IRF has been leased as interim facility solution, then "CL3-I" (Class 3 - Interim) is the FPD planning action shown.

2. The length of use of an IRF intended as interim space is governed by the language issued by the IRF Site Approval letter, not by its classification in iNFADS. Consult Chapter 8 and Appendix G for more information on IRFs.

(5) Retrieval of Out-grant. When a Marine Corps facility that is out-granted could be used to satisfy a Marine Corps deficiency, then it may be advantageous to retrieve the out-granted facility. On FPDs, retrieval of an out-grant is recorded as "OUTG-R" (Out-grant - Retrieve).

(6) Other Acquisition Planning Actions. Other acquisition planning actions should be considered that use funds other than MILCON. Examples of less common planning actions include public-private venture (PPV), joint use with another agency, enhanced use leases (EULs), assets realized through National Defense Authorization Act (NDAA) 2013 section 331 inter-governmental support agreement, etc. These are not available as proposed actions in the iNFADS system. Planners should contact their region planning staff or MCICOM on a case-by-case basis to discuss the feasibility of using these options.

c. Eliminating Surpluses: Conversions, Reassignments and Disposal

(1) One of the main goals of the MCFPPS is to efficiently reduce facility deficiencies and eliminate surplus facilities. The MCFPPS allows the installation planner to explore various alternatives to satisfy facility deficiencies without resorting to new construction. An economic analysis of various alternatives, performed in accordance with reference (k) guidance, will assist in the decision making process.

(2) Installation planners should consider eliminating surplus facilities first by satisfying deficiencies in quality and quantity in all relevant category codes and functions. Many facility deficiencies can be resolved by committing underutilized assets to the deficient function. This action helps reduce not only the facility deficiency, but also reduces the surplus of the other category code. Such facilities may be converted to another use or reassigned for use by another activity. In addition, a facility that is inadequate for its current use may be only substandard for another category code and upgraded to adequate by the commitment of lesser resources than required for replacement.

(3) Before determining that a facility is excess, the facility planner should check to ensure that the facility is not required for mobilization or other contingency situations. A small quantity of surplus space, in good condition, may be temporarily retained for contingency purposes to meet “swing space” requirements,

or for other short term assignment needs. However, an ongoing need for contingency space must be identified and quantified in a BFR.

(4) The installation planner should use the following planning actions and his or her professional training and judgment to determine if a surplus facility can fulfill other mission requirements. These actions should be coordinated with the unit that has knowledge of what works and what doesn't work relative to their facility. Ultimately, all actions will be reviewed by the Installation Planning Board and resolved.

(5) The installation planner should also explain, in a note on the FPD, the justification for retaining surplus facilities. For example, the facility configuration may not allow use of the extra space for another function, or security/safety considerations may preclude use of the facility for other functions.

(a) Conversion. Planners should determine the potential for conversion of a facility from one category code to another, to reduce or eliminate a surplus or to satisfy a deficiency. The process of putting a facility (which is no longer required for its current use or may not represent the "highest and best" use) to a new use by the same user is known as a conversion. The planning action that appears on the FPD of the gaining category codes is "CONVFR" (convert from), and is further defined with the losing CCN. Likewise, on the FPD of the losing category code, the planning action "CONVTO" (Convert to) should appear, further defined with the gaining category code. Conversions are a means for achieving an optimum utilization of existing assets often at little or no cost.

1. Conversions can result in facilities being converted from inadequate to adequate or substandard dependent on the new function and the degree of satisfaction they provide.

2. A facility may be converted, then require renovation. Should such a case occur, the conversion (CONVTO) must be implemented before the planning action can reflect renovation (RENOV). Until the conversion on the Property Record is complete, the renovation action should be detailed in the FPD Action Notes. The conversion of assets to categories where there are no foreseeable deficiencies to justify a project in the losing category is prohibited without prior permission from HQMC LF/MCICOM GF.

3. HQMC LF/MCICOM (GF-3) Housing Section must approve the conversion of bachelor housing facilities to other uses or the conversion of other buildings to bachelor housing. This requirement for approval includes all permanent party barracks (Category code 721 or 724) and all transient billeting fund facilities with the exception of those facilities managed by MCCS with NAF.

(b) Reassignment. The process of enabling a facility that is no longer required by its current user to be used by another Marine Corps user (either for the same or a different use), is known as a reassignment. The principal definition of the term involves the reassignment of an asset from one property record holder to another. The term can also refer to a change in user with no change in the property record holder. The planning action that appears on the FPD of the gaining activity is "REASFR" (reassign from) and is further defined with the UIC of the losing activity. Similarly, "REASTO" (reassign to) appears on the FPD of the losing activity as the planning action and is further defined with the UIC of the gaining activity. On Marine Corps installations, the land and buildings (Class 1 and 2 property) are owned and retained by the installation, although FSRM responsibilities may be assigned to a tenant. Class 3 property may be transferred.

1. Reassignments of Class 3 property can be made to various users of an activity. The reassignment of the property means the plant accountability will change from the original host to the requesting activity. Class 1 property cannot be transferred outside the USMC without HQMC (LF) approval, and only in cases where the land is excess to the needs of the Marine Corps. For policy and questions regarding real property transfers, please coordinate with HQMC LF/MCICOM (GF-6) Real Estate and Asset Management Section.

2. Installation Planners should ensure that REASTO and CONVTO planning actions have corresponding REASFR and CONVFR planning actions, and that a reassignment or conversion is not going to create a surplus somewhere else. Refer to reference (l) for additional guidance on conversions and renovations.

(c) Reassignment: Disposal. Inadequate facilities that are not suitable for another use should be considered for disposal. However, unless the building is unsuitable for habitation, before disposing of a facility, it is the installation planner's responsibility to ensure that such facilities are not needed by another unit on the installation or within the region, or forecast to arrive within the coming 36 months. Appropriate notes within the iNFADS FPD should reference the timeframe and future unit for whom the building is being retained. See also section 5.8 for additional information. Facilities that are considered surplus and have not been identified for any other use, may be declared excess and transferred to another agency. NAVFAC P-73, Real Estate Procedural Manual, discusses interagency transfer of excess property. The following planning actions remove facilities, which financially burden the Marine Corps plant account.

1. Disposal. The planning action used to address many surplus facilities is "DISPOS" (disposable assets). Various methods of disposal are discussed in reference (m). This planning action can reflect a plan to dispose of the facility in a specific method, which should be described in an FPD Note. This planning action can also reflect a general plan to dispose of the facility in an unspecified manner. The status of the disposition will be recorded in iNFADS, as directed by reference (n).

2. Demolition. This action should be used when a facility is either deteriorated beyond economic repair, is required for the siting of a MILCON project based on economics or an operational requirement, or is unable to satisfy other requirements. The planning action "DEMOL" (demolish) or "DEM_C" appears on the FPD to reflect this plan. The planning action can be further identified by the project number in the "ID" column or in a note.

3. Replace. For those inadequate facilities that are being used, but should be replaced, for which a project has not been submitted, the planning action "REPLCE" (replace) is optionally available for use on an FPD. Planners should plan a replacement project as soon as possible. An acquisition planning action (CONSTR) should be included with any replacement planning action for which a project has been submitted.

e. Facilities listed or eligible for listing on the National Register of Historic Places may require additional approvals prior to disposal or alteration. As discussed previously, reference (d), Chapter 8 should be consulted if a planned action will affect any property listed or eligible for listing on the National Register of Historic Places.

4. Status Quo Planning Actions. When an AE reveals that a facility is required and meeting its mission, a *status quo* planning action should be recorded in iNFADS.

Status quo planning actions do not require the expenditure of any construction dollars. The status quo planning actions available in iNFADS are as follows:

a. Continued Utilization. When a facility should remain in use for its existing function and user, the FPD planning action to reflect this plan is "USE". This action is the default option that appears in the absence of other planning actions.

b. Retention. When a facility is not currently required, but would be required for near-term planned mission expansion, or in the event of known future mobilization, then "RETAIN" is the FPD planning action to be used. To use this planning action, the planned expanded mission should be a HQMC LF/MCICOM approved mission change or expansion, or the facility requirement must be a part of an approved Mobilization Plan.

c. Continue Existing Out-grants. An out-granted facility is one that is owned by the Marine Corps, but is rented, leased, or otherwise assigned to another service or government agency. If there are no plans to terminate the out-grant, use the planning action symbol for out-grants - continue, "OUTG-C".

d. Real Property Accountability Officer (RPAO)

(1) Interest in Real Property Accountability at all levels of government is increasing. In 2005, the DoD published reference (o) that mandates that the heads of DoD components shall “maintain an accurate and current inventory” of their real property. In response to this mandate and in recognition of the importance of accurate real property data, the Marine Corps created RPAOs at each installation, as well as a Real Property Officer (RPO) at MCICOM. RPAOs will be responsible for ensuring that real property data for their installation is accurate and up-to-date in the system for their installation.

(2) The MCICOM RPO will be responsible for promulgating guidance on installation real property management processes and procedures as well as preparing the Marine Corps inventory to pass audit and Clean Financial Statement requirements.

Chapter 6

Facility Planning Document

1. Facility Planning Document (FPD). FPDs are computer-generated reports of planning actions for specific categories of facilities (Cat Codes). The FPD is a product of the planning module of iNFADS. An FPD is generated by iNFADS for each category code and tenant activity on an installation for which a requirement—through the BFR process—and asset utilization(s)—through the AE process—has been assigned. These documents summarize the requirements; show the individual assets and sizes of facilities that are used to meet that requirement on the installation; and plan to minimize the surplus or deficiencies. The FPDs act as a facilities balance sheet, showing proposed use of existing assets, plans to acquire or remove assets, and the resulting quantities following all proposed actions. The FPD will further identify means to satisfy deficiencies or reallocate surplus property to fulfill other requirements.

a. The FPD provides an overview of an installation category code BFR, existing assets, and planning decisions regarding the continued use of existing facilities, demolition, conversion to another use, and/or replacement with special or MILCON projects. FPDs shall be submitted as part of the construction program documentation to justify projects. All MILCON projects proposed in the aggregate of the installation FPDs should be listed in the NAVMC 10956, Summary for Correction of Facility Deficiencies and should represent the total construction requirements for the installation.

b. The FPD overview should ultimately satisfy the entire BFR for that category code across the FYDP timeline. For those facilities requirements that do not require a BFR (see reference (a) for list of which category codes require BFRs), the FPD should include a narrative planning analysis to document any proposed increases. This analysis should be included with project document submissions.

2. FPD Regional Approach. It is vital that the MCI regions take a regional approach in satisfying deficiencies and surpluses in order to maximize regional facility assets. A few examples of regional assets include training facilities and ranges, hospitals, administrative buildings, shopping areas, and long-term storage. The MCI regions should use the FPD as a tool to manage and balance the region’s assets. A regional economic analysis may demonstrate the most effective facilities solution.

3. Installation Command’s Actions

a. Marine Corps installations are responsible for comprehensive preparation of all FPDs that support their planning programs. The FPD is a tool that the planner uses to document how the installation balances requirements, assets, and planned facilities actions for most occupied buildings. A properly prepared FPD will provide proposals for optimum use of existing assets and will provide a plan to satisfy deficiencies and dispose of surplus facilities.

b. It is the installation planner’s responsibility to update FPDs; all FPDs shall be updated whenever the corresponding BFRs change, but no less than once every 24 months even if BFRs do not change.

4. Activity ID Data and Category Code. The first step in updating the FPD is identifying the activity and the category codes that are associated with the activity. There should be a BFR for each category code describing the amount of

space required to support the mission of all units under this particular function. The BFR is attached to the FPD in iNFADS.

a. Each installation will need to determine within a given building who is occupying the space, if the allocation is sufficient for that unit, and whether the space is appropriate for their purposes. Among the planning actions that should be captured on the FPD are: continued use, upgrade, conversion, or removal of each facility in that category code, and any proposed actions that increase or decrease the future assets.

b. The FPD sheets will be used to assist with space planning, therefore, the fields need to be kept up to date and populated with relevant information. Information on the user, their UIC, their contribution to the BFR, and the amount of space they occupy for a given category code should be reported in the FPD sheets and property record cards.

5. Elements of Planning Balance. Planning analysis involves determining the suitability of an installation for a variety of uses based on the review of existing assets and mission requirements, as quantified by the BFR. The planner first seeks available facilities to satisfy the requirement before pursuing new construction. If the mission can be satisfied by using underutilized facilities from another category (modified or not), this conversion should be considered within an economic analysis. If justified, the conversion should be the preferred alternative over new construction.

a. CONVTO and CONVFR should match and have validated BFRs. In the current fiscal environment, the practice of retaining significant surplus facilities without plans for disposal or conversion will no longer be acceptable, and the MCI regions will be held accountable via metrics and Common Output Levels of Service (COLS) to ensure that this practice is ended. Facilities should also not be converted incorrectly to a “junk” cat-code to facilitate their disposal.

b. Where facilities are substandard, the record should address the measures and plans to repair those deficiencies. Should the deficiencies not be economically feasible to justify renovation, plans for suitable replacement facilities should be addressed.

c. Ultimately, the total plan for meeting the requirement should be identified within the FPD; the total planned assets must balance with the requirement. If there are surplus facilities, their disposition should be addressed. If there is a deficiency, the plan for satisfying the BFR should likewise be discussed. The MCI regions have the responsibility to ensure planned assets match requirements for all category codes. HQMC LF/MCICOM will develop metrics and an audit process to confirm that this task is being completed in a timely and accurate fashion.

6. Existing Facility Inventory. The Facilities module of iNFADS contains a detailed inventory of existing facilities by area, condition and planned usage. The inventory consists of the following elements:

a. Facility number: Assigned building or structure number; when no building or structure number is assigned, property record numbers will be shown.

b. Use Indicator: Use “Y” (Yes) or “N” (No) to indicate that the facility has more than one use (CCN) or user.

c. Engineering Evaluation (EE): Year of the latest EE.

d. Type of construction of the particular facility. The type of construction is indicated by P, S, and T, referring to permanent, semi-permanent, and temporary, respectively (see reference (n)).

e. Condition: Adequate, Substandard, or Inadequate. Specific quantity (primary unit of measure only) displayed under the appropriate condition heading for each facility number.

f. Deficiency Codes: See Appendix F for definitions of deficiency codes.

7. Planning Actions. The core steps of facilities planning are identification of requirements, compiling information on existing facilities (e.g., size, condition, and functionality), determining deficiencies and surpluses, and then developing planning actions to address them. The planner proposes methods to satisfy deficiencies and dispose of surpluses. The planning actions and their associated scopes are used in calculating the "Total Proposed Adequate Assets" (TPAA) shown on the FPD, as well as the "Proposed Quantity Deficient" and "Proposed Quantity Surplus."

a. Deficiencies and Surplus Quantities. Deficiencies and surplus quantities are each calculated in two ways. Existing deficiencies in iNFADS show the lack of adequate assets and do not include substandard or inadequate assets towards mathematically satisfying the BFR. For Marine Corps planning purposes, however, substandard facility assets are included when formulating the deficiency/surplus calculation. If existing deficiencies exist, then acquisition planning actions (e.g., minor construction or MILCON projects) should be developed. Existing surplus quantities reflect all facilities, regardless of condition or degree of ownership. If a surplus exists, then disposition planning actions should be developed (e.g., demolition) in most cases. Separate calculations are made for proposed deficient and surplus quantities.

b. MCFPPS

(1) The MCFPPS encourages that planning actions are proposed to make substandard facilities adequate or to reassign or convert them to another use for which they will be adequate or can be made adequate. The MCFPPS also requires planning actions that dispose of inadequate facilities. Specifically, a proposed deficiency is based on using TPAA to satisfy the BFR. TPAA is the sum of all quantities with a"+" designator on the FPD. The "+" reflects the planned use of an adequate or substandard facility. A proposed surplus includes the TPAA plus scopes with a "0" planning action designator. This reflects the planned use, retention, out-grant retrieval, or modification of inadequate facilities.

(2) As a note, facilities planners should not be proposing new construction when TPAA equals or exceeds the requirement. There are cases where, due to other needs, a balanced category may better serve the mission, and assets should be reallocated to more pressing needs.

c. Existing Quantity Deficit (Deficient). “Existing Quantity Deficit (Deficient)" is calculated for each unit of measure entered for each CCN for which requirements or assets have been entered in the MCFPPS. It appears on both the Facility Requirements Plan (FRP) Summary and the FPD.

(1) An FRP is a complete display of all the data generated on an FPD organized by installation, planning area, and category code. The FRP provides a statement of facility requirements; lists assets (adequate, substandard, and inadequate) by their current user and use; lists the existing deficiencies and

surplus facilities; and displays future plans to use, acquire, or dispose of assets that result from the plan's recommendations. The deficiency is defined as follows:

(a) For iNFADS (at Marine Corps installations): *Requirement – Adequate – Substandard = Existing Quantity Deficient* (**Note:** FPD's definition of deficiency does reflect substandard assets but does not include inadequate assets. Substandard assets should be brought to adequate whenever possible.

(b) The planning analysis of the deficiency may indicate that a MILCON project would be the appropriate planning action; however, as additional data are collected on operational details, it may become clear that the projected operations can be adequately supported by existing assets alone, or by a project that doesn't meet the full deficiency. If this is the case, the BFR was too great and should be reduced accordingly. Ensure the quantities shown under the assets conditions match the quantities in the action column; all spaces in the building must be accounted for.

d. Proposed Quantity Deficit. "Proposed Quantity Deficit" is also computer-generated and reflects the proposed planning actions. This deficiency reflects the planned use of substandard and inadequate assets towards satisfying the BFR. It appears only on the FRP Summary. The substandard assets should either be made adequate or used to satisfy some other deficit. The inadequate assets are disposed by one of several methods. This deficiency is defined as follows: *Requirement (BFR) - TPAA = Proposed Quantity Deficient.* Surplus facilities are all assets above the BFR quantity for each CCN.

e. Existing Quantity Surplus. "Existing Quantity Surplus" is calculated for each unit of measure entered for each CCN for which requirements or assets have been entered into MCFPPS. It appears on both the FRP Summary and the FPD. The existing surplus, unlike the Existing Quantity Deficient, does represent substandard and inadequate assets as defined below: *(Adequate + Substandard + Inadequate) - Requirement (BFR) = Existing Quantity Surplus*

f. Proposed Quantity Surplus. "Proposed Quantity Surplus" is a computer-generated quantity that reflects the proposed planning actions. It is an indication of how substandard and inadequate assets are resolved by the planning actions. It appears only on the FRP Summary. It is defined as follows: *(TPAA + Scope Quantities with "O" designator) - Requirement (BFR) = Proposed Quantity Surplus.*

g. BFR and Assets Comparison. The BFRs previously developed and the assets previously evaluated are compared in this phase of the MCFPPS. Deficiencies and surplus quantities are automatically calculated. The results are then analyzed along with other planning data obtained from previous approved Master Plans, other special planning studies, and activity-provided data. The planning actions should identify a plan for optimum use of existing facilities, disposition of surplus facilities, and satisfaction of deficiencies.

h. Facilities Decisions. Decisions are made on which facilities to continue to use for their present functions. Recommendations are made on other planning actions, including conversions, reassignments, renovations, new construction, leases, disposals, and demolition necessary to resolve the deficiencies and surplus. The development of planning actions is the last step in the FPD update process.

i. The planner must remember that the MCFPPS is designed to provide facility support for mid-range (six years) facility requirements. Therefore, it is

important that facilities planning data reflect strategic (across the FYDP) in lieu of short-term or ad hoc requirements.

8. Planning for Deficiencies. Prior to proceeding with project determinations and submittals, the activity facility planner should review the FPD, and ensure the following:

a. Activity planning documents conform to the latest version of the activity's FSRs.

b. BFRs and iNFADS are up-to-date. Any pending approvals should be initiated by the installation, either through the MCI region or MCICOM.

c. Duration of the requirement—is the need for spaces temporary, short-term, or permanent?

d. Activity Data used for project justifications are the same data submitted on Bachelor Housing Surveys, Family Housing Surveys, warehousing reports, excess facility reports, and the RPI. Due to escalation of costs to rehabilitate existing buildings, consideration should be given to alternate uses for the existing buildings to satisfy other facility deficiencies. This is particularly applicable in evaluating the pros and cons of modernization versus new construction of bachelor housing.

e. Projects to restore permanent or semi-permanent structures should be in accordance with the current edition of reference (l), as well as reference (d) if the structure is a historic property.

f. Maximum use will be made of previously prepared designs through site adaptation, where feasible.

g. The following questions should be considered as part of the decision to program new construction projects in the FYDP:

(1) Is the project critical to performing the basic mission of the unit or installation (e.g., is it essential or "nice to have")?

(2) Can we satisfy the requirement in some other manner (e.g., space on another installation, leasing off-base)?

(3) Is safety or health the primary justification?

(4) Will the project have an immediate effect on improved Quality of Life?

(5) Is Physical Security or Anti-Terrorism a primary consideration?

(6) Will a proven economic benefit, such as energy savings or lower Operations and Maintenance costs, result?

(7) Is the project supported by an economic analysis?

(8) Will the project correct a violation of environmental or safety code or law?

(9) Is the project vital to the conduct of required military training?

(10) Is the project essential to providing reliable utilities operations?

(11) How does this project affect other requirements, the environment, utilities infrastructure, traffic, and other land uses?

h. Projects may be deferred when:

(1) The requirement supports a function that can be provided by the local community.

(2) The facility supports a service that can be obtained with greater efficiency by contract.

(3) The project is not supported by an economic analysis showing the proposal to the best alternative from a life-cycle perspective.

9. Planning Solutions. Planning actions are shown in Section 3 of the FPD (see Appendix H). They indicate deficiencies and surpluses by category code on the FRP). Planning actions are identified on the FPD in the ID column. This documents the use of existing facilities and the need for either acquisition or reductions in that category. The scope indicates how the particular planning action and associated scope will impact on the "TPAA" on the FPD, and "Proposed Quantity Deficient" and the "Proposed Quantity Surplus" of the FRP Summary.

a. Installation planners should:

(1) Update FPDs on a continuous basis, as necessary.

(2) Use Planning Action Notes to explain timing or phasing of planning actions, as appropriate.

(3) Employ appropriate disposal planning actions on assets assigned to a category code for which there are surplus assets.

(4) Show information, such as the building numbers of facilities being converted and the names of the units involved in reassignments, in the Planning Action Notes.

(5) Do not use vague Planning Action Notes to as placeholders such as "CONSTR XXX" or "???" when planning projects. Unspecified future projects or conversion targets/scopes will not be validated.

(6) Do not use "CONSTR XXX" or "???" to show satisfaction of remaining deficiencies when the activity has no plan to submit the project.

(7) Use planning notes for all projects and provide information on the scope, estimated cost, timing, and any critical milestones.

(8) Reflect latest status of projects by regular updates.

b. Designators. Designators are as follows:

(1) (+) The scope associated with the planning action and (+) designator will be included in the calculation of "Proposed Quantity Deficient" and "Proposed Quantity Surplus" shown on the FRP Summary. The asset (whether existing or planned as an acquisition) will contribute to reducing any deficiency and/or will increase any surplus shown for these "proposed" quantities on the FRP Summary. The "TPAA",

shown on the FPD, is based on the summation of all scopes with a planning action that has a (+) designator.

(2) (-) The planning action associated with this designator proposes to remove the asset quantity displayed in the "Scope" column from the particular category code. The asset would, therefore, not figure in the calculations of "TPAA", and the Quantities on the FRP Summary.

(3) The condition of the asset shown in the "Scope" column is inadequate and, therefore, will not impact the calculation of "TPAA". It will, however, contribute to the "Proposed Quantity Surplus" on the FRP Summary.

c. Proposed Quantity Calculations

(1) The calculations of the "Proposed Quantity Deficient" and "Proposed Quantity Surplus" on the FRP Summary are as follows: "Proposed Quantity Deficient" = Requirement - "TPAA" - Other Assets "Proposed Quantity Surplus" = "TPAA" + Other Assets + All scopes with (0) designator - Requirement

(2) Deficiency Codes are shown for information purposes and are linked to EEs, which contribute to the assessed condition of the facility. See NAVFAC P-78 for details.

10. General Notes. The notes section of the FPD allows the planner to describe special circumstances that may not be picked up elsewhere in the FPD.

a. Special circumstances

(1) "Standard (STD) Notes". Standard notes. These notes apply to facility requirements and approval conditions and are updated by MCICOM, MCI regions or designated Commands.

(2) "General (GEN) Notes". Further narrative explanation of any data or peculiar aspects of the FPD. General notes are updated by the activity or MCICOM up to a maximum of 99 lines for each category code.

(3) "FPD Action Notes". Further explanation of any planning action. Notes are tied to a particular planning action by use of a note number shown under the "NT" column. Number them 01, 02, 03, etc. In these notes, also include proposed project year and costs, as well as related categories affected in this project.

b. FPD Conditions. FPDs are created in iNFADS if:

(1) Inventory exists in that category code.

(2) A facility requirement exists for that category code.

c. FPD Update. The FPD is dynamic and should be updated whenever:

(1) There is a change in the BFR.

(2) The facility assets are changed as a result of an EE.

(3) A project is completed that affects the quantity or alters the adequacy of the facility.

(4) Proposals for satisfying existing deficiencies and disposing of surpluses are revised.

d. Special Areas. Requirements for "Special Areas" should be separately identified from requirements at the main site, and require separate BFRs. The General Notes section of the FPD can be used to highlight those category codes for which there will be more than one FPD due to the existence of these "Special Areas". This information can be used later during the planning analysis phase.

11. FPD Schedule. FPDs reside in iNFADS. At a minimum, it must be updated annually to coincide with the annual Facilities Condition Assessments Systems update, as well as the one-year MILCON programming cycle. Installations with multiple projects should regularly update the FPDs to reflect changes in the project schedules, unit changes, cost, building conditions, and other planning information to ensure the database is accurate and capable of supporting planning efforts. Installations shall revise FPDs and notify HQMC LF/MCICOM to coincide with the MILCON cycle, as listed in the annual MILCON guidance letter. Following the completion and acceptance or demolition of facilities, the facility action notes should be revised to clear the deficiency or surplus.

12. Bachelor Housing Conversion. HQMC LF/MCICOM must approve the conversion of bachelor housing to other uses or conversion of other buildings to bachelor housing in accordance with reference (p). The process should be initiated upon completion of the FPD, proposing such action. The installation FPD must reflect the proposed action, with planning notes. Requests for conversion must be submitted to HQMC LF/MCICOM GF via the relevant regional MCI. The request must show that there is no need for the building as a BEQ and that the building is an economically feasible means of satisfying the requirement. BFRs and copies of the appropriate FPDs should be provided with the project documents to justify the planning actions.

13. FPD Planning Instructions. The FPD is accessed through iNFADS. The following sections provide additional details about the FPD which is a report under iNFADS. The Planning module includes detailed tabs where the actions take place. Once the FPD is edited, a final report is generated that should resemble the Sample FPD in Appendix H.

14. Activity Identification

a. The iNFADS Planning module is accessed by executing a query of category codes on an installation. The typical query is to request the BFR edit report sorted by installation UIC, Special Area (if applicable), and CCN. From the results of that query individual category codes and buildings can be accessed. This section of the FPD is general information and summary data.

b. Changes in other modules will carry over to the FPD (for example, changes to the property record card’s building condition will carry over to the FPD). The approval and change dates shown in BFR edit report indicate the latest updates. FPDs in support of MILCON projects must be up to date (within the current FY). Remember to include all proposed construction projects (MILCON or Minor Construction) in the planning action notes for all affected CCNs. This helps the activity keep track of planning actions, and helps higher authorities respond to questions.

15. Requirements vs. Total Proposed Assets. The BFRs for each category code are addressed in Chapter 4. The approved quantity is the target for all planning actions listed in the FPD. Ideally, the total of all buildings used and any acquisitions, minus those reallocated or demolished, will balance with the approved

requirement. Recognizing there will be some inefficiency, any totals that are over 5% of the unit's requirement should be explained under the notes section (see the Sample FPD in Appendix H and the checklist for approval in Appendix D).

a. "Other" Requirement. Requirements that have multiple aspects, such as warehouses that store materials using both SF and cubic feet (TC) should report both under the "other" requirement. For example, a warehouse may have 321,448 net square feet (NSF) of allowable storage and 3,239,380 cubic-feet of storage due to the ability to stack materials on pallets and racks. Both area (SF) and volume (TC) should be listed.

b. Summaries. The summaries of adequate, substandard, and inadequate facilities are generated from AEs. The delta shows the assets minus requirements. If there is no delta, or the delta is small, no planning actions are required. If the delta is large, then a planning action to resolve the surplus or deficiency is warranted.

16. Utilizing Existing Inventory. iNFADS will generate a list of facilities with area and condition data for each category code. The typical planning action for those facilities is "USE", which should not change in many cases.

a. Substandard and Inadequate Facilities

(1) If facilities are listed as "substandard", in most cases, there should be a plan for renovating the facilities to make them adequate. "Inadequate" facilities, defined as not economical to renovate (make adequate) for that CCN, should be disposed of whenever possible. Deficiency codes for substandard facilities are useful to describe the nature of and need for renovation projects and as justification for not utilizing facilities (not used because it is inadequate). It should also be noted that many facilities have multiple CCNs; if there are proposed projects, then all affected FPDs must be updated.

(2) As the Marine Corps changes its end-strength, it will be increasingly important to monitor the condition of facilities on our installations and proactively address substandard and inadequate structures through renovation or disposal. As a note, do not plan for use of an inadequate facility scheduled for demolition or rehabilitation, unless there are special circumstances. Any special circumstances should be explained in the FPD Notes.

b. Disposition of Facilities. The disposition of facilities is an important part of the planner's record of analysis. In the case where an existing asset does not meet the requirement, the analysis should discuss the plan for acquiring additional space. In those cases where too much space remains in the category code, there should be a plan to transfer and convert excess spaces to meet deficiencies, demolish inadequate excess facilities, or reallocate spaces to other users (Note: conversion to a new CCN is not allowed if it results in a surplus for the receiving CCN). Projects that require improvements to a facility in order to convert it into adequate space should be carefully evaluated to ensure that conversion is correctly categorized as construction or repair. Some improvements that would be considered repair when the CCN doesn't change are considered construction if accompanied by a change in CCN (see reference (l)).

c. It may be desirable for an installation to retain some useful spaces as "swing space" where there are known short-term requirements, however, long-term retention of excess space is discouraged. If swing space is retained, document it within the notes section of the FPD.

17. Facilities Actions

a. Where there is a shortage of space, due either to the conversion of excess space from another category or the acquisition of new spaces, the shortage should be noted in the FPD. The project number, scope, and estimated cost should be listed, along with any contributing notes. In those cases where a project involves facilities within several CCNs, list the related CCNs. These planning actions should be the same scope as those presented on the approved project document (Form DD1391).

b. In cases where there is a space deficiency but there are no projects (including un-programmed projects), the requirement should be re-evaluated. For those cases where the requirements and assets support multiple installations in the region, the planner should describe the projects in the FPD general notes at all affected installations. Also, ensure that project information is kept up to date. If a project changes scope, enter the new scope on the FPD.

18. Planning Notes. Use of planning notes will help to explain any future actions and rationale for MILCON projects. Where there are facilities that will not satisfy the requirement, there may be other suitable uses for the facilities. Notes are entered in the column next to the proposed action and will be reviewed as the MILCON or other projects are being validated. When the action has been completed, the planner shall remove old notes to avoid confusion and revise the deficiency codes.

19. Space Utilization

a. Each installation is required to manage the space in its facilities, ensuring that as a facility’s utilization is reduced that the excess space be made available to satisfy existing deficiencies. In order to reduce the need for new facilities, the use of existing available facilities helps the Marine Corps to meet its mission without the need to allocate scarce resources to build excess capacity. At a minimum, the installation must be capable of showing its facility utilization, identifying any excess space by condition, and identify the occupants of each facility. An up-to-date BFR, covering each unit’s operational space, can justify the utilization or identify opportunities to recover spaces.

b. Installations may use the capabilities of the iNFADS Planning module to display the planned utilization of each facility by category code. An FRP report may be generated that shows, by category, the proposed surplus and deficiencies. As better space management systems become available, the installation is encouraged to adopt those systems as long as they provide annual reports to HQMC LF/MCICOM at the end of each Fiscal Year, showing the facility-by-facility utilization levels and the summary by category code.

20. Important Considerations

a. FPDs provide a tangible description of the size and quality of available spaces. As feasible, these attributes should be included in the installation Geographic Information System (GIS) to enable data to be portrayed as geographic information. Master Planning and site approvals (Chapter 7) bring additional attention to the location of the assets, beyond just the space and qualitative aspects of the installation’s facilities.

b. The FPDs must support space management efforts by tracking facility occupancy. Planning notes should be used to describe the space allocated to various users and should identify where the allocation does not match their

requirements. The installation Commanding Officer is expected to monitor space allocation to ensure units/activities do not exceed their requirements and thus incur unnecessary operating costs.

Chapter 7

Master Planning

1. What is a Master Plan? With the publication of reference (q) in 2012, DoD began a paradigm shift in its thinking relative to what a Master Plan should be, and what the Master Planning process should entail. At the heart of that paradigm shift is a desire for installations to become more sustainable and use our lands and environmental resources more efficiently. In many ways, installation Commanding Officers are like mayors of small cities in that they guide their communities to meet both the short- and long-term goals to create quality places to live and work. The new paradigm adopts an urban planning focus on mixed use development, reduction of sprawl (where feasible), walkable installations, networked development areas, community interaction, and conservation of resources.

a. Reference (q) also champions creation of a new oversight body, the Installation Planning Board, hat validates all installation projects (including siting) against the vision and objectives presented in the installation Master Plan. reference (q) and this MCO direct installation Commanding Officers and MCI regional Commanders to use the Master Plan as a regulation for development.

b. The Master Plan is the blueprint that will guide development and facility decisions in the years to come. Successful Master Plans establish creative business processes that enable installation Commanding Officers to build and improve their communities on a variety of levels. In addition, good Master Plans acknowledge the unique relationship between the installation, its tenants, and the surrounding community, and establish strategies to maintain and improve positive relationships between the base and neighboring communities.

c. Reference (q) directs DoD installations to establish a long-term, or end-state, vision for the installation that is supported by actionable objectives and to submit projects to achieve those objectives in a reasonable time frame. The vision should account for what is known about the current and future missions of the installation, as well as the need to reach an end-state that achieves current goals regarding encroachment protection, sustainability, renewable energy, energy conservation, transportation efficiency, etc. The end-state should also responsibly respond to environmental conditions on the base, and in the region, and facilitate environmental stewardship for future generations.

d. The Master Plan for an installation, or complex of installations, is an integrated document that presents, in graphic, narrative, and tabular form, an analysis of the present composition and functions of the installation(s), and the optimum plan for its orderly and comprehensive development. It is made up of a series of products that focus upon various aspects of the installation and its requirements. This Chapter will discuss the components of the plan, the metrics for evaluating plans, and the concerns that a Master Plan should address.

e. Master Plan Goal. The goal of the Master Plan is to produce the optimal sustainable installation end-state that will fully support all installation missions in the most efficient and cost-effective manner. In order to accomplish this goal, all disciplines for sustainable planning and design need to be incorporated into the Master Plan. The Master Plan must meet current mission requirements and have flexibility to accommodate mobilization, new missions and mission changes.

f. The sustainable planning process can guide the base towards a compact and walkable installation, with minimal non-permeable surfaces, shorter utility runs, etc. This end-state may result in lowered total cost of ownership over the life of each facility and the installation. The amount of developed land is held to a minimum and controlled with growth boundaries. The vision and long-term goals of the Master Plan, component plans and other planning processes span a 20-year period, and strive to achieve the best sustainable end state for the installation.

g. An installation that is sustainable in the long-term will not only consider the interaction of people, facilities, and mission within the installation boundary, but will also consider the burdens and impacts of military operations on the community. Encroachment may occur in both directions across the military property line and improper facility siting could result in inverse condemnation, complaints, or general ill will within the community. The CPLO regularly works with the community to address encroachment, mission sustainment, and compatible land use. Master planning is an inherent part of controlling encroachment and maintaining positive military/community relationships. The master planning process involves stakeholders across the installation, led by a facilities planning Integrated Product Team (IPT) that works for the Installation Planning Board.

2. Hierarchy of Planning Products and Processes. The new hierarchy of planning, from large to small and not by order of execution, is the Installation Comprehensive Plan, Installation Master Plan, ADP/Component Plans and Studies, and Facility Site Plan. Each is described below.

a. Comprehensive Plan

(1) The Comprehensive Plan is a high level Executive Summary identifying the links between the Installation Master Plan and its component plans with other installation planning documents such as INRMPs, ICRMPs, Encroachment Control Plans (ECPs), Joint Land Use Plans (JLUPs), and Range Complex Master Plans. It is a stand-alone document. The Comprehensive Plan incorporates the Master Plan Executive Summary and then crosswalks the vision and objectives of Master Plan with those of other installation plans, so that it provides a single overview of land use and facilities planning for the installation. The Comprehensive Plan summarizes the Master Plan, removing sensitive analysis and for official use only (FOUO) information, and enabling it to become a tool for collaboration with stakeholders.

(2) When outlining the Scope of Work (SOW) for a Master Plan update, installations planners are responsible for ensuring that the SOW also captures the Comprehensive Plan, as this is a new and unique Marine Corps requirement. See Appendix I for an outline of a Comprehensive Plan.

b. Installation Master Plan. The Installation Master Plan is the overarching facilities planning document for the entire installation, including ranges and satellite sites. This plan contains the vision for the base’s desired sustainable end-state, and uses component plans, as appropriate, to analyze and describe smaller planning areas within the installation and systems across the installation. The Master Plan has several required elements (such as a regulatory plan, an installation network plan, and the installation development plan) and standards necessary to act as a guide to installation development. It addresses the impacts of the component plans and summarizes their concerns. See Appendix J for an outline of an Installation Master Plan.

c. Area Development Plans (ADPs)

(1) An installation Master Plan provides the overarching framework for component plans, studies and site plans. ADPs look more intently at specific development or redevelopment area on the installation.

(2) As part of the Visioning process (see Section 7.5), the IPT and stakeholders, under the direction of the Installation Planning Board, will subdivide the installation into development or redevelopment areas. Each of these areas will be the focus of an ADP or site plan. Areas may correspond to special areas of a large installation, but an ADP may be completed for an area of interest that is not designated a special area within iNFADS. ADPs can also be developed for those assets on the installation related to centrally managed programs such as DLA, DODEA, etc. The ADPs act as the engine of the Master Plan, creating individual area lay-downs. As required, supporting site plans refine the lay-down fidelity.

(3) ADPs, once completed, are summarized in the Master Plan and provided as attachments. A recommended ADP format is provided in Appendix K).

c. Facility Site Plan. The Facility Site Plan is the smallest master planning document, and can address a single facility or be a subset of an ADP. A Facility Site Development Execution Plan describes how to implement the area or facility lay down (e.g., phasing, land and space management). The site plan provides the project level basis of design and, in turn, contributes to the plan-based programming outlined in reference (q).

d. Other plans and studies. Other component plans and studies address aspects of the built environment, such as transportation and utilities; natural or cultural resources, range management, encroachment control, etc. These additional plans support the Installation Master Plan in achieving the desired sustainable end-state and should be summarized within the Comprehensive Plan. All plans must advance the installation’s vision, goals and objectives, and accomplish measureable and actionable objectives.

e. Community Planning. Some municipalities have invited installation planners to sit on their planning commission/ boards as an advisory member, to provide input related to potential impacts of community planning on the installation. While the provisions of reference (q) apply, an installation may also encourage local and/or regional municipal planners to attend or serve in an advisory/non-voting role on the Installation Planning Board for those agenda items that may have impacts outside the installation fence line. Such collaboration promotes cooperation, and increases coordination and awareness.

f. Notice of Pending Planning/Zoning Action. Many municipalities notify military installations of any pending planning and zoning actions that may be proposed within a certain distance from the installation boundaries (e.g., any action within 3,000 linear feet). Normally, the installation is notified of the relevant meeting date and given an opportunity to comment/attend. If not captured within the existing municipal regulations, said notification requirements will need to be added/codified within the municipality’s land use /zoning regulations and/or code. Likewise, even outside the immediate borders of the installation, community planning efforts should be monitored to protect the installation’s operational interests. Potential hazards to aviation, such as building within airfield safety clearances, as well as incompatible community land use, e.g., housing within an APZ or high-noise area, can lead to encroachment on an installation’s ability to meet its mission. The relationships between the community and the installation can

proactively avoid such incompatible land use through coordination of community zoning. Reference (r) addresses AICUZ issues; see also section 7.15 below.

g. Other. Routine planning actions not addressed by the Master Plan, such as siting a temporary sign, can be reviewed by locally, with coordination between installation staff and relevant stakeholders. All land use changes should be evaluated against the Master Plan, and any new buildings, structures, or long-term (over 30 days) equipment sites must be approved by the Installation Commanding Officer. Site planning and site approvals are discussed in later in this chapter.

3. Master Planning Process. Reference (q) on Master Planning outlines a substantively different focus and process for master planning, emphasizing planning strategies that reinforce capabilities to support the defense mission, promote quality of life, and enhance sustainability and environmental viability.

a. Given the UFC requirements, installation planners need to ensure that the NAVFAC or U.S. Army Corps of Engineers (USACE) Project Manager (PM) and the selected contractor preparing the Master Plan are well-versed with the UFC's requirements and that the tasks and deliverables outlined in the contract SOW will produce a "Tier 2 compliant" Master Plan—one that addresses both the physical requirements and introduces the long-term goals of sustainable development. To ensure the Master Plan SOW includes all necessary components, it is highly encouraged to forward the draft SOW to HQMC LF/MCICOM for review prior to contract negotiations. Section 7.8 outlines the key components of a UFC-compliant Master Plan. Section 7.8 and Appendix J outline the minimum content and a suggested outline for a UFC-compliant Master Plan, respectively. Section 7.9 outlines studies and other plans that support the Master Planning process; and Sections 7.14 and 7.15 provides guidance on other relevant planning issues.

b. Master Plan Development Steps. There are five steps to developing a new Master Plan or Master Plan update: The products of steps 1-5 are considered components of the final Master Plan, which is the summary document, as described in step 6.

(1) Vision Plan—The Installation Planning Board should partner with all stakeholders in leading the sessions to identify both the missions of the installation that must be supported and the end-state (20-year) vision for the installation. Key parameters such as sustainability, the capability to provide training ranges, compact development, and aesthetic considerations should not be overlooked when developing this vision. At this stage, the content of the Master Plan, the areas under study for ADPs, and infrastructure are all considered. The Vision Plan will ultimately also include a summary of future development, resulting from the analysis of component plans.

(2) Installation Development Plan (IDP)—The ADPs provide a comprehensive look at the features, the requirements, constraints, and capabilities of each area under study. Each ADP contributes toward the total installation plan, which then considers how these areas work together. The IDP also considers base-wide issues in a regulating plan and illustrative plans, such as street and transit networks within and between areas, sidewalks, trails and bikeways; utilities, and green infrastructure. These component plans take a systematic approach to addressing the needs of the installation's specific areas. Special studies may be performed independent of the Master Plan update on special issues, such as utilities or traffic studies; these would inform the component plans and a summary of the conclusions should be provided within the ADP or Master Plan. Under these plans, the overall installation's needs are analyzed against the Vision Plan.

(3) Installation Planning Standards—these are the rules guiding the development and site planning for individual projects. Building Standards should be presented as pre-design guidance that governs building sites, orientation, placement, size, and appearance within an area. Street standards guide the supporting transportation and parking infrastructure. Landscape Standards guide the use of sustainable plantings, outdoor furnishings, signage, and visual amenities to improve the quality of life. These standards should be specific enough to guide construction contracts and should be vetted by NAVFAC to ensure the criteria will be enforceable.

(4) Analysis and Development Program: Development Program—the projects that will contribute toward meeting the vision, to include short-term projects, modifications to existing facilities and infrastructure, and long-range replacement facilities. Implementation of these improvements will fully satisfy all deficiencies, demolish unnecessary structures, and accommodate future missions.

(5) Analysis of Requirements—the overall requirements to support the mission and the installation vision are evaluated, discussed, and the needs are prioritized. The results of the analysis will be the Capital Improvements Program (CIP), elements of which will be ultimately submitted as projects.

(6) Completed Master Plan—the final Master Plan is the summary of the individual supporting documents that have been reviewed by all stakeholders. This is approved by ADC I&L (LF)/COMMCICOM. The aforementioned plans are summarized in the Installation Master Plan, but individually available as stand-alone component plans. The Comprehensive Plan is also provided as a separate document for approval by ADC I&L (LF)/COMMCICOM as a deliverable that may be publicly released.

4. Master Plan Preparation. The following are other key process elements that should be considered prior to the start of a Master Plan update and during the process.

a. Funding. As a general rule, installations are responsible for funding Master Plan updates. Funding for Master Plan updates or development of ADPs may be requested from HQMC LF/MCICOM; however, availability of centrally managed funds is typically limited and will be disbursed by overall priority. Installations are responsible to request funding in the quarter prior to the Fiscal Year, or to fund studies using local authority. Funding for special studies such as siting studies, utilities analyses, feasibility studies, relocation plans, and environmental impact analyses also are a base responsibility, but may be eligible for funding from HQMC LF/MCICOM. FECs may prepare the study in-house or contract-out the study on a reimbursable basis with installation funding.

b. Training. Development of a UFC-compliant Master Plan requires that trained individuals are involved throughout the process. Installation Commanding Officers are expected to ensure that the planning staff takes advantage of training opportunities within the first two years of their employment for new employees, or by FY 2016 for existing planners. Initial orientation for installation Commanding Officers is 4-hours, whereas installation planner training is 32 hours every 2 years. Reference (q) outlines three tiers of formal training for installation planners:

(1) Tier 1: The following courses fulfill the requirements for training on Plan-Based Programming:

(a) Facilities Planning.

(b) Facilities Projects Seminar.

(c) Economic Analysis.

(d) Real Estate Seminar.

(e) MCON Programming and Budgeting.

(f) Introduction to Public Works.

(g) USMC Facilities Management.

(2) Tier 2: Courses that can be used to fulfill the requirements for Sustainable Planning Strategies and Principles include, but are not limited to, the following Army Planning Institute courses:

(a) Leadership Training (HQMC/Installation Commanding Officer/Public Works).

(b) Course 241: Master Planning Principles (Public Works).

(c) Course 952: Advanced Training (Public Works).

(d) Master Planning Practicum (Public Works).

(e) Course 1 is an overview of tiers 1 and 2 and covers the 4-hour requirement for installation Commanding Officers in reference (q). Course 2 covers the Master Plan structure outlined in reference (q) in detail, while Courses 3 and 4 cover the planning processes that generate UFC-compliant products. Course descriptions, duration and approximate cost, in 2013 dollars, are captured in Appendix L.

(3) Tier 3

(a) LEED training fulfills the intent of reference (q). LEED training is highly encouraged but optional, as a guide for an in-house multi-disciplinary planning team, targeting net-zero and high performance facilities for the installation. The baseline requirements for LEED trainings are found on the U.S. Green Building Council (USGBC) web site: (www.USGBC.org). Other LEED accreditations are encouraged to add value to the Master Plan, ADPs, as well as site plans, as needed. Optional LEED standards are listed in the Master Plan format and element definition located in Appendix J. PWD Utilities & Energy Management (UEM) is another source of knowledge and a resource for an installation integrated planning team.

(b) Installation planners should also take advantage of other vital training available through Naval Civil Engineering Corps Officers School (CECOS), HQMC LF/MCICOM, or other agencies. Valuable training topics for planners include NEPA and environmental training, energy conservation principles, Anti-Terrorism and Physical Security related training, AICUZ or RAICUZ training/seminars, airfield safety criteria, range safety training, explosives safety planning courses, and Marine Corps acculturation.

d. Review of Plans

(1) All installation stakeholders are encouraged to review the planning products to provide a comprehensive evaluation of potential conflicts. All

controversial issues should be locally adjudicated by the Installation Planning Board and the installation Commanding Officer. The corresponding MARFORs and outside agencies such as NAVAIRSYSCOM, BUMED, DLA, Defense Commissary Agency (DeCA), etc. are also encouraged to receive copies of the draft products for comment.

(2) ADC I&L (LF)/COMMCICOM approval of the Master Plan requires submittal of draft plans to HQMC LF/MCICOM for review and comment at the 35% or mid-point. This staffing and review process takes between six and eight weeks, from receipt of materials until comments are ready be submitted to the PM. If component plans have been provided earlier, the review timeframe may be shortened. Final draft (90%) review will take at least four weeks. Once the draft final Master Plan is approved, ADC I&L (LF)/COMMCICOM will provide an approval letter for inclusion with the published document.

e. Installation Product Team (IPT). Formation of an IPT, or project team, is critical to the success of a UFC-compliant Master Plan. In addition to the NAVFAC/ USACE PM and the contractor personnel, the team should consist of a representative from each of the following installation functions–Engineering, Planning, Environmental, Real Property/Real Estate, Utilities and Energy Management (UEM), CPLO, GeoFidelis, security, fire, safety, explosives safety, environmental health, and MWR/MCCS. While not all of these installation personnel will have regular roles in the development process, they are all stakeholders and need to provide input into the installation vision, goals and objectives, current uses, identification of current and future issues, and problem-solving. The major tenants and regional MCI should be encouraged to participate by providing a representative to the IPT.

f. Installation Planning Board: Action Proponent

(1) The Installation Planning Board (IPB) is stood up at the beginning of the master planning process, and will be the action proponent for the Master Plan, as prescribed in reference (q). The Installation Planning Board will administer the plan and planning actions, and make the call for updates or a new plan. The Installation Planning Board may be combined with the Environmental Impact Review Board (EIRB) to keep Installation Master Planning and NEPA planning integrated. Likewise, the IPB could also be combined with the Encroachment Management Action Team (EMAT).

(2) The IPB will convene as required. It is chaired by the installation Commanding Officer or designee, staffed by the IPT. The host and tenant units will attend for facility and infrastructure-related issues. The IPB should provide assistance with regard to process, applications, meeting schedules/agendas, minutes, POCs, etc. To ensure standardized and uniform forms across the Marine Corps, all relevant IPB forms, applications, and requests should be reviewed by their applicable MCI regions and MCICOM representatives. All Master Plan SOWs should be forwarded to HQMC LF/MCICOM for review to ensure that the plans will meet the UFC requirements.

(3) Each IPB meeting is recorded (e.g., meeting minutes) to build upon past actions and to avoid repetition and contradictions. Alignment is regularly checked with the Master Plan and ADPs along with the approved vision plan. Documentation and records will prove helpful when master or ADPs require update.

(4) GeoFidelis maps are the official maps of the installation and shall be used for Master Plans. Base maps and graphics shall be provided to the installation in a compatible format with installation planning and development maps. Special layers for the Master Plan can be created and once Master Plans have been

approved, these maps shall become the basis of comparison for siting projects and recommending development. See Appendix M for a list of GIS data layers that should be developed in support of the Installation Master Plan.

5. Visioning Plans. The first step in the master planning process is the visioning session, which is typically performed in a public setting with relevant stakeholders, with the goal of developing a unified vision statement. The vision statement normally defines the installation's optimal development principles for maximizing its long-term capabilities in accordance with reference (q).

a. Visioning Sessions: Roles and Responsibilities

(1) The PM and program leader are expected to perform data gathering and research prior to the Visioning Session and present it during the initial meeting. Dialogue and interviews with the IPB, stakeholders and local government must be undertaken, and briefed as part of the initial visioning presentation.

(2) A Visual Preference survey, to include Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis, will be used as guides. Expertise to conduct a visual preference survey or conduct the Visioning Session may be found in-house, regionally, or contracted out.

(3) The installation must coordinate with the MCI regions, MARFORs, and HQMC LF/MCICOM to ensure support and coordination prior to and during the visioning process. Also, installations will need to ensure that they have a summary of CMC programmatic decisions for sourcing new installation requirements, based on a 20-year planning horizon.

(4) Installation Planner responsibility during the visioning process is to provide information, data and graphics for the installation and local area profiles as lead-ins to the vision-based planning session. The data must include an updated FSR, along with mission, demographic, economic and development data and graphics for on-and-off installation populations, as well as the installation land use, building occupancy data and assignments, population density, and infrastructure on-and-off the installation. Reference (q) provides additional data guidance. GeoFidelis maps shall be provided to assist in the visualization of the installation, to include identification of key points of interest, nodes, constraints, and other features within the installation. Some of this data may be obtained by contract staff if not readily available to the installation staff.

(5) Tenants will provide their manpower document, equipment inventory, and/or a walkthrough AE. Verify that the FSR and other relevant data sources listing total numbers of the groups that live, work, and/or use facilities and services on-and-off the installation are accurate, and provide up-to-date occupancy data for all assigned spaces.

(6) When their services are necessary, the contract team is expected to provide a description of planning strategies and their statutory requirements for achieving the vision from the criteria. The contract team is also expected to address sustainable planning strategies for master planning, and to provide a list of Best Management Practices (BMPs).

(a) Databases. Marine Corps databases such as TFSMS, iNFADs (BFR, FPD and FRP), and the Facilities Condition Assessments Systems, are used for determining force loading and facility assets and requirements on the installation. It is the installation Commanding Officer's responsibility to ensure the FSR and information in all databases is up to date prior to the visioning sessions, as this

information shall be the basis of the FYDP program. The other stakeholders, to include HQMC LF/MCICOM, should provide a long-range assessment of the installation's mission, and this should be articulated at the beginning of the visioning process.

(b) SWOT Analysis. For the SWOT analysis, stakeholder workgroups are used for collaboration, and the installation's GeoFidelis staff should have large base maps ready for input, discussion and written comments/notes. A SWOT analysis helps identify the unique characteristics within installation. Focus will be on defining planning areas to include: installation, local area, satellite facilities and special areas. This exercise will help to frame the discussion and encourage stakeholder feedback and input. The stakeholder working group provides the installation Commanding Officer and his/her staff with an instant climate survey for the installation that can be used as a development guide/tool.

(c) The vision statement's goals and objectives are then established by a comprehensive visioning session, led by an experienced facilitator for the installation and stakeholders as identified in reference (q). The Visioning Process will be briefed and put in context as the first of five steps in the Master Planning Process, with the IPB introduced as its action proponent. The installation Core Competency Areas will be covered and HQMC LF/MCICOM programmatic execution policies as they apply to the requirements.

(7) Visioning Session Interviews

(a) Interviews should be conducted prior to the visioning session, and the information from the interviews analyzed and presented to the visioning team to help identify trends, lessons learned, and to gain institutional knowledge. The planning process can ill afford repeating past mistakes and an effort must be made in the interviews to identify them (e.g. road blocks to future development).

(b) The following is an 11-step installation interview baseline that can be modified to the installation and/or functional area of the participant:

1. Describe your current mission, force and equipment loading.

2. Describe current facility support (i.e., buildings/rooms/types of use/space/frequency of use).

3. Describe adequacy of current facilities (i.e., space, workarounds, unsheltered equipment, condition, etc.).

4. Identify new missions, changes and departures for host and tenants and new development.

5. Identify how key functional relationships with other units/agencies are supported with the existing facility lay down and any desired improvements (e.g., proximity, size, condition of facilities).

6. What are the installation's strengths, weaknesses, opportunities for improvement, and threats to the Mission/Quality-of-Life?

7. What is your vision for future development?

8. What are the most important criteria for future development (e.g., security, safety, traffic, cost of living, etc.)?

9. Describe any constraints or perceived roadblocks to future development.

10. Identify any concerns about the installation and any documents, studies, reports, etc., that may help this plan for future development.

11. Is there anyone else that should be interviewed as part of this study?

(d) Interviews should be conducted by personnel with appropriate security clearances and with non-disclosure agreements in place.

b. Framing Process

(1) The framing process captures the vision and then frames the installation planning areas, as delineated in the Framework Plan in reference (q). Specifically, the IPT and other stakeholders, under direction of the IPB, should subdivide the installation into areas for development or redevelopment and other planning actions. It may also be advantageous to treat special assets, such as ranges, waterfront, or airfields, as Areas for study. These key assets often have ties to other areas that may be further explored within the Network Plans.

(2) These defined areas will each be the focus of an ADP or site plan. The installation Commanding Officer will approve/validate the subdivision as part of his/her approval of the Vision Plan for the installation. Installation Planners should group the facilities records in iNFADS to align with these subdivisions, which will facilitate planning, development, programming and execution. It is not required to designate each area as a "special area" within iNFADS; however, the special areas should have an ADP. Chapters 5 and 6 of this Enclosure, along with reference (n), specify procedures on how to manage iNFADS planning areas.

(a) Framing Questions. Framing questions for the visioning process are taken from the "Oregon Model" for community visioning. That model involves a comprehensive four-step process (see reference (q)) centered on four framing questions. Each step involves different activities and results in specific products.

1. Where are we now? [SWOT].

2. Where are we going? [Installation & Community Profiles].

3. Where do we want to be? [Visioning].

4. How do we get there? [Strategies, Goals and Objectives].

5. In addition to the four framing questions offered by the Oregon Model, the Marine Corps planning process includes an additional question:

6. Are we getting there? [Action Plan & Metrics].

7. The varied responses will help drive an attainable, supportable and actionable vision statement, with usable goals and measurable objectives. With regard to validation, the project leader must be able to identify, execute and track any tasked objective for completion.

8. The responses also assign tracking and accountability to the IPB. The IPB can use the Plan of Actions and Milestones (POA&M) and other

management tools such as PERT and Gantt Charts to improve plan execution, enabling it to better track progress to the desired end-state.

(b) Constraints and Opportunities

1. The framing process next moves to Constraints and Opportunities for development from the perspective of the installation, local area and region. With all development opportunities and constraints identified, developable land can be determined and set aside from land dedicated for safety, conservation and preservation for wildlife habitat, historic preservation, agricultural or forestry use, AICUZ, surface danger zones (SDZs)/weapons danger zones (WDZ) and other reasons.

2. The contract team is expected to compile information on constraints and opportunities for review by the IPB. Once validated by the IPB, this information will restrict or eliminate development for a given area (such as a Superfund/IRP site or opportunities such as an open space with a vista for a proposed park).

3. An important aspect of the Master Plan is the determination of the installation's capacity to absorb new missions and a description of any limiting factors that would hinder additional development. Rather than the goal of "maxing out" the installation's capacity, it is important to consider the trade-offs if missions are added or expanded.

4. From a sustainability consideration, it is equally important to identify those areas that are over-developed to explore the advantages of moving units either to another part of the installation or completely off-base. These concerns should be summarized at the high level and addressed in more detail within the ADPs.

(c) Visioning Importance. It is important to get the visioning process correct from the beginning, as the vision will impact subsequent master planning processes that follow. Sample vision statements are posted in reference (q). Both short-term and long-term milestones should be created for the installation along the 20-year time line, with five-year increments.

(d) Measurable Objectives. Vision-based measureable objectives are created for accountability for the installation Commanding Officer, staff and stakeholders, assisting leaders to get to the desired end-state. The objectives chart a path to achieve the vision. The objectives must address the goal of attaining metrics, standards, and leveraging positive trends at the installation. Two examples of objectives are:

1. Create a sustainable community with a five-minute walking distance between facilities in designated key areas of the installation.

2. Ensure all new installation facilities, entering design in 2018, achieve zero net energy by 2030.

(e) Metrics, Standards and Trends

1. Metrics, standards and trends will help the installation assess the overall vision implementation. Planning strategies listed within reference (q) can thereafter be applied to assist and focus the installation towards accomplishing the objectives with information from framing question 3. The process can be easily adapted to incorporate new baselines and create new visions,

strategies, and objectives to address what is not working and promote what does. Metrics are addressed more thoroughly later in this chapter.

2. Once the objectives are evaluated, a new or revised vision or goals can be prepared based on feasibility, funding, etc. The vision-based process is circular and encourages feedback and adaptation to realize the installation's full sustainability potential.

(f) Deliverables. Planners can expect the vision-based planning deliverables to include vetted vision statement, goals, measureable objectives and planning strategies, GeoFidelis compatible maps and graphics depicting the areas of interest, and stand up of the Installation Planning Board. The Vision Plan should also include a Future Development Plan showing the capability of the installation to absorb its current and planned missions. That plan is initially provided as a high-level document that will ultimately be refined by the results of the rest of the component plans and included in the final Master Plan.

6. Installation Development Plan. The Installation Development Plan contains all ADPs, as well as the Installation Network Plan. The installation is subdivided into planning areas as part of the Visioning Process and those are areas are studied in detail. Once those areas are defined, an ADP or site plan will be developed for each area. The Network Plan consists of systems, such as roads and utilities that tie the areas together.

a. Area Development Plans (ADPs)

(1) The ADPs are a primary component of the Master Plan. All planning resources are brought to bear on a specific area or sub-area to achieve its most sustainable end state.

(2) ADPs or site plans will be prepared for each of the planning areas defined during the Visioning process. Once complete, the ADP will serve as the siting reference for future projects; projects that do not align with the ADP will require a siting variance from the Installation Planning Board.

b. ADP Processes. A recommended format for an ADP is provided in Appendix K. Processes and data to develop an ADP include:

(1) ADP Goals and Objectives.

(2) Base Facility Requirements and Land Area Requirements (Loading).

(3) Functional Relationships within area and to other areas.

(4) Base Map & Data Collection.

(5) Area and Capacity Analysis.

(6) Alternate Plan Development.

(7) Alternate Plan Evaluation.

(8) Preliminary Final Plan Development review.

(9) Final Plan Development accepted by IPB.

(10) Area Development Planning Standards.

(11) Identify Funding Sources.

(12) Prepare Project List.

(13) Prepare Schedule & Phasing Plan.

c. Process Responsibilities. Planners must ensure that Process 1 (ADP Goals and Objectives) aligns with the vision, goals and objectives of the Framework Plan. In Process 2 (BFRs and Land Area Requirements), planners must seek creative ways to satisfy the requirements while meeting the sustainable development goals. NEPA planning must be engaged through the process through step 9 (Final Plan Development). NEPA planning must show the impacts from potential development or redevelopment activities and inform the resources data and graphics, along with all other disciplines in the IPT. If additional NEPA will be required for proposed projects, the recommended studies should be identified and tied to any proposed projects. Information should be pursued early to avoid delaying projects milestones.

d. Urban Design. Urban design techniques will play a prominent role in Process 2 (BFRs and Land Area Requirements) and Process 3 (Functional Relationships), as a balance is reached between land, facilities and the BFRs for the area. Urban design considers the optimal placement of buildings in relation to each other in a way that meets the desired vision. In Process 10 (Area Development Planning Standards), urban design techniques and collaborative planning will be used to create development standards, which will be consolidated in the Regulatory Plan. UEM must ensure that energy concerns are met before development in monitoring the urban design lay down.

e. CONOPS. All requirements for both personnel and equipment need to be reviewed/analyzed upfront in the planning process, along with how the organization will operate. The “concept of operations” or CONOPS describes how the unit uses the facilities and operates within their assigned operational areas. An example of installation CONOPS is a Fire Station, which should ideally be sited to meet reaction times for its area of responsibility (AOR). For tactical units, the operational and logistic needs are taken into account. Consideration of mobilization requirements; adjacent lay-down areas; transportation routes to embarkation points; refueling capabilities; and other concerns would be another example of CONOPS that affect how an area is developed. In cases where the information is classified, the areas should still be identified but reported in a classified annex. Taking the CONOPS into account helps the installation support its mission and retains sufficient areas and buffers for those operations without losing them to development.

f. Access Issues. Emergency access is needed to ensure that installation gates support the local community under mutual aid agreements. Compact design, both horizontal and vertical, consolidation of uses, and other design techniques, will reduce facility and infrastructure footprint, thus increasing walk-ability and achieving the best sustainable end-state. The transportation network should be evaluated to ensure that traffic onto or off the installation does not adversely impact the surrounding community. Strategies to mitigate these issues should be provided within appropriate component plans.

g. Sustainability

(1) Process 5 (Area and Capacity Analysis) ensures that the best sustainable end-state is achieved, also looking at how developable the area may be

with any trade-offs. Capacity analysis also considers the infrastructure loads, potential for adding power, water, and other utilities, the effects of building density on drainage, traffic, and parking, and innovative ways to improve the layouts of buildings to increase energy effectiveness. Process 6 (Alternate Plan Development) introduces alternatives to derive the best sustainable solution. The results of Processes 1 through 13 must be documented and provided as deliverables for the ADP. New or revised BFRs will be used to update FPDs for the planning area. Scheduling and phasing of projects must be integrated with all other ADP in the Installation Development Plan, as coordinated by the IPB.

(2) Other existing component plans and independent studies include transportation, utilities, airfield, harbor, Integrated Cultural Resources Management Plan (ICRMP), Integrated Natural Resources Management Plan (INRMP), Range Management Plans, AICUZ/RACUZ Plans, etc. These are required to comply with various federal laws and regulations. These component plans are considered within the ADPs, and are summarized in the Comprehensive Plan at the end of the process.

h. Report. An independent Area Development Study results in a report, and not a Final Plan, showing the feasibility of any contemplated actions. For example, if an installation desires to evaluate its current walk-ability for Healthy Community Planning, a status report will be generated with several courses of action for improvements with applicable rough order of magnitude costs. These reports can be consulted and expanded within an ADP.

7. Installation Network Plans. A Network Plan will be created for the installation, which consists of an Illustrative Plan, Regulating Plan, Street and Transit Plan, Sidewalk and Bikeway Plan, Green Infrastructure Plan, and Primary Utility Plan. Sustainability measures, such as LEED, Net-Zero, High Performance Facility, low impact development principles, and Alternative Energy, will be integrated into the plan.

a. Transportation

(1) Since the publication of the ISTEA in 1991, and most recently in the MAP-21 (2012), federal transportation laws have targeted transportation efficiency and multi-modal transport. In response, reference (q) directs installation Master Plans to emphasize multimodal transport (walking, biking, mass transit, car pools) within and between planning areas (the Street and Transit Plan and the Sidewalk and Bikeway Plan) as a means of reducing single occupancy vehicle (SOV) use.

(2) Where practicable, facilities within the core (center) of each Planning District should be accessible via walking and biking, and transportation corridors for walking and biking should network the cores of different planning districts across the installation. Ideally, future development will be increasingly compact, resulting in increasingly walkable installations, thereby reducing the need for SOVs. Reductions in the attendant costs of pavement, drainage, and continual maintenance and improving the quality of life and health benefits for installation users may also be achieved.

(3) Plans should consider transportation inside and outside of the base, including vehicular, public transit, private shuttle service, pedestrians, and bicycles. Land use is directly tied to transportation, and planning transportation systems and land use together results in greater efficiency, reduced costs, fewer environmental impacts, and improved quality of life. Parking is a major concern on many military installations and should be addressed as part of a comprehensive land use and transportation strategy. Installations are encouraged to condense parking into shared lots or parking structures that serve multiple facilities and reduce

the requirement for single-purpose paved and impervious surfaces as well as the impacts of Anti-Terrorism and Physical Security setbacks.

b. Transportation Management Plan (TMP). Existing TMPs for Marine Corps installations often consider only vehicles and parking. The goal is to reduce the use of SOVs in favor of multi-modal transportation. Given that installation infrastructure will be slow to change, particularly in light of fiscal realities, installation planners should modify their TMPs to reflect all of the modes of transport available or proposed for the installation, and not just vehicles. Transportation planning should also identify targets to increase use of multimodal transportation. Information traditionally placed in the TMP must be integrated into the Regulating Plan, rather than kept as a standalone plan.

c. Street and Transit Plan. When mass transit is available, bus pullouts can be integrated into the vehicular, bicycle and pedestrian mix. The provisions of reference (q) apply, and the examples of multi-modal roadways are adapted to a given installation environment. Roads should be designed to accommodate the entire needs of proposed traffic and some road restrictions are appropriate. Where heavy military vehicles, oversized, or industrial traffic is anticipated, the road geometry must accommodate the flow without creating undue congestion.

d. LOS and Parking Issues. The IPB reviews both multi-modal traffic levels of service (LOS) and parking issues brought up by host and tenant units. To ensure traffic flows freely through the base during peak times, the IPB will recommend a minimum LOS for each major installation roadway and strategies to reduce peak loads. Possible strategies include staggered work hours, encouragement to use mass transit or ride-sharing, policies to increase living on-base or close to work, and use of compact vehicles and bicycles. When possible, routes for industrial traffic should be separated from commuter and on-base traffic through the use of alternative points of entry and restricting traffic on some roads.

e. Sidewalk, Trail, and Bikeway Plan. As appropriate, include a sidewalk, running trail, and bikeway plan as part of the TMP update. Integration with other modes of transportation will be accomplished in Installation Network Plans, and an effort made to integrate all modes between buildings and with the roadways. As a BMP, a bike sharing program may increase the use of paths once they are built.

f. Green Infrastructure Plan. The Master Plan should include a Green Infrastructure plan that establishes and protects the requirements for parks, open space and other landscaping for the installation. The installation will define an Installation Growth Boundary at the completion of the Master Plan; this boundary will be enforced by the IPB in that body’s review of site approval requests. The growth boundary for facilities will be enforced to conserve green infrastructure, using strategies such as reuse, infill, vertical compact development, etc., to conserve natural and cultural resources.

g. Primary Utility Plan. reference (q) provides guidance for the Primary Utility Plan and the data layer list in Appendix M includes those for installation utilities. Future development plans will need utility information with regard to location and capacity to accommodate new facilities and infrastructure. Utility information will be gathered from local providers. Along with traditional utilities, such as electrical, water, and sewers, the Utility Plan shall also include IT networks, communication lines, wireless systems, and security systems infrastructure as part of the Utility Plan.

h. Installation Regulating Plan

(1) In accordance with reference (q), the Installation Regulating Plan will follow and draw from all ADPs. The Regulating Plan acts as the installation's integrated development guide and ties into the Network Plan to form a complete system. The Regulating Plan is an internal document that provides development specifications for contractors. This plan, administered by the IPB, serves to regulate development. Any variance from the regulation must be granted by the IPB. The Regulating Plan should be written in a way that is enforceable to ensure compliance with building set-backs, heights, parking plans, site improvements and other architectural features that contribute to the vision and goals of the installation.

(2) During area development planning, standards of development will be formulated and they will need to be consolidated into one set in the Regulating Plan. This applies to all disciplines used in the Area Development and Site Planning process, to include architecture and landscape architecture. Existing plans will be utilized where needed in a given Planning Area, and then standardized in the Regulating Plan.

8. Installation Planning Standards

a. The standards for building envelopes, street envelopes and landscaping must provide guidance to developers. When standards are effectively enacted, the IPB will have less of a workload with variance review or rewriting the standard using an in-house IPT. These standards are drawn from the Network Plans but are used to generate guidance for development to ensure that construction projects comply with the goals of the Vision Plan. The standards may vary depending upon the area, but within each planning area they should be consistently applied. Building, Street and Landscape Standards act like a building code for developers, and their typology standards must be compatible with the installation missions. The standards must be clear, enforceable, and included in all project pre-design documents to ensure compliance within construction projects.

b. DoD facility standardization is currently in progress and General Building requirements for specific facility types in reference (q) will be replaced by the Joint UFC and DON FC in the Whole Building Design Guide. When applicable, the Whole Building Design Guide will be used in installation master planning, area development, MCFPPS and planning actions. Specific facility types will be inserted into the Regulating Plan with its typology and landscaping standards.

9. Components of a Master Plan. Following the analysis of each of the component plans, a final Master Plan document is produced that summarizes the vision, ADPs, standards, and recommended improvements. Appendix J provides a recommended outline for Master Plans.

a. When complete, the Master Plan shall:

(1) Reflect and amplify actions proposed in the FRP.

(2) Provide a systematic process for development and property disposal, including needed changes to facility assets and recommendations for any required phasing for such changes.

(3) Be the official activity FPD that coordinates programming (Program Objective Memorandum (POM), MILCON, NAF, etc.)

(4) Be the instrument to maintain continuity in future facilities planning and development.

(5) Be used for approximate siting of all future facilities.

(6) Be used to present the Marine Corps position on land and facility use, incorporating the requirements of reference (s).

(7) Include a Capital Improvements Plan (CIP) not more than three years old with detailed site maps for projects in the first two years of the current five-year program.

(8) Identify environmental resources, facilitating compliance with environmental regulations and stewardship.

(9) The Master Plan establishes the planning actions that are most appropriate to achieve a balanced development over time, while encouraging sustainable planning and development practices, ensuring resource management, and local and regional coordination.

b. To achieve full compliance with reference (q), installations need to follow both the format described in Appendix J, and the processes outlined in this Chapter. The plans should be enhanced by adding consideration of LEED and other elements. While each base is unique, each installation Master Plan must:

(1) Provide an Executive Summary, discussing the major findings of the Master Plan update, significant changes from past development, and overall viability of the installation to meet proposed mission. The Executive Summary will be one input to the Comprehensive Plan, which will crosswalk the vision, goals and projects of the Master Plan with those of other planning efforts at the installation. While the Executive Summary may have information that is FOUO, the Comprehensive Plan removes sensitive information and may be released to the public as a stand-alone product.

(2) Describe the installation, to include date established, brief history, mission(s), major tenants and their mission(s), size, population broken down by military, civilian employees, and contractors; current replacement cost for buildings and improvements, and relationships with other military installations both in the region and across the Marine Corps. A description of the region outside the installation boundary is also a necessary component to understanding the installation context and relationship to the surrounding community.

(3) Provide a two-way analysis of the facilities requirements: First, broken out by category for each major unit, and then aggregated by category for each special area and base-wide. For community support and other base-wide facilities provide the total requirements based upon the population, instead of identifying the individual contributions of each unit. Additionally, discuss any non-facility operational or training requirement, such as airspace, ranges, water access, ports of embarkation, access to rail, etc.

(4) Discuss existing capabilities of the primary mission facilities, both qualitative and quantitative. The section describing primary mission facilities at an air station, for example, shall describe the condition and suitability of the runways, flight line facilities, air space, airfield safety zones, and air traffic control systems. A training base would describe the training areas, schools, special or unique training areas (physical training courses, special terrain, weapons ranges, etc.), and billeting capabilities that contribute to a peak and

annual training capacity. This section also addresses the uniqueness and value to the Marine Corps of this installation in providing a capability that is not found at other installations.

(5) Describe existing conditions of operational supporting facilities, such as administrative, storage, and maintenance facilities. Summarize the condition of all utilities and infrastructure, listing capacity issues, age, and upgrade plans. Separately provide an analysis of the community support and housing capabilities, including numbers, age of facilities, capacity, and quality of life issues. Where assets are provided regionally, address the contribution to each installation.

(6) Describe environmental and natural resources issues, to include discussions of those areas supporting endangered species or cultural resources, developable areas, land-use constraints, any conflicting areas where issues of natural environment are at odds with training or operations, and how those interests are balanced. Discuss any historic or cultural assets that are either listed or eligible for listing on the National Register of Historic Places or that may be of cultural or historic interest to Native American tribes or Native Hawaiian organizations. The discussions should summarize and reference more exhaustive documents rather than include every detail. Physical restrictions to development, such as extremely steep terrain, waterways, areas affecting drinking water and wells, unsuitable soils, and habitat should be graphically displayed to avoid incompatible development.

(7) Discuss those policies and practices that will encourage sustainable development, energy efficiency, and the goals of the installation to meet LEED Silver certification for its facilities.

(8) Provide a substantive discussion of the training areas, to include discussion of all weapon systems and ranges, maneuver areas, trails, training challenge courses, air operating areas such as landing zones, outlying fields, simulated flight decks, confined landing areas, and any other necessary spaces both on and off-station that help the installation meet its mission. The plan should identify the training value of the installation both in terms of on-base assets and proximity to other training resources. Where significant training occurs off-base, describe any limitations, including issues of access to training areas, transportation, conflicting uses, and capacity issues. Identify any training deficiencies where the existing shortfalls require units to deploy in order to achieve mission capability.

(9) List all constraints to development, including man-made such as safety zones from airfield operational areas, ESQD arcs, areas sensitive to electromagnetic radiation (EMR) hazards such as fuel, ordnance, and personnel. Any areas requiring restricted access due to sensitive mission, range safety areas, and high-noise operations should be identified along with an appropriate restriction on land use. Force protection set-backs and any other operational practices restricting future development should be listed to prevent incompatible development.

(10) Identify issues where the installation mission is potentially at odds with the surrounding community. Provide an encroachment analysis to include AICUZ summary for air stations, RAICUZ for range training areas, and discussions of any traffic, noise, or incompatible land use issues that could adversely affect the relationship with the community and long-term viability of the installation. Where possible, also describe the positive relationships with the community and any partnerships that show how the installation benefits the surrounding areas.

(11) The installation Commanding Officer may also need additional information that is too sensitive for the public domain. Therefore, provide any "Official Use Only" supplements that discuss issues that are not appropriate for public release, such as:

(a) Security shortfalls, sensitive communication lines, and base vulnerabilities, to include Critical Infrastructure Protection. Where this information is classified, the annex may be written by the installation staff in-house, vice part of a general Master Plan.

(b) Mobilization capability, logistic shortfalls, and proposed improvements shall be provided as another separate annex to the Master Plan, typically a classified document, in the form of an illustrated narrative from the installation Commanding Officer to the ADC I&L (LF)/COMMCICOM.

(12) These supplemental documents are intended to accompany the information of the Master Plan, but do not allow the sensitive material to become part of the public domain. These shall be forwarded to HQMC LF/MCICOM via the appropriate classification, and will be distributed as needed.

c. The Master Plan establishes base development continuity. As the basis for siting all future facilities, it considers:

(1) General planning factors such as adjacent land uses, infrastructure requirements, and consolidating similar functions.

(2) Issues particular to the Marine Corps, such as unit integrity requirements, separating bachelor and family housing, and long-term development potential.

(3) Issues particular to the activity such as planning constraints and existing facilities. The agency preparing the Master Plan will consult with HQMC (LF)/MCICOM GF for special considerations or instructions, particularly addressing Marine Corps-wide planning objectives and long-term development.

10. Other Master Planning Products. Other plans that are part of the Continuum of Planning Products include the Land Use Plan, Transportation Plans, CIP and Demolition Plan. These are discussed below. Master Plans will rely upon and summarize these existing plans, and these plans will as act as the basis for future development.

a. Land Use Plan. The Land Use Plan is the core of the Master Plan and incorporates the "accounting" features of the FRP, across the facilities categories together with the geographic data supporting land use and site planning decisions.

(1) The FSR documents the base loading that the installation and the Master Plan will need to accommodate.

(2) BFRs determine the size of the various facilities that will need to be included in the Master Plan.

(3) FPDs determine which planning actions are available to the planner to balance requirements and assets on a category-by-category basis.

(4) The aggregate of all FPDs is called the FRP, which gives a summary of all assets, deficiencies, and proposed acquisitions.

(5) The existing assets should be depicted within GIS, with output maps to show existing facilities and proposed new construction as well as proposed demolition. Appendix M provides a list of required and recommended data layers and maps to be generated as part of the Master Planning process.

(6) GeoFidelis is the USMC initiative to ensure compatible GIS systems at all installations. Additional details and resources are available as described on the website at: https://www.geofidelis.usmc.mil and reference (t).

b. Capital Improvements Plan (CIP). The CIP is an integral part of the Master Plan. The CIP details how the plan will be implemented on a project basis. The CIP includes information on costs for projects identified in the Master Plan. All projects in the FYDP should be described in the CIP; those projects beyond the FYDP should be depicted on General Development Maps and listed as “un-programmed future development”. The CIP is the preliminary step to developing MILCON and other projects.

c. Demolition Plan

(1) The Demolition Plan illustrates which facilities are to be demolished, and provides a general timeframe for such demolition. Annual guidance will be provided by HQMC LF/MCICOM on submission of proposed demolition projects. Projects will be entered into the Facilities Integration Website at the following address: https://www.hqmc-facilities.org/index.cfm (Facilities Integration Website). Facilities that are scheduled for demo should show as “inadequate” in iNFADS due to condition or configuration.

(2) Additional topics may be addressed in a Master Plan that address specific systems and themes that guide development include:

(a) Excerpts from AICUZ or Range Air Installation Compatible Use Zone (RAICUZ) studies, showing the impacts of operational areas on and off base.

(b) Excerpts from other planning or system studies, such as transportation, utility distribution, electronic security, environmental, or space management plans. Traffic study services are available from the Military Traffic Management Command (MTMC) and are the responsibility of the installation. Typical services include support of master plan updates, Defense Access Road evaluations, and special studies to evaluate traffic or transportation requirements and impacts.

d. Comprehensive Plan. The Executive Summary is compared with other component plans/studies and is presented in a form that is publically releasable. All sensitive information will be removed from this plan. Examples of issues discussed in the Comprehensive Plan include transportation, utilities, airfield, harbor, Integrated Cultural Resources Management Plan (ICRMP), Integrated Natural Resources Management Plan (INRMP), Range Management Plan, AICUZ/RACUZ Plans, etc., as required to comply with various federal laws and regulations. These issues should be evaluated within the ADPs and summarized in the Comprehensive Plan.

e. Development Maps: Geographic Information Systems (GIS). Installation maps, along with the geospatial data used to prepare them, must be prepared and maintained in an up-to-date status by the installation commander. The Marine Corps supports the management of geospatial data and automation of map production using a standards-based GIS known as GeoFidelis, which is detailed in reference (t). The GeoFidelis initiative includes a standard data model to track existing and planned facilities, infrastructure, and land use. In addition to supporting facilities

planning processes, GIS data and map products are used in other installation management areas such as environmental and real estate as well.

11. Quality Assurance

a. The Installation Master Plan is subject to Quality Assurance (QA). Specifically, the DoD has created Performance Metrics to measure the UFC compliance with the Master Plan, which is presently on a monitoring basis. As funding and training become available, the Master Plans may be rated for adherence to the UFC. The five performance metric areas are:

(1) Training and Qualification.

(2) Master Plan Policies and Processes.

(3) Planning Product Format: Compliance Tier 1.

(4) Strategies and Principles Application: Compliance Tier 2 and Optional Tier 3.

(5) Master Plan Administration: Installation Planning Board.

b. The performance metric areas are related and training is the common thread and a key to success. A UFC-compliant Master Plan requires the design and planning teams to be thoroughly trained in both traditional Master Planning techniques and in sustainable planning practices.

c. Training and certifications allow a qualified DA to provide accurate technical advice and oversight. Training allows a DA to easily pick a contractor in source selection to produce a technically accurate and useable Master Plan. Training allows the Marine Corps client to ensure that planning needs are met by the Master Plan for the next five years or until the installation mission or environment changes significantly and an update is required. Training also provides a firm foundation for the installation planning process and to develop and set policies for the Master Plan and the IPB, which will follow. Ideally, Tier 2 training is needed by the DA, contractor and planner before the Master Plan Kick-off in order to be effective.

d. While this Manual will assist in planning product formats for the Master Plan and ADPs, training enables all parties to establish the format and produce useful content that will fulfill all installation needs. In order to create effective strategies and principles, Tier 1 and 2 training is required for all Master Plan IPT members and is strongly suggested for other participants. In order to be selected to perform Master Plans, the contractor or design teams must demonstrate that they have the necessary expertise in sustainable planning to satisfy the Tier 1 and 2 UFC requirements. Finally, the IPB, who will administer, manage and work the Master Plan, needs to be trained in order to work effectively towards achieving the desired end state for the installation. Quality assurance checks are captured within reference (q).

12. Training and Qualification

a. Urban planning and design UFC-based training at Tier 2 for IPT members, design agents, and contractors performing Master Plans is needed before project Kick-off to effectively execute the Vision, Development Plan and Development Standards in the Master Plan to include ADPs. Plan-based programming requires Tier 1 training to execute the Installation Development Program with its Requirements

Analysis and integrated Project List. Other annual efficiency training adds to but is NOT a substitute for Tier 2 training to work on a plan unless the training involves follow-on advanced courses at the DoD Master Planning Institute (MPI) or other approved sources. An MPI training course catalogue is provided by USACE and gives courses that count toward the continuing education hours required by reference (q). In an in-house Master Plan, Marine planners assume the DA training and certifications.

b. With a DA and Contractor Master Plan, a contractor produces and is responsible for Quality Control of all processes and deliverables in the project. The DA, as the Technical Representative for the Contracting Officer—an administrative position—is responsible for quality assurance of all processes and deliverables. The Marine Corps planner is responsible for quality assurance for monitoring processes and accepting deliverables as well as supporting the IPB. Reference (q) states the performance criteria for DA, client and planner.

c. Consult HQMC LF/MCICOM or MCI region if there are questions or concerns over the level of training by the DA or contractor, or the capability of other major participants to manage and produce a UFC-based Master Plan.

13. Master Plan Processes and Metrics

a. Reference (q) sets Master Planning guidance across all of the DoD components. Collaboration plays a pivotal role in the success or failure of the Master Plan in the sharing of resources from other stakeholders on and off base. For example, no collaboration with the local government can result in a lack of mass transit options near the base, reducing or eliminating transit-oriented development (TOD) as a strategy. Reference (q) encourages collaboration as a BMP and a QA check must take this into account as compliance and note how it affects other areas.

b. The Vision Plan expectation is stability of the vision through development planning, establishing development standards, programming and success in achieving the end-state in the summary. A solid vision plan is a common thread throughout the Master Plan and will have to be realigned if QA finds discrepancies while planning is in progress or finds inconsistencies at the end of the Plan.

c. The Installation Development Plan (IDP) process involves basically Area Development and Network Planning. The ADP is governed by a different UFC and the Network Plan by the UFC for the applicable engineering discipline. The processes produce all ADPs and Network Plans contained in the Installation Development Plan. The Network Plan consists of the Illustrative Plan, Regulating Plan, Street and Transit Plan, Green Infrastructure Plan, Sidewalk and Bikeway Plan and Primary Utility Plan.

d. The QA expectation for the Marine Corps planner is that these plans will be integrated. A gap analysis can validate the integration and identify any rework.

e. The process for assembling the Installation Development Standards involves taking all the Development Standards in the ADP and consolidating them into a Form Based Code for the installation to manage development. The code will have building, street and landscape standards in keeping with the Vision Planning Process (VPS).

f. The QA expectation for the Marine Corps planner is that these standards are accurate and executable by a Design-Build contractor. See reference (q) for additional information.

g. The process for creating a Document Development Program and assembling a Plan Summary is simple. The processes summarize the Master Plan and addresses achievement of the desired end-state in the Vision. This summary should also include a 20-year timeline with detail for the first six years and incremental milestones for the remainder.

h. The Marine Corps planner QA expectation is that all previous parts of the Master Plan fit the Vision and desired end state with its timeline.

i. The Strategies and Principles process has ten Master Plan strategies with elements for urban planning and design and MCFPPS. These strategies also have related sustainable principles from Appendix L, which have QA metrics. The ten strategies are interrelated and consist of Sustainable Planning; Natural, Historic, and Cultural Resource Management; Healthy Community Planning, Defensible Planning, Capacity Planning, Area Development Planning, Area Development Planning, Network Planning, Form-Based Planning, Facility Standardization and Planned-Based Programming.

j. For QA purposes the strategies are first used in the Vision Plan for the installation and then with the principles in each ADP in its respective district. These strategies and principles are finally manifested in Form Based Code in the Installation Development Standards.

k. The QA expectation for the Marine Corps planner is to achieve the performance metric without compromising related Principles and Strategies, reaching a balance. See reference (q) for additional information.

14. Master Plan Administration: Installation Planning Board

a. When completed, the Master Plan will be administered and managed by the IPB. The IPB will maintain and apply the Installation Planning Standards to development on the installation. In keeping with the New Oregon Model, and its action and results-oriented approach, the IPB should be introduced during the Vision plan and their role stated. Their participation in the planning process from start to end will provide an orientation for the IPB when planning is complete.

b. The involvement of the IPB during the visioning process and their participation during different phases such as districting, area development, network development, and the important Regulating Plan and Installation Development Standards is key to the success of the Master Plan. The Plan and the Standards will be core responsibilities of the IPB and the installation planning staff. These products are expected to provide background for the installation leadership and continuity for the future development. The involvement of the IPB should continue beyond the updates to Master Plan documents.

15. Planning Guidance. As noted above, reference (q) outlines a comprehensive process for master planning, emphasizing planning strategies that reinforce capabilities to support the defense mission, promote quality of life, and enhance sustainability and environmental viability. The focus is underscored in the reference (u) (see Appendix N).

16. Other Planning Considerations and Concepts

a. Sustainable Planning and Design: The USGBC (www.usgbc.com) developed the Leadership in Energy and Environmental Design (LEED) rating system to standardize and encourage environmentally-sensitive design and building. The LEED Green

Building Rating system is a voluntary national standard for developing quality sustainable buildings. While not a government program, the LEED program is considered a high-quality rating system that encourages sustainable design. Many private-sector and government entities are using the LEED rating system, and many government entities require projects to follow LEED guidelines. These guidelines emphasize attaining goals and indicators of sustainable site development, water conservation, energy efficiency, materials, and indoor environmental quality. An important evolving part of the LEED system is the importance of broader planning issues, including transportation, storm water, and socio-economic site decisions.

(1) The DON values sustainable planning and design to improve the quality of installations and to promote long-term cost effective development. The NAVFAC issued a Planning and Design Policy Statement that provides criteria to support the design of sustainable facilities and infrastructure. The Secretary of the Navy has directed that all MILCON shall be LEED Silver capable. The overall policy is available at http://www.buildinggreen.com, and requires LEED green building rating at the Silver level. These policies should be adhered to whenever possible. The Land Use Module of reference (v) also discusses sustainable land use practices in depth. The planner should become familiar with reference (v) Land Use Module, Navy policy, industry standards, and innovative practices on sustainable development, including the interrelationships between land use, transportation, and storm water management, among others.

(2) Opportunities to support sustainable planning should be identified at the beginning of the planning process in order to encourage an installation’s sustainability legacy and to potentially reduce development, maintenance, and operational costs. Cost savings of sustainable planning and design can be realized in the short-term and long-term maintenance, energy, and operational costs of facilities. The Marine Corps supports sustainability in planning, and values LEED principles as important contributions to improving facilities planning and development, particularly when it results in cost savings. Many A/E firms have LEED-certified staff in response to the growing demand for sustainable building and design practices. (See the US Green Building Council website for more information on LEED standards, http://www.usgbc.org)

b. Environmental, Cultural, and Natural Resources. Environmental studies provide valuable information to the planner in preparing the Master Plan. INRMPS, ICRMPs, pollution control plans, and other environmental plans are useful materials that must be consulted. Specialized environmental conditions, such as culturally sensitive areas or endangered species habitat, should be addressed in the Master Plan. In addition, many states have prepared environmental plans that should be used in preparing the Master Plan.

c. Storm water Management and Low-Impact Development. Storm water has traditionally been managed with engineering solutions that move water off site as quickly as possible. Current thinking and practices, however, take a more comprehensive approach to minimizing the effects of storm water. Reducing impervious surfaces has the biggest effect on storm water. Slowing storm water to allow for infiltration is the preferred method of addressing storm water on-site. This is typically accomplished by reducing impervious surfaces and by creating vegetated swales, constructed wetlands, and a variety of detention ponds that respond to the particular site conditions, among other practices. Such treatments not only effectively manage excess storm water on-site, they reduce runoff and erosion both on-site and downstream, as preventing many pollutants from entering potentially sensitive watersheds.

d. Anti-Terrorism Standards. Reference (w) describes Anti-Terrorism considerations for planning and site design. The Instruction refers to specific common criteria and minimum construction standards to mitigate antiterrorism vulnerabilities and terrorist threats. The planner should strive to incorporate these requirements into a comprehensive planning strategy that includes all elements discussed in this Chapter. For current information and guidelines, see http://www.wbdg.org.

e. Physical Security and Crime Prevention. Reference (x) describes the measures and involvement of the Provost Marshall and physical security staff in planning. Reviews of security measures, to include fencing, lighting, building access, and visibility standards by the installation physical security staff shall be included when planning all projects.

f. Critical Infrastructure Protection considerations should also be included in the Master Plan. While much of the analysis is classified for official use only, the general principles are to ensure the viability of the installation's mission through avoiding single points of failure. Redundant features in utilities systems and back-up planning helps to maintain the continuity of operations in event of a failure of some element. The challenge of the planner is to ensure that a critical element has back-up or work-around alternatives. If a single point of failure is identified then appropriate projects should be submitted to correct the vulnerability.

g. Design and Aesthetics. Architectural and landscape design and aesthetics are important contributors to the quality of life on military installations. Reference (y) provides useful principles for sustainable plantings and appropriate green spaces. Good design makes working and living easier, more efficient, and more pleasant. Architectural and landscape design reflect the character of the installation to the general public and the military population on that base. Where available, the installation appearance plan should be consulted regularly to provide guidance and consistency for new projects. A coherent plan can improve how people find their way through the base. Visitors and new arrivals will need to find key facilities, making it important that signage and graphics help them reach their destinations.

h. Real Estate Concerns. An important consideration of Master Plan development is the existing legal encumbrances on use, or disposition of land or facilities. Such encumbrances are generally contained in real estate agreements, some dating from the time the activity was originally occupied by the Marine Corps. The activity commander should ensure any such legal encumbrances are noted in the Master Plan and fully considered as the master plan is developed. The activity commander should keep intermediate commanders advised on the development of the Master Plan.

i. Community Interests

(1) Installations must foster cooperative planning relations with local and regional planning agencies to encourage mutually-beneficial development in and around the base. Installation Commanding Officers, CPLOs, and planning staff should be aware of and involved in community planning that affects base operations and land use. Some examples of important issues to be addressed include transportation, environmental issues, noise issues (particularly AICUZ), installation boundaries and buffers, and zoning. A Joint Land Use Study (JLUS) is a useful process to coordinate and communicate development options between bases and adjacent communities.

(2) To further the orderly development of Marine Corps activities, activity commanders and CPLO staff should establish close and harmonious planning relations with local agencies and planning commissions of neighboring city, county, and State agencies for cooperation and resolution of mutual physical development problems. To assist in this relationship, it may be advantageous to prepare a Memorandum of Understanding (MOU) to identify planning areas of mutual interest, establish points of contact, specify form and lines of communication between planning bodies, and identify procedures to follow to resolve differences. Such coordination shall include compliance with Reference (z), as implemented by reference (aa).

(3) Another way to encourage cooperative relations with local communities is to utilize the CPLO as the liaison to the local planning authority. This person should attend local meetings regularly and be the contact person in order to improve communication between the installation and the local planning authority. Early communication is often the means of avoiding conflicts.

j. Encroachment. Present trends indicate military installations and associated operational areas in the United States and overseas will experience severe external development to the degree that required military operations may be impacted. Reference (ab) identifies topics that could potentially create encroachment issues: urban growth; airborne noise; endangered species and critical habitat; air & land space restrictions; unexploded ordinance and munitions; radio frequency encroachment; maritime sustainability; air quality; cultural awareness; and clean water. Installation Commanding Officers must be fully aware of potential encroachment issues and Marine Corps policy on encroachment. As discussed above, utilizing the CPLO is one step that the installation Commanding Officer can take to address encroachment issues as they arise. Assistance in the areas of recognizing and dealing with encroachment issues can be provided by the HQMC LF/MCICOM.

k. Installation Sustainability. The following is the CMC policy on maintaining operational capability at Marine Corps installations:

(1) Installation Acquisition and Release: The Marine Corps policy is to acquire, retain, and maintain only those installations and intruding air/water areas, essential to the conduct of required military operations. Special attention must be given to maintaining complete operational capability at Marine Corps air stations; priority should be given to protecting AICUZs, and to securing the necessary protective interests in land around the installation in accordance with joint reference (ac). Nonessential holdings and installations will be released promptly, in accordance with the current edition of reference (h). Requirements to acquire additional land should be based on a definitive study, such as an AICUZ or RAICUZ study. See also reference (ad) for additional information.

(2) Multiple Use: The Marine Corps will continue to review and implement multi-use options for existing and proposed facilities, land, water, and air areas/assets when not in conflict with essential military operations.

(3) Nonmilitary Joint Use: The Marine Corps will, when requested, consider controlled joint use of Marine Corps air stations with civil aviation whenever it can be determined such use will not be in conflict with required Marine aircraft operations and will not create undue flight safety hazards. Any joint-use arrangement should require civilian operators, commercial or private, to pay appropriate user fees, normally in the form of landing fees. Other military facilities and land areas which may be available by agreement for nonmilitary purposes should be made available on a fair market value basis unless otherwise approved by the Secretary of the Navy within existing laws and regulations.

l. Regional Planning. In the civilian world, regional planning involves coordination and cooperation between cities, towns, and counties on a regional level. Successful regional planning results in coordinated employment centers that are served by adequate roads, transit, and housing, and the preservation of open space to satisfy environmental and recreational needs. In the military environment, regional planning includes considering facilities and installations on a regional level to identify and proactively minimize duplication of facilities and assets. Some facilities types that may be appropriately considered as regional assets include housing, long-term storage, commissary and exchanges, and training/range facilities.

m. Joint DoD Use. Fulfillment of space requirements can be accomplished through partnerships with other DoD entities, in which the Marine Corps uses space in facilities owned by other military branches. This is most successful at installations with a strong joint presence. For example, a Marine Corps installation may be able share an airfield with a neighboring Army base, resulting in significant savings. Other examples of facilities with potential to share include hospitals, housing, recreational facilities, and training facilities.

n. Planning for BRAC. Master Planning is carried out separately from formal BRAC planning. Proactive planning, however, often results in a smoother BRAC process. Planning that leads up to the BRAC process often overlaps with facilities and land planning, and efficiencies can be gained by coordinating BRAC and facilities planning processes. Special efforts should be made to share, whenever possible, information such as Facilities Support Requirements, mapping data, and project information.

17. Environmental Planning. All projects must satisfy NEPA policies, documenting the effect on the environment in an Environmental Impact Statement (EIS), Environmental Assessment (EA), or by categorical exclusion (CATEX). Refer to reference (d), Chapter 12, and reference (e) for detailed guidance relative to environmental planning.

18. Site Planning. Planning at the site level involves the operational utility of placing buildings adjacent to other related facilities and areas. There are many competing activities that could be placed at a specific site, and the duty of the planner is to optimize the operations in that area.

a. Functional analyses look at the grouping of compatible types of activities, such as bachelor housing with mess facilities, or aircraft parking apron with maintenance hangars. By looking at a unit’s many functions, there are logical associations and there are aspects that detract from a specific operation. Some detractors, which lead to incompatible land use, could include placing noisy activities next to housing areas, grouping non-related high traffic generators in a congested area, or placing functions at such a distance that extra travel is necessary on a regular basis. Good planning seeks synergy between the missions and seeks to improve the units overall operations.

b. Site planning involves building-specific orientation and arrangement. Key elements of site planning are security, the aesthetic quality of place, access to infrastructure, and the efficiency of the installation. Placing buildings within a specific area can affect the comfort of the building occupants (e.g., solar gain, air flow through windows), aesthetics (e.g., views from the inside, grouping of buildings in an area), access by roads and parking, and physical security, such as standoff distances. Utility access, environmental conditions, existing building layouts of neighboring buildings, and topography are all factors in choosing the proper sites for buildings. Site planning is finalized at the design stage, but

the planner should be aware of site planning issues from the beginning. In many cases, it is acceptable to put a function off-station to leverage the community's capabilities and retain on-station properties for functions of higher military value. Site planning guidelines are an important aspect of the Master Plan. How the site relates to the rest of the base, how it is oriented, and how a person gets to the site are important to the success of the facility and the unit.

(1) Site Approvals. The Master Plan should provide sufficient guidelines to site specific projects by identifying known projects in the Master Plan. For new projects, the principles of the Master Plan must be followed and new buildings should meet the intent of the installation's Vision Plan, as well as the specific guidelines of the Planning Standards. All projects or long-range commitment of land use (over 30 days) must obtain site approval from the installation Commander or IPB. This approval applies regardless of funding source or type of structure. A new site approval is not required for the replacement of equipment within a building, replacement of outdoor equipment within the same footprint for the same purposes, or placement of items in a designated storage lot, such as "open storage", aircraft on a flight line, or vehicles in a parking lot. Site Approvals have requirements specific to military installations, and are part of all project document submissions to HQMC LF/MCICOM.

(a) The installation Commander can approve sites that conform to the Master Plan; those sites that deviate from approved plans or involve safety criteria related to airfield clearances, electromagnetic radiation, or range SDZs will require submission to HQMC LF/MCICOM via regional MCIs for endorsement to appropriate agencies. Explosive safety site approvals are submitted electronically and are routed to the appropriate approval authorities via Website Approval Request (WEBSAR). Where more than one issue is involved (i.e., explosive safety and airfield safety), the requests for approval may proceed in parallel to each agency. When submitting projects that may involve special site approvals, please note that the approval process will require additional time and delays in seeking approval may affect the ability to meet project schedules.

(b) Airfield Safety site approval requests shall be sent to HQMC LF/MCICOM via the regional MCI if the project meets all safety criteria, with a copy to NAVAIRSYSCOM. Sites that do not meet safety criteria will require a waiver from NAVAIRSYSCOM prior to site approval.

(c) The installation of electronic equipment or development of a site near equipment that emits electromagnetic radiation (EMR) will require evaluation by SPAWARSYSCOM. A detailed analysis may be required at the expense of the action proponent if the project could present hazards to personnel, fuels, ordnance, or interference with other transmitters, navigational devices, or antennae. The request for site approval shall include all relevant information, including the study on EMR effects, and is submitted to HQMC LF/MCICOM via the regional MCI.

(d) Projects involving live-fire ranges shall be submitted to HQMC LF/MCICOM, via both the regional MCI and then TECOM, to ensure that projects meet all applicable range safety standards. Sites that are near ranges must be evaluated by TECOM to verify that they fall outside any SDZs.

(e) Projects involving ordnance safety, including Hazards from Electromagnetic Radiation to Ordnance (HERO) should be submitted to the DoD Explosive Safety Board (DDESB) or subordinate agencies with delegated authority using the automated WEBSAR system. While HQMC LF/MCICOM receives an information copy of this submission, MARCORSYSCOM Program Manager for Ammunition (PMAM) reviews these submissions as the designated subject matter expert for ordnance safety. The

explosive safety site approvals are submitted electronically and tracked by MARCORSYSCOM using the WEBSAR system.

(2) Site Approval Documentation. Requests for Site Approval must be submitted for every change to land use as part of the project approval. Construction that does not take place inside existing structures should be carefully evaluated and a Site Approval package must be signed by the installation Commander or their designee prior to any improvements. Any changes to an area without corresponding Site Approvals are not authorized and may be required to be removed or relocated at the discretion of the installation Commander.

(a) This applies to any structure, equipment installation, facility, long-term lay down area, or other improvement, regardless of funding source, that will occupy real estate. Vehicles or mobile facilities that are connected to utilities or are in one location for more than 30 days shall also request site approval. Where designated lots or van pads are provided for the purpose of supporting this property, site approval for that area will be sufficient.

(b) The elements of the Site Approval are similar to those of a building permit:

1. Description of proposed project, to include the size, cost, need for project, and how it affects surrounding area.

2. Graphic depiction of site and how it corresponds to the Master Plan and local form based codes, to include all known constraints both natural and man-made, utilities, roads, and existing buildings.

3. Environmental impacts, to include NEPA documentation.

4. Special site concerns, to include explosive, airfield, range, electromagnetic radiation, or other conditions that require approval from higher headquarters (mentioned above).

(c) Site approval documents are evaluated by the local command and, if the proposed land use conforms to the existing Master Plan, they may be approved by the installation Commanding Officer without additional HQMC LF/MCICOM approval. Form NAVMC 11069, Request for Project Site Approval, acts as a cover checklist for concerns that must be addressed. Sites that involve special safety considerations or are in conflict with the Master Plan objectives require HQMC LF/MCICOM approval, submitted by the installation via the regional MCI.

(3) Submitting Site Approval Request

(a) Prior to any significant improvements on an area, there must be a Site Approval on record with the installation Commander. This applies to all alterations to a site, to include paving, connecting to utilities, erection of structures or facilities, and storage or placement of equipment for more than 30 days, and applies regardless of the funding source to all units on the installation. Failure to receive site approval may result in the installation Commander requesting removal and restoration of the site at the unit’s expense.

(b) The facilities planning staff at each base are equipped to assist the units with preparing and obtaining site approvals. Once a unit has submitted all necessary documentation to the installation’s planning staff, they will forward a site approval recommendation to the installation Commander. The Commander will provide a decision whether to approve/disapprove the site, or defer approval

pending additional information, within 30 days. If necessary, the Commander will forward the package to higher headquarters for special safety considerations.

(4) Request for Project Site Approval. The following shows the "REQUEST FOR PROJECT SITE APPROVAL", which should be filled out and included with every project, whether approved locally or at a higher headquarters:

(a) Additional information required within this form may be attached as back-up justification, as well as a site map at no less detail than 1"=200' for each location, and for large areas, a summary map showing the entire project impacts. Additional graphic and narrative information that supports the land use planning decision should be included as part of the site approval package.

(b) If NEPA documentation has not been completed, provide a point of contact and current status of the analysis. Without adequate NEPA documentation, the site cannot receive final approval, nor can construction begin.

(c) Projects requiring review by the DON, such as airfield or explosives safety shall also fill out and attach the additional site approval forms found on the NAVFAC website: https://portal.navfac.navy.mil.

(5) Siting/Standards Variances

(a) Facility and infrastructure siting must be completed in accordance with the Master Plan and ADPs. For those projects involving siting, but not covered by either type of plan, host and tenant units will apply for a variance. The installation Commanding Officer has the authority to approve all siting that conforms to the principles of the Master Plan. For those projects that do not conform, or involve airfield safety, ranges, EMR, or explosives safety concerns, approval must be sought from HQMC LF/MCICOM or other higher headquarters depending upon the issue.

(b) Facilities planners will use the siting procedures captured in a Site Approval request, and must specify the nature and duration of the waiver requested. Airfield Safety waivers are handled via the Infrastructure Business Operations Navy/NAVAIR/NAWC Support (IBONS) system, with copies to HQMC LF/MCICOM. Contact NAVAIRSYSCOM for an IBONS account. Ordnance Waivers are granted by SECNAV and must be reviewed by the DDESB via the WEBSAR system. As with regular ordnance site approvals, the request package must be submitted via MARCORSYSCOM PMAM for review. All other requests should be sent to HQMC LF/MCICOM.

(c) Requests must fully describe the need, why the proposal cannot meet relevant safety criteria and the nature of all restrictions such as AICUZ,, ESQD, Imaginary Surface, to areas subject to hazard from electromagnetic radiation to ordnance (HERO), personnel (HERP) and fuel (HERF), etc. All sites shall address all NEPA concerns and list any proposed mitigating factors.

19. Master Plan Review Responsibilities

a. The installation is responsible for forwarding the draft Master Plan to HQMC LF/MCICOM for review. Depending upon the size of the plan, the review will require several weeks. A minimum of six to eight weeks from the receipt of the plans should be planned for HQMC review and comments to be returned to the installation. The installation Commanding Officer and DA should coordinate the number of copies needed for review with HQMC LF/MCICOM, as well as the format (paper, disk, electronic files), early in the contract to ensure enough copies are

available. Insufficient copies at the review stage will require routing limited copies and will extend the timeframe for returning comments to the installation.

b. During submittal of the draft Master Plan to HQMC LF/MCICOM, comments may also be solicited from cognizant supporting commands (e.g., Naval Air Systems Command, Naval Bureau of Medicine, etc.) and other agencies. The comments are compiled and forwarded by letter to NAVFAC or the design agent.

(1) Approval. The Preliminary (Pre-Final) Master Plan is later submitted to HQMC LF/MCICOM to show all revisions. If the comments have been adequately addressed and the plan is acceptable, it will be routed for approval to the ADC I&L (LF)/COMMCICOM for signature, on behalf of the CMC. The approval letter will be sent to the DA and the installation for inclusion with the Final Plan.

(2) The number of copies and format are to be determined prior to the start of the Master Planning effort. The approved Master Plan is then distributed as the comprehensive document for the development of the activity. Any classified appendices will be forwarded and approved by separate correspondence.

c. Project List and Plan Based-Programming. The PWD FYDP and IPL must be tracked to monitor progress. The installation planner will keep these lists current and report progress, adding any new FSRM or MILCON projects.

20. Space Utilization. Host and tenant units apply to the IPB for approval to move to, or from, a facility; however, the regional MCI's endorsement is required for major moves within an installation that involve 50 or more people, require repairs greater than $1,000,000, or affect MILCON projects. The IPT staffs the move with regard to engineering, planning, real property, environmental, etc. to ensure that mission impact, Quality-of-Life, and sustainability are optimized. The installation Commander approves the move based on base and region resources then directs the RPAO and installation planner to update their respective iNFADS modules. Both regional and HQMC LF/MCICOM approval is required for moves between installations in the same region, and moves outside the region require endorsements by affected installation commanders and regional MCIs, with approval by HQMC LF/MCICOM.

Chapter 8

Implementation

1. Implementation. Implementation consists of developing the planning action justification and project documentation for the implementation and execution of planning solutions. The master planning process typically identifies a list of proposed projects that are designated by funding type, typically MILCON, NAF construction, and Facility Restoration and Modernization Projects (O&M-funded Projects).

a. This Chapter addresses the MILCON programming and implementation process. It also explains and summarizes NAF construction project programs, and Japanese and Korean Government construction project programs. Facilities projects are more completely addressed in reference (l).

b. MILCON projects are expensive to build, maintain and operate. The installation planner or engineer should verify that the alternatives listed below are considered before permanent MILCON and NAF construction projects are planned, programmed and implemented. An economic analysis is required to determine the best alternative.

c. To that end, facilities planners and engineers should not propose minor construction and large repair projects just because that's what has always been done. As facilities age, such actions may be uneconomical. An economic analysis should consider various alternatives and the overall life-cycle costs. Remember to factor in mitigation costs (hazardous material remediation, as well as mitigation if the project will adversely affect a historic property) into the economic analysis.

2. Solutions other than MILCON

a. Existing Facilities

(1) Before any construction project implementation strategy is solidified it is the installation planner’s responsibility to ensure that the requirement cannot be fulfilled with an existing available facility. As mentioned in Chapter 5, AE, the installation planner must not only evaluate available existing facilities on his/her installation but must consult with the region to locate any available existing facilities elsewhere in the region. If space is under-utilized, the installation Commanding Officer has the authority to reassign spaces to more equitably accommodate the requirements within existing assets.

(2) Installation planners should also consider the availability of facilities outside the installation, either at nearby federal buildings, or commercially available spaces as potential assets, before deciding upon new construction. This should be noted in the planning notes as well as a project economic analysis. Possible exceptions to this include warehouse or administrative category codes covered in the recent “Freeze the Footprint” policy.

b. Interim Relocatable Facilities (IRFs). Some facility requirements may be temporary and do not warrant a construction project. IRFs are often a quick, cost effective, short term facility solution. IRFs are often modular trailers, light pre-engineered buildings, inflatable, or fabric structures. IRFs can fulfill emergent facility needs without the time constraints of permanent construction, although site preparation costs can reach MILCON levels. Appendix G provides specific guidance for requesting IRFs. IRFs may not be used as a permanent or

long-term facilities solution. HQMC LF/MCICOM is also pursuing a goal to reduce the total inventory of IRFs on Marine Corps installations by 50% by 2018.

c. Facility Projects. Minor construction projects below $750,000 and all facility repair projects are funded by O&M funds. The Facility Projects programming and implementation process is covered in detail in reference (l).

d. Leased Spaces. Another option for short-term growth is to use leased facilities. There are some facilities requirements that may be better met through the private sector or by leasing spaces off-installation. When available, community service facilities may be adequately provided by the surrounding community without the need for military construction. In some cases, the use of leased facilities may be in a more favorable location than on-station or another military installation. Storage facilities for materials that are not needed on a day-to-day basis, or that support deployment, may be appropriate in leased facilities with access to transportation hubs. Housing and some administrative spaces should be examined to see if leasing is a reasonable alternative to construction. Leasing is handled by NAVFAC and coordinated through the installation Real Property staff.

3. MILCON Process. Congress has determined that MILCON projects are new construction projects over $750,000. This chapter describes the MILCON process and the various programs with projects that typically exceed the $750,000 threshold and, therefore, fall under MILCON, including unspecified minor construction (UMC), Emergency Construction, SECDEF contingency MILCON funding, replacement and repair of damaged facilities, environmentally-related MILCON programs, Energy Conservation Investment Program (ECIP), and the Defense Access Roads (DAR) Program.

4. MILCON Terms, Documents, and Processes. Planners and others creating and submitting MILCON projects should be familiar with the following terms, processes and documents that are central to how DoD and the Marine Corps plan, prioritize and program projects:

a. The DoD Planning, Programming, Budgeting and Execution (PPBE) Process

(1) The Defense Reorganization Act of 1958 gave the SECDEF, under the policy guidance and direction of the President and National Security Council, two distinct lines of authority. A direct line of command was established through the Joint Chiefs of Staff (JCS) to the Unified and Specified commands. A line for administrative control of the military departments and for management of support of military forces was established through the Secretaries of the military departments.

(2) Through the command line, the SECDEF issues decisions on threat appraisal, strategy, and forces. Through the administrative or management line, SECDEF issues decisions on program goals to support the forces and budgeting of annual funds to support the programs. The process through which these decisions and resultant actions are integrated is the DoD PPBE.

b. Future- Years Defense Program. The principal document of the PPBE is the FYDP, which is the program and financial plan for the DoD as approved by the SECDEF and arrays cost data, manpower, and force structure over a five-year period (force structure for an additional three years). One feature of the FYDP is a display of the total resource requirements for each appropriation, by resource categories, needed to support the approved force levels.

c. Program Objective Memorandum (POM)

(1) The DON POM is the Secretary of the Navy's recommendation to the SECDEF for detailed application of the DON's resources. The POM is developed, within constraints imposed by the SECDEF's fiscal guidance, to satisfy all assigned functions and responsibilities during the period of the FYDP. The POM is the instrument through which programming under fiscal constraints is implemented. The POM does not reflect all known requirements but those requirements affordable within specific budget levels.

(2) The basic MILCON programming effort takes the Marine Corps approved concepts and objectives, which are identified in the planning phase, and places them into a fiscally-constrained priority list of projects for review and approval by the CMC. This program, when approved by the CMC, becomes the Marine Corps MILCON Program of Record and is submitted to the Department of the Navy's Financial Management and Budget office (FMB). The Marine Corps MILCON program is then consolidated with the CNO-approved Navy MILCON program for submission as the DON MILCON program portion of the DON POM. However, it is recognized that the Marine Corps MILCON program is separate and distinct from the Navy program when questions arise on requirements. The POM represents a comprehensive and detailed expression of the resource requirements associated with the total commitment of the DON. Assessment of risks and military advantages of the proposed programs, as measured against those currently approved in the FYDP, are addressed.

(3) The Military Construction Integrated Projects List (MILCON IPL) is a listing of projects that have been submitted by each installation to HQMC LF/MCICOM GF's MILCON section and is supported by the Marine Corps chain of command. This listing of projects is used in the development of annual construction programs.

d. MILCON Planning and Programming Guidance Letter. Annually, the CMC (I&L, LF) will publish a MILCON Planning and Programming Guidance Letter. The MILCON planning guidance is published prior to the MILCON cycle and forwarded to each installation. The guidance letter provides the latest information and procedures for creating DD 1391s and supporting documents, key dates, as well as any updated policy. Each planned MILCON project shall be based upon updated planning documents and current FSRs.

5. MILCON Team Planning and Programming Process (MTP3)

a. The MTP3 describes the milestones and timelines involved in the military construction planning and programming process. The MTP3 process begins with the identification of a mission requirement and ends with the congressional appropriation of funds. Marine Corps planning and MILCON staffs work with NAVFAC to produce a project, the associated documentation and validate the quality. Figure O-1 within Appendix O illustrates this process.

b. Throughout the cycle projects are produced, validated, briefed and prioritized. Those projects that are well documented and fulfill high priority missions of the Marine Corps progress through the cycle and are eventually approved and funded by Congress.

c. Project documentation in the form of a DD Form 1391 is produced in two separate iterations. At the beginning of the project documentation evolution the field (Marine Corps installation planners and/or NAVFAC planners produce an activity-level DD Form 1391. The activity-level DD Form 1391 should fully state the facility requirement but may lack complete supporting documentation. Projects prioritized for further development require a FEC Final DD Form 1391 to be

generated. During the FEC Final DD Form 1391 phase the project scope is verified, all back up documentation is included and validated by the project team and the project is submitted to the HQMC LF/MCICOM GF MILCON Section for further prioritization and validation for funding.

6. DD Form 1391 Documentation

a. The process for generating and submitting the DD Form 1391 documentation described in the MTP3 cycle has been completely automated. DD Form 1391 documents are generated and submitted in the Electronic Project Generator (EPG) database. Access to the database is provided via the NAVFAC Portal. Installation planners should contact their servicing FEC for information on EPG training opportunities.

b. Specific guidance for how to fill out the DD Form 1391 in EPG changes year by year as priorities and process change and upgrades are made to the system. Refer to the MILCON Guidance Letter for the most current guidance.

7. DD Form 1391 Attachments. It is important that planning documentation described in this Manual be submitted with each MILCON project submission, either electronically or placed in EPG when appropriate. This documentation includes the updated FSR, installation maps showing project locations, BFRs for categories of proposed construction, the corresponding FPDs with all buildings proposed for demolition included, BEQ Worksheets, Collateral Equipment Lists, Site Approval (including explosive safety or airfield safety approval), Economic Analysis, environmental planning documentation, and any other attachments as specified by the current MILCON Guidance Letter. It is essential that the documentation is kept up-to-date to ensure that a strong and accurate project package is validated. Changes to the DD Form 1391 also need to be reflected in the corresponding environmental planning documents.

8. Basic Facility Requirements. The category code directory in iNFADS indicates which BFRs should be prepared. The BFRs should be current, and based on the updated FSR, as submitted by the installation. Reference (g) contains criteria for many category codes, but some will require individual engineering analysis. Updated BFRs for all category codes included in the MILCON project should be converted to PDF files and attached to the project in EPG. For those categories not requiring BFRs, provide a description of how the scope was derived and any supporting documentation, such as utilities study, transportation analysis, JSIVA recommendation, or other reports.

9. Facility Planning Document

a. The FPD compares requirements quantity on the BFR to the current facilities inventory, the resultant deficiencies (if any), and the planned MILCON or R2 (Minor Construction) projects that satisfy facility shortfalls. Facilities planning balances requirements versus assets. Planners are responsible for updating all of the applicable FPDs for MILCON projects and ensuring that they support the scope of the project. This includes ensuring the BFR quantity matches the BFR calculations submitted with the project, correct condition and quantities are shown in the inventory, and that all planning actions are correctly indicated on the FPDs. Likewise, ensure that planning actions use the prime unit of measure, and that all required units of measure are accurately reflected.

b. Where projects involve multiple category codes, ensure all affected FPDs are provided. Further, if assets are converted from or to another category, FPDs from those receiving categories should also be included. Remember to reduce the BFR quantity if a sizable deficiency is calculated but the existing assets are

sufficient. If there is some reason for the requirement to remain at a higher level a general note should be added to the FPD to explain the discrepancy.

c. Show the total scope of a proposed multiple category code construction project in the Notes section of all category code FPDs, list the related category codes, and refer to it on other related FPDs. The user can thus quickly find all parts of a project without having to search through the FPDs.

10. BEQ Worksheet

a. BFRs and FPDs are not applicable to BEQ projects; instead, the BEQ Requirements Worksheet is submitted. The Worksheet is formatted in a similar fashion to the BFR/FPD – reflecting current manning, projected manning, barracks assets, and shortfalls. More information and instructions for the BEQ Requirements Worksheet are generally published in the MILCON Guidance Letter or can be obtained from MCICOM Housing Section.

b. Housing projects must likewise be consistent with the Master Plan, have the necessary site approval documentation, and all other supporting documentation as other DD1391 submissions, as stated within the guidance letter. For additional information on housing policy, refer to reference (p).

11. Collateral Equipment List. HQMC (I&L LFS/MCICOM G4, Logistics/Services) has the budgetary and funding responsibility for collateral equipment for facilities at Marine Corps activities. However, it is the installation planner’s responsibility to identify necessary collateral equipment for programming in the DD Form 1391. A list detailing the necessary collateral equipment must by attached to the DD Form 1391 in the EPG. Early identification of collateral equipment guarantees that the funds are programmed and contributes to a successful acquisition strategy. The section below outlines the different types of collateral equipment and their funding sources. For more information on collateral equipment consult reference (ae), Chapter 4. The following items are not collateral equipment, but must be included in the project:

a. Built-In Equipment or Installed Equipment

(1) Accessory equipment and furnishings required for operations and affixed as part of the building or facility. These are engineered and built in as an integral part of the final design and are an essential part of the facility. Equipment in this category is considered part of the building or facility and is Class 2 plant property.

(2) The initial costs to buy and install this equipment are construction costs and shall be included in MILCON appropriations. Justification for this type of equipment should be included in the DD Form 1391 for the project. An example of such would be the ventilation and filtration equipment associated with a sand blasting and paint facility.

b. Technical Equipment.

(1) This is equipment which, although it may be built-in, installed, or portable, is not readily available from usual commercial sources or for general issue or use within the DON. It is specialized equipment, under the cognizance and procurement control of one of the Systems Commands or offices of the DON, and is intended for use at a specialized activity or with a specialized facility within an activity. This equipment requires technical and engineering work, in each instance, to develop the purchase specifications.

(2) This equipment includes, but is not limited to, such items as special communications and electronic equipment, special furnaces and research equipment, etc. Installation is normally funded by the MILCON project and purchase is normally through procurement funds.

c. Non-technical Equipment

(1) This is sometimes called plant or organic property. It is accessory equipment and furnishings that are movable and not fixed as an integral part of the facility. Normally, these are all items of collateral equipment that are loose, portable, or can be detached from the structure without special tools. In addition, these include permanently attached equipment directly related to the structure operating function such as technical, scientific, production, and processing equipment not under the cognizance of a System Command or office of the DON.

(2) The procurement of this non-technical equipment is not construction; it is investment Procurement, Marine Corps (PMC) or expense O&M, USMC (O&MMC) items. Personnel support equipment for bachelor housing, dining facilities, and other support facilities will be funded under the O&MMC, Operations and Maintenance, U.S. Marine Corps Reserves (O&MMCR), or PMC appropriations by HQMC. An example would be portable food preparation equipment used in a mess hall.

d. Medical/Dental Equipment. All equipment to outfit a medical/dental clinic or hospital will be funded by BUMED, regardless of the source of construction funds. MILCON projects for medical/dental facilities are programmed by BUMED. Those projects funded by other sources (host-nation, etc.) must follow the planning and programming procedures of reference (af) and equipment lists must be submitted to the CMC (HQMC, I&L LFS/MCICOM G4, Logistics/Services) so that NAVFAC can program for the funds. Naval Medical Command (NAVMEDCOM) will specify the medical equipment to be purchased.

12. Site Approval

a. The site approval is an essential part of the MILCON Project package. The site approval process, described in Chapter 7, and documentation ensures that all Marine Corps facilities projects meet certain criteria for safety, security, environmental responsibility, and coherent land use according to the installation’s Master Plan. Lack of a viable site can adversely affect the cost of the project, and may jeopardize its programming. Ensure that signed site approvals are submitted with each project. Note that if the environmental planning documentation has not yet been completed, there could be more than one approved site and a preferred alternative. If the site approval requires additional review, such as by the DDESB, indicate the status of the site approval. A DDESB Explosives Safety Site approval from WEBSAR is required for the project to proceed and time should be allowed for this process. The planner will work closely with the Explosives Safety Officer (ESO) and customer e.g., Naval Munitions Command (NMC) to secure DDESB approval.

b. The installation has limited explosives safety approval authority with the remainder controlled by DDESB. Except for explosives or airfield facilities, site approval should be obtained prior to start of design. Siting of all facilities projects, regardless of funding source, at Marine Corps installations should conform to the Master Plan. Sites that do not conform shall be forwarded first to the Installation Planning Board, if one has been established, and then to MCICOM via the regional MCIs for approval. Site approval denotes that a project’s location conforms to established planning principles and the Master Plan of the activity, and that any criteria infractions have or will be properly authorized.

Site approval of a project does not constitute approval of the project, its scope, or funding, but use of the land.

13. Economic Analysis

a. Each MILCON project submitted for the program must be accompanied and supported by a valid economic analysis. Without a strong economic justification, Marine Corps projects will not be selected for consideration. A strong economic analysis comparing achievable and realistic, business and facility, and non-construction options is a necessity. The most recent version of the approved economic analysis software, EconPack should be used. The most recent software version should be obtained from the USACE website.

b. The summary of the economic alternatives required in the DD Form 1391 must be supported by a full economic analysis attached to the EPG 1391. Economic analyses should not yield negative Cumulative Net Present Values. An exception is permitted for the brief “payback period” before a new facility will generate savings. To avoid a negative Net Present Value, do not assign a residual value to a building that is greater than the cost of the building in that year. For more information on how to perform an economic analysis refer to reference (k).

c. When preparing an economic analysis, at least two viable options should be considered. The use of a “straw-man” analysis, which puts an untenable alternative against the proposed project, is to be avoided. When making the comparisons, the conditions should be similar—for example, if one outcome yields extra space that can be utilized by another unit then the value of that space should also be included in the overall economic description for that alternative. If there are associated costs, such as demolition or environmental mitigation that would not be needed for the alternative, then those costs should be included in the analysis.

14. Environmental Planning. Before submitting a project for programming, and approving the site, alternatives must be examined to ensure that environmental issues are considered along with costs and technical or mission considerations.

a. Through the environmental planning process, agencies are required to critically review the need for a project and consider whether there are alternative ways to meet the need that would have lower environmental impacts. This means that more than one site alternative and facility alternative (i.e., "new construction" or "rehabilitation" option) may be required to be analyzed, particularly if the project is unique or complex. The project will not be validated unless environmental concerns are adequately addressed and resolution documented.

b. The installation planner or engineer must ensure that the proposed action has received the necessary scrutiny and complies with the intent of references (b) and (c) and other environmental laws or regulations that are triggered by the action. The engineer standard operating procedure, per the United Facilities Guide Specifications, is to secure environmental planning documentation during project scoping. Failure to document or consider the effects of the project can jeopardize the viability of an individual MILCON project.

c. The environmental planning review and analysis is a regular and expected O&M planning function identified and funded by the action proponent for the project. Be aware that HQMC LF/MCICOM does not budget or retain funds for environmental documentation.

d. Environmental planning documentation for MILCON projects are funded similar to any other planning cost of the MILCON project. MILCON design funds cannot be

used for the development of environmental planning documentation. It may be impractical to do a complete environmental planning analysis prior to the initial submission of a project. If the project only requires a categorical exclusion, attach the Decision Memorandum and Record of Environmental Impact Review (REIR) to the EPG 1391. If an EA or EIS is required, the proposed schedule should be attached to the DD Form 1391 in EPG. If an EA or EIS will be required, the process should be initiated when a project is selected to undergo an FEC Final DD Form 1391; however, make sure that there is sufficient flexibility in the project to allow for appropriate consideration of alternatives per reference (b). The environmental planning documentation will also be annotated in the Site Approval documentation prior to approval.

15. MILCON Program Execution

a. Authority. The authority for DON procurement, vested by law in the Secretary of the Navy, is delegated for facilities construction to the Commander, NAVFACENGCOM. In some instances, depending on physical location of the MILCON, the USACE is delegated the authority to execute Marine Corps MILCON projects.

b. Design. Projects are designed by NAVFAC, often by an A/E firm under contract. Where possible, contracts are awarded as Design-Build, which makes the construction contractor responsible for the design as well, leading to efficiencies and the potential for savings through incorporating cost-saving features into the facility.

c. Supervision. MILCON for the DON is supervised by NAVFAC Facilities Engineering and Acquisition Divisions (FEADs). Contract award and change order authority are generally retained at the Officer in Charge of Construction (OICC) level. The FEAD is responsible for contract administration and inspection for compliance with the plans and specifications. Upon completion of the facility, the FEAD ensures the installation receives accurate “As-Built” design drawings, and that all property records data is conveyed including a complete DD Form 1354, Transfer and Acceptance of DoD Real Property (which will go to the RPAO), and entered into iNFADS.

d. Adjustment Authority. During execution of the MILCON program, when the project encounters unexpected costs, there is always the temptation to reduce project scope. Conversely, when there are unexpected savings, there is the impulse to add to the project scope to match available funding. Either action is contrary to good management and usually conflicts with the congressionally approved scope of the project. Accordingly, deviation from approved project scope, at any stage of programming or construction, will be made only upon approval by HQMC LF/MCICOM. This includes the desire to retain buildings slated for demolition by a MILCON project.

16. Inventory Records Process for MILCON. The installation planner must take an active role in ensuring that new facility information is entered into the real property database in a timely manner after completion of a MILCON project. The official means for capturing this data is DD Form 1354. Refer to DD Form 1354 example and checklist provided within Appendix D, Figure D-5. The process for MILCON projects is as follows:

a. Shell DD Form 1354

(1) When the MILCON Project is funded, the responsible party at the installation (planner or engineer) fills out a “shell” DD Form 1354 based on the DD Form 1391 and should include information for data elements 5, 6, 9a, 10,11, 12, 13,

15, 17 on the DD Form 1354. The “Remarks” section on the back of the form should be used to document tertiary units of measure (e.g., warehouse space has three measures). The responsible party should also attach the measurement checklist.

(2) The information contained in the shell version of the DD Form 1354 provided by the installation tells NAVFAC which facilities need to be updated in iNFADS. It identifies the Category Codes which will require quantities, the Units of Measure for those quantities, and additional data (measurements and tertiary units of measure) required to complete a property record card.

b. NAVFAC. NAVFAC is the Design Agent on all USMC MILCON projects and, therefore, has the responsibility to complete the DD Form 1354. The ultimate responsibility for completion is non-transferable even if a party other than the Design Agent is contractually obligated to produce the DD Form 1354.

c. Request for Proposal (RFP) Process. Prior to the RFP process the responsible party at the installation forwards the shell DD Form 1354 and attachments to the NAVFAC PM for the project. The PM is an employee of the servicing IPT and FEC.

d. Interim DD Form 1354. As the project nears completion the PM prepares an “interim” DD Form 1354 based on the contract deliverable and the “shell” DD Form 1354, being sure to allow enough time to submit these to the installation 30 days prior to final inspection. The DD Form 1354 must conform to reference (n) or the most recent guidance.

(1) Demolition of all facilities must be shown on the form.

(2) Costs should be final costs known at the time of preparation.

(3) Tertiary quantities, where applicable, must be shown in Block 28.

(4) Measurements can be shown in Block 28, or attached to the form, for each new facility.

(5) The construction deficiencies punch list can be put on the form (Block 27) or attached to the form.

(6) NAVFAC must maintain a suspense file to update costs at contract close-out.

e. Facility Acceptance. After installation receives the DD Form 1354 from NAVFAC, the installation RPAO (typically the Facilities Engineer, PWO or Deputy PWO) must sign Block 25 “Accepted By”. The DD Form 1354 must be signed no later than the day the installation accepts the facility. Installations should retain a suspense file to confirm final costs.

f. Responsible Party. The responsible party at the installation has 10 days from receipt of the signed DD Form 1354 to:

(1) Create new property record cards for new facilities.

(2) Update existing property record cards for any facilities that were modified or expanded.

(3) Attach an electronic version (PDF) of the DD Form 1354 and attachments to all changed property record cards.

(4) Use the “Existing” button in the “Documents” tab of iNFADS to link multiple property record cards to one document.

(5) Enter the contract number in the “Costs” tab of iNFADS for the costs shown on the DD Form 1354.

g. Note: For more information on DD Form 1354, refer to reference (n).

17. Unspecified Minor Construction (UMC). UMC funds support projects costing less than $2 million that demand remedy sooner than would be possible if delayed for authorization and funding through the regular MILCON program. Typically, room is made in the regular MILCON program in a given year to fund any urgent requirements below the $2 million limit. If an installation discovers an urgent requirement meeting UMC criteria it should consult with the HQMC LF/MCICOM MILCON section immediately to develop a course of action. General project criteria and submission requirements for UMC projects are as follows:

a. UMC Project Qualification. Except for self-amortizing projects as defined below, all UMC projects must satisfy at least one of the following conditions:

(1) The facility requirements addressed by the project were identified too late for inclusion in the last MILCON budget submission to the OSD.

(2) A useable completion date for the facility is required substantially sooner than would be possible if the project was to be delayed for inclusion in the next annual MILCON program.

(3) No feasible alternative, interim or permanent, is available pending inclusion in, and subsequent project completion by, an annual MILCON program.

(4) Additionally, one or more of the following conditions apply:

(a) A new primary mission assignment cannot be implemented without the requested construction.

(b) Unexpected growth in existing primary missions cannot be accommodated without the requested construction.

(c) Unexpected rapid progress in a high-priority research and development effort cannot be exploited without the requested construction.

(d) The requested construction is necessary to conform to regulatory or statutory requirements that must be complied with to continue performing primary missions.

(e) Unexpected new items of major equipment necessary to the performance of primary missions cannot be put into operation without the requested construction.

(f) The security of nuclear or other classified special weapons would be compromised without the requested construction

(g) The requested construction consists of essential alterations incident to repairs (funded from other than MILCON) immediately necessary to continue performing current primary missions.

(h) The unexpected loss of, or severe reduction in, supporting utility sources or systems will jeopardize the ability to continue performance of primary missions without the requested construction.

(5) Note: The DD Form 1391 documentation shall be prepared after consultation with and as dictated by the HQMC LF/MCICOM GF.

b. UMC Approvals. Authority for approval for UMCs lies with the Secretary of the Navy.

c. UMC Guidance and Documentation

(1) Installations shall coordinate with the HQMC LF/MCICOM GF as soon as the requirement is discovered. All projects submitted must be supported by facility planning and programming and environmental planning documents just like projects in the Core Program or as specified by HQMC LF/MCICOM GF.

(2) The justification for projects proposed for funding under the Secretary of the Navy emergency authority shall include clear and concise explanation of the change in mission and responsibility generating the requirement for the project. Include the reason why the project cannot await funding in the next MILCON Authorization Act.

(3) Letters forwarding requests for use of emergency authority will include proposed reprogramming of projects authorized and approved for funding for the activity concerned whenever the activity has sufficient outstanding MILCON projects. Include the rationale for deferral of such projects. In those instances where there are no outstanding projects eligible for reprogramming for the activity concerned, the forwarding letter should so state.

d. Emergency Construction

(1) The annual MILCON Authorization Act allows the Secretary of the Navy to carry out a military construction project not otherwise authorized by law if the Secretary determines the project is vital to national security and the requirement and the project are so urgent that deferral for inclusion in the next MILCON Authorization Act would be inconsistent with national security.

(2) No funds are appropriated specifically for emergency construction. Projects approved under the Appropriations authority are carried out within the total amount of funds appropriated for MILCON that have not yet been obligated.

e. UMC and Emergency Construction Project Submittals. Installations shall submit requests for Emergency construction projects to HQMC LF/MCICOM GF.

18. Restoration or Replacement of Damaged Facilities

a. Authority. Under the authority of reference (ag), damaged facilities may be replaced or restored using funds available from MILCON appropriations when the funded cost exceeds $750,000. For projects below the $750,000 threshold installations shall contact HQMC LF/MCICOM GF. The use of this authority has been restricted by the SECDEF to complete replacement or “major restoration” of a facility. In the cases where the phasing is such that restoration or replacement will not be unduly delayed, it should be included in the annual MILCON program.

b. Eligibility. To establish eligibility for funding under reference (ag), projects shall be assessed in terms of the following requirements and guidelines:

(1) Damage must be due to fire, storm, earthquake, flood, typhoon/hurricane, or other acts of God. For the purposes herein, an act of God does not normally include damage sustained from prevailing or seasonal heavy weather, nor does it include an accumulation of minor damage incidents.

(2) Project must involve complete replacement or major restoration.

(3) A continuing military requirement for the facility must exist.

(4) Project scope must remain within the scope of the facility being restored or replaced; however, only the validated requirement can be restored regardless of the original facility size. Improved materials may be used where economically justified; i.e., a building of temporary or semi-permanent construction may be replaced by a permanent facility.

(5) Damage to facilities receiving normal abuse as a part of their function usually will not be considered under this authority.

c. Appropriations. Appropriations are not made available through any annual appropriation act to fund projects in this category. Projects approved under this authority must be funded by reprogramming actions that defer or identify savings available from approved projects. Therefore, projects qualifying under this authority must compete for funds with other high-priority projects selected for approval during the annual MILCON program review cycle.

d. Submittal Requirements. All projects submitted under the authority of reference (ag) must be supported by facility planning and programming documents identical to those required for other MILCON projects. The documents required shall be prepared in accordance with instructions contained in this Manual. A single restoration project will be prepared for all facilities that are damaged under the same act of God. Installations shall submit requests for restoration or replacement of damaged facilities projects to HQMC LF/MCICOM GF, as determined by project cost.

19. Energy Investment Programs (ECIP)

a. There are several appropriated and private party funded programs available for making energy conservation and renewable energy investments. Marine Corps appropriated funds for energy efficiency and renewable energy are managed as the Energy Investment Program (EIP). EIP provides funds specifically for energy and water conservation and renewable energy projects using Operations and Maintenance, U.S. Marine Corps (O&MMC) Facilities Sustainment, Restoration and Modernization (FSRM) type funding. In addition to typical FSRM project submission requirements, these project submissions require life cycle cost analyses justifying the project as cost effective. Specific guidance is published annually or as needed by GF-1. In addition to the EIP program, MILCON or FSRM programs may be used for energy related projects, though these projects will compete with other priorities in these programs.

b. ECIP is a special MILCON-funded program centrally-managed by the Deputy Under Secretary of Defense (Energy, Installations, and Environment) (DUSD (EI&E)) for retrofit or replacement construction projects designed to improve energy efficiency at DoD facilities through the use of energy saving technologies, materials, and equipment. Submittal requirements and programming criteria can be found in reference (ah).

c. Energy investments may also make use of private, or alternative financing from energy services and utility companies. Energy Savings Performance Contracts are long term contracts where an energy services companies (ESCOs) invests in energy saving measures that are paid back through savings achieved and guaranteed by the ESCO. The ESCO owns the improvement and operates and maintains it until the end of the payment period. Utility Energy Services Contracts (UESC) are with utility companies and are similar to ESPCs except that the improvements are not owned by the utility and savings are not guaranteed.

d. A key aspect to the energy program is the use of energy performance contracts also referred to as alternative financing. Many installations are using technology such as ground source heat pumps, boiler decentralization, and natural gas networks and cogeneration plants financed through ESPCs and UESCs to replace substantial facilities infrastructure. More information can be found in Chapter 3 of reference (ah) and through consultation with MCICOM.

20. Defense Access Roads (DAR) Program. The DAR Program provides a means for DoD to pay a fair share for public road improvements that provide access to DoD installations. The Marine Corps pays for DAR projects out of the regular MILCON appropriation. Reference (ai) provides guidance submission criteria and process.

21. Marine Corps Community Services Non-Appropriated Fund (NAF) Projects. MCCS (called Morale Welfare and Recreation by Department of Navy) requires a broad array of facilities to provide community services including recreational, fitness, health and educational services as well as food and beverage and Marine Corps Exchange operations. MCCS facilities construction projects are generally paid for through NAF. The installation planner takes the lead in planning the facility and should coordinate with the MCCS headquarters component on relevant technical and funding issues. All MCCS projects must be part of the installation Master Plan and planned accordingly in an ADP.

a. MCCS HQ Authority. MCCS headquarters component has the authority and responsibility to review, prioritize and fund MCCS projects. For more information on planning and submitting MCCS/NAF funded projects see reference (aj) or contact MCCS headquarters. Certain community facilities are funded by typical MILCON appropriation as described in references (ak) and (al).

b. DoD Funding Policy for MWR Facilities. DoD funding policy for the construction of MWR facilities is provided by reference (am). A distinction is made for construction of facilities at new installations or where expansion is required because of a mission change, or influx of new units, or systems, and (in certain instances) for support of U.S. Forces deployed in foreign areas where DoD personnel do not have ready access to civilian community or commercial alternatives normally available in the United States. It is recognized that from time to time service unique situations or exigencies, that need immediate or more specific attention, may require deviation or exception to the basic funding policy. These deviations or exceptions will be reviewed by the Assistant Secretary of Defense, Acquisition and Logistics (ASD (A&L)) and Undersecretary of Defense Comptroller (USD (C)) on a case-by-case basis.

22. Defense Commissary Agency (DeCA) NAF Projects. DeCA, Fort Lee, Virginia has delegated authority and responsibility for the Military Services Commissary construction programs (both existing facilities and new facilities). DeCA Facilities Directorate establishes policies and procedures and provides guidance for Facility sustainment and construction activities to include: Program Execution for Major Construction; Major and Minor Construction Programs; Sustainment Programs;

Refrigeration/HVAC; Repair and Maintenance; Energy Programs; and, Environmental Programs that impact all commissaries.

a. DeCA Project Funding. The DeCA construction projects are funded with Commissary surcharge dollars. Surcharge dollars are used to renovate/refurbish existing facilities; build new facilities and equip all facilities, both existing and those approved for establishment. Annually, DeCA assesses the need for major investment dollars in priority and Service order via its Facility Condition Index (FCI) and prioritization model that utilizes four major elements including the Facility Condition, Operational Conditions, Long-Term Market Condition/Evaluation, and Military Service Assessments. All facilities projects for existing commissaries shall be submitted directly to HQ, DeCA ensuring coordination with the DeCA Zone Managers, applicable DeCA region Engineers, and local installation facilities engineers, as required.

b. New Commissary Requests. Requests to establish new commissaries on Marine Corps installations are submitted to the Deputy Commandant, Installations and Logistics (DC, I&L), who will assess the requests and submit to the DoD Commissary Operating Board (COB) for recommended approval if the installation meets the DoD established criteria points. All DoD criteria are considered in the aggregate. If the Board approves the recommendation, the COB Chairman then submits the Board's approved recommendation to the Principal Deputy Undersecretary of Defense, Personnel and Readiness (PDUSD (P&R)).

c. Final Approval. PDUSD P&R has final approval authority on all establishment requests. Installation Commanding Officers should assess the requirements and criteria for requesting an establishment per guidance provided within reference (an) prior to submitting request to the DC, I&L. The DC, I&L will provide a timely response to the installation Commanding Officer citing approval or disapproval of the establishment request with appropriate rationale for either direction.

23. Interim Relocatable Facilities

a. Accelerated or expanded fielding of equipment and unit activations often result in short-term facility requirements that cannot be satisfied through normal MILCON and Minor Construction programming timelines. IRFs are often a quick, cost effective, short term facility solution. IRFs can be inflatable or fabric structures, but typically are trailer units.

b. IRFs can fulfill emergent facility needs without the time constraints of permanent construction. Some pre-engineered or modular buildings that are designed to be quickly installed at a site, but left in place for long periods of time do not meet this definition and are not in consonance with the intent of this Manual and reference (ao) governing their use. See Appendix G for more information on IRF policy.

24. Japanese Host Nation Construction Programs

a. The Government of Japan (GOJ) has funded facilities for Armed Forces throughout Japan through various relocation construction programs and the Japanese Facilities Improvement Program (JFIP). Guidance is provided by references (ap) and (aq).

b. While funding for the projects comes from GOJ, there are U.S. responsibilities for planning, oversight, design, and collateral equipment. Similar to the DD Form 1391 project documents, the GOJ uses a Form 22 project

document. The COMUSFORCESJAPAN guidance letter provides additional detail on project submissions.

c. JFIP projects do not cover all needs—there are some projects that may require MILCON funding. The GOJ typically does not fund renovation projects, therefore the responsibility for maintenance and minor construction remains with the installation Commanding Officer.

25. Japanese Relocation Construction Programs

a. "Relocation" means a facility or area currently used by U.S. Armed Forces will be totally or partially released back to the GOJ and the facility or area will be relocated to a different facility or area. Reference (ar) initiated the relocation construction program.

b. The relocation is classified into two categories: One is at the initiative of the GOJ and the other at the initiative of the United States.

(1) The relocation at the initiative of the GOJ is effected to release a specific facility or area to solve land shortages, mainly in urban areas.

(2) The relocation at the initiative of the United States Government (USG) is effected to move or realign United States military units.

26. Japanese Facility Improvement Program. As follow-on to the cost-sharing agreements reached between the United States and the GOJ in 1977, the United States began to seek other avenues to increase the GOJ share of the cost of maintaining the Armed Forces in Japan. The United States recommended that facilities construction, particularly housing, be undertaken since this is a critical problem in Japan. In December 1978, the Japanese proposed a program for facilities construction which was accepted by the United States. This program is unique in that: No release of facilities is involved (no quid pro quo); this is a GOJ initiative; and funds come from the Japanese Defense Agency Budget.

a. JFIP Projects. The first projects were authorized in Japan Fiscal Year (JFY) 1979 and involved only housing and environmental protection projects. Since then, other types of projects have been designed and constructed. The JFIP, as a GOJ program, provides benefits to the construction industry and satisfies environmental and safety concerns of civilians living near United States bases.

b. All projects must be approved by local governments and civilian land owners, which have created some sensitive issues and negotiations for the GOJ. The JFIP has been expanded to include some operational type projects, though housing (both family and bachelor) will continue to receive the largest portion for some time.

27. Definitions

a. DoD Construction Agent. The USACE, NAVFAC, Air Force Civil Engineer Center (AFCEC), and construction agents assigned under reference (as).

b. Pacific Command (PACOM) Area. The geographic area for which the Combatant Commander Pacific (PACOM) has operational responsibility.

c. Host-Nation Funded Construction Program. Any construction program that provides facilities in direct support of DoD personnel or programs, and which is

funded partially or totally by the host nation in which DoD personnel are stationed, for example, JFIP.

d. Host-Nation Funded Project. Any construction project which is included in a host-nation funded construction program.

e. Central Funding System (CFS). Funds appropriated for military construction to offset United States design, construction surveillance, inspection, and overhead costs required to manage host-nation construction programs as authorized by reference (at).

28. Budget System. The JFY begins on 1 April of the same calendar year and ends on 31 March of the following year. For example, the period of JFY 2014 is from 1 April 2014 through 31 March 2015, while the period of USFY 2014 is from 1 October 2013 through 30 September 2014. The GOJ budget consists of annual expenditure and contract authorization over two fiscal years.

a. Annual Expenditure. Projects covered by this expenditure must be executed by awarding a contract and making payment within one fiscal year (FY). The budget appropriated for such projects may be carried over only to the following FY upon obtaining approval from the Finance Minister. GOJ projects implemented by using this budget mainly cover such work as survey/design, minor construction of facilities and construction of exterior support facilities.

b. Contract Authorization. The budget system in Japan is based on a single fiscal year cycle. However, there are those projects which will be executed over more than one year. Contract authorization is allowed for such projects. Under this system the contract is awarded in the first FY and the payment and work are implemented over two FYs. Award of the contract is required in the first FY.

c. Survey and Design. Normally, survey and design of JFIP projects is executed by using annual expenditure in the initial FY while the construction of the facility itself is executed by awarding a contract with contract authorization in the second FY. The construction of exterior support facilities is completed by using another annual expenditure in the third FY.

29. Host Nation Funding. Host-nation support should be actively sought to satisfy Marine Corps construction requirements in Japan before United States MILCON funds are requested. Only if host-nation funding is unlikely, or will not result in the timely satisfaction of United States requirements, or if there are other compelling reasons to proceed with construction programs, will the MILCON program be considered as the acceptable funding source. Collateral equipment and specialized built-in equipment not provided by GOJ must be funded by the U.S. Equipment and project funding shall be coordinated to minimize delays. The installation Commanding Officer is responsible for requesting and budgeting for U.S.-funded equipment in order to meet mission requirements.

a. MILCON Budget. A project funded by the host nation may not also be included in the MILCON budget. Submission of projects in both MILCON programs and host-nation funded construction program (HNFCP) is authorized. The MILCON program will lag the HNFCP by a minimum of two United States FYs.

(1) This system will allow timely programming of a project if host-nation funding is denied and should be used for those projects where denial is a concern.

(2) Host-nation funded projects normally will be designed and constructed to meet U.S. MILCON program criteria and standards for reliability, maintainability, function, personnel health, safety, and environment.

b. Environmental. Pollution abatement procedures at federal facilities outside the United States prescribed in reference (au) shall be considered in HNFCP projects.

c. Programming. U.S. MILCON and O&MMC minor construction projects may be programmed to complement host-nation funded projects, as required, to provide usable facilities where differing construction standards or material availability are not adequate for United States needs.

d. Explosive Safety. DoD components must submit plans to the DDESB for host-nation funded projects for new construction or modification of fixed or movable ammunition and explosives facilities, including facilities in their proximity, before host nation action on the project is initiated. Reference (av) applies.

30. Marine Corps Responsibility and Authority

a. HQMC

(1) Monitor the planning, programming, design and construction of HNFCP built on Marine Corps installations in PACOM.

(2) Ensure that HNFCP projects are not included in annual MILCON budget requests.

b. Installation: Request the U.S. funds to procure and install U.S. equipment that is collateral to the Host Nation funded project.

c. Commander, Marine Corps Installations Pacific (COMMCIPAC)

(1) Shall complete U.S. Forces Japan (USFJ) Form 22 for all projects submitted for host-nation funding. Copies of these forms shall be provided to the HQMC LF MILCON no later than 1 September for the next JFY for information before formal submission to the Japanese Facilities Subcommittee.

(2) The proposed host nation construction plan shall be provided annually to HQMC LF MILCON by 1 Dec. The listing should include the status of all projects proposed for funding in the upcoming Japanese Fiscal Year (JFY), and the status of all prior year projects, including those which have been completed in the past year.

(3) The reporting shall include the anticipated level of effort and funding (in Yen) for the proposed projects. Additionally, by 1 Jun, a separate list shall be provided to HQMC LF MILCON, showing the final approved JFIP program for the current JFY.

31. Project Numbering System

a. JFIP projects have gone through a series of numbering systems. Older projects were identified and numbered by a 10-place alpha-numeric code, hyphenated into four separate segments of information; i.e., 84-MC-6099-03.

(1) JFY submitted for funding - (84).

(2) Service Sponsor - (MC) = Marine Corps.

(3) Special Area Number - (6099).

(4) Priority Number within JFY - (03) by location.

b. Currently, projects will continue to carry six places: MC9999, which is the Service plus 4-digit project number. This can be further modified with identifiers that show the funding category.

32. Programming

a. Recommended Project Funding Sources

(1) JFIP. JFIP is the preferred source of funding and will specifically be used for:

(a) Family housing and all community support facilities except income producing NAF projects.

(b) Replacement of existing facilities due to environmental and/or safety deficiencies.

(c) All other projects not specifically identified below.

(2) MILCON. MILCON is the preferred source of funding and will specifically be used for: Renovation or expansion of existing facilities.

(a) "Offensive" operational projects, those which increase the capability or capacity to conduct offensive operations; specifically new ammunition storage and new petroleum storage/distribution facilities.

(b) Politically contentious projects - those not receiving the backing of local politicians.

(c) Classified or sensitive projects.

(d) Operational communications projects.

(3) NAF. NAF is the preferred source of funding for: Exchanges, commissaries, bowling alleys, clubs, temporary lodging facilities, and other income producing projects.

b. Prioritization of Projects. Projects are prioritized by US Forces, Japan and objectively scored based upon their importance and weight, regardless of Service. MCIPAC has oversight of the JFIP program and should be consulted for the most current policy and project status.

33. Korean Host Nation Construction Programs. Similar to the JFIP program, there are available funds from the Government of South Korea to fund local requirements. Host Nation Construction guidance will be provided by PACOM. COMMCIPAC has oversight of the Korea Host Nation Construction program.

34. Conclusion. The implementation phase of the MCFPPS results in tangible new assets that improve the ability of the installation to support its mission. Facilities are constructed to meet new missions as well as to replace those buildings that have exceeded their economic life. Failure to follow good planning practices may lead to a poorly laid-out base, leading to operational and training impacts. On the other hand, utilizing the well thought-out processes of the earlier chapters will result in new facilities that show physical evidence that the installation remains relevant and effective into the future.

a. MILCON Guidance. At the beginning of each annual MILCON submission cycle, HQMC LF/MCICOM will provide a MILCON Guidance Letter. This guidance will give specific instructions on the project documents package contents, milestones, and goals. Careful adherence to these instructions can ensure that the installation's project submission is complete, valid, and is favorably considered for programming in that FY.

b. Future Policy Guidance and Updates. Please refer to the MCICOM website for updates to this instruction and any additional guidance that may assist in the successful planning and programming of construction projects. The individuals at HQMC LF/MCICOM, listed in the guidance letter, are also available for assistance in clarifying policy or assisting in challenging facilities issues.

c. Environmental Planning. If environmental planning documentation has not been completed, provide point of contact and current status of the analysis. Without adequate environmental planning documentation, funds will not be released for execution, the site cannot receive final approval, nor can construction begin.

d. Navy Review. Projects requiring review by the DON, such as airfield or explosives safety shall also fill out and attach the additional site approval forms found on the NAVFAC website.

Chapter 9

Validation

1. Validation

a. Validation occurs throughout the planning and programming process. Validation entails reviewing data and products for accuracy and clarity, as well as larger, system-wide reporting of MCFPPS results for users. The planning system and its separate phases are evaluated on how they improve efficiency or mission capability. The final documentation resulting from a new construction or capital improvement project is recorded on the DD Form 1354 and then entered into the iNFADS system.

b. This becomes the basis for updating the records and reviewing steps one through four in the cycle, verifying that the assets meet the mission requirements. Likewise, following a renovation project, the condition of the facility should be updated in the iNFADS property record and FPD documents.

2. Quality Control in the Planning System

a. The value of having a systematic approach should be evident by the final outcome of an installation meeting the needs of the Marine Corps units. This is an imperfect process but one that seeks continuous improvement. While not attempting to please everyone, the installation Commanding Officer continually balances the needs of the user with the long-term stewardship of the facilities and land.

b. Quality control seeks to improve the processes and policies of the system to improve the level of service and long-range sustainability of the installation. Improvements are made by receiving feedback from all involved, seeking innovative solutions, and ensuring that the installation stays relevant to the various needs of the Marine Corps. When the MCFPPS is not correctly followed, there will be problems in supporting the project and ensuring facilities are in place and on time. Poor planning often ends up costing the installation more over time, due to inefficiencies, costly construction change-orders, and retro-fitting to correct prior errors. The Master Plan documents the long range goals—ideally, the development of the installation should represent progress toward meeting the goals of the Master Plan.

3. Long-Term Planning Goals

a. The long-term success of an installation is measured by its relevance to meeting the current and planned missions. Installations remain relevant by ensuring their current capabilities are sustainable and by their ability to adapt to changes in future missions. By staying proactive with the surrounding community, the pressures of encroachment may be resisted, enabling installations to continue training and operations.

b. Compliance with environmental policies and best practices will minimize the damage to ecosystems, thus maintaining environmental quality and forestalling regulatory oversight and penalties. Applying the principles of sustainable development will enhance the capabilities of the installation to reduce the consumption of water and other resources, while creating facilities that are easier to maintain over their life-cycle. By designing buildings with flexibility and long-term capability in mind, their ability to support new equipment or missions will reduce the needs for demolition and new construction.

c. Further, installations need to consider life-cycle costs when recommending new assets. An efficient complex of facilities may offset the construction costs by reductions in wasted man-hours, or by providing a superior maintenance capability that increases the weapons system readiness. In the current fiscal climate, however, renovation or conversion of facilities will be encouraged over new construction.

4. Feedback to the Planning System. Improvements to the process require the involvement of all users and participants. The user who identifies shortfalls in the ability of a particular building to maintain a weapons system may lead to a change of facilities criteria (FC) that, in turn, will help the design and construction of future buildings. On the other hand, by keeping silent, the design flaws may be perpetuated throughout the Marine Corps by the deficient criteria, adversely affecting other units. HQMC LF/MCICOM works with the DON and other agencies to continuously improve the FC. Involvement by the local planners and users at the installation level provides many useful improvements to the process. Policies are often a solution to a process deficiency but, may create problems in another area. While many policies are the promulgation of law or the dictates from the DoD, other policies or guidance may be adapted to better serve the needs of the Marine Corps. Some of the policy adverse impacts are not visible except at the installation level. Thus, it is incumbent upon the regions and installations to provide feedback on ways to streamline burdensome policies.

5. Maintaining Accurate Records

a. Much of the MCFPPS is dependent upon accurate information. Tools to automate processes and assist in planning are dependent upon accurate data within iNFADS. GeoFidelis seeks to integrate digital mapping (GIS) with facilities databases. Use of inaccurate data may lead to costly planning errors, affecting project design and construction.

b. Conversely, attention to capturing accurate data and comparing existing constraints with planned development may allow an installation to forecast problems and have solutions in place to minimize disruption to the activities on base. Therefore, it is incumbent upon the installation planner to ensure that all planning documentation is accurate, verified, and available.

c. Gaps in Data. Gaps in data for existing conditions should be identified and, when possible, the information may be gathered by special survey or studies. Property record data must be accurate and the DD Form 1354 should be scrutinized to ensure that all relevant data is entered correctly. While the Resident Officer in Charge of Construction (ROICC) or FEAD is responsible for compliance with the contract, it is important for the planner to verify that the installation received what was expected from the construction project.

d. New buildings should be identified on station maps, in the installation GIS, and location information provided to security and fire departments, as well as other affected units. Building tenant profiles should be periodically verified to assist in accurate space planning, and to avoid “mission creep” or encroachment into other areas. With the increased dependence upon technology to assist the planning processes, the importance of accurate records increases. The enhancement to quality of the base planning products makes accurate record-keeping well worth the efforts.

Appendix A

Acronyms and Abbreviations

Acronym/ Abbreviation	**Long Title**
ACE	Aviation Combat Element
ADC I&L (LF)	Assistant Deputy Commandant (Installations and Logistics) (Facilities)
ADP	Area Development Plan
AE	Asset Evaluation
AICUZ	Air Installation Compatible Use Zone
AIS	Annual Inspection Survey
ASD (A&L)	Assistant Secretary of Defense (Acquisition and Logistics))
ASD (MR&L)	Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics
ASN (E,I&E)	Assistant Secretary of the Navy (Energy, Installations, and Environment)
AT/FP	Anti-Terrorism/Force Protection
AVPLAN	Aviation Plan
BFR	Basic Facilities Requirement
BFRL	BFR List
BMP	Best Management Practice
CCN	Category Code Number
CECOS	Civil Engineer Corps Officer School
CFS	Central Funding System
CIP	Capital Improvements Plan
CMC	Commandant of the Marine Corps
COB	Commissary Operating Board
COLS	Common Output Level of Service
COMMCICOM COMMARFORCOM COMMARFORPAC COMMARFORRES	Commander, Marine Corps Installations Command Commander, Marine Corps Forces Command Commander, Marine Corps Forces Pacific Commander, Marine Forces Reserves
COMUSFORCESJAPAN	Commander, U.S. Forces, Japan
COMUSPACOM	Commander, U.S. Pacific Command
CONOPS	Concept of Operations
CONVFR	Convert from
CONVTO	Convert to
CORRS	Commanding Officers Readiness Reporting System
COTS	Commercial off the shelf
CPLO	Community Plans and Liaison Officer
DAR	Defense Access Roads
DC Aviation (APP)	Deputy Commandant Aviation (Planning and Programming Division)
DDESB	Department of Defense Explosive Safety Board
DeCA	Defense Commissary Agency
DEMOL	Demolish

Acronym/ Abbreviation	Long Title
DISPOS	Disposable assets
DLA	Defense Logistics Agency
DoD	Department of Defense
DODERP	DoD Environmental Restoration Program
DODI	Department of Defense Instruction
DoJ	Department of Justice
DON	Department of the Navy
DUSD (EI&E)	Deputy Undersecretary of Defense (Energy, Installations, and Environment)
EA	Environmental Assessment
ECIP	Energy Conservation Incentive Program
ECP	Encroachment Control Plan
EE	Engineering Evaluation
EIRB	Environmental Impact Review Board
EIS	Environmental Impact Statement
EO	Executive Order
EPG	Electronic Project Generator
ESO	Explosives Safety Officer
ESQD	Explosives Safety Quantity Distance
EUL	Enhanced Use Lease
FAA	Federal Aviation Administration
FBI	Federal Bureau of Investigation
FC	Facilities Criteria
FCI	Facility Condition Index
FEAD	Facilities Engineering and Acquisition Division
FEC	Facilities Engineering Command
FIP	Facility Improvement Program
FIR	Facilities Impact Review
FPD	Facilities Planning Document
FRP	Facilities Requirements Plan
FSR	Facilities Support Requirements
FSRM	Facilities Sustainment, Restoration, and Modernization
FYDP	Future Year Defense Plan
GEN	General
GOJ GSA	Government of Japan General Services Administration
HERF	Hazardous Emissions for Radio Frequency
HERP	Hazard from Electronic Radiation to Personnel
HNFCP	Host-Nation Funded Construction Program
HQMC	Headquarters, U.S. Marine Corps
HRO	Human Resources Office
IAB	Installation Planning Board

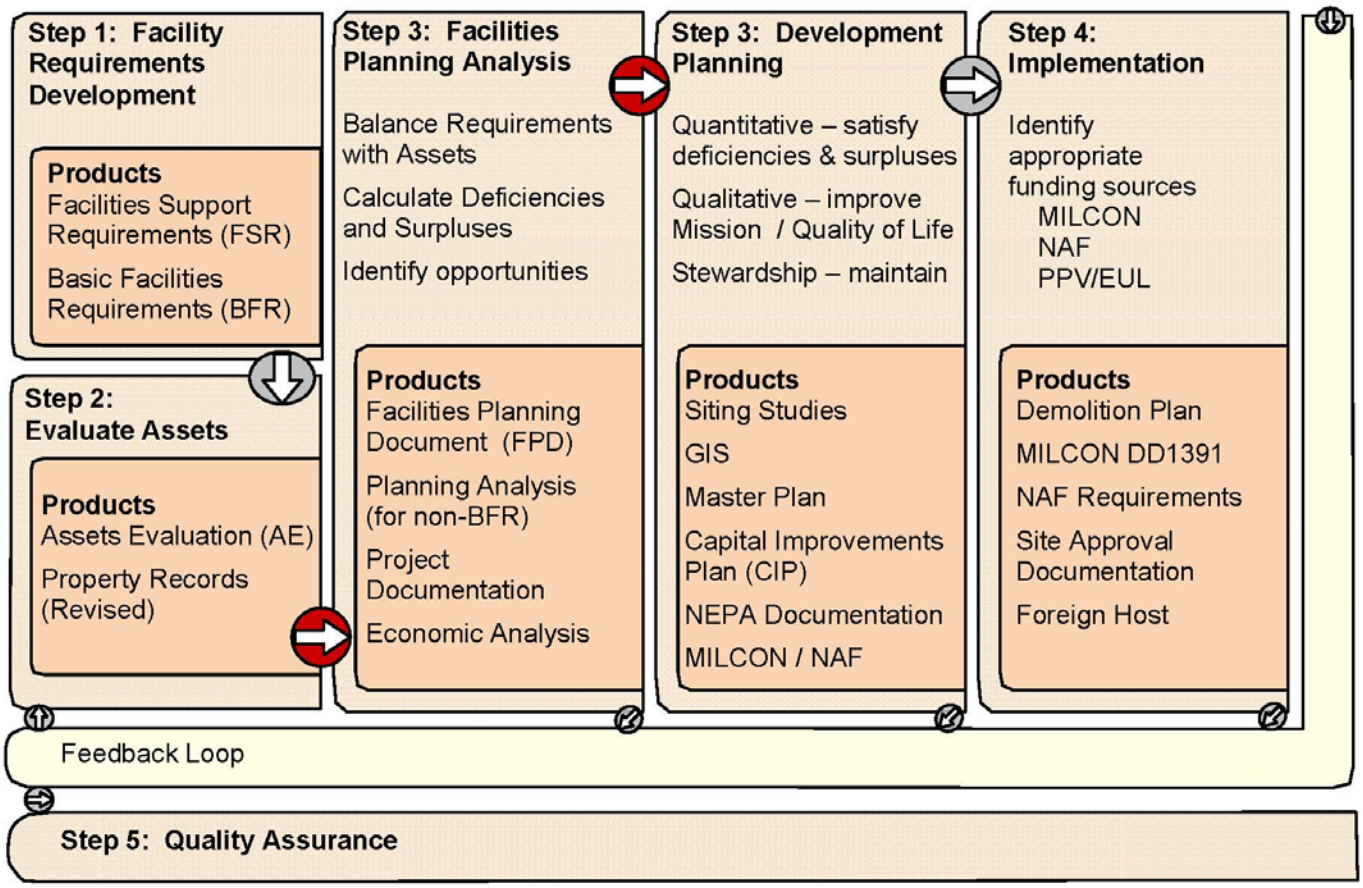
Acronym/ Abbreviation	Long Title
ICRMP	Integrated Cultural Resources Management Plan
iNFADS	internet Naval Facilities Assets Data Store
INRMP	Integrated Natural Resources Management Plan
IPT	Integrated Product Team
IR	Installation Restoration
IRF	Interim Relocatable Facility
JCS	Joint Chiefs of Staff
JFIP	Japanese Facilities Improvement Program
JFY	Japan Fiscal Year
JLUP	Joint Land Use Plan
JSIVA	Joint Staff Integrated Vulnerability Team
LEED	Leadership in Energy and Environmental Design
LOE	Level of Effort
LOGCOM	Logistics Command
LOS	Level of Service
MAGTF MARFORRES	Marine Air Ground Task Force Marine Forces Reserves
MCCDC	Marine Corps Combat Development Command
MCCS	Marine Corps Community Services
MCFPPS	Marine Corps Facilities Planning and Programming System
MCI	Marine Corps Installations
MCICOM	Marine Corps Installations Command
MCO	Marine Corps Order
MCSC	Marine Corps Systems Command
METL	Mission Essential Task List
MILCON	Military Construction
MILCON IPL	Military Construction Integrated Projects List
MILCON RL	Military Construction Requirements List
MPI	Master Planning Institute
MROC	Marine Corps Requirements Oversight Council
MTMC	Military Traffic Management Command
MTP3	MILCON Team Planning and Programming Process
MWR	Morale Welfare and Recreation
NAF	Non-Appropriated Fund
NAVAIRSYSCOM	Naval Air Systems Command
NAVFAC	Naval Facilities Engineering Command
NAVINST	Naval Instruction
NAVMC	Navy Marine Corps
NAVMEDCOM	Naval Medical Command
NEPA	National Environmental Policy Act
NITC	NAVFAC Information Technology Center
NMC	Naval Munitions Command

Acronym/ Abbreviation	Long Title
NSF	Net Square Feet
O&MMC	Operations and Maintenance, U.S. Marine Corps
O&MMCR	Operations and Maintenance, U.S. Marine Corps Reserves
OSHA	Occupational Safety and Health Act
OICC	Officer in charge of construction
OPNAVINST	Operational Naval Instruction
OPR	Office of Primary Responsibility
OSD	Office of the Secretary of Defense
OUTG-C	Out-grants – continue
PDUSD P&R	Principal Deputy Under Secretary of Defense for Personnel and Readiness
PERT	Performance Evaluation and Review Technique
PM	Project Manager
PMC	Procurement, Marine Corps
POA&M	Plan of Actions and Milestones
POM	Program Objective Memorandum
PP&O	Plans, Policies, and Operations
PPBE	Planning, Programming, Budgeting and Execution
PPV	Public-Private-Venture
PWD	Public Works Department
RAICUZ	Range Air Installation Compatible Use Zone
RCUZ	Range Compatible Use Zone
REASFR	Reassign from
REASTO	Reassign to
REIR	Record of Environmental Impact Review
REPLCE	Replace
RFP	Request for Proposal
ROICC	Resident officer in charge of construction
RPAO	Real Property Accountability Officer
RPI	Real Property Inventory
RPO	Real Property Officer
SDZ	Surface Danger Zone
SECDEF	Secretary of Defense
SF	Square Feet
SHPO	State Historic Preservation Office
SMS	Sustainment Management System
SOI	Secretary of the Interior
SOW	Scope of Work
STD	Standard
SWOT	Strengths, Weaknesses, Opportunities, and Threats
T/E	Table of Equipment
T/O	Table of Organization

Acronym/ Abbreviation	Long Title
TC	Cubic Feet
TECOM	Training and Education Command
TFSD	Total Force Structure Division
TFSMS	Total Force Structure Management System
TIP	Training Input Plan
TMP	Transportation Management Plan
TOD	transit-oriented development
TOECR	Table of Organization/Equipment Change Request
TPAA	Total Proposed Adequate Assets
UDP	Unit Deployment Program
UEM	Utilities and Energy Management
UFC	Unified Facilities Criteria
UIC	Unit Identification Code
UMC	Unspecified Minor Construction
USD (C)	Undersecretary of Defense Comptroller
UNS	Universal Needs Statement
USACE	U.S. Army Corps of Engineers
USC	United States Code
USFJ	U.S. Forces Japan
USG	United States Government
USGBC	US Green Building Council
USMC	United States Marine Corps
UUNS	Urgent Universal Needs Statement
WDZ	Weapons Danger Zone
WEBSAR	Web Site Approval Request

Appendix B

Marine Corps Facilities Planning and Programming System (MCFPPS)



Marine Corps Facilities Planning and Programming System: Five-Step Planning Process

Appendix C

DOTMLPF/C Process

1. Breakdown

a. Go through checklist.

b. Determine

(1) What has been done?

(2) What still needs to be completed?

(3) Who has the lead?

(4) What needs to be added that is not on the list?

c. Fill out Funding Requirement Spreadsheet.

d. Fill out Compensation Requirement Spreadsheet.

e. Assign taskers and due dates to appropriate agencies.

f. NOTE: For all following PILLARS, identify all USMC Funding requirements broken out by Appropriation by year to P&R.

2. DOTMLPF/C Pillars

a. Doctrine

(1) Determine if doctrine exists.

(2) Determine if doctrine is current.

(3) Identify doctrinal gaps.

(4) Review coalition doctrine.

(5) Joint publication synchronization.

(6) Develop POA&M for all doctrinal changes required.

(7) Provide monthly status reports for all actions.

b. Organization

(1) Determine OPLAN impacts.

(2) Develop mission statement.

(3) Develop T/O&E.

(4) Implement T/O&E into TFSMS.

(5) Determine “mirror imaging” impacts.

(6) Determine Navy impact.

(7) Define IOC/FOC.

(8) Develop 5400 Bulletin.

(9) Determine command relationships.

(10) Identify recommended compensation.

(11) Determine requirement to reconstitute capabilities removed from FMF.

(12) Determine additional maintenance/support requirements.

(13) Determine Joint requirement impact.

(14) Determine I&L impacts.

(15) Determine new unit names.

(16) Determine new unit locations and affiliated higher headquarters.

(17) Develop METLs.

(18) Determine changes required to current METLs.

(19) Determine manning precedence level to be assigned.

(20) Determine service responsibility for SORTS reporting.

(21) Develop POA&M for all organizational actions required.

(22) Provide monthly status reports for all actions.

c. Training

(1) Determine new manpower training requirements.

(a) Assess training throughput.

(b) Determine school seat requirements.

(c) Determine instructor requirements (USMC Internal & External).

(2) Develop T&R Manual.

(3) Operating procedures (Safety SOP/Test).

(4) Determine Inter-Service training necessary.

(5) Review Inter-Service training agreements.

(6) Develop MOS road-maps.

(7) Determine MTT/NETT requirements.

(8) Determine MOS Manual impacts.

(9) Determine MOS related certification requirements.

(10) Determine incidental certification requirements.

(11) Determine additional annual reserve training requirements.

(12) Validate, develop and or implement all formal school house curriculums.

(13) Determine formal school requirement.

(14) Develop PME for all Service and Joint schools.

(15) Develop POA&M for all training actions required.

(16) Provide monthly status reports for all actions.

d. Materiel

(1) Determine sourcing plan for equipment.

(a) Determine cost and develop appropriate budget submissions.

(b) Prioritize sourcing with other sourcing efforts.

(c) Develop procurement plans/estimates of supportability (timeline).

(d) Develop new equipment fielding plans.

(e) Develop redistribution plans.

(2) Develop disposition plan for equipment currently on hand by units that may be used as compensation for this activation.

(a) Develop redistribution plans.

(b) Develop foreign military sales and DRMO.

(c) Develop Inter-Service transfer plan.

(3) Determine AAO impacts (GWOT, MPF, etc.).

(4) Determine depot level impacts.

(5) Determine intermediate level impacts.

(6) Determine new combat development issues.

(7) Determine impacts on maintenance/readiness.

(8) Determine equipment life cycle issues.

(9) Determine impact on classes of supply.

(10) Determine impact on ammunition requirement.

(11) Develop SORTS Assessment and POA&M for all materiel actions required.

(12) Provide monthly status reports for all actions.

e. Leadership

(1) Determine communications plan.

(2) Determine command relationships.

(3) Develop service letter of agreement between (if necessary):

(a) C2 relationships.

(b) MOAs, MOUs.

(4) Determine CMS/EKMS requirements.

(5) Develop change management plan.

(6) Develop POA&M for all leadership actions required.

(7) Provide monthly status reports for all actions.

f. Personnel

(1) Determine OPTEM/PERSTEMPO impacts.

(2) Determine reserve impacts.

(3) Determine command screening issues.

(4) Determine E8/E9 screening issues.

(5) MOS assignment and conversion policy.

(6) Maintenance and support MOSs (also with organization).

(7) FSRs in place.

(8) Determine accessions numbers.

(9) Develop mitigation flow plan for IFLEX issues.

(10) Generate grade shaping assessment.

(11) Develop staffing plan to achieve IOC & FOC requirements.

(12) Determine selective reenlistment bonus (SRB)/lateral move impacts.

(13) Determine ASVAB/GCT needs impact.

(14) Identify and approve offset.

(15) Determine P2T2 impact.

(16) Determine unit precedence impact (id bill payers).

(17) Determine recruiting impact.

(a) Determine supportability of non-prior/prior service.

(b) Determine IMA impact.

(18) Determine legislative constraint impact.

(19) Develop SORTs assessment.

(20) Determine NAVY impact.

(21) Determine civilian impact.

(22) Determine retention/FTAP/STAP impact.

(23) Develop POA&M for all personnel actions required.

(24) Provide monthly status reports for all actions.

g. Facilities

(1) Conduct facilities assessment.

(a) Determine MILCON impacts and timeframe.

(b) Determine environmental impact (NEPA requirements).

(c) Determine building conversion impacts.

(d) Determine training/schoolhouse/billeting impact.

(2) Determine base/facilities support impact.

(3) Determine RTC impact.

(4) Develop an integrated facilities plan that will meet IOC/FOC projected dates.

(5) Develop facilities addendum to Service letter of agreement (if necessary).

(6) Develop POA&M for all facilities actions required.

(7) Provide monthly status reports for all actions.

h. Cost. What are the specific Marine Corps and PILLAR costs (cost savings and/or cost avoidance) for implementing specific initiative?

3. Common Pitfalls

a. Ignoring second and third order effects (Examples: Armory requirements, training the trainers).

b. Unrealistic procurement and MILCON timelines (Example: Not accounting for funding and contractual lead time).

c. Using best case scenarios (Example: All materiel funding will be provided through supplemental) and provide contingency plan if best case scenario falls through.

d. Using different data among DOTMLPF pillars. Standardize data set early on (i.e., use the same Fiscal Year authorized strength report and cost assumptions throughout working group).

e. Planning in a vacuum among DOTMLPF pillars (cross pollinate early and often).

f. Forgetting about the POM cycle, not only when you need it, but when you need to ask for it.

Appendix D

Sample Forms/Reports

1. Example FSR Elements

PERSONNEL PROJECTIONS

Report Info: Displays Chargeable Personnel by Installation UIC, and Unit Name

Record Count					2011									Total(Fiscal Year)
					Civilian Graded/ Ungraded Chargeable	Civilian NAFI Chargeable	Marine Active Chargeable		Marine Reserve AR Chargeable	Marine Reserve IMA Chargeable		Navy Active Chargeable		
					Other	Other	Enlisted	Officer	Enlisted	Enlisted	Officer	Enlisted	Officer	
MCAS CHERRY POINT	M00203	HQTRS 2D MAW	NC	DNNL		1	256	84		10	16	8	8	383
		Total(Unit Name)				1	256	84		10	16	8	8	383
	M00208	6TH SP SEC COMM TM HQTRS 2D MAW	NC	DNNL			15							15
		Total(Unit Name)					15							15
	M00209	DET B MWCS-28 MACG-28 2D MAW	NC	DNNL			238	10						248
		Total(Unit Name)					238	10						248
	M00210	DET A MWCS-28 MACG-28 2D MAW	NC	DNNL			239	10						249
		Total(Unit Name)					239	10						249
	M00211	CALIB LAB HQTRS 2D MAW	NC	DNNL			6							6
		Total(Unit Name)					6							6
	M00212	HQTRS MWCS-28 MACG-28 2D MAW	NC	DNNL			75	9						84
		Total(Unit Name)					75	9						84
	M00213	2D MAW BAND HQTRS 2D MAW	NC	DNNL			50	1						51
		Total(Unit Name)					50	1						51
	M00214	HQTRS MAG-14 2D MAW	NC	DNNL			80	23				8	5	116
		Total(Unit Name)					80	23				8	5	116
	M00218	MARINE AVN AIRCREW TRNG SYSTEM HQTRS 2D MAW	NC	DNNL	3		6	8						17
		Total(Unit Name)			3		6	8						17
	M00219	DET C MWCS-28 MACG-28 2D MAW	NC	DNNL			239	10						249
		Total(Unit Name)					239	10						249
	M00221	DET HQTRS MACG-28 2D MAW	NC	DNNL			14	8				1	1	24
		Total(Unit Name)					14	8				1	1	24
	M00251	MP CO 2D MAW	NC	DNNL			88	4						92
		Total(Unit Name)					88	4						92
	M00317	HQTRS	NC	DNNL	1		40	14				4	3	62

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2. Navy Loading

Row Labels	Sum of AUTH_CFY	Sum of AUTH_FY1	Sum of AUTH_FY2	Sum of AUTH_FY3	Sum of AUTH_FY4	Sum of AUTH_FY5
AZ, YUMA	126	123	123	123	123	123
	0	0	0	0	0	0
AD	65	65	65	65	65	65
CN	7	7	7	7	7	7
DH	54	51	51	51	51	51
CA, BARSTOW	20	20	20	20	20	20
	0	0	0	0	0	0
AD	1	1	1	1	1	1
DH	19	19	19	19	19	19
CA, BRIDGEPORT	18	18	18	18	18	18
	0	0	0	0	0	0
AD	15	15	15	15	15	15
DH	3	3	3	3	3	3
CA, CAMP PENDLETON	3368	3347	3346	3346	3346	3346
AD	1648	1661	1661	1661	1661	1661
CN	195	195	195	195	195	195
DH	1265	1231	1231	1231	1231	1231
PP	0	0	0	0	0	0
RA	257	257	256	256	256	256
RT	3	3	3	3	3	3
(blank)	0	0	0	0	0	0
CA, LEMOORE	217	217	217	217	217	217
	0	0	0	0	0	0
AD	217	217	217	217	217	217
CA, MIRAMAR NAS	329	328	328	328	328	328
	0	0	0	0	0	0
AD	177	176	176	176	176	176
CN	19	19	19	19	19	20
DH	133	133	133	133	133	132
CA, SAN DIEGO	403	402	402	402	402	402
	0	0	0	0	0	0
AD	397	396	396	396	396	396
DH	6	6	6	6	6	6
CA, TWENTY NINE PALMS	626	622	622	616	616	614
	0	0	0	0	0	0
AD	388	389	389	389	389	389
CN	9	9	9	9	9	9
DH	229	224	224	218	218	216
GA, ALBANY	14	14	14	14	14	14

3. Expanded Training Input Plan (TIP)

ACTY_UIC	ACTY_LONG_NAME	MAJOR_CLMT	MAJ_CLMT_NAME	BIN	AUTH_MPWR_TYPE	APPROP_CATEGORY	MPWR_RSRC_CODE	AUTH_CFY	AUTH_FY1	AUTH_FY2	AUTH_FY3	AUTH_FY4	AUTH_FY5	HMPRT_GEO_LOC	HMPRT_GEO_LOC_NAME	ACTUAL_GEO_LOC	PARENT_ACTY_UIC
32547	BRMEDCLINIC MCAS MIRAMAR	18	BUMED	3696284	C	OMN	DH	1	1	1	1	1	1	2062194	CA, MIRAMAR NAS	2062194	259
32547	BRMEDCLINIC MCAS MIRAMAR	18	BUMED	3696285	C	OMN	DH	1	1	1	1	1	1	2062194	CA, MIRAMAR NAS	2062194	259
32547	BRMEDCLINIC MCAS MIRAMAR	18	BUMED	3696287	C	OMN	DH	1	1	1	1	1	1	2062194	CA, MIRAMAR NAS	2062194	259
32547	BRMEDCLINIC MCAS MIRAMAR	18	BUMED	3731036	C	OMN	DH	1	1	1	1	1	1	2062194	CA, MIRAMAR NAS	2062194	259
32547	BRMEDCLINIC MCAS MIRAMAR	18	BUMED	3731037	C	OMN	DH	1	1	1	1	1	1	2062194	CA, MIRAMAR NAS	2062194	259
32547	BRMEDCLINIC MCAS MIRAMAR	18	BUMED	3731038	C	OMN	DH	1	1	1	1	1	1	2062194	CA, MIRAMAR NAS	2062194	259
32547	BRMEDCLINIC MCAS MIRAMAR	18	BUMED	3731039	C	OMN	DH	1	1	1	1	1	1	2062194	CA, MIRAMAR NAS	2062194	259
32547	BRMEDCLINIC MCAS MIRAMAR	18	BUMED	3731040	C	OMN	DH	1	1	1	1	1	1	2062194	CA, MIRAMAR NAS	2062194	259
32547	BRMEDCLINIC MCAS MIRAMAR	18	BUMED	3731041	C	OMN	DH	1	1	1	1	1	1	2062194	CA, MIRAMAR NAS	2062194	259
32547	BRMEDCLINIC MCAS MIRAMAR	18	BUMED	3731042	C	OMN	DH	1	1	1	1	1	1	2062194	CA, MIRAMAR NAS	2062194	259
32547	BRMEDCLINIC MCAS MIRAMAR	18	BUMED	3731043	C	OMN	DH	1	1	1	1	1	1	2062194	CA, MIRAMAR NAS	2062194	259
32547	BRMEDCLINIC MCAS MIRAMAR	18	BUMED	3731044	C	OMN	DH	1	1	1	1	1	1	2062194	CA, MIRAMAR NAS	2062194	259
32547	BRMEDCLINIC MCAS MIRAMAR	18	BUMED	3731045	C	OMN	DH	1	1	1	1	1	1	2062194	CA, MIRAMAR NAS	2062194	259
32547	BRMEDCLINIC MCAS MIRAMAR	18	BUMED	3731046	C	OMN	DH	1	1	1	1	1	1	2062194	CA, MIRAMAR NAS	2062194	259
39912	NAVSPECWAR ATC DET YUMA	88	SPECWARCOM	200149	E	MPN	AD	1	1	1	1	1	1	2040620	AZ, YUMA	2040620	68869
39912	NAVSPECWAR ATC DET YUMA	88	SPECWARCOM	703242	E	MPN	AD	1	1	1	1	1	1	2040620	AZ, YUMA	2040620	68869
39912	NAVSPECWAR ATC DET YUMA	88	SPECWARCOM	703243	E	MPN	AD	1	1	1	1	1	1	2040620	AZ, YUMA	2040620	68869
39912	NAVSPECWAR ATC DET YUMA	88	SPECWARCOM	743892	E	MPN	AD	1	1	1	1	1	1	2040620	AZ, YUMA	2040620	68869
39912	NAVSPECWAR ATC DET YUMA	88	SPECWARCOM	743893	E	MPN	AD	1	1	1	1	1	1	2040620	AZ, YUMA	2040620	68869
39912	NAVSPECWAR ATC DET YUMA	88	SPECWARCOM	743894	E	MPN	AD	1	1	1	1	1	1	2040620	AZ, YUMA	2040620	68869
39912	NAVSPECWAR ATC DET YUMA	88	SPECWARCOM	743895	E	MPN	AD	1	1	1	1	1	1	2040620	AZ, YUMA	2040620	68869
39912	NAVSPECWAR ATC DET YUMA	88	SPECWARCOM	743896	E	MPN	AD	1	1	1	1	1	1	2040620	AZ, YUMA	2040620	68869
39912	NAVSPECWAR ATC DET YUMA	88	SPECWARCOM	1369003	E	MPN	AD	1	1	1	1	1	1	2040620	AZ, YUMA	2040620	68869
39912	NAVSPECWAR ATC DET YUMA	88	SPECWARCOM	1369005	E	MPN	AD	1	1	1	1	1	1	2040620	AZ, YUMA	2040620	68869
39912	NAVSPECWAR ATC DET YUMA	88	SPECWARCOM	1369006	E	MPN	AD	1	1	1	1	1	1	2040620	AZ, YUMA	2040620	68869
44248	NAVFAC ROICC CHERRY POINT	25	NFAENGCOM	83801	O	MPN	AD	1	1	1	1	1	1	2370885	NC, CHERRY POINT	2370885	62470
44248	NAVFAC ROICC CHERRY POINT	25	NFAENGCOM	83804	O	MPN	AD	1	1	1	1	1	1	2370885	NC, CHERRY POINT	2370885	62470
44248	NAVFAC ROICC CHERRY POINT	25	NFAENGCOM	89850	O	MPN	AD	1	1	1	1	1	1	2370885	NC, CHERRY POINT	2370885	62470
44248	NAVFAC ROICC CHERRY POINT	25	NFAENGCOM	3560736	C	OMN	DH	1	1	1	1	1	1	2370885	NC, CHERRY POINT	2370885	62470
44248	NAVFAC ROICC CHERRY POINT	25	NFAENGCOM	3562693	C	OMN	DH	1	1	1	1	1	1	2370885	NC, CHERRY POINT	2370885	62470
44248	NAVFAC ROICC CHERRY POINT	25	NFAENGCOM	3562714	C	OMN	DH	1	1	1	1	1	1	2370885	NC, CHERRY POINT	2370885	62470
44248	NAVFAC ROICC CHERRY POINT	25	NFAENGCOM	3562750	C	OMN	DH	1	1	1	1	1	1	2370885	NC, CHERRY POINT	2370885	62470
44248	NAVFAC ROICC CHERRY POINT	25	NFAENGCOM	3562765	C	OMN	DH	1	1	1	1	1	1	2370885	NC, CHERRY POINT	2370885	62470
44248	NAVFAC ROICC CHERRY POINT	25	NFAENGCOM	3562793	C	OMN	DH	1	1	1	1	1	1	2370885	NC, CHERRY POINT	2370885	62470
44248	NAVFAC ROICC CHERRY POINT	25	NFAENGCOM	3562795	C	OMN	DH	1	1	1	1	1	1	2370885	NC, CHERRY POINT	2370885	62470

4. Basic Facility Requirements (BFR) Worksheet

FY	Service	Service Location Code	Location Name	Schoolhouse Name	CID	Course Name	Sponsor Code	Stud Type	Stud Qual	FY12 Req	ONDJ (FY12)	FMAM (FY12)	JJAS (FY12)
2012	M	06	MCRD PARRIS ISLAND, SC	DRILL INSTRUCTOR SCHOOL	M0681E2	DRILL INSTRUCTOR	C461TPS	0E		350	117	116	117
2012	M	06	MCRD PARRIS ISLAND, SC	DRILL INSTRUCTOR SCHOOL	M0681E2	DRILL INSTRUCTOR	C466	9E		12	4	4	4
2012	M	06	MCRD PARRIS ISLAND, SC	DRILL INSTRUCTOR SCHOOL	M0681E2	DRILL INSTRUCTOR	RAM-2	0EF		1	0	1	0
2012	M	06	MCRD PARRIS ISLAND, SC	RECRUIT TRAINING REGIMENT	M068083	RECRUIT TRAINING MASTER (MALE) COURSE	MPP-23	0EE		12432	3854	2611	5967
2012	M	06	MCRD PARRIS ISLAND, SC	RECRUIT TRAINING REGIMENT	M068083	RECRUIT TRAINING MASTER (MALE) COURSE	RAP	2E		2788	864	781	1143
2012	M	06	MCRD PARRIS ISLAND, SC	RECRUIT TRAINING REGIMENT	M068093	RECRUIT TRAINING (FEMALE)	MPP-23	0EE		2600	806	546	1248
2012	M	06	MCRD PARRIS ISLAND, SC	RECRUIT TRAINING REGIMENT	M068093	RECRUIT TRAINING (FEMALE)	RAP	2E		180	56	50	74
2012	M	06	MCRD PARRIS ISLAND, SC	EASTERN RECRUITING REGION (ERR) OFF	M06M654	MEPS LIAISON	MCRC	0E		55	18	19	18
2012	M	06	MCRD PARRIS ISLAND, SC	EASTERN RECRUITING REGION (ERR) OFF	M06M654	MEPS LIAISON	MCRC	0O		5	2	1	2
2012	M	06	MCRD PARRIS ISLAND, SC	EASTERN RECRUITING REGION (ERR) OFF	M06MAT4	OPERATIONS COURSE	MCRC	0E		30	10	10	10
2012	M	06	MCRD PARRIS ISLAND, SC	EASTERN RECRUITING REGION (ERR) OFF	M06MAT4	OPERATIONS COURSE	MCRC	0O		15	5	5	5
2012	M	06	MCRD PARRIS ISLAND, SC	WEAPONS AND FIELD TRAINING BATTALI	M06M815	COMBAT MARKSMANSHIP TRAINERS	C476	0E		330	110	110	110
2012	M	06	MCRD PARRIS ISLAND, SC	WEAPONS AND FIELD TRAINING BATTALI	M06M815	COMBAT MARKSMANSHIP TRAINERS	MARFORES	0E	FR	1	0	1	0
2012	M	06	MCRD PARRIS ISLAND, SC	WEAPONS AND FIELD TRAINING BATTALI	M06M855	MARINE CORPS COMBAT MARKSMANSHIP COACH	C4614	8		3	3	0	0
2012	M	06	MCRD PARRIS ISLAND, SC	WEAPONS AND FIELD TRAINING BATTALI	M06M855	MARINE CORPS COMBAT MARKSMANSHIP COACH	C476	0E		330	110	110	110
2012	M	06	MCRD PARRIS ISLAND, SC	WEAPONS AND FIELD TRAINING BATTALI	M06M855	MARINE CORPS COMBAT MARKSMANSHIP COACH	MARFORES	0E		3	0	3	0
2012	M	06	MCRD PARRIS ISLAND, SC	WEAPONS AND FIELD TRAINING BATTALI	M06M855	MARINE CORPS COMBAT MARKSMANSHIP COACH	MARFORES	3E		4	0	4	0
			MCRD PARRIS ISLAND, SC Total							**19139**	**5959**	**4372**	**8808**
2012	M	08	MCRD SAN DIEGO, CA	RECRUITER SCHOOL	M088061	RECRUITING MANAGEMENT	MCRC	0E		75	25	25	25
2012	M	08	MCRD SAN DIEGO, CA	RECRUITER SCHOOL	M088061	RECRUITING MANAGEMENT	MCRC	0O		75	25	25	25
2012	M	08	MCRD SAN DIEGO, CA	RECRUITER SCHOOL	M0881C1	BASIC RECRUITER	MCRC	0E		1800	600	600	600
2012	M	08	MCRD SAN DIEGO, CA	RECRUITER SCHOOL	M0881C1	BASIC RECRUITER	RAM-2	0EF		25	8	9	8
2012	M	08	MCRD SAN DIEGO, CA	RECRUITER SCHOOL	M08HA61	OFFICER SELECTION OFFICER	MCRC	0O		40	13	14	13
2012	M	08	MCRD SAN DIEGO, CA	RECRUITER SCHOOL	M08K791	ADVANCED CAREER PLANNER	MCRC	0E		50	17	16	17
2012	M	08	MCRD SAN DIEGO, CA	RECRUITER SCHOOL	M08K791	ADVANCED CAREER PLANNER	MPP-25	1E		40	20	20	0
2012	M	08	MCRD SAN DIEGO, CA	RECRUITER SCHOOL	M08M451	CAREER RECRUITERS	MCRC	0E		100	33	34	33
2012	M	08	MCRD SAN DIEGO, CA	RECRUITER SCHOOL	M08M681	RECRUITER INSTRUCTOR	MCRC	0E		75	25	25	25
2012	M	08	MCRD SAN DIEGO, CA	RECRUITER SCHOOL	M08M681	RECRUITER INSTRUCTOR	RAM-2	0EF		6	2	2	2
2012	M	08	MCRD SAN DIEGO, CA	DRILL INSTRUCTOR SCHOOL	M0881E2	DRILL INSTRUCTOR	C461TPS	0E		350	117	116	117
2012	M	08	MCRD SAN DIEGO, CA	DRILL INSTRUCTOR SCHOOL	M0881E2	DRILL INSTRUCTOR	C466	9E		6	2	2	2
2012	M	08	MCRD SAN DIEGO, CA	DRILL INSTRUCTOR SCHOOL	M0881E2	DRILL INSTRUCTOR	RAM-2	0EF		1	0	1	0
2012	M	08	MCRD SAN DIEGO, CA	WESTERN RECRUITING REGION (WRR) O	M08M654	MEPS LIAISON	MCRC	0E		57	19	19	19
2012	M	08	MCRD SAN DIEGO, CA	WESTERN RECRUITING REGION (WRR) O	M08M654	MEPS LIAISON	MCRC	0O		3	1	1	1
2012	M	08	MCRD SAN DIEGO, CA	WESTERN RECRUITING REGION (WRR) O	M08MAT4	OPERATIONS COURSE	MCRC	0E		30	10	10	10
2012	M	08	MCRD SAN DIEGO, CA	WESTERN RECRUITING REGION (WRR) O	M08MAT4	OPERATIONS COURSE	MCRC	0O		15	5	5	5
2012	M	08	MCRD SAN DIEGO, CA	RECRUIT TRAINING REGIMENT	M088085	RECRUIT TRAINING MASTER (MALE) COURSE	MPP-23	0EE		13468	4175	2828	6465
2012	M	08	MCRD SAN DIEGO, CA	RECRUIT TRAINING REGIMENT	M088085	RECRUIT TRAINING MASTER (MALE) COURSE	RAP	2E		2732	847	765	1120
2012	M	08	MCRD SAN DIEGO, CA	RECRUIT TRAINING REGIMENT	M08MME5	MARTIAL ARTS INSTRUCTOR	MACE	0E	FP	102	34	34	34
2012	M	08	MCRD SAN DIEGO, CA	RECRUIT TRAINING REGIMENT	M08MME5	MARTIAL ARTS INSTRUCTOR	MACE	0O	FP	6	2	2	2
2012	M	08	MCRD SAN DIEGO, CA	CAREER PLANNER SCHOOL	M0881D6	BASIC CAREER PLANNER	MARFORES	3E		6	2	2	2
2012	M	08	MCRD SAN DIEGO, CA	CAREER PLANNER SCHOOL	M0881D6	BASIC CAREER PLANNER	MPP-25	1E		65	16	26	23
2012	M	08	MCRD SAN DIEGO, CA	CAREER PLANNER SCHOOL	M0881D6	BASIC CAREER PLANNER	RAM-2	0EF		5	2	1	2
			MCRD SAN DIEGO, CA Total							**19132**	**6000**	**4582**	**8550**
2012	M	09	MAGTFTC TWENTYNINE PALM	MARINE CORPS COMMUNICATIONS-ELEC	M0924X1	AVIATION RADAR FUNDAMENTALS	C466	9E		2	1	0	1

CCN: 4 NOMENCLATURE: 5

LOADING ANALYSIS/JUSTIFICATION OF REQUIREMENT

Description: 6

Planning Criteria: 7

Loading: 8

Analysis: 9

TOTAL REQUIREMENT: 10 SF or m2nd

Date Prepared: 11

Prepared By: 12

CCN: 4 NOMENCLATURE: 5

a. Installation/Installation UIC. Type in the name of the installation. Installation is a base, camp, post, station, yard, center, or other activity, including leased facilities, under the jurisdiction, custody, or control of the SECDEF or the Secretary of a Military Department or, in the case of an activity in a foreign country, under the operational control of the Secretary of Defense or the Secretary of a Military Department, without regard to the duration of operational control. Type in the UIC number. The UIC of the Department of Navy (or Navy/Marine Corps) shore activity where the real property resides. An installation may include one or more sites. If requirements pertain to a new platform for which final home-porting has not been determined, then TBD (to be determined) is an acceptable entry.

b. User/User UIC. Type in the name of the user and user UIC for which is requirement is being developed.

(1) Site (Special Area)/Planning Area. Type in the alpha code for the site and planning area designation. Special areas/sites are defined by geographical business rules, while planning areas allow geographic areas to be combined for planning purposes. Planning areas are comprised of one or more sites. (Sites are a physical geographic location that is or was owned by, leased to, or otherwise possessed by a 000 Component.) Each site is assigned to a single installation. A site may exist in one of three forms:

(2) Land only, where there are no facilities present and where the land consists of either a single land parcel or two or more contiguous land parcels.

(3) Facility or facilities only, where the underlying land is neither owned nor controlled by the government. A stand-alone facility can be a site. If a facility is not a stand-alone facility, it must be assigned to a site.

(4) Land and all the facilities thereon, where the land consists of either a single land parcel or two or more contiguous land parcels.

c. CCN: Type in the five digit CCN of the BFR. A complete listing of the CCNs can be found in reference (a).

d. Nomenclature: Type in the nomenclature description of the BFR category code. A complete listing of the CCNs can be found in reference (a).

e. Description: Identify the reason for the facility requirement. Provide specific planning information related to the facility.

f. Planning Criteria: Identify the criteria used to develop the BFR. Identify if the reference (g) was used, or another UFC, or an Industrial Engineering Study, or other special study.

g. Loading: Clearly identify the authoritative source used for the loading information. Include the time frame of the loading. If there are projections, include narrative of projections and identify the duration for which the loading is anticipated to be accurate (up to five years).

h. Analysis: Show the calculations used to derive the requirement, or identify a special study that was used to conduct the analysis. Attach the study.

i. Requirement: Summarize the total requirement in the appropriate unit of measure. For instance if using SF identify the total requirement in both SF and square meters.

j. Date Prepared: Type in the date that the BFR was prepared.

k. Prepared By: Type in the name of the person preparing the BFR, their email address and phone number.

l. Page: Identify the number of pages associated with the BFR.

5. NAVMC 10915. Fillable form is located at https://navalforms.documentservices.dla.mil/web/public/home. In the Determination of Requirements, please include the summary of requirements. For multi-user BFRs, use following pages to break out the individual unit's requirements, providing the total summary on this form. Where there are two or more units of measure (such as in warehousing), include all appropriate totals. The MCICOM Review Action "Evaluation" section is to be filled in by the approving official, who will note any changes to requested amount (revised totals), any special conditions or features that must be included in the project documents. Established Requirement will go into iNFADS as primary requirement.

6. Basic Facilities Requirements (BFRs) Approval Checklist

Preparation				
BFR Planning Checklist Items	**Yes**	**No**	**Not Required**	**Comments**
Does this category code require a BFR? (See reference (a))	☐	☐	☐	
Is there a construction or special project within six years that affects this category code?	☐	☐	☐	
Is the installation FSR information up to date for units using this category?	☐	☐	☐	
Are there any known reductions in this requirement forecast within the next six years?	☐	☐	☐	
Is there an existing regional asset that can satisfy this requirement?	☐	☐	☐	
Is this requirement unique (e.g., is this space requirement accounted for under a different, duplicative category, such as general vs. specific administrative or storage space)?	☐	☐	☐	
Could this requirement be better satisfied by the local community vice on-base?	☐	☐	☐	
Is this a new requirement?	☐	☐	☐	
Has this requirement been addressed in the Master Plan?	☐	☐	☐	
Is the requirement based upon Approved criteria? (Please identify)	☐	☐	☐	
Does the requirement break out the need by unit and consolidate the total?	☐	☐	☐	
Does the BFR request more/less than the criteria recommends?				

Execution				
Are all necessary fields correctly filled in on BFR form?	☐	☐	☐	
Are totals accurately calculated (check math)?	☐	☐	☐	
Are the appropriate “Net-to-Gross” factors applied?	☐	☐	☐	
Has the user verified that the requirement is correct?	☐	☐	☐	
BFR Planning Checklist Items	**Yes**	**No**	**Not Required**	**Comments**
Does the installation commander support this requirement?	☐	☐	☐	
Conclusion (Following Approval)				
Has the total requirement been entered into iNFADS?	☐	☐	☐	
Has MCICOM (GF-7) been notified of BFR approval?	☐	☐	☐	

7. DD Form 1354. Fillable form is located at http://www.dtic.mil/whs/directives/infomgt/forms/index.htm

8. DD Form 1354. Fillable form is located at http://www.dtic.mil/whs/directives/infomgt/forms/index.htm

9. Property Record Card

CLASS 2 PROPERTY RECORD

FACILITY NAME	OBSTACLE COURSE	**FACILITY NUMBER**	4614
		REPORT DATE	28 AUG 2013

INSTALLATION UIC	M00146 MCAS CHERRY POINT NC		**REAL PROPERTY UNIQUE ID**		14097
FACILITY ID	NFA100001752258		**LAST UPDATED**		02 JUL 2013
INSTAL MGMT CLMT	M00027 MARCORP		**PROPERTY RECORD NO**		210470
MANPOWER BSO	CMC		**FACILITY TYPE**	3	STRUCTURE
OPERATIONAL STATUS	ACT	Active	**ACTION TYPE**	1	ACQUISITION
SPECIAL AREA			**FAMILY HOUSING INDICATOR**		N

LOCATION

REGION		
COUNTRY	USA	UNITED STATES
STATE	37	NORTH CAROLINA
COUNTY	049	CRAVEN
CITY	0885	CHERRY POINT
MAP GRID	54-7L	
STREET ADDRESS	4614 RECREATIONAL LN	

DISPOSAL

CONSOLIDATED PROPERTY NO	
DISPOSAL METHOD CODE	
DISPOSAL COMPLETION DATE	
DISPOSAL CONTRACT NO	
EXCESS DECLARATION DATE	
SURPLUS DETERMINATION DATE	

ACQUISITION

ESTATE CODE	13	OTHER MIL	**ACQUISITION DATE**	16 JUL 2000
INTEREST TYPE	FEE	U.S. Government owned property	**GOVERNMENT COST**	$ 5,000
LAND CCN	91140	LAND - CONDEMNATION		
ACQ CONTRACT NO	UNKNOWN			

MAINTENANCE

PREPONDERANT USER	M00146 MCAS CHERRY POINT NC	
PRIME USE CAT CODE	17950	TRAINING COURSE
PRIME FAC CODE	1790	MISCELLANEOUS TRAINING FACILITY
MNT FUND SOURCE CODE	4	USMC
MNT RESPONSIBILITY UIC	M00146 MCAS CHERRY POINT NC	
ASSET EVALUATION DATE		
CURRENT PRV	$ 107,208	
PRV AT EOY 12	$ 107,208	

MEASUREMENTS	**ENGLISH**	**METRIC**
LENGTH		
WIDTH		
HEIGHT		
AREA		
AREA UM		
FLOOR ABOVE GROUND QUANTITY		1
FLOOR BELOW GROUND QUANTITY		0

CONSTRUCTION

FACILITY BUILT DATE	01 JUL 1998	
CONSTRUCTION TYPE	SEMI	SEMI-PERMANENT
HISTORIC STATUS DATE		
HISTORIC STATUS CODE	NEV	Not yet Evaluated

READINESS FACTORS

MDI		**DATE**	
CONDITION RATING		**DATE**	
CONFIGURATION RATING	100	**DATE**	13 JUN 2009
PHYSICAL QUALITY RATE	95		

CLASS 2 PROPERTY RECORD

FACILITY NAME	OBSTACLE COURSE	**FACILITY NUMBER**	4614
		REPORT DATE	28 AUG 2013

UTILIZATION

UTILIZATION ID	1						
FAC USE CCN	17950	TRAINING COURSE	**SET BACK VALUE**	1.00	**DOD FAC**	1790	
FACILITY USE			**MAX VALUE**	250.00	**DOD UM**	EA	
USER ACTIVITY	M00146 MCAS CHERRY POINT NC		**OUTGRANT IDENTIFIER**		**PRIMARY UM**	EA	

CONFIGURATION

	AREA		OTHER		ALTERNATE	
	English	Metric	English	Metric	English	Metric
ADEQUATE	.50	.20	1.00	1.00		
SUBSTANDARD						
INADEQUATE						
TOTAL	.50	.20	1.00	1.00		
UNIT OF MEASURE	AC	HA	EA	EA		

SUSTAINMENT FUND SOURCE	1106 Operation and Maintenance, Marine Corps
SUSTAINMENT ORGANIZATION	08 MARINE CORPS ACTIVE
OPERATIONAL FUND SOURCE	1106 Operation and Maintenance, Marine Corps
OPERATIONAL FUNDING ORG	08 MARINE CORPS ACTIVE

NOTES

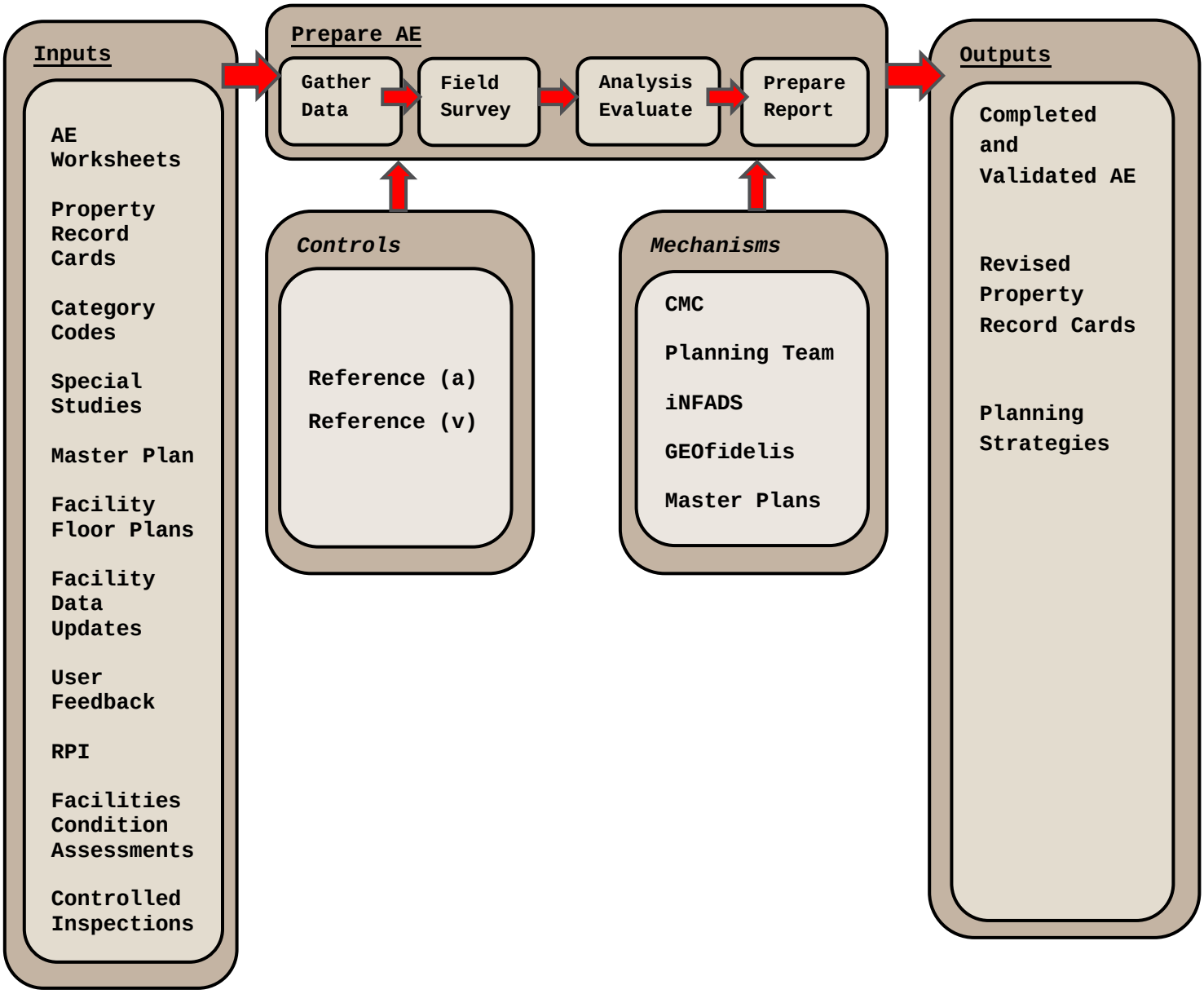
18 DEC 2012 Obstacle Course has been relocated to Recreational Lane & "F" street, due to the P-136, Barracks Project. JCE

LOCATION DIRECTIONS TEXT

HEAD NORTH FROM MAIN GATE ON ROOSEVELT UNTIL "F" STREET. TURN RIGHT ONTO "F" STREET AND OBSTACLE COURSE IS ON THE RIGHT ACROSS FROM B.193

Appendix E

Asset Evaluation (AE) Process



Appendix F

Functional/Configuration Deficiency Code Definitions

*Reproduced from NAVFAC Portal:

https://portal.navfac.navy.mil/portal/page/portal/am/navfaclant_am/au/def%20code%20definitions_2%20july%2009.doc

Deficiency Code Definitions

SUMMARY

1. Functional/Configuration Deficiency Code Definitions - Version 8.4

a. Functional/configuration deficiency codes are determined and collected during an AE and are used to identify impacts to the suitability of spaces for their intended use.

b. NOTE: These deficiency codes only apply to the functionality of the facility concerning configuration only and NOT to condition. The AE team should exercise sound professional judgment in determining the deficiency codes for each utilization within a facility. Deficiency codes must be entered for all substandard or inadequate facilities and may be entered for adequate spaces if appropriate.

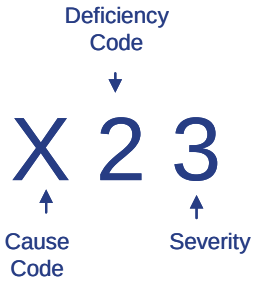


Figure F-1.--Deficiency Codes.

c. Deficiency codes are composed of three characters (see Figure F-1). The first character is a letter between W & Z inclusive and represents a cause code indicating which general type of deficiency is present (i.e., code compliance, functional space criteria, etc.). The second character is a number between 0 & 9 inclusive. This character represents the specific deficiency that is present. Cause codes and their related deficiency codes are presented in Table F-1. The third character is a number between 1 & 4 inclusive. This last character represents the severity of the identified deficiency where 1 is minor, 2 is significant, 3 is severe and 4 is critical. Severity refers to the ACTUAL impact the deficiency code has on space use and not on POTENTIAL impact. Any facility square footage listed as less than adequate will require a deficiency code be provided.

Table F-1.--Cause Codes.

		Cause Codes			
		W	**X**	**Y**	**Z**
		Code Compliance	**Functional/Space Criteria**	**Location/Siting Criteria**	**Inadequate Capacity/Coverage**
Deficiency Codes	**1**	OSHA	--	**Facility Location**	Fuel Systems/Piping
	2	Seismic	Building Interior Configuration	Flood Plain/Environmental Incompatibility	Communications
	3	--	**Building or Structure**	Site Characterisitics	Depth of Water
	4	Explosive Safety Facility System	Ceiling Height	Explosive Safety Distance	Structural/Foundations
	5	Fire Codes		Airfield Safety Clearance	Facility Components
	6	Environmental Hazard		Excessive Noise	Environmental Systems
	7	ATFP			Electrical Systems
	8	Accessibility			Piping Systems
	9	**Building Code**			**Supporting Systems**
	0				Alarm System/Physical Security

d. We may have to limit the number of deficiency codes used for each cause code. In that instance, use the most severe deficiency or use the deficiency code that is written in bold type. Each cause code category has one bolded deficiency. This bolded deficiency code may be used as you would any other deficiency code or it may be used to signify that there are many deficiencies within this one cause code.

e. You should use always use a thorough description to define each deficiency to ensure each deficiency can be understood during the development of planning actions for the FPD. If the time is taken at this point to provide detailed information during the AE, anyone should be able apply the applicable planning action to address any deficiency and maintain the facility in good order at adequate standards. See Figure F-2.

SUMMARY

EXAMPLES

--A facility has several code compliance deficiencies: *W11* for a minor OSHA issue, *W51* for lacking sprinklers in an occupied area of the building, *W82* for lack of handicap access that prevents a handicap employee from proper performing his duties. Let's say you also had *X22*, *Y31*, and *Z41* deficiencies from the other cause code categories, but you only had space for 4 deficiencies. You could then use W92 as a catch all for the three W deficiencies you have listed along with a description that could read, "*Building 54 has several building code potential code violations for OSHA, fire safety (lacking sprinklers in occupied this occupied area of the building), and a notice of violation due to the lack of handicap access for an employee that works in the building.*"

--A facility has several code compliance deficiencies that include a minor OSHA violation – *W51*, lack of sprinklers in the main –*W51* office area, and some other minor building code violations – *W91*. In this instance, *W91* is used to identify specific building code violations not as a catch all category for all of the code compliance deficiencies. The facility also had *X22*, *Y31*, and *Z41* deficiencies from the other cause code categories, but there are no limits on the number of deficiencies you can enter. Therefore, all of six deficiencies will be listed along with appropriate descriptions to define each of the six deficiency issues.

Figure F-2.--Examples.

2. W – Code Compliance

a. This cause code refers to deficiencies that prevent realizing full functionality of a facility due to code compliance reasons. Pertinent codes are identified in the below definitions.

EXAMPLES

--A facility has been completely vacated due to fire code violations that deem the building uninhabitable because of safety factors. The fire code violation therefore totally restricts the use of the facility. The appropriate code for this deficiency would be *W54*.

--An administrative facility is located too close to the installation's perimeter fence line according to AT/FP criteria. The administrative space in this facility, however, is completely utilized. Although an AT/FP deficiency exists, it is not in any way restricting the use of the facility therefore the appropriate code for this deficiency would be *W71*.

--An administrative facility with one user is located too close to the parking lot according to AT/FP criteria. In response, 1000 SF facing the parking lot of the 3000 SF facility is not being utilized due to concerns over AT/FP. While the facility is still being used, a substantial portion of the facility is unusable. The appropriate code for this deficiency would be *W73*.

Figure F-3.--W – Code Compliance Examples.

b. Definitions

(1) Occupationl Safety and Health Act (OSHA): An OSHA deficiency is a facility deficiency generally for non-compliance with the National Fire Protection Association (NFPA) 101, Life Safety Code. The function within a facility may present an OSHA violation that could generate a complementary facility action (modernization). An index of functional OSHA related actions can be found at http://www.osha.gov/html/a-z-index.html#A.

(2) Seismic: A seismic deficiency is a facility structural deficiency generally related to earthquake. The building design deficiency reference is reference (j) (Reference (aw) on seismic design for buildings is under development). Assessing seismic safety of existing buildings is defined in the Interagency Committee on Seismic Safety in Construction (ICSSC) RP6 National Institute of Standards and Technology reference (ax).

(3) Safety Standards: Was deleted.

(4) Explosive Safety Facility Systems

(a) Explosive safety deficiency applies to a facility system that does not meet the design regulations of the reference (ay) for the ordnance functions being performed. These facility systems may be exterior to the facility being reviewed, yet part of the overall facility explosive safety envelope. Siting deficiencies should use the Y cause code. In some instances there may be some overlap between the two cause codes.

(b) Logic/background: OP-5 applies to Navy, USMC and their DoD and non-DoD tenants. Examples of facility systems exterior to a facility are lightning protection systems (LPS) and barricades. The installation's ESO and waivers/exemptions can be resources for the planner.

(5) Fire Codes: A fire code(s) deficiency is a facility deficiency with non-compliance to NFPA 1, Fire Code. Deficiency examples with short definitions can be readily found at http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1. Guidance information can be found in reference (az).

(6) Environmental Hazard: Determination of environmental hazard (issues with hazardous waste, hazardous material, nuclear, electromagnetic, solar, etc) should not be solely determined by the installation planner without assistance from the Safety Officer and the facility manager of the installation. The deficiency should be determined by subject matter experts.

(7) Anti-Terrorism Force Protection (AT/FP): An AT/FP deficiency should relate to standards within the body of knowledge in reference (w) or more stringent standards by a DoD component or Local Code.

(8) Accessibility: These deficiencies are identified as non-compliant with reference (ba) and determining a particular deficiency can be accomplished by reviewing reference (bb). These standards can be reviewed at http://www.access-board.gov/ufas/ufas-html/ufas.htm.

(9) Building Code: This deficiency code is used to identify a facility may have multiple code compliance deficiencies or code compliance deficiencies not specified above. This deficiency code may be used for a building code compliance issue or as single catch all category if a facility has several code compliance violations.

(10) Determining Severity

(a) Indicates a code violation may exist but no official citation or fine has been documented and the potential violation has no impact on the designated functions within the facility.

(b) Indicates a code violation has been noted, but there is no fine and the violation does not restrict the use of the facility's designated functions.

(c)Indicates a code violation has been documented, a fine has been assessed and the violation requires restricted the use of the facility's designated functions.

(d) Indicates a code violation has been documented, a significant fine has been assessed and the violation requires prohibits or severely restricts the use of the facility for its designated functions.

3. X – Functional or Space Criteria

a. The deficiencies for this Cause Code are based on current use versus designed purpose of the building. Some activities may be better suited to a facility than others. As tenants and functional uses change so may the deficiency and/or the severity of the deficiency.

EXAMPLES

--A facility has been converted to accommodate administrative functions. The facility contains columns that interfere with the optimal configuration for laying out cubicle seating. The resulting layout represents inefficient space usage due to the columns. The columns forced the resulting inefficient configuration but did not severely reduce the tenant's ability to function. The appropriate code for this deficiency is *X22*.

--A maintenance bay is too short to accommodate the full length of a new class of vehicles it is intended to service. The resulting work around requires the tenant to leave the bay door open while working on vehicles even during severe weather conditions. Further, the tenant does not have full mobility around the vehicle within the space to properly service the vehicles. The appropriate code for this deficiency is *X23*.

--A Marine Corps unit stores all its warehouse equipment in quadcons. The ceiling height in the given warehouse facility will not accommodate the full stack height of two quadcons. As a result, the unit employs smaller palcons to utilize the remaining stack height available to them. The appropriate code for this deficiency is *X41*.

Figure F-4.--X – Functional or Space Criteria Examples.

b. Definitions

(1) Accessibility: Was deleted.

(2) Building Interior Configuration: This deficiency code deals with the layout and interior design of the building or structure. Does the building design work for its current use? Are there elements of the interior design that impact the functionality of the current use? Are there interior design elements that create workarounds for the existing tenant or occupant? Are there areas of the building that cannot be used

due existing interior finishes or design elements? Are there areas of the building that can only be partially used due to layout or interior components of the building? Does space occupied exceed BFR due to layout of the building making some square footage unusable? Is the net to gross of this building higher than BFR allowed (over-sized corridors and stairwells, large open entry atrium that cannot be occupied, existing interior walls limiting room occupancy, etc.) and due to building interior (not inefficiencies created by user, underutilization of available space or unnecessary use of space)?

(3) Building or Structure

(a) This deficiency code deals structural elements/components of building or structure that impact the current activity operations within the facility. Do column alignments impact layout and population density or block line of sight? Is access to the building limited (i.e., doors not tall or wide enough, no loading dock, etc)? Is structure designed to support current loading (i.e., psf live load of current tenant exceeds design capacity)? Does the space require exceed available capacity (i.e., BFR/SF requirement exceeds available SF in the building)? Does the lack of stories or the existence of stories impact activity mission?

(b) NOTE: If there are several over reaching deficiencies within this Cause Code, use this single deficiency code to address all the others. This deficiency code may be used for a building or structural issue or as single catch all category if a facility has several functional/space criteria issues.

(4) Ceiling Height: This deficiency code deals with the interior ceiling height and overhangs outside the building. Does the interior ceiling height interfere with interior function of the building? Can operations within the space function normally? Can items being stored be properly stacked? Does the bay height reduce the storage available/required? Is additional stacking height required to meet functional needs? Can vehicles be brought into a maintenance bay for service?

(5) Determining Severity

(a) Indicates that there is an issue with the building interior but the issue does not impact operational efficiencies. The activity/tenant has workarounds and is able to complete their mission with workarounds and/or little effort that does not take away from the mission.

(b) Indicates that there are issues that require several workarounds that impact operational efficiencies. The workarounds require additional efforts that take away from other duties or tasks. Over time, these extra workarounds impact operational efficiencies, but with minimal impact to mission.

(c) Indicates that there are issues with the building interior and require several workarounds. These workarounds impact daily operation, have a significant impact on operational efficiencies and are a drain on resources. These issues have a financial impact on operations or will be costly to correct.

(d) Indicates that the issues are so significant it requires regular work stoppages or has a significant impact on operational funding requirements.

4. Y – Location or Siting Criteria

a. The area that a facility is located may be impacted by several factors. Zoning criteria developed by the base or region as well as environmental impacts and adjacency issues should be considered when reviewing the deficiency codes for this Cause Code, location and siting. Due to functional/operational adjacency provisions, some tenants may be located within areas that are impacted by safety clearances or other conditions. As tenants of a building change, so may the deficiency codes which may have applied to a facility.

EXAMPLES

--A warehouse is located in a flood plain. As a result of this siting situation, the warehouse does not employ the bottom 6 feet of the 20 feet of vertical space to avoid damage to equipment that may be caused due to flooding. The appropriate code for this deficiency is *Y23*.

--A training facility does not meet explosive safety clearances due to its proximity to a magazine. As a result, the facility is used only to store miscellaneous training equipment. Because no portion of this facility is used for its intended use, the appropriate code for this deficiency is *Y44*.

--A training facility is located in a flood plain. The facility is being fully utilized year round for training purposes with no impact to classroom use or scheduling. The appropriate code for this deficiency is *Y21*.

Figure F-5.--Y – Location or Siting Criteria Examples.

b. Definitions

(1) Facility Location: This deficiency code addresses the overall location of the facility. Is the facility zoned in accordance with Region or Installation planning? Do the operations of surrounding activities, interfere with tenant operations? Are there adjacencies with other command elements that are not being met (i.e., the command occupies two facilities that are several blocks apart and this negatively impacts communications or other operational efficiencies common use of equipment such as forklifts or time traveling between facilities takes away from operational time.)? Is access to the building site is limited? Does the

site location require additional building security? This deficiency code may be used for a facility location issue or as single catch all category if a facility site has several location/siting criteria issues.

(2) Flood Plain / Environmental Incompatibility: This deficiency code addresses the topography, natural environment and soil conditions that the building is sited upon. Is the facility in a flood or tidal plain? Is it in an area that could be subjective to damage from tidal surge, heavy rain, an earthquake, a volcanic eruption, or other natural disaster? When considering these types of natural disasters, planners should also consider frequency of occurrence, and should a natural disaster occur, how severe would the damage be. Planners should also review the loss of the facility to a command; it only takes one natural disaster to occur to wipe out an operation. If this facility is pivotal to command mission or would be very expensive to replace and the risk is high, this should be reflected in the severity code. Other issues to consider would be topography (i.e., is the area subject to landslides, is it set on a high ridge or in a low lying valley or at sea level like most Navy facilities?). How stable is the building site? Is the soil contaminated? Is the soil loamy and contributing to building settlement? Are the soils high in clay that prevent drainage and retain water, causing high moisture content in the building? Are there endangered species that can require a reduction in noise levels or other operational functions that negatively impact propagation?

(3) Site Characteristics: This deficiency code addresses site characteristics and supporting structures at the site. Are there conditions at this site that create operational inefficiencies? Is the building within an historic district and does this impact operation in some way? Are there characteristics of the site that limit physical accessibility to the site or reduce access to support operations? Are on-site utilities at capacity or not available? Does the site require additional security due to isolation? Are the roads, sidewalks, parking, and fencing adequate?

(4) Explosive Safety Distance

(a) Explosive safety distance deficiency applies to a facility that does not meet the siting regulations of the reference (ay). This could be applied to a potential explosive site (PES) or exposed site (ES). Facility system deficiencies should use the W cause code. In some instances there may be some overlap between the two cause codes. Does the facility and/or operation/activity within the facility need to be in the arc? Does it have the proper waiver to be there? Does the facility have the necessary design elements in place to protect the structure and the people and operations within? Can the structure be economically modified/upgraded to meet current design standards for the activity that currently occupies the facility within an arc?

(b) Logic/background: OP-5 applies to Navy, USMC and their DoD and non-DoD tenants. The ESO and waivers/exemptions can be resources for the planner.

(5) Airfield Safety Clearance: This deficiency code addresses the location of a facility within or adjacent to an airfield. Does the facility and/or occupant need to be adjacent to the airfield? Does the facility need to be modified to meet airfield criteria? Does the facility meet building code and airfield safety criteria for the tenant? Is a waiver required for the current operation in this structure?

(6) Excessive Noise: This deficiency code addresses the location of a facility as it relates to a noise exposure. The noise caused by facility operations, such as levels of noise created airfield hangars, on aprons or airfields or engine test cells. Or it could be a facility that is adjacent to a noisy operation and is being impacted by being exposed to the noise. Again, if noise exposure is the problem, does the activity need to be in the facility? If the facility is the creator of noise, is there anything that could be done to reduce noise levels? Is this industrial operation zoned properly? Have waivers, when needed, been secured? Can noise attenuation be added economically?

(7) Determining Severity

(a) Indicates that there is an issue with the location of the building but the issue does not impact operational efficiencies. The activity/tenant has workarounds and is able to complete their mission with workarounds and/or little effort that does not take away from the mission. The facility may not have proper protective design elements, but the facility has a waiver to be located within a given area.

(b) Indicates that there are issues that require several workarounds that impact operational efficiencies. The workarounds require additional efforts that take away from other duties or tasks. Over time, these extra workarounds impact operational efficiencies, but have minimal impact to mission. Or, the facility may not have proper protective design elements and has a waiver to be located within a given area, but needs some type of renovation to maintain the waiver and the renovations can be easily completed at minimal cost.

(c) Indicates that there are issues with the location of the building and the activity/tenant requires several workarounds. These workarounds impact daily operations, have a significant impact on operational efficiencies, and are a drain on resources. Or, the facility may not have proper protective design elements and has a waiver to be located within a given area, but needs some type of costly renovation to maintain the waiver. These issues have a financial impact on operations or will be costly to correct.

(d) Indicates that the issues are so significant that the activity/tenant requires regular work stoppages or has a significant impact on operational funding requirements and/or cost to correct is prohibitive. Or, the facility may not have proper protective design elements, has a waiver to be located within a given area and requires renovation to maintain the waiver, but work required is cost prohibitive.

5. Z – Inadequate Capacity/Coverage

a. This cause code refers to functional deficiencies that are brought about by missing components or components that are lacking in capacity (not due to the condition of the component in question).

Figure F-6.--Z – Inadequate Capacity/Coverage Examples.

EXAMPLES

--The electrical system within a workshop does not accommodate the loads necessary to operate the equipment. As a result, electrical generators have been placed in the workshop to provide the necessary electricity. The appropriate code for this deficiency is *Z73*.

--A building converted to accommodate a library does not have the appropriate foundations to accommodate the loading applied due to the weight from books and shelving. The result is that only half the full storage capacity of each floor is employed. The appropriate code for this deficiency is *Z43*.

--The water along a pier is not deep enough to accommodate the class of ship intended to berth at this facility. The dredging issue would indicate a code for this deficiency of *Z34*.

b. Definitions

(1) Fuel Systems/Piping:

(a) Such facility systems support fuel storage and distribution for fueling ships and aircraft and motorized vehicles and equipment. Fuel Systems include pipeline receiving facilities, tank truck and tank car receiving facilities, marine receiving facilities, and pipeline dispensing/pumping facilities. Storage tanks are used to store fuel and include associated piping, pumping, and tank monitoring equipment. A network of pipelines provides the conduit for the movement of fuel for storage and distribution.

(b) Fuel Storage Facilities can be associated with Bulk Storage that typically include Fuel Depots, Aircraft Fueling Facilities located on a Naval Air Station that support fueling aircraft, Marine Receiving and Dispensing Facilities located on a Naval Installation that support ships, and Fuel Dispensing Facilities on a Naval Installation that support fueling vehicles and equipment.

(c) For Aircraft Fueling Facilities “Hot Pit Fueling Stations” support fueling aircraft while the engines are operating to facilitate immediate takeoff.

(2) Communications

(a) Communications Systems include fiber optic cable systems, switching device systems, and wire distribution systems to connect to telephone and data terminal systems within a building or structure. Computer network systems consist of fiber optic cabling systems and wire distribution systems to support internet and video

conferencing. Special Communications Systems include Secret Internet Protocol Router Network (SIPRNET) and Non-Secure Internet Protocol Router Network (NIPRNET) systems.

(b) Communications Systems also include those buildings that are equipped with communications equipment only. These buildings are typically linked to an antenna transmission system for data analysis and transmission.

(3) Depth of Water: Locations where water depths are shallow near the shore require extensive dredging to support marine facilities such as piers and wharves. The depth of water at a pier may need routine or constant maintenance dredging to maintain the required depth for safely berthing ships at piers or wharves.

(4) Structural/Foundations: The characteristics of a facility include the type of facility construction such as structural system, foundation system, wall system, ceiling system, floor system, and roof system. This affects facility performance and reliability. The shape or configuration of the facility also contributes to the facility characteristics of a facility in determining how effective a facility can be utilized for its intended purpose.

(5) Facility Components

(a) The Facility Components consist of building materials that comprise the building and whether those materials are compliant with current standards. The quality of building materials determines the extent of life-cycle costs for maintenance, repair, and modernization.

(b) The quality of building materials also affects the performance and reliability of the facility. These materials define succinct building components such as window, door, floor and ceiling systems, interior and exterior walls systems, lighting systems, roofing systems, and building foundation and structural systems.

(6) Environmental Systems: These systems refer to a facility's Heating Air Conditioning and Ventilation System (HVAC). This also includes the Testing Air Balance System (TABS) associated with HVAC in buildings. Separate exhaust systems critical to industrial activities are also important Environmental Systems. Waste disposal systems that are critical to industrial processes and hazardous waste accumulation and storage sites can be categorized with Environmental Systems.

(7) Electrical Systems: These systems include interior and exterior electrical distribution systems, wiring and feeders, cable trays and conduit, electrical control systems, interior and exterior lighting systems, circuit panels, and electrical generators. Such systems also include Uninterrupted Power Systems (UPS).

(8) Piping Systems: Piping Systems for this category include water and sewer piping and plumbing systems. (Piping Systems in this category do not include fuel piping).

(9) Supporting Systems: Support systems may be used if the other systems listed in this cause code do not apply. This deficiency code may be used for a facility support system issue or as single catch all category if a facility has several systems issues.

(10) Alarm System/Physical Security: These types of systems are associated with security alarm systems for ingress and egress, motion detection systems, camera surveillance systems, and guard shelters and control gates.

c. Determining Severity

(1) Indicates a deficiency exists but has no impacts to the use of the facility for its designated functions, no workarounds are required.

(2) Indicates a deficiency is present and moderately restricts the use of the facility's designated functions, minimal workarounds are required.

(3) Indicates a deficiency or deficiencies are present and significantly restricts the use of the facility's designated functions, and is impacting operational expenses.

(4) Indicates a deficiency or deficiencies are present and prohibit or severely restrict the use of the facility for its designated functions and have caused a significant increase in operational expenses.

Appendix G

Interim Relocatable Facilities Policy and Procedures

Ref: see Enclosure (1), references (l), (w), (ao), (az), (bc), (bd), (be), and (bf)

1. Purpose. Reference (a) permits, with restrictions, the purchase or leasing of relocatable structures to satisfy interim facility needs. This policy outlines the procedures for initiating and approving such requests and designates the official approving authorities.

2. Applicability. This policy applies to a limited class of relocatable facilities designed to be used as temporary solutions for facilities shortfalls. As defined in reference (a), these provisions do not apply to personal property accountable in organic troop unit allowance lists.

3. Definitions. Interim Relocatable Facility (IRF). A habitable and/or occupiable prefabricated structure that is designed and constructed to be readily moved (transportable over public roads), erected, disassembled, stored, and reused. Also included in the definition are tension fabric structures assembled from modular components and air supported domes, both of which can be easily disassembled, moved, and reused. For the purpose of this policy, this definition excludes mobile military equipment such as communications vans, emergency management and command post trailers. Also excluded are tents, modular sheds less than 500SF, temporary contractor trailers, and temporary government construction administration trailers that are located on or in the vicinity of a construction site.

4. Policy

a. Interim Nature. Relocatable facilities may be used for short-term facility requirements caused by transitory peak military missions, deployments, military contingency operations, or disaster relief requirements; or urgent requirements (such as accelerated equipment fielding, rapid personnel changes or new mission requirements) pending approval and construction of facilities via normal Military Construction (MILCON) programs. Their use may be approved in only those situations where the requirement could not have been foreseen by Headquarters Marine Corps (HQMC) or the activity/command in time to provide permanent facilities and will not be approved to solely satisfy existing Basic Facility Requirements (BFR) deficiencies or for replacing existing inadequate facilities. When use is approved, it is only to the minimal scope that allows for mission accomplishment until permanent facilities can be provided. Exemptions to this provision can only be provided by the proper approval authority designated in paragraph 7 of this policy.

b. Duration of Use. As described in reference (a), IRFs fulfill a short-term, normally three years or less, requirement. The length of time an installation will utilize an IRF must be identified prior to the IRF procurement or lease. Use beyond the approved time requires re-approval by the proper approval authority designated in paragraph 7 of this policy.

c. Where IRFs are required as interim facilities pending completion of permanent construction, the installation shall prepare and submit a project for permanent construction during the next MILCON programming cycle. The MILCON project DD Form 1391 shall indicate that IRFs are in use. The use of the IRFs will be discontinued upon completion of permanent facilities. Lease documents should contain provisions for removal of the IRFs from the activity. Exemptions to this

provision can only be provided by the proper approval authority designated in paragraph 7 of this policy.

d. When IRFs are required for billeting occupants during renovation of a facility (either MILCON or O&M scope), the IRFs should be provided as part of the project cost and included on the DD Form 1391 cost estimate. Approval is not needed to provide relocatables in this way as they are considered contractor provided. However, the relocatable facilities must be removed from the site by the contractor upon completion of the renovation project unless re-use is approved by the proper approval authority designated in paragraph 7 of this policy. Contract documents must contain provisions for delivery, installation, and removal of the relocatable facilities by the contractor.

e. IRFs shall be accounted for as Class III personal property, unless they are authorized for procurement using construction procedures, in which case they will be accounted for as Class II real property.

f. An economic analysis must be completed to compare procurement versus leasing costs of the IRF. The more economical means must be pursued, unless adequate justification is provided to explain deviation from this policy.

5. Procedures. IRF requests will be initiated by the installation commander via the “Relocatable” tab on the Facilities Integration (FI) Web site. The FI Web site requires a log-in and password, which can be requested on the website. When requesting access to the system, users should request access to the “FSRM” function of the website when prompted, and type “Request access to the Relocatables Module” in the comment block.

a. Tenant activities will submit requests for additional facilities requirements to their installation via the chain of command. Installations will validate the requirements via the facilities planning process. Note: Installation commanders are responsible for submitting IRF requests for facilities that will be emplaced on their base. Marine Corps Systems Command (MARCORSYSCOM), affiliated Program Executive Officers (PEO), TECOM, Marine Corps Community Services (MCCS) and other uniformed services must coordinate with installations to emplace any structures or facilities to support fielded equipment, training, or any other activities or initiatives on an installation. Examples of such structures or facilities include, but are not limited to, storage, training support, maintenance, and administrative spaces. Such IRF requests must originate with the installation and be approved by the installation’s proper approval authority designated in paragraph 7 of this policy.

b. Upon validation of the requirement, installations will submit an IRF request to the appropriate Marine Corps Installation (MCI) regional (MCIs WEST/EAST/PAC/NCR) Commander, in accordance with reference (h), via their chain of command for any IRF that will be emplaced on the installation property. (NOTE: For any installation that does not report to a MCI region, such as MCB Quantico, submissions will be sent directly to ADC I&L (LF)/COMMCICOM. A routing chart is included at the end of this policy.) If an intermediate command disapproves the request, they will return the request to the installation via the FI Web site with comments. The installation will be able to make the necessary changes and re-submit the request to the MCI.

c. Once received, the ADC I&L (LF)/COMMCICOM will approve the IRF request via the FI Web site, or return the request to the respective installation via the intermediate command with comments.

d. IRFs will be requested and approved via the FI Web site to maintain consistency and visibility of all IRFs approved within the Marine Corps. If the website cannot be accessed, the IRF can be approved by paper or e-mail, but the package must be uploaded into the system as soon as possible. At a minimum, an IRF package will include the following:

(1) Facility function and unit/installation supported.

(2) Number of buildings requested and their total square footage.

(3) Date facility is required.

(4) Length of time relocatable facility will be used for the function.

(5) Estimated costs and proposed source of funding for the procurement or lease, to include delivery, set-up, teardown, packaging, and transportation, all of which should be included in the acquisition.

(6) Estimated costs and proposed source of funding for site preparation, foundations, utilities, and other construction.

(7) Estimated life-cycle costs and proposed source of funding for sustainment, to include utilities, facilities services, maintenance, and repair.

(8) Number and type of personnel (military, civilian, contractor) to use the facility.

(9) Proposed disposition of facility upon termination of requirement.

(10) Plans for replacement with permanent facilities if applicable, including project number, title, and program year.

(11) Economic Analysis to compare procurement to leasing costs.

(12) BFR documentation when IRFs are being used pending construction of a permanent facility solution.

(13) Facility Planning Documentation (FPD).

(14) Site approval form NAVMC 11069.

(15) An aerial picture depicting existing structures with proposed IRFs superimposed. Scale, labeling, north arrow, depiction of all applicable structures, parking spaces, sidewalks, and streets are required.

(16) Brochure or other pictures (external and internal) of proposed IRF.

(17) NEPA documentation.

(18) Signed endorsement from the installation Commander and intermediate commands when applicable.

6. Coordinating Instructions

a. Funding. There is no centralized funding for IRFs within the Marine Corps. Normally, the IRF will be funded through locally available Operations & Maintenance, Marine Corps (O&MMC) funds. However, if procurement is more cost effective, and if the purchased cost exceeds the investment threshold as set forth in reference (bg),

the proposed IRF must compete with all other Marine Corps un-programmed requirements for available PMC funds. The unit or activity requesting the IRF must seek funding through their chain of command. The approving authority (HQMC) will not approve an IRF request until proper funding is secured.

b. Procurement Agent. In accordance with subpart 1.6 of reference (c), the NAVFAC is the designated procurement agent for all IRFs unless otherwise specified. Regional commands will coordinate with their Facilities Engineering Command (FEC) to determine the appropriate contract administration fee for IRF procurement and/or lease.

c. Accountability. As stated in reference (a), IRFs shall be properly regarded as personal property; however, all IRFs shall be entered into the Internet Navy Facility Assets Data Store (iNFADS) as a Class III record and will be identified as a Facility Type Code "5" (Relocatable), and Construction Type Code “R” (Relocatable) for reporting purposes by the installations. Temporary facilities acquired through construction procedures will be accounted for as Class II real property and entered into iNFADS with the appropriate Facility Type Code (but cannot be “5” which only applies to Class III) and Construction Type Code “T” (Temporary).

d. Design Standards. IRFs shall be designed to comply with local building codes and references (d) and (e) to ensure the protection of life, mission, and property. Per reference (f), IRFs shall be designed to maximize energy efficiency. Energy and water consumed in IRFs are counted against installation intensity reduction mandates. All component equipment of the IRF shall be Energy Star rated.

e. Sustainment. For IRFs occupied by reimbursable tenant activities, the tenant is responsible for funding sustainment. For IRFs occupied by Marine Corps tenant activities, sustainment may be funded either through installation BOS funds or tenant O&M funds, as determined by the approval authority. Facilities Sustainment, Restoration and Modernization (FSRM) may not be used to fund maintenance or repair of IRFs.

f. Minor Construction Site Preparation. Site preparation is typically O&MMC funded minor construction. Procedures in reference (g) are to be followed for approval of the minor construction projects prior to the approval of the IRF.

7. Responsibilities

a. ADC I&L (LF)/COMMCICOM is responsible for approving or disapproving all MCI regional and subordinate installation IRF request.

b. HQMC will be responsible for approving and funding IRFs supporting Presidential, Congressional, OSD or Marine Corps initiatives, such as the “Grow the Force” initiative of 2007. This authority may be delegated to the MCI regions via e-mail or formal message.

c. MCI regional Commanders and installations which report directly to HQMC are required to maintain records of all approved IRFs within their command until the IRF is disposed of, the lease terminated, or it is no longer in use by the installation.

d. MCI regional Commanders and installations which report directly to HQMC will provide HQMC an annual summary of all IRFs approved. A sample template is included at the end of this policy. The summary is due to ADC I&L (LF)/COMMCICOM no earlier than 1 September and no later than 30 September of each year. The

summary must be endorsed by the MCI regional Commanding General or personnel with “by direction” authority.

e. Installation Commanders are responsible for disposing of IRFs when they are no longer required or are deemed unfit for service. Re-use of the IRF for another purpose must be reauthorized by MCI regions and ADC, I&L (LF)/COMMCICOM

f. Installation Commanders will maintain current records of all IRFs emplaced on their installation, to include their exact location, size, and purpose. Records of IRFs that have been disposed of or whose leases have been terminated will be kept on file for two years.

g. Installation Commanders are responsible for entering IRFs into iNFADS and updating the property status in the system as required.

h. MARCORSYSCOM and affiliated PEOs are responsible for informing the MCI regions and ADC I&L (LF)/COMMCICOM via formal message of any relocatable facilities or shelters that will be provided to the installations to support newly fielded equipment or MARCORSYSCOM programs. This includes but is not limited to Corrosion Prevention and Control (CPAC) and simulators. MCI regions shall ensure that proper liaison is made with NAVFAC.

Appendix H

Facilities Planning Document (FPD)

FACILITY PLANNING DOCUMENT

Report run on: July 13, 2009 10:32 AM

Installation	M62204	MCLB BARSTOW CA
Planning Area	BA	NEBO AREA
Tenant UIC	M62204	MCLB BARSTOW CA
Category Code	44110	GENERAL PURPOSE WAREHOUSE

Rqmt Appr Requirement Chg 05-MAY-06 Allowance Chg 03-JUL-09 Latest Chg 23-SEP-07

	Requirement	Allowance	UM	Adequate	Substandard	Inadequate	Total	Delta (Assets-Rqmt)
Area	46,912.00	321,448.00	SF	191,621.00	129,827.00	0.00	321,448.00	274,536.00
Other	59,485.00	3,239,380.00	TC	1,941,110.00	1,298,270.00	0.00	3,239,380.00	3,179,895.00
Alternate	10.00	70.01	SH	50.01	20.00	0.00	70.01	60.01

Total Proposed Assets 73,356.00 Result of Proposed Action 26,444.00

Standard Notes 1) PENDING CMC APPROVAL
2)

FACILITY DETAIL — SATISFACTION OF DEFICIENCY/SURPLUS

Facility NO	SA	Multi	EE	Const	Condition	Measurement	Def Codes	Action ID	Action	Scope	Note
1A	BA	Y	2005	SEMI	ADEQUATE	22,934.00		USE	+	3,042.00	
2	BA	N	2005	SEMI	ADEQUATE	124,715.00		OUTG-C	-	124,715.00	01
233	BA	N	2005	TEMP	ADEQUATE	2,400.00		USE	+	2,400.00	
3	BA	Y	2005	SEMI	ADEQUATE	39,664.00		USE	+	36,406.00	
4	BA	Y	2005	SEMI	SUBSTANDARD	118,838.00	X33Z53	OUTG-C	-	117,884.00	03
63	BA	Y	2005	PERM	ADEQUATE	1,908.00		USE	+	1,908.00	
8	BA	Y	2005	SEMI	SUBSTANDARD	10,989.00	Z53Z83	USE	+	24,600.00	

ACQUISITIONS

PLANNING ACTIONS FOR CONVERSIONS AND REASSIGNMENTS

Facility NO	Referenced FPD	Action ID	Action	Scope	Note
368	BA / M62204 / 73010	CONVFR	+	5,000.00	

FPD GENERAL/ACTION NOTES

GENERAL NOTE: None

01 HQMC comment:
Building 3 is used by other organizations for organizational storage. Their Basic Facility Requirements are included in other category codes. The space in building 3 should be recategorized to those CCNs.

02 Used for temporary storage of deliveries, construction materials, etc.

03 Warehouses 2 & 4 is NASA

Page 1 of 1

Activity Identification - *FPD Activity Section*

FACILITY PLANNING DOCUMENT

Report run on: July 13, 2009 10:32 AM

Installation	M62204	MCLB BARSTOW CA
Planning Area	BA	NEBO AREA
Tenant UIC	M62204	MCLB BARSTOW CA
Category Code	44110	GENERAL PURPOSE WAREHOUSE

Rqmt Appr Requirement Chg 05-MAY-06 Allowance Chg 03-JUL-09 Latest Chg 23-SEP-07

Requirements vs. Total Proposed Assets - *FPD Requirements Section*

	Requirement	Allowance	UM	Adequate	Substandard	Inadequate	Total	Delta (Assets-Rqmt)
Area	46,912.00	321,448.00	SF	191,621.00	129,827.00	0.00	321,448.00	274,536.00
Other	59,485.00	3,239,380.00	TC	1,941,110.00	1,298,270.00	0.00	3,239,380.00	3,179,895.00
Alternate	10.00	70.01	SH	50.01	20.00	0.00	70.01	60.01
		Total Proposed Assets		73,356.00		Result of Proposed Action		26,444.00

Utilizing Existing Inventory *- FPD Utilization of Inventory Section*

FACILITY DETAIL								SATISFACTION OF DEFICIENCY/SURPLUS				
Facility NO	SA	Multi	EE	Const	Condition	Measurement	Def Codes	Action ID	Action	Scope	Note
1A	BA	Y	2005	SEMI	ADEQUATE	22,934.00		USE	+	3,042.00	
2	BA	N	2005	SEMI	ADEQUATE	124,715.00		OUTG-C	-	124,715.00	01
233	BA	N	2005	TEMP	ADEQUATE	2,400.00		USE	+	2,400.00	
3	BA	Y	2005	SEMI	ADEQUATE	39,664.00		USE	+	36,406.00	
4	BA	Y	2005	SEMI	SUBSTANDARD	118,838.00	X33Z53	OUTG-C	-	117,884.00	03
63	BA	Y	2005	PERM	ADEQUATE	1,908.00		USE	+	1,908.00	
8	BA	Y	2005	SEMI	SUBSTANDARD	10,989.00	Z53Z83	USE	+	24,600.00	

ACQUISITIONS

PLANNING ACTIONS FOR CONVERSIONS AND REASSIGNMENTS					
Facility NO	Referenced FPD	Action ID	Action	Scope	Note
368	BA / M62204 / 73010	CONVFR	+	5,000.00	

Planning Actions - *FPD Notes*

	Requirement	Allowance	UM	Adequate	Substandard	Inadequate	Total	Delta (Assets-Rqmt)
Area	46,912.00	321,448.00	SF	191,621.00	129,827.00	0.00	321,448.00	274,536.00
Other	59,485.00	3,239,380.00	TC	1,941,110.00	1,298,270.00	0.00	3,239,380.00	3,179,895.00
Alternate	10.00	70.01	SH	50.01	20.00	0.00	70.01	60.01

Total Proposed Assets 73,356.00 Result of Proposed Action 26,444.00

Total Proposed Assets 73,356.00 Result of Proposed Action 26,444.00

Standard Notes 1) PENDING CMC APPROVAL

2)

FACILITY DETAIL							SATISFACTION OF DEFICIENCY/SURPLUS			
Facility NO	SA	Multi	EE	Const	Condition	Measurement	Def Codes	Action ID	Action	Scope	Note
OUTG-C						-	124,715.00	01			
USE						+	2,400.00				
USE						+	36,406.00				
OUTG-C						-	117,884.00	03			
USE						+	1,908.00				
USE						+	24,600.00				

FPD GENERAL/ACTION NOTES

GENERAL NOTE: None

01 HQMC comment:
Building 3 is used by other organizations for organizational storage. Their Basic Facility Requirements are included in other category codes. The space in building 3 should be recategorized to those CCNs.

02 Used for temporary storage of deliveries, construction materials, etc.

03 Warehouses 2 & 4 is NASA

Appendix I

Recommended Outline for Comprehensive Plan

Section 1.0 Installation Vision
1.1 Installation Mission
1.2 Planning Vision, Goals & End State
1.3 Vision Statement
1.4 Installation Framework
- Map
- Districts
- Network
- Land Use and Developable Land
- Constraints, Opportunities

Section 2.0 Installation Development Summary
2.1 Executive Summary
2.2 Installation Network Plan
- Illustrative Plan
- Regulating Plan
- Street and Transit Plan
- Sidewalk and Bikeway Plan
- Green Infrastructure Plan
- Primary Utility Plan

2.3 Installation Land Use Plan
2.4 Installation Development Standards Summary
2.5 Project Listing
2.6 Program Development
- Five Year Development Plan (FYDP)
- Integrated Priority List (IPL)
- Phasing
- Build Out to Growth Boundary

Section 3.0 Crosswalk with Other Installation Plans
3.1 Integrated Natural Resources Management Plan (INRMP)
- Executive Summary
- Mission/Vision Integration - How INRMP Supports the Installation Mission and Vision
- Constraints, Opportunities

3.2 Integrated Cultural Resources Management Plan (ICRMP)
- Executive Summary
- Mission/Vision Integration - How ICRMP Supports the Installation Mission and Vision
- Constraints, Opportunities

3.3 Encroachment Control Plan (ECP)
- Executive Summary
- Mission/Vision Integration - How ECP Supports the Installation Mission and Vision
- Constraints, Opportunities

3.4 Integrated Land Use Plan (ILUP) and Joint Land Use Study (JLUS)
- Executive Summary
- Mission/Vision Integration - How ILUP/JLUS Support the Installation Mission and Vision
- Constraints, Opportunities

3.5 Range Management Plan (RMP)
- Executive Summary
- How RMP Supports the Installation Mission (Project List)
- Constraints, Opportunities

Section 4.0 Regulating Plan and Vision End State
4.1 Summary of Regulating Plan
Installation Planning Board
Installation Environmental Impacts Review Board
4.2 Vision End State

Appendices
Appendix A Maps
Appendix B Five Year Plan and IPL

APPENDIX C: MAP LIST

Map List for Comprehensive Plan

A-3 Management Areas
A-4 Environmental Regulatory Issues
A-4 Environmental Emission Sources
B-1 Base Layout
C-1A Existing Land Use
C-1B Future Land Use
C-1E Vicinity Existing Land Use
A-1 Areas of Critical Concern
C-2 Composite Constraints/Opportunities
D Airfield Operations
F-4 On-Base Noise Contours
F2 Compatible Use Districts
G Composite Utilities
H-1 Base Wide Communications
I-1 Community Network and Access to Base
I-2 On-Base Network
I-3 Communications and NAVAID Systems
I-3 Transportation Plan
K Architectural Compatibility
L Landscape Development
M-2 Short Range Development Plan
M-3 Long Range Development Plan
N Fire Protection

Government Furnished Material Baseline for Comprehensive Plan, Master Plan and Area Development Plans

Joint Land Use Study (JLUP)
Encroachment Control Plan (ECP)
Region and Installation Sustainability Plans
Range Comprehensive Master Plans
Storm Water Protection Plan
Spill Prevention and Control Plan
Bird Airstrike Safety Hazard (BASH) Plan
Facility Space Utilization Report
Air Emissions Study
Air Installation Compatible Use Zone (AICUZ) Study
Airfield Obstructions Study
Central Heating Plant Study
Communications-Computer Systems Architecture
Integrated Cultural Resources Management Plan
Electrical System Upgrade
Facilities Excellence Plan
Housing Community Plan

Integrated Natural Resources Management Plan
Surface Development and Distribution Command Traffic Studies (SDDC-TEA)
Natural Gas Distribution System Study
Real Property Inventory
Installation Restoration Program Study
Sanitary Sewer System Capacity and Condition Study
Water Distribution System Study

Appendix J

MASTER PLAN FORMAT

1.0 Vision Plan
1.0.1 Commander's Letter and Guidance
1.0.1 Project Scope
1.0.2 Planning Process and Assumptions
1.0.2.1 DoD Policy & UFC
1.0.2.2 Planning Design References
1.0.3 Installation Overview and History
1.1 Installation and Community Profiles and Stakeholders
1.1.1 Installation Development Profile
1.1.1.1 Installation Mission Profile and Trends
1.1.1.1.1 Current and Future Mission Requirements [FSR]
1.1.1.1.2 Installation Workforce & Residents [FSR]
1.1.1.1.3 Mission Limiting Factors and Assets
1.1.1.1.1.1 Existing Real Estate
1.1.1.1.1.1.1 Real Estate and Land Utilization
1.1.1.1.1.1.2 Land Use Restrictions Summary
1.1.1.1.1.2 Real Property Inventory
1.1.1.1.1.2.1 Facility and Infrastructure Condition
1.1.1.1.1.2.1 CORRS
1.1.1.1.1.2.2 Property Record/Maximo Report
1.1.1.1.1.3 MCI COM Plans, Policies and Facility Allowances
1.1.1.1.1.4 Resources & Assets (architecture, greenbelts, etc)
1.1.1.1.4 Installation Maps (Baseline Map Index)
1.1.1.1 Region and Local Area Governance/Liaison and Trends
1.1.1.1.1 Federal Agencies
1.1.1.1.2 State and County Departments
1.1.1.1.3 Local Governments
1.1.1.1.4 Local Separate Operating Agencies, Authorities and COG/MSA
1.1.1.1.5 Installation Activities with Local Governments
1.1.1.1.6 Region and Local Area Maps
1.1.1.1 Challenges and Opportunities
1.1.2 Region & Local Area Development Profile and Trends
1.1.2.1 Off-Installation Workforce & Clientele [FSR]
1.1.2.1.1 Demographic Needs for Services
1.1.2.1.1 Transportation and Installation Accessibility
1.1.2.2 Changing External Environmental Conditions and Trends [Census]
1.1.2.2.1 Land Use
1.1.2.2.2 Population Density
1.1.2.2.3 Environmental Change
1.1.2.2.4 Transportation Systems
1.1.2.3 Challenges & Opportunities

1.2 Project Scoping
    1.2.1 Stakeholder Interviews
    1.2.2 GIS Analyses
    1.2.3 Field Visits
1.3 Installation Visioning Charette: New Oregon Model
    1.3.1 Visual Preference Survey
    1.3.2 SWOT
    1.3.3 Vision Statement
        1.3.3.1 Alternative Visions
        1.3.3.2 Vision Statement
    1.3.4 Goals
    1.3.5 Measurable, Actionable Objectives
    1.3.6 Action Plan & Installation Planning Board
1.4 Developable Land
    1.4.1 Utilized\Built Out
    1.4.2 Greyfield
    1.4.3 Greenfield
    1.4.4 Brownfield/Superfund
1.5 Installation Framework Plan1.5.1 District Framing Criteria
        1.5.1.2 Paths
        1.5.1.2 Edges
        1.5.1.3 Districts
        1.5.1.4 Nodes
        1.5.1.5 Landmarks
    1.5.2 Existing Conditions
    1.5.3 Installation Districting and Development
        1.5.3.1 Subdivided & Prioritized for Development/Redevelopment
        1.5.3.2 Historic Preservation/Historic District
        1.5.3.3 Open Space
                1.5.3.3.1 Conservation/Preservation
                1.5.3.3.2 Health & Safety
                1.5.3.3.3 Security
                1.5.3.3.4 Recreation
        1.5.3.4.4 Criteria Applied
    1.5.4 Significant Features Influencing Development
    1.5.5 Planning Strategies, General Requirements and Concepts Used
    1.5.6 Current and Future ADP Projects
1.6 Summary Future Development Plan
    1.6.1 Infrastructure
    1.6.2 Notional Facility Footprints and build out/BRAC
    1.6.3 Conservation/Preservation and Development Limits
        1.6.3.1 Concentrate Sustainable Development Inside Growth Boundary
        1.6.3.2 Conserve and Preserve Land Outside Growth Boundary
2.0 Installation Development Plan
    2.0.1 Executive Summary Integrating Area Planning with Network Plan
        2.0.1.1 Executive Summary APD, Engineering Studies & Site Surveys
        2.0.1.2 Integration of Existing Functional Area and Centrally Managed Plans
                2.0.1.2.1 National Environmental Policy Act (NEPA) Documents
                2.0.1.2.2 Integrated Natural Resources Management Plan

2.0.1.2.3 Integrated Cultural Resources Management Plan
2.0.1.2.4 Range Control Management Plan/Airfield Plan/Harbor Plan
2.0.1.2.5 DLA-E
2.0.1.2.6 DDESB Explosives Safety Site Plans
2.0.1.2.7 DODEA
2.0.1.2.8 Other
2.0.1.3 Engineering Studies & Site Surveys
2.0.1.2.1 Intermodal Transportation Plan/SDDC Traffic Engineering Agency
2.0.2 Installation Network Plan
2.0.2.1 Installation Illustrative Plan: ADPs and Studies
2.0.2.2 Installation Street and Transit Plan
2.0.2.3 Installation Non-vehicular Plan
2.0.2.3.1 Sidewalks & Jogging Baths
2.0.2.3.2 Bikeways & paths
2.0.2.3.3 Equestrian paths (Camp Pendleton only)
2.0.2.4 Installation Green Infrastructure Plan
2.0.2.5 Installation Primary Utility Plan
2.0.2.5.1 Water
2.0.2.5.1.1 Distribution System
2.0.2.5.1.2 Fire Protection
2.0.2.6 Wastewater/Industrial Wastewater & Storm Water
2.0.2.7 Communications
2.0.2.8 Electrical & Cathodic Protection
2.0.2.9 Central Heating and Cooling
2.0.2.10 Fuels
2.0.2.11 Solid Waste/Recycling
2.0.2.12 Security
2.0.2.13 Quality-of-Life
2.0.2.14 High Performance Facilities & Sustainability Appendix E/LEED Practices
2.0.2.14.1 LEED-New Construction
2.0.2.14.2 LEED-Existing Building
2.0.2.14.3 LEED-Neighborhood Design
2.0.2.14.4 LEED-Health Care
2.0.2.14.5 LEED-Schools
2.0.2.14.6 LEED-Retail
2.0.2.14.7 LEED-Commercial Interiors
2.0.2.14.8 LEED Retail Interiors
2.0.2.15 Existing Plans
2.0.2.15.1 National Environmental Policy Act (NEPA) Documents
2.0.2.15.2 Integrated Natural Resources Management Plan
2.0.2.15.3 Integrated Cultural Resources Management Plan
2.0.2.15.4 Range Control Management Plan/Airfield Plan/Harbor Plan
3.0 Installation Development Standards
3.1 Installation Regulating Plan
3.1.1 Street Envelop Standards
3.3.1 Building Envelop Standards
3.1.3 Architectural Standards

Appendix K

AREA DEVELOPMENT PLAN (ADP) FORMAT

Phase I: Identification:

1.0 Goals, Objects & Vision End State
2.0 Objectives
3.0 Facility Requirements and Land
- 3.0.1 Area Force Loading
- 3.0.2 Area Equipment Loading
- 3.0.3 Developable Real Estate
- 3.0.3 Re-developable Real Property
- 3.0.4 Assets (Architecture, Greenbelt, etc)

4.0 Functional Relationships
- 4.0.1 Functional Relationship Diagrams
- 4.0.2 Functional Relationships

5.0 Base Maps
- 5.0.1 Area Map
- 5.0.2 Vicinity Map
- 5.0.3 Location Map
- 5.0.4 Other Maps

6.0 Site Analysis and Data Collection
- 6.0.1 Master Plan, design guide, installation reports and user information
- 6.0.2 Environmental Features
- 6.0.3 Tree Survey
- 6.0.4 Physical features: buildings, utilities, pavement, fences and easements

Phase II: Evaluation

7.0.0 ADP Area Analysis
- 7.0.1 Off-Site Conditions
  - 7.0.1.1. Land Use
  - 7.0.1.2. Transportation
  - 7.0.1.3. Utilities
    - 7.0.1.3.1. Water System
    - 7.0.1.3.2. Sanitary Sewer
    - 7.0.1.3.3. Storm Drainage System
    - 7.0.1.3.4. Electrical, Gas and Steam Systems
    - 7.0.1.3.5. Telephone System
    - 7.0.1.3.6. Other Types of Communication and DCIP
    - 7.0.1.3.7.0. Environmental Conditions and Hazards**
      - 7.0.1.3.7.0.1 Drainage Pattern i.e. watershed and flow direction
      - 7.0.1.3.7.0.2. Storm Water Management Areas
      - 7.0.1.3.7.0.3. Flood Plain
      - 7.0.1.3.7.0.4. Wetland
      - 7.0.1.3.7.0.5. Wildlife Habitat
      - 7.0.1.3.7.0.6. UST, IRP
      - 7.0.1.3.7.0.7.0. Other Hazards
    - 7.0.1.3.8. Historical, Cultural and Archeological Resources
    - 7.0.1.3.9. Safety Hazards
    - 7.0.1.3.10. AT/FP Physical Security
    - 7.0.1.3.11. Sources of Air, Noise and Light Pollution
    - 7.0.1.3.12. Visual Enclosure [views]
- 7.0.2. On-site Conditions
  - 7.0.2.1. Geology
  - 7.0.2.2. Topography
  - 7.0.2.3. Hydrology
    - 7.0.2.3.1. Subsurface
    - 7.0.2.3.2. Surface

7.0.2.4. Soils
7.0.2.5. Climate
7.0.2.6. Vegetation
7.0.2.7.0. Wildlife Habitat
7.0.2.8. Archeological, Cultural and Historical Resources
7.0.2.9. Visual Survey
7.0.2.9.1 General geologic, topographic and vegetative character
7.0.2.9.2. Visual Character
7.0.2.9.3. Sensory information -- noise, odor, confined space
7.0.2.9.4. Micro-climate
7.0.2.10. Opportunities and Constraints
7.0.2.10.1 Map
7.0.2.10.1.1. Natural Features to Preserve
7.0.2.10.1.2. Natural Features to Conserve
7.0.2.10.1.3. Climatic Impacts
7.0.2.10.1.4. Existing Structures of Historic, Architectural or other Significance to Preserve/Conserve
7.0.2.10.1.5. Existing Structures/Landmarks Relationships Related to Development
7.0.2.10.1.6. Existing Structures/Features with Negative impacts
7.0.2.10.1.7.0. Vehicular/No-vehicular conflicts and opportunity
7.0.2.10.1.8. All Utilities in Area or Impacted by Development
7.0.2.10.1.9. Required buffers, setbacks, hazard zones, easements, ROW
7.0.2.10.1.10. Important Visual Nodes
7.0.2.10.1.11. Desirable/Undesirable Visual Impact enhancement/screening
7.0.2.10.1.12. Significant Vegetation i.e. Trees & Shrubs
7.0.2.10.2. Opportunities and Constraints Evaluation
7.0.2.10.3. Limited or Confined Area Adjustments
7.0.2.10.3.1. User Requirements
7.0.2.10.3.2. Land
7.0.3. Alternate Site Development
7.0.3.1. Number of Alternatives and Facility Types (UFC)
7.0.3.2. Delineation of Area Boundary
7.0.3.3. Vehicular Circulation in Area
7.0.3.4. Delineation of Existing and Proposed Development Sites
7.0.3.5. Site Access Points including Service Areas
7.0.3.6. Pedestrian Access and Potential Linkage
7.0.3.7.0. Significant Features and Proposed Landmarks
7.0.4. Alternate Plan Evaluation
7.0.4.1. Review--Design Team, Customer, User
7.0.4.2 Development Alternatives
7.0.4.3 Impact on Other ADP
7.0.4.4 Impact on Installation Network
7.0.4.5 Review of Alternative and Selection of Preferred Alternative
7.0.5 Final Area Development Plan
7.0.5.1. Preliminary ADP
7.0.5.2. Final ADP
7.0.5.2.1 Requirements
7.0.5.2.2 Illustrative Plan
7.0.5.2.2.1. Existing and Proposed Roads and Driveways; Parking Lots with Spaces
7.0.5.2.2.2. Existing and Proposed Pedestrian Walkways
7.0.5.2.2.3. Areas for Plazas and Outdoor Displays
7.0.5.2.2.4. Areas with Special Paving or Street Furnishings
7.0.5.2.2.5. Large Scale Open Space e.g. Parade Grounds, Ball Fields, etc.7.0.5.2.2.6. Service Areas with Screening

7.0.5.2.2.7.0. Areas for Future Expansion, Planned or Potential
7.0.5.2.2.8. Major Utility Corridors
7.0.5.2.3. Regulating Plan
7.0.5.2.2.1. Building Envelopes
7.0.5.2.2.2. Street Envelopes
7.0.5.2.2.3. Landscaping Standards
7.0.5.2.2.3. Architectural Standards
7.0.5.2.2.4. Restricted Building Line (RBL)
7.0.5.2.2.5. Area Growth Boundary
7.0.5.2.4 Implementation Plan
7.0.5.2.5 Capacity Analysis
7.0.5.2.6 Supported Sketches and Renderings
Phase III: Area Development Execution Plan

Appendix L

Master Planning Training Resources

1. DoD Master Planning Institute (DODMPI): UFC-Compliant Master Plan Training through the USACE. The new Installation Master Planning UFC outlines a more energy efficient and sustainable model for planning military installations. It outlines 10 key planning strategies that all installations must incorporate into their master plans. It describes a minimum set of planning products and processes that all installations must adopt as they prepare their master plans. It also outlines recommended training for installation planners and commanders. Our training baseline consists of the following three courses (with USACE Course equivalent) to create a UFC-compliant Master Plan:

2. Command Orientation: Commander and Planner Master Planning Workshop. In this 4-hour session, Commanders and their planners will learn about the master planning process and products required for Marine Corps installations. They will develop an understanding of the planning processes and products required by the Installation Master Planning UFC and Marine Corps guidance. They will gain knowledge about the 10 planning strategies in the UFC and how to apply those strategies at their installations. This includes training on sustainable planning, area development planning, healthy community planning, network planning, form based planning, resource conservation (including NEPA), defensible planning, capacity planning, and plan-based programming (including functional planning). Using scale models, they will also learn how to prepare elements of an ADP for a portion of an installation. This course will be supported by USACE faculty with one planning instructor from the Urban Collaborative.

a. Curriculum (4 Hours of Training): An Introduction to Military Master Planning: The Unified Facilities Criteria (UFC): lecture (1.5 hours). Applying the UFC – creating a vision, analyzing a site, preparing alternatives, evaluating alternatives: exercise (2.5 hours).

b. Deliverable: Workshop Report documenting schedule, participation, and example images from student work.

3. Basic Training: Master Planning Principles Class (PROSPECT 241). In this 2.5 day course, participants will learn the basics of master planning for Marine Corps installations. On day one, they will develop an understanding of the planning processes and products required by the Installation Master Planning UFC and Marine Corps guidance. They will gain knowledge about the 10 planning strategies in the UFC and how to apply those strategies at their installations. This includes training on sustainable planning, area development planning, healthy community planning, network planning, form based planning, resource conservation (including NEPA), and plan-based programming (including functional planning). They will also learn about key planning and urban design principles – from the making of great streets to the planning of appropriate parking. On day two, they will learn how to plan within current AT/FP regulations and how to accommodate parking and transit. Using planning metrics, they will also learn how to evaluate planning products. On day three, they will learn about specific Marine Corps/Navy planning procedures and they will be able to evaluate actual planning products that are consistent with the UFC. This course will be supported by three faculty members (Headquarters, USACE lead and two planning instructors from the Urban Collaborative).

a. Curriculum (20 Hours of Training)

(1) Day 1. Introduction: Logistics, registration, pretest (1 hour). An Introduction to Military Master Planning: The UFC: Lecture (2 hours) Creating a Master Planning Vision: Lecture and exercise (1 hour)
Principles of Urban Design: Lecture and exercise (3 hours). The Planning Process: lecture (1 hour).

(2) Day 2. Planning for Energy-Efficient Net Zero Installations: Lecture and exercise (3 hours) Planning for Antiterrorism/Force Protection: Lecture and exercise (1 hour). Measuring Excellence in Planning - Planning Metrics: Lecture and exercise (4 hours).

(3) Day 3. Marine Corps Planning - AEs, FPDs, and BFRs: Lecture (1 hour) DoD Planning Products: Lecture and exercise (2 hours) Conclusion: Wrap-up, next steps, post-test (1 hour).

b. Deliverable. Course Report documenting schedule, participation, and example images from student work

4. Master Planning Advanced Techniques (PROSPECT 952A). In this 4.5 day studio-based course, planners will prepare a conceptual ADP from the development of a vision to the preparation of Illustrative and Regulating Plans. Students will gain an understanding how design shapes and is shaped by physical, economic, political, social, environmental, and cultural considerations. Students will be introduced to additional graphic and technical tools to aid in their presentation of planning products. They will learn how to prepare a program for short and long-term development based on their plan. The course includes field surveys and design review sessions. This course will be supported by USACE faculty staff of both government and representatives from the Urban Collaborative.

a. Curriculum (36 Hours of Training)

(1) Day 1. Introduction: Logistics, registration, pretest (1 hour). An Introduction to Military Master Planning: The UFC: Lecture (2 hours) Planning Forum: exercise (1 hour). Planning for Complete Streets: Exercise (2 hours). Precedent Study: Field exercise (2 hours).

(2) Day 2. Guest Speaker - Marine Corps Planning: Lecture (1 hour) Document Review - learning from history: Exercise (1 hour) Planning Patterns: lecture and exercise (2 hours). District Analysis - existing condition assessments: Field exercise (3 hours) Analysis Mapping: Exercise (1 hour).

(3) Day 3. AT/FP Planning: Lecture (0.5 hours). Strengths, Weaknesses, Opportunities,and Threats, Vision and Principles (SWOT-VP): Exercise (2 hours). Functional Relationships and Requirements: Exercise (1.5 hours). Alternative Development: Exercise (4 hours).

(4) Day 4. Selling the Plan: Lecture (0.5 hours) Participatory Design (0.5 hours). Pre-final Illustrative Plans and Sections: Exercise (3 hours). Final Illustrative Plans and Sections: Exercise (2 hours). Capacity Calculations and Program Development: Exercise (2 hours).

(5) Day 5. Making a Regulating Plan: Exercise (2 hours) Out-briefings: Exercise (1.5 hours). Course Wrap-up (0.5 hours).

b. Deliverable: Course Report documenting schedule, participation, and example images from student work.

Appendix M

Master Plan Map Data Layers

General Plan Maps & Map Series				V 2.6	V 3.0
Plan/ Program -A	**Map -#**	**Plan/Program Map, Layer(s) and Details**	**Descriptions**	**Layer Groups**	**Layers**
	1	Composite Installation Constraints and Opportunities	Natural resources constraints maps in combination with other constraints that have an effect on future sitings and facility development on the installation, using the base map. Show Clear & APZ, ESQD and AICUZ. Use maps for Areas of Critical Concern, Management Areas, Environmental Quality, Environmental Emissions, Flood Plan and Out grant.	Use All Environmental Maps and Base Map	Use All Environmental Maps and Base Map
	2	Historic Preservation	All districts, structures, sites and/or artifacts of historic, architectural, or cultural significance properties listed or eligible for listing on federal, state and local registers of historic places with reference (bh). This shall include all properties on the installation that may meet the criteria for eligibility for inclusion in the National Register of Historic Places.	Cultural, Cadastry	Historic District/Landscape/ Object, Native Affiliation, Traditional Cultural Resource
	3	Archaeology	All archaeological structures, sites and/or artifacts of historic, archaeological or cultural significance under the law. Any maps depicting the location of archeology sites must be restricted to prevent unauthorized access, damage to the sites and violations of the law.	Cultural	Archaeological Site, Cemetery or Burial Site, Cultural Restricted Area/Resource Potential Area/ Survey Area, Sacred Site
	4	Threatened and Endangered Species	Federally Listed Threatened and Endangered Species. Location, inventory, and delineation of all Federally listed Threated and Endangered species and their habitat. Where applicable State listed species shall be included. Location of primary habitat as well as areas of potential habitat restoration efforts. Habitats are labeled for species found in each area. If the habitat has species in the range and is suitable for a threatened or endangered species the distinction should be made.	Fauna	Special Status Species, Species Range/Specific Habitat

General Plan Maps & Map Series				V 2.6	V 3.0
Plan/ Program -A	**Map -#**	**Plan/Program Map, Layer(s) and Details**	**Descriptions**	**Layer Groups**	**Layers**
			Show species pictures of concern if applicable.		
	5	Wetlands & Floodplains	All floodplains and wetlands for installation to include the 100-year floodplain with contours, which is delineated by the limits of a flood that has a one percent chance of occurrence in any given year. Location of wetlands as defined by the US Fish and Wildlife Service's Classification of Wetlands and Deep-Water Habitats of the US National Wetland Inventory (NWI)). Use NWI classification system and general working definition of an area inundated by surface water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil for growth and reproduction. Wetlands generally include swamps, marshes, bogs and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds. Wetland areas less than one acre should be located on the map but do not require NWI designation.	Hydrography	Wetland
	6	Coastal Zone Management Act (CZMA)	CZMA For installations along the coast only, depicts the boundaries of the Coastal Zone Management Area on the installation and any pertinent information.	Hydrography, Ecology. Landform	Shoreline, Shore Management Zone, Shore Entry Location, Bathymetry
	7	Soil Borings & Soil Types	Locations and composition of soil types and borings depicting areas suitable and unsuitable for construction. Use Boring information for the entire base with greater coverage in the airfield pavement and intensive building areas. Use the best available existing data; new borings are not required from NAVFAC or the USACE District Office.	Geology	NO LAYER put samplings in Bore Hole and Survey Job
	8	Geology and Surface Features	Geology including surface, subsurface, and paleontology, using existing literature and other data to describe the geology of the area such as surveys and seismic	Geology	NO LAYER

General Plan Maps & Map Series				V 2.6	V 3.0
Plan/ Program -A	**Map -#**	**Plan/Program Map, Layer(s) and Details**	**Descriptions**	**Layer Groups**	**Layers**
			studies. Depicts location of mineral and fossil fuel deposits and sources of geothermal energy on the installation. May depict potential for earthquakes and approximate depth of the water table and aquifer.		
	9	Topography & Physiography	Topography and physiography of the area using existing literature and other data with contours depicting 5-foot positive or negative elevation changes overlaid on a topographic map. DEM and LIDR may be used if available.	Landform	General Contour, Elevation Contour, Spot Elevation
	10	Hydrology	Existing hydrologic information and surface drainage patterns to model and map drainage basins. Field surveys can be performed to verify and update the surface drainage data. Data includes both perennial and intermittent streams. In case of no existing government hydrology data, USGS data, state water resources data, data collected in the field, or data obtained from other credible sources. Show the location of drainage systems	Hydrography, Improvement Flood control	Natural Water Body, Historic River Alignment
	11	Vegetation Types	Classifies, locates and delineates vegetative types and boundaries in the unimproved areas of each installation.	Flora	Vegetation, Land Cover
	12	Forest (Commercial Timber)	Wooded areas that are used for commercial timber harvest and that are larger than 5 acres. Urban forests are trees identified as unique, indigenous, or exotic and to be retained and maintained. Show the boundaries of wooded areas and urban forest trees and location of commercial timber operations and the location of large stands of trees. Future construction projects that require extensive removal of trees should be identified. Show hardwood stands, softwood or pine stand or mixed stands in accordance with the U.S. Forest Service definitions. Ages of tree stands and details regarding frequency of harvest and management practices such as periodic	Flora	Forest Compartment, Forest Product Harvest, Forest Stand, Land Management Zone

General Plan Maps & Map Series				V 2.6	V 3.0
Plan/ Program -A	**Map -#**	**Plan/Program Map, Layer(s) and Details**	**Descriptions**	**Layer Groups**	**Layers**
			burning may be added and if a permit is needed for periodic burning activities and the permit expiration date.		
	13	Agriculture Grazing/Crops	Agricultural Out leasing areas i.e. grazing and cropland. Shows results of reports, studies, and plans on government/private lands leased to another party for agricultural purposes. Shows recommendations for the continuing out leasing, crop rotations or alternative agricultural uses for no-conflict mission activities.	Land Status	Agriculture Tracts
	14	Fish and Wildlife	Areas used for hunting and fishing i.e. reports, studies, and plans on hunting and fishing activities on the installation. Shows recommendations for management by natural resources specialist and other naturalists involved in Government lands and adjacent impacted areas.	Fauna	Fish Hatchery/Location/ Haven, Nuisance Species
	15	Prime & Unique Soils	Prime and Unique Soils including Agriculture Soils Classification i.e., reports, studies, and plans pertaining to soils and prime and unique farmlands on each installation. Develop land use management alternatives to avoid the elimination or removal of prime and unique soils from present or future agriculture use in consultation with guidance and studies from the government--USDA, or appropriate state and county agencies.	Soil	NO LAYER for prime soil use Agricultural Tract by inference
	16	Grounds Categories	From reports, studies, and plans on the installation grounds: improved, semi-improved, unimproved, pavements facilities, and permanent bodies of water. Classification from consultation with the community planner, installation landscape architect, natural resources planner, and/or agronomist.	Fauna, Hydrography,	Vegetation, Land Cover, Natural Water Body
	17	BASH	From reports, studies, and plans and consult with the installation Bird Animal Strike Hazard (BASH) office, to determine the prevalence and potential for bird and animal	Transportation Air, Fauna	Nuisance Species

General Plan Maps & Map Series				V 2.6	V 3.0
Plan/ Program -A	**Map -#**	**Plan/Program Map, Layer(s) and Details**	**Descriptions**	**Layer Groups**	**Layers**
			aircraft strikes. Show recommendations for management of bird nesting areas, rookeries and bird attracting features or activities to control and assess impact on installation missions.		
	18	Outdoor Recreation	From reports, studies, and plans related to outdoor recreation areas on the installation, showing user capacity, identifying areas for future development and the making land use recommendations for the use of areas. Recommendations may include land or properties--public or private--available or potentially available, located outside the host installation and should include alternatives to maintain these areas in their natural state or employing conservation measures. Includes but is not limited to golf courses, stables, riding trails, jogging paths, hiking trails, picnic grounds, camp grounds (improved and primitive), water-based, and sports fields. Consultation with the MWR manager on the installation, local, state and federal offices for additional information on recreation assets within reasonable commuting distance of the installation for comprehensive planning	Improvements Recreation	Recreation Area, Recreational Feature, Recreational Trail, Recreational Trail Feature, Playground, Camp Ground, Golf Course, Golf Course Feature
	19	Environmental Regulatory	Overall road map for achieving and maintaining compliance with all environmental laws and regulations providing recommendations to maintain, and enhance the existing environmental quality of the installation. Recommendations that may require the installation to initiate the NEPA process and show any environmental impact findings for actions pending at the installation.	Environmental Hazard Characterization	Environmental Compliance Site/ Discharge Point/Remediation Site/Sample Location, DoD Formerly Used Defense
	20	HAZWASTE Generation	From relevant reports, studies and plans for hazardous waste generation, accumulation and satellite points. Tabular data can disposal methods, type of	Env Haz Hazmat Hazwaste, Env Haz Solid Waste	Environmental Regulated Facility, Munitions Waste Disposal

General Plan Maps & Map Series				V 2.6	V 3.0
Plan/ Program -A	**Map -#**	**Plan/Program Map, Layer(s) and Details**	**Descriptions**	**Layer Groups**	**Layers**
			permits, regulatory agency that issued each permit, and permit expiration date as well as state and federal laws governing generation, transporting, treatment, and storage requirements for the HAZWASTE management program. Show hazardous waste management plan is supported by spill prevention and response and waste minimization plans. Show how it reduces the rate of waste generation; and how recycling program minimizes waste.		
	20	Permitted Hazardous Facilities	Show relevant studies and reports for all permitted permanent and interim hazardous waste storage facilities on the installation and provides information on the hazardous materials stored.	Buildings	Buildings
	21	Solid Waste Disposal	Show relevant studies, reports, and plans for all solid waste disposal sites on the installation (e.g., landfills --closed and open, hard fill areas-- concrete and fill material, etc., recycling facilities e.g., central recycling facility, composting areas, mulching areas, etc., solid waste diversion procedures and provide information on operations and management.	Env Haz Solid Waste	Potential Environmental Site, Environmental Sample Location
	22	Resource Conservation Recovery Act (RCRA)	RCRA sites based on studies, reports, and plans for the installations with land use recommendations. Show current asbestos control efforts, which include the identification, quantity, and removal plan to achieve an asbestos-free environment. Tabular data may show buildings known to contain asbestos with a description of where asbestos was found and the risk of exposure along with a list of buildings suspected of containing asbestos and a list of buildings known to be asbestos-free. List date when information was compiled.	Env Haz Building Env	Pollution Area, Environmental Remediation Site
	23	Installation Restoration Program	IRP based on studies, reports and plans on all IRP sites, with land use recommendations. Location of test wells and planning and environmental	Env Haz Remediation, Env Site Management	Pollution Area, DoD Formerly Used Defense

General Plan Maps & Map Series				V 2.6	V 3.0
Plan/ Program -A	**Map -#**	**Plan/Program Map, Layer(s) and Details**	**Descriptions**	**Layer Groups**	**Layers**
			recommendations for the following:		
	24	Environmental Emissions	Current environmental concerns and necessary data from installation environmental specialist or other appropriate sources. Shows alternatives and actions required to protect facility occupants and workers and the environment from hazardous exposure to and as a result of contaminants. List applicable federal, state, interstate, and local laws and regulations for contaminating activities, environmental protection, occupational health and safety policy.	Env Haz Pollution Control. Utilities Waste Water, Utilities Industrial, Utilities Storm, Water, Electrical, Communications, Env Haz Building Env	
	24	Air Emission	Clean Air Act emission requirements:	Env Haz Pollution Control	Environmental Compliance Site/ Sample Location
	25	Waste Water Non Point Discharge Elimination System	Constraints and operating parameters of the Wastewater NPDES under state environmental permit requirement for RCRA. Show different types of facilities that require the state NPDES water permit to operate, which include a list of all sanitary and industrial waste water treatment facilities requiring permits. List permit parameter of each permitted facility. Show all wastewater discharge sources e.g., industrial and domestic to include information regarding discharge permits, issuing regulatory agency and expiration date. Show data should specific permit parameters for each source for comparison with actual standards for compliance.	Utilities Waste Water, Utilities Industrial	Wastewater Utility Segment/Node, Environmental Discharge Point, Monitoring Location
	26	Storm Water Non Point Discharge Elimination System	Regulated storm water nonpoint source discharges and their analysis points on the installation, issuing regulatory agency and expiration date. Tabular information shall include specific permit parameters for each regulated source and show comparison with actual standards for compliance.	Utilities Storm	Wastewater Utility Segment/Node, Environmental Discharge Point, Monitoring Location
	27	Drinking Water Supply Sources	Water supply sources and sampling points on the installation. Tabular data includes drinking water permits, regulatory issuing agency, and permit	Utilities Water	Water Node/Segment

General Plan Maps & Map Series				V 2.6	V 3.0
Plan/ Program -A	**Map -#**	**Plan/Program Map, Layer(s) and Details**	**Descriptions**	**Layer Groups**	**Layers**
			expiration date. It includes specific permit parameters for each sampling location, allowing for actual analysis information to be entered, accessed by user and modified. Comparison of analytical data with actual standards for compliance.		
	28	Electromagnetic and Radiation Sources	Sources of electromagnetic radiation of potential concern to humans and animals. The potential field of impact, including side lobes, shall be delineated for each source. Location of electromagnetic emission devices and the area of potential effect. Tabular data includes specific exposure limits for each source. Comparison between analytical data with actual standards for compliance.	Utilities Electrical, Communications	Emag Radiation Hazard
	29	Radon Sources	Locations of radon sources and sampling locations where radon sampling results exceed 30 picocuries/l. Tabular information includes specific exposure limits for each source and allow for actual analysis information to be entered, accessed by user, and modified. Show a comparison between analytical data with actual standards for compliance.	Env Haz Building Env	NO LAYER
	30	Imaginary Surface and Obstructions	Structures, overhead utility lines, trees and other obstacles that penetrate the approach surfaces are identified.	Buildings, Utilities Electrical, Transportation Air	Air Accident Zone, Airfield Imaginary Surface, Pavement Segments/Section
	31	Utility System	Overall layout of existing primary utility lines and their major connections for facilities on and off the installation. Show each utility system with a standard distinctive symbol, using the layers of the base map. .	COMPOSITE	COMPOSITE
	32	Water Supply System	Existing sources of water supply, and shall show locations of wells, entrance on installation of other sources of supply, storage tanks, main distribution lines with pumping stations, hydrants, valves, metering points, and water treatment plants.	Utilities Water	Water Utility Segment, Water Utility Node, Well, Well Field, Pump Station, Station Line
	33	Sanitary Sewer System	Existing sanitary sewer system, including location of collection system,	Utilities Storm	Waste Water Utility System

General Plan Maps & Map Series				V 2.6	V 3.0
Plan/ Program -A	**Map -#**	**Plan/Program Map, Layer(s) and Details**	**Descriptions**	**Layer Groups**	**Layers**
			manholes with their respective identification number, pumping stations, sewage treatment plants, outfall(s), capacities, cesspools, septic tanks, leaching fields, and independent systems. Record the type of treatment and effluent discharge and capacity of treatment plants and include outfall(s) and final destination of drainage, showing flow direction of receiving body of water.		
	34	Storm Drainage	Existing storm drainage system, including location of pipes, manholes with their respective identification number, catch basins, inlets, pumping stations, culverts, outfalls, French drains, and tile fields. Show Industrial waste disposal systems if industrial waste including aircraft cleaning fluid is handled through the storm drainage system. Indicate points of entry into the system, size of pipes, type of material, and direction of flow. Show general drainage features such as drainage divides, water courses, and major drainage ditches. Indicate the final destination of drainage (ocean, river, creek). Record special conditions such as snow storage, total rainfall for each month (average for a period of record), flood control facilities, and frost conditions.	Utilities Storm	Waste Water Utility System, Waste water segment/Node, Inundation, Monitoring Location, Environmental Discharge Point
	35	Electrical Distribution System	Sources of electrical power and the installation's primary distribution, street lighting systems, and apron maintenance lighting system.	Utilities Electrical	Electrical Utility Node/Segment
	36	Central Heating and Cooling System	Location of plant to include: type (HTW or STM), capacity, temperature, and pressures as applicable; type fuel; and number and size of boilers or generators expressing 1000 British thermal units (BTU) per hour or pounds of steam per hour rated capacity. Include fuel storage tanks, pipelines, manholes, heat	Utilities HCS	Thermal Utility Node/Segment

General Plan Maps & Map Series				V 2.6	V 3.0
Plan/ Program -A	**Map -#**	**Plan/Program Map, Layer(s) and Details**	**Descriptions**	**Layer Groups**	**Layers**
			and cooling systems.		
	37	Natural Gas Distribution System	Existing natural gas system, including distribution system and storage.	Utilities Gas	Gas Utility Node
	38	Liquid Fuel System	Existing liquid fuel system with source of supply location and capacity of all facilities for the storage and distribution of AVGAS fuel, MOGAS fuel, jet fuel, diesel oil, and luboil at the installation including the name plate data on major equipment	Utilities Fuel	POLUtilityNode
	39	AST/BGT	Bulk storage below ground and aboveground (AVGAS, jet fuel, diesel, MOGAS)	Utilities Fuel	POLUtilityNode
	40	Cathodic Protection System	Consolidates all utilities systems, structures, and facilities that are subject to electrochemical corrosion within the confines of the installation or affecting those on the installation	Utilities Electrical	Electrical Utility Node
	41	Industrial Waste and Drain System	Constraints and operating parameters of the Wastewater NPDES under state environmental permit requirement for RCRA. Show different types of facilities that require the state NPDES water permit to operate, which include a list of all sanitary and industrial waste water treatment facilities requiring permits. List permit parameter of each permitted facility. Show all wastewater discharge sources e.g., industrial and domestic to include information regarding discharge permits, issuing regulatory agency and expiration date. Data should show specific permit parameters for each source for comparison with actual standards for compliance	Utilities Industrial	Wastewater Utility Segment, Wastewater Utility Node
	42	Other On Installations Communications Systems	All systems not under control of government and installation level communication units. Cable locations and supporting facilities related to leased telephone systems, energy monitoring and control systems, fire warning systems, non-mission related cable TV (such as for family housing and unaccompanied quarters) or any other systems dedicated to and installed by a commercial entity	Communications	Communication Utility Node/ Segment, Electrical Utility Node/ Segment

General Plan Maps & Map Series				V 2.6	V 3.0
Plan/ Program -A	**Map -#**	**Plan/Program Map, Layer(s) and Details**	**Descriptions**	**Layer Groups**	**Layers**
			should be shown on this map		
	43	Communication and NAVAID Systems	Use maps with information prepared by installation level communication units or supporting engineering agency. Map H1 is reserved for the use of government and installation level communication units. Map H2 is provided to show all communications systems and equipment not owned and maintained by government and installation level communication units, as listed below. Map H3 is specific to Navigational Aids (NAVAIDS) and Weather Facilities, which are the responsibility of government and installation level communication units. Map H4 is a composite of all communications systems, including both government and installation level communication units owned and maintained and those owned and maintained by others, for use along with other infrastructure systems in inventorying and analyzing capacity for support of plan recommendations.	Communications	Communication Utility Node/ Segment, Electrical Utility Node/ Segment, Navigational Aid
	44	Fire Protection and Safety	Fire safety buffer distance, vehicle maneuverability areas, and any other graphic material required to support the Fire Protection Plan. Provide a graphic representation of any fire protection districts which provide mutual aid overlaid on base map. Maps should include fire protection for:	Military Operations, Utilities Water, Env Haz General	Buildings, Transpiration Routes, Road Path, Road Segment
	45	Layout and Vicinity Maps (Base Map)	Existing managed and maintained facilities on- and off- the installation (except utilities and landscape) and provides the basis for all other maps. Use imagery, photographs, maps and available as-built drawings. Determine the accuracy of information available and comply with GeoFidelis standards.	Buildings, Land Status, Land Form, Improvement General	Buildings, Administrative Boundary
	46	Installation	Existing facilities on the installation accurately depict boundaries, contours/LIDR, ESQD, aircraft barriers, installation streets, runways, taxiways, parking ramps, airfield special	Buildings, Land Status, Land Form, Improvement General, Cadastre	Buildings, Administrative Boundary

General Plan Maps & Map Series				V 2.6	V 3.0
Plan/ Program -A	**Map -#**	**Plan/Program Map, Layer(s) and Details**	**Descriptions**	**Layer Groups**	**Layers**
			areas, aircraft maintenance facilities, rotary wing landing areas.		
	47	Off-base Sites	Sites identified by name and entity for clarity such as city, county, state or private along with prime installation and access route(s) to off-installation facilities.	Cadastre, Land Status	Administrative Boundaries, Installation
	48	Regional Location Map	Location of the installation relative to a region. Provides the basis for analyzing regional planning factors affecting the installation. The following information will be included:	Cadastre, Land Status	Administrative Boundaries, Installation
			A small outline map of the state shown as an insert on this map. Installation shown as a star. Major cities shown with black circles with names.		
	49	Vicinity Location Map	Provides basic data required to define and analyze planning factors in the immediate vicinity of the installation. Provides greater detail than the regional map, showing access road information denoting how the installation is linked to the surrounding transportation network, cities, etc.	Cadastre, Land Status, Transportation Air	Transportation Routes, Road Path, Installation
	50	Land Use Planning	Current use of land on the installation and local area such as industrial, administrative, residential, recreational, proposed annexations, etc. Show boundaries for state, county, city and installation(s). Shows specific/predominant facility functions by Category Code Number grouped into general land use categories in consultation with the Community Planner.	Cadastre, Buildings, Transportation Vehicle, Air, Water	Land Use, Buildings
	50	Current Land Use	Shows the current use of land on the installation according to the Master Plan and through the use of color the specific land use categories e.g. air/sea operations, industrial, administrative, residential, open space, mixed use, etc., to determine land use pattern.	Cadastre, Buildings, Transportation Vehicle, Air, Water	Land Use, Buildings
	51	Future Land Use Plan	Depict through use of color, proposed future land use functions. Developable land can be indicated by	Future Projects	Land Use, Buildings, Future Projects Land Use

General Plan Maps & Map Series				V 2.6	V 3.0
Plan/ Program -A	**Map -#**	**Plan/Program Map, Layer(s) and Details**	**Descriptions**	**Layer Groups**	**Layers**
			another color identifying development within known constraints IAW with the Master Plan.		
	52	Vicinity Existing Land Use	Using the same land use categories show those land uses in the portions of the civilian community immediately adjacent to the boundaries of the installation. Where no development exists immediately adjacent to the installation, this map is not required.	Cadastre, Buildings, Transportation Vehicle, Air, Water, Military Operations	Land Use, Buildings
	53	Vicinity Existing Zoning	Zoning information from the appropriate civilian planning office staff and portray current zoning categories as delineated by the civilian community as a second overlay. Show any conflicts to present land use and pending rezonings that may affect the operation of the installation.	Cadastre, Buildings, Transportation Vehicle, Air, Water, Military Operations	Land Use, Buildings, Out grant
	54	AICUZ	Air Installation Compatibility Use Zone (AICUZ) DNL noise contours based on the most current released AICUZ study shall be shown and labeled.	Auditory, Cadastre, Boundaries	Pollution Area, Noise Abatement Feature, Noise Zone/Receiver/Source, Impact Area
	55	JLUS	Maps from the Joint Land Use Study grant to guide compatible development around an airfield.	JLUS Grant	JLUS Grant
	56	Transportation Systems	Multi-modal transportation from pedestrian, vehicle, massed transit, etc.		Transpiration Route, Rail Track/Station,
	57	Contingency Planning	Supports installation contingency planning. The following maps may be included and added to support the installation mission: mobilization planning, AT/FP security, emergencies, natural disasters and time of war.		
	58	Airfield Pavement Plan	Shows information on layout, type of pavement, and bearing capacities of existing airfield pavement. It is used as an aid in developing aircraft parking and air installation utilization studies. The Airfield Pavement Evaluation Program is the principal reference for this map with tabular data. Large-scale drawings and data associated with airfield pavements, such as cross sections and elevation profiles, to further explain information delineated on the Airfield	Utilities Electrical, Transportation Air, Communication	Pavement Section/Branch/ Stripping

General Plan Maps & Map Series				V 2.6	V 3.0
Plan/ Program -A	**Map -#**	**Plan/Program Map, Layer(s) and Details**	**Descriptions**	**Layer Groups**	**Layers**
			Pavement Plan. Both maps will be aligned with requirements in current DoD airfield and heliport planning UFC, as well as the Airfield Pavement Evaluation Program.		
	59	Airfield Pavement Detail	Large-scale drawings and data associated with airfield pavements, such as cross sections and elevation profiles, to further explain information delineated on the Airfield Pavement Plan. Both maps will be aligned with requirements in current DoD airfield and heliport planning UFC, as well as the Airfield Pavement Evaluation Program.	Utilities Electrical, Transportation Air, Communication	Pavement Section/Branch/ Stripping, Distance Markers, Navigational Aid
	60	Aircraft Parking Plan	Uses portions of Map C-1. All existing aircraft parking positions in the operational and maintenance areas of all aircraft required to support the unit mission(s). The following information can be used: parking aprons, hangars, refueling outlets, parking spots, orientation, aircraft type, Operations Facility, Control Tower, Dining Hall, Billeting, Fire Station(s), hot cargo pad, wash rack, rinse facility, hush house, maintenance lights, security fence, aircraft revetments, Priority I & II areas, taxi lanes/lines and non-use areas e.g., FOD.	Transportation Air	SEE LAYERS
	61	Energy Plan	All Energy Plan requirements and data or for other facilities energy conservation programs and distribution system data as applicable. Show energy conversation features, such as building orientation, roof materials, solar panels, and related energy conservation features noted in the OSD sustainability Planning Guide.	Utilities EMCS	Future Projects (NO LAYER for Energy Projects)
	62	Architectural Compatibility	Summary of visual analyses, important architectural features, views, focal points, other opportunities to supplement text and sketch information for the installation’s Architectural Compatibility Guide. Other information such as phasing of paint plans, or subdivisions of the installation for new	Buildings, Future Projects, Visual	Buildings

General Plan Maps & Map Series				V 2.6	V 3.0
Plan/ Program -A	**Map -#**	**Plan/Program Map, Layer(s) and Details**	**Descriptions**	**Layer Groups**	**Layers**
			particular architectural treatment may be included		
	63	Landscape Development	Installation landscape design and graphic representation of landscape architectural districts overlaid on base map.	Visual	Grounds Maintenance, Vegetation, Flora Planting or Seeding
	64	Current Plan	The funded and approved site locations for development (facilities, special use areas) needed to support the installation mission(s). Based on the approved funded project lists for 1-2 years.	Future Projects, Land Status	Future Projects, Land Use
	65	Short-Range Development Plan	All approved site locations for development of facilities, special use areas needed to support the installation mission(s) as reflected in the current FYDP for the next five years. Based on the development projected in the Current Development Plan and results of analysis performed for development pending funding in the next six years--MILCON and Special Projects.	Future Projects, Land Status	Future Projects, Land Use, External Property Interest
	66	Long-Range Development Plan	All proposed relocations of installation activities into new or renovated facilities, expected demolition and replacement of facilities beyond the current 5-year FYDP, and major new construction proposed for a long-range period.	Future Projects, Land Status	Future Projects, Future Projects Land Use, External Property Interest
	67	Quality of Life	Show locations with project information and illustrations to support the installation’s Quality Of Life (QOL) planning. Show QOL districts and projects overlaid on base map.	Buildings	Buildings, Future Projects, Future Land Use

Appendix N

The Under Secretary of Defense Memorandum: Installation Mater Planning

THE UNDER SECRETARY OF DEFENSE
3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION, TECHNOLOGY AND LOGISTICS

MAY 2 8 2013

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
DIRECTOR, DEFENSE LOGISTICS AGENCY
DIRECTOR, WASHINGTON HEADQUARTERS SERVICES

SUBJECT: Installation Master Planning

Department of Defense (DoD) military installations are invaluable national defense resources that must be planned and developed in a sustainable manner that supports current missions and preserves long-term military capabilities. Fundamental to the effectiveness and sustainability of our installations is the master planning process, which establishes a clear and principled long-range vision for the development of installations that support the Department's defense mission and enrich the communities they serve.

With that goal, the Department recently updated its requirements for the design and content of installation master plans, as detailed in Unified Facilities Criteria (UFC) 2-100-01, "Installation Master Planning." This document reflects a comprehensive approach to developing installations across DoD using planning strategies that reinforce capabilities to support the defense mission, promote quality of life, and enhance sustainability and environmental viability.

The new UFC will accomplish its intended purpose only through clear guidance and strong senior leadership support. To that end, I am issuing the following policy to provide the foundation for effective installation master planning.

- The DoD Component exercising management responsibility over each installation shall develop a master plan that defines opportunities for site development and alternate land use and incorporates the following planning strategies:
  - **Sustainability** allows an installation to meet present mission requirements without compromising its ability to meet future requirements. Sustainability also conserves limited natural resources (including land and fossil fuels) through compact, mixed-use development.
  - **Resource management** preserves and enhances natural, historic, and cultural resources.
  - **Transportation alternatives** provide for pedestrian, bicycle, and transit-friendly communities that allow residents opportunities for regular physical activity and, consequently, healthier lifestyles while decreasing dependence on automobiles.
  - **Defensibility** protects critical infrastructure and incorporates appropriate safeguards to prevent mass casualties in the event of a terrorist attack.

- **Area and network planning** creates identifiable and connected districts based on geographical features, land use patterns, building types, and transportation networks.

- **Form-based planning** guides the scale and character of development, prescribing the size and form of buildings, the patterns of circulation between buildings, and the relationship between buildings and outdoor space.

- **Local and regional coordination** ensures that planning within the installation boundary considers constraints and opportunities beyond the boundary and promotes compatibility with local authorities.

- All land use, development, and real estate actions on an installation shall conform to its master plan.

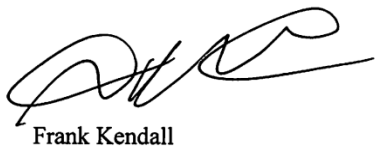
- DoD Components shall establish installation planning boards to review and endorse installation master plans, which shall be approved by a command above the installation level no less frequently than every 5 years.

- For the purpose of keeping plans current and relevant, DoD Components shall maintain a comprehensive list of all installation master plans and their respective completion dates.

- DoD Components shall provide master planning training for key personnel using curricula developed either in-house or through the Army's Master Planning Institute, toward a goal of at least 4 hours of training for installation commanders and 32 hours of training biennially for installation master planners. This training goal comports with the requirement of the American Institute of Certified Planners.

DoD Components shall develop or update all installation master plans in accordance with this policy not later than October 1, 2018. The Deputy Under Secretary of Defense for Installations and Environment shall establish metrics to evaluate the implementation of this policy. This policy will be incorporated into DoD Instruction 4165.70, "Real Property Management."

I appreciate your support of our master planning process and commitment to improving our installations for the long term.



Frank Kendall

Appendix O

MILCON

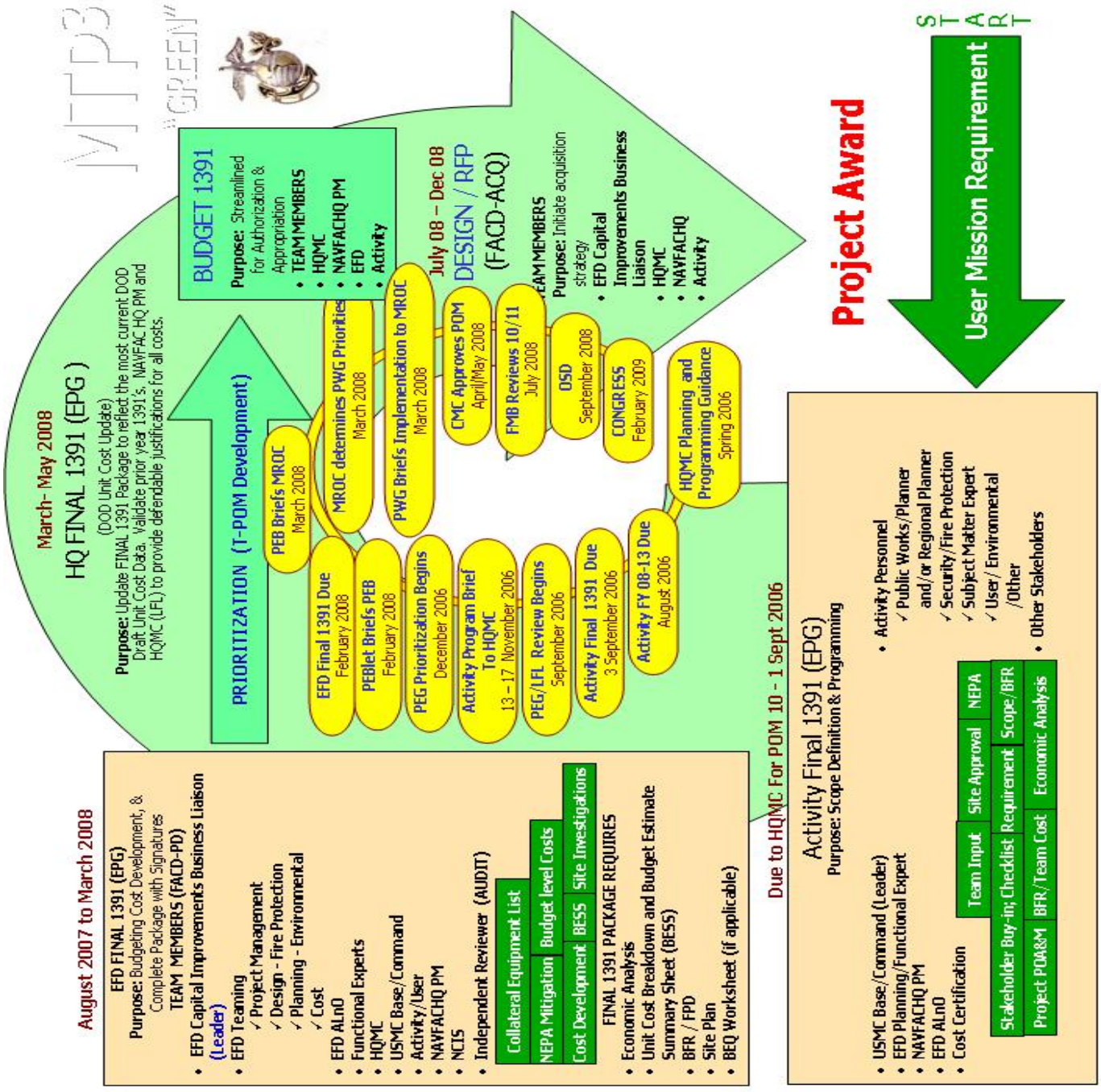


Figure O-1--MILCON Team Planning and Programming Process (MTP3).

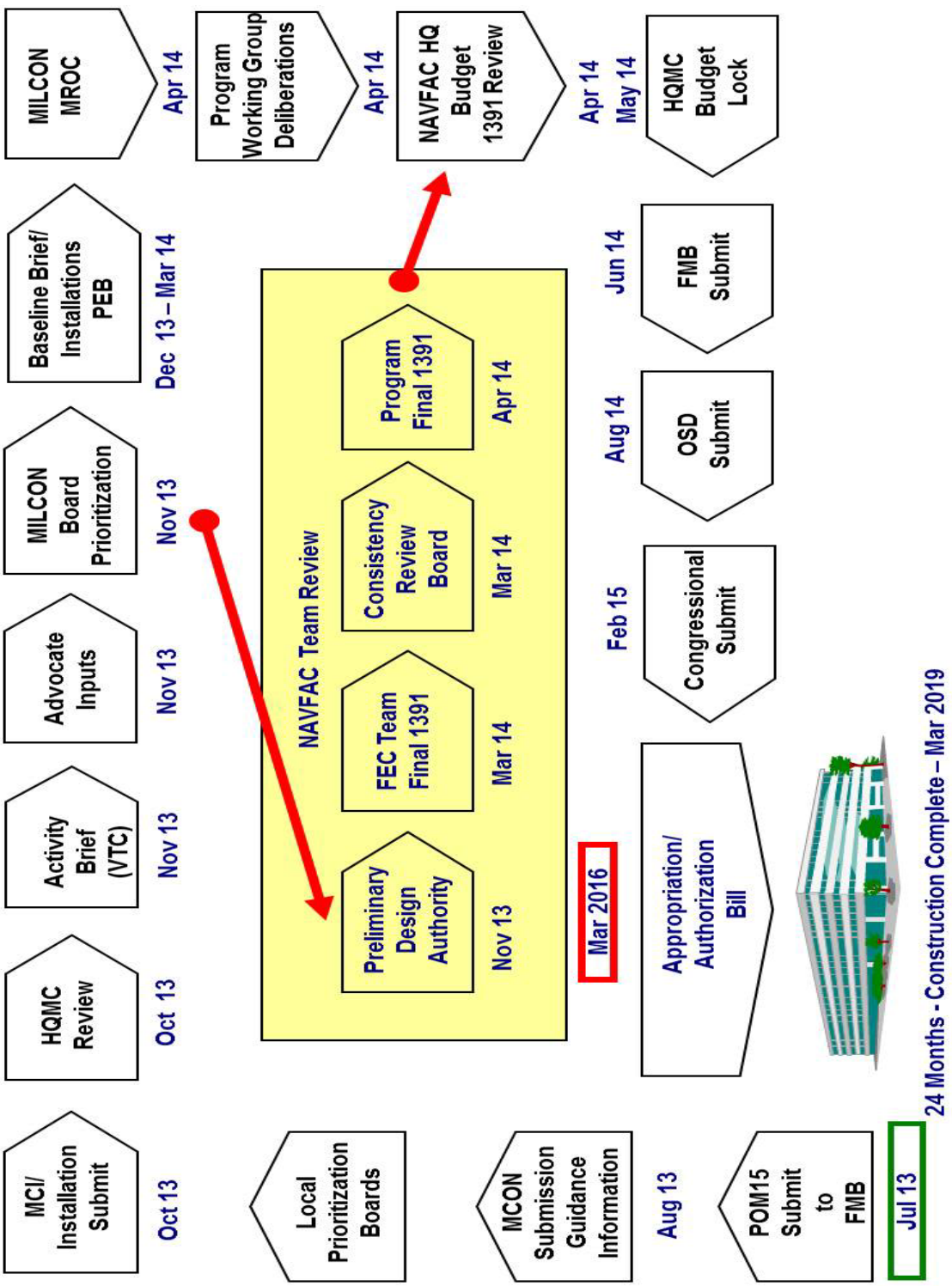


Figure O-2--Marine Corps - FY16 MILCON Calendar (Tentative).