
Requirements Document (RD)

FY xx Project Title

Base xxxx

PDC AAAA12345

Date

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A. Introduction

Purpose

Additional information on the purpose, use, and clarification of the RD and companion Project Management Plan (PMP) can be found in the USAF Project Manager's Guide for Design and Construction (The Blue Book).

The purpose of the RD is to provide the designer a basis for understanding the project requirements. It also provides the framework for executing this project through the team members. Active involvement by the user during all phases of design and construction is essential to insure the facility meets all functional requirements. The Design Agent (DA) is responsible for verifying the accuracy of the information contained within this document.

Goals and Objectives

This sample paragraph should briefly explain the project's purpose, and state User specific goals the designer should consider. Add and edit as required.

The Air Force's goal is to design quality facilities that enhance mission effectiveness and protect the environment. A focus on quality must be maintained throughout project development and construction. The Air Force's objectives are to deliver a project on time, within available funds and in a safe manner, which satisfies the user's needs.

B. Project Description

This section should provide a concise project description, including any special requirements the designer should address and a general breakout by functional area. Describe what is important to the User. The DD Form 1391 could be used in lieu of this section only if sufficient detail is provided. Limit the length to no more than two pages, and use plain English in describing the work. This section should be prepared by the BCE Project Manager during an interview with the User Coordinator. Air Force criteria should be referenced and reviewed in preparing this section. The designer is responsible to verify the project description during the Project Definition process.

Project Statistics

Installation:	
Fiscal Year:	
Project Name:	
PDC Number:	
Host Command:	
Requiring Command:	
Category Code:	
Scope:	
Programmed Amount:	
Construction Cost Limitation:	
Operational Need Date:	
Facility Need Date:	

Project Narrative

Provide a general narrative explaining: the facility's purpose, types of activities it will support, and major area categories (i.e., admin, shop, storage, etc.). Special relationships with other facilities should be noted in this section.

Process Narrative

Include process descriptions developed by the User if available. The user should emphasize special physical relationship between processes. These relationships may help the designer better understand the facility requirements.

B. Project Description (cont'd)

Space Requirements

The RD should not dictate a floor plan, but provide the designer a sense for the space required by functional type. Also include any special requirements. The intent of this paragraph is to indicate gross areas, and provide backup for the gross area on the DD Form 1391. This information will be fully developed by the designer during Project Definition. Applicable sections of MIL-HDBK 1190 or AFH 32-1084 (AFM 86-2) can be used.

Space Type	Area (SF)	Remarks

User Equipment

Describe special equipment and support requirements and source of supply (GFE, third-party contracts, etc.). Not stating equipment requirements early could impact usable space and result in a design change. If specific requirements are unknown, state so, and give a general idea of what is expected based on work activities planned. Do not include typical office furniture, copiers, personal computers, etc.. Examples of items to include are kitchen, laboratory and special audiovisual requirements, special communication systems, and special computer system requirements. Describe special floor and wall space requirements for the equipment in the remarks column.

Description	Quantity	Remarks (supporting utilities, supply source)

B. Project Description (cont'd)

Special Requirements

This list is a guide in developing user requirements for the designer to consider and should not be considered all-inclusive. These requirements should be verified and additional requirements identified during Project Definition. Where non-MILCON funds will be used in conjunction with the project (such as equipment purchases), provide specific details in the Remarks column. Include brand names of existing systems where appropriate. Where a waiver is required, specify in the remarks column.

Special Requirements	Required Y / N / na	Remarks
Real estate acquisition		
Well permits		
Public utility easements		
Demolition		
Environmental concerns		
Recycle materials		
Special soil conditions		
Vehicle Parking		
Roofing Systems		
Doors (Vault, Overhead)		
Industrial waste sewage connection		
Unusual Mechanical Systems		
Unusual Ventilation Requirements		
Vibration Isolation		
Special Heating/Cooling Loads		
Temperature/Humidity Control		
Fire Protection Systems (i.e. AFFF)		
Special Piping (compressed air)		
Process Equipment/Systems		
Irrigation		
Landscaping and Exterior Signage		
Electrical		
Emergency Generator		
UPS		
Power Conditioning/PCCIE		
Lightning Protection		
Static Electricity Isolation		
Unique Electrical Equipment		
Special Grounding		
Special Power (400 HZ power)		
Unique Lighting (exterior, interior)		

B. Project Description (cont'd)

Special Requirements (cont'd)

Special Requirements	Required Y / N / na	Remarks
Communications/Antennas		
Special Computer Systems/Support		
Public Address or Intercom		
TEMPEST/HEMP/RF Shielding		
SCIF/Vaults (Class)		
Physical Security (fencing, IDS)		
Anti-terrorism		
Elevators		
Comprehensive Interior Design (CID)		
Furniture: - By This Contract		
- By Another Contract		
- Relocate Existing		
Pre-wired Workstations		
Sound Attenuation		
Structural Interior Design (SID)		
Unusual Clear Spans		
Special Structural (cranes, MHE)		
Unique Floor Loads or Needs		
Energy Compliance (10 CFR 435)		
EMCS		
Metering		
Life-Cycle Cost Studies		
Lighting / Envelope Screening		
Blast (if screening fails)		
Special Safety Systems		
Special OSHA requirements		
Americans with Disabilities Act Requirements (ADA)		
Visually-impaired vendors (GSA program)		
State Historical Preservation Office Review		
Recycling Considerations		

B. Project Description (cont'd)

Special Requirements (cont'd)

Special Requirements	Required Y / N / na	Remarks
Security clearances		
Special construction escort requirements		
Drawings and plans (CADD) - Design Drawings - As-builts - GIS		<i>Specify the operating system and disk size</i>
Workaround Facilities		
Overseas travel		
Other (specify)		

The items listed above are to be used as a guide by the designer in developing user requirements. The list is not to be interpreted as an all-inclusive summary of project considerations. During the Project Definition (PD) phase of design, the designer must verify the accuracy of the requirements noted above, and any special requirements that may arise during the design process.

C. Area Development Plan

This section describes the project site, its relationship to the base, and supporting infrastructure. This section should be prepared with the assistance of the base community planner. Refer to the Base Comprehensive Plan for assistance.

Project Relationship to the Base Comprehensive Plan

Site Selection

Explain the project's functional relationships to surrounding facilities and any unique siting requirements. To develop this information, have the base community planner verify the project's relationship to the BCP, or any changes from the BCP. Show on an area plan or preferably on a Composite Plan as discussed below. Attach a copy of the approved site plan if not provided in the DD Form 1391 package in Attachment 1.

Future Development

Show on an Area Plan (Attachment 2) other projects planned in the near vicinity over the next five years (title and FY) or sited nearby. Recommend a narrative indicating how this project may affect future siting options, potential traffic or utility service requirements in the area. This information can be coded as future developments on the Composite Plan as noted below.

Architectural Compatibility

Refer to Attachment 4.

Site Development

Discuss features of the area as they relate to this project. See section D, Environmental Planning, for factors that could affect siting. This discussion is easily presented on a Composite Plan (Attachment 2), with narrative as needed and coded to show proposed project and planned future developments. Examples include, but are not limited to:

Opportunities

Highlight any special considerations enhancing the site selection on the Composite Plan.

- Existing open space, topography, vegetation, tree cover, and views.
- Facilities scheduled for demolition.
- Prevailing winds, solar orientation, and local climate.
- Site access.
- Separation of auto, pedestrian, and service traffic.
- Anticipated growth and expansion.

C. Area Development Plan (cont'd)

Constraints

Note any special restrictions impacting the site on the Composite Plan.

- Airfield clearance criteria.
- Explosive quantity-distance criteria.
 - Site plan approval by the DoD Explosive Safety Board
- Fire equipment access.
- AICUZ noise criteria or sound attenuation requirements.
- Building height limitations.
- Set back criteria from roads, airfield surfaces, curbs, sidewalks, etc.
- Environmental contamination.
- Public Utilities
- Utility capacities and excess capacities
- Established pedestrian and vehicular traffic patterns
- Available water flows and pressure data
- Flood plain maps

D. Environmental

This section should highlight any potential environmental concerns. Timely completion of the EA, environmental permits, surveys, and other environmental issues is crucial to the successful execution of all MILCON projects. Since the EA is typically not completed prior to submission of the RD, try to communicate any issues which could impact the project. This section should be written by the base environmental manager. If the Environmental Compliance portion of the DD Form 1391 is completed, it can be used in lieu of this section; however, ensure all known permits and approving authority are identified. The OPR for each required action should be identified in the Remarks section. Also identify non-MILCON fund sources.

Environmental Permits	Required Y / N / na	Remarks
Air Quality		
Water Quality		
Water Connection		
Wastewater		
Stormwater		
Solid Waste		
Hazardous Waste (RCRA)		
Environmental Construction		
Other (specify)		

Hazardous Substance Surveys	Required Y / N / na	Remarks (date of last survey)
Asbestos		
Lead Based Paint		
PCB		
Radon		
IRP Sites		
Toxic industrial waste		
Radiological		
Heavy Metals		
Other (specify)		

Known Abatement Considerations	Required Y / N / na	Remarks
Asbestos		
Lead Based Paint		
PCB		
Radon		
Hazardous Waste (RCRA)		
Heavy Metals		
Other (specify)		

D. Environmental (cont'd)

Environmental Planning	Required Y / N / na	Remarks
AF Form 813/814		
Environmental Assessment (EA)		
Environmental Impact Statement (EIS)		
AICUZ/Noise Siting		
Natural Resources Protection		
Clean Air Conformity Analysis		
Pollution Prevention Considerations		
Wetlands		
Flood Plains		
Threatened/Endangered Species		
Archeological/Historic Preservation		
Coastal Zone Management		
Coastal Barrier Resources		
Wellhead Protection		
Cropland/Grazing Land		
Underground Storage Tanks		
Fuel Dispensing/Tank Farms		
Fuel Cell Maintenance Hangars		
Engine Test Cells		
Corrosion Control Facilities		
Oil-Water Separators		
Industrial pre-treatment requirements		
AFFF Containment		
Fire Training Facilities		
Water Main Connections		
Sanitary Sewer Connections		
Wastewater Treatment Facilities		
Hazardous material storage		
Biological Wastes		
Solid Waste Incinerators		
Central Heating Plants/Large Boilers		
Sedimentation Controls		
Other (specify)		

E. Requirements Document Agreement

The RD may be prepared by a different organization than the PMP. As a minimum, the base environmental manager and the Chief Engineer should sign this agreement. MAJCOMs may require additional signatures at this point. Check and provide as necessary.

Agreement Statement

The undersigned agree to follow the provisions of this Requirements Document. Each activity will focus its efforts and influence to provide complete, comprehensive, up-front planning and to meet the objectives of designing and constructing this project to fulfill user needs and to meet Air Force quality, safety, and reliability expectations, with minimum changes, within budget, and within schedule. Changes to this plan must be coordinated with and approved by the undersigned or their designated representatives.

Signatures

BASE ENVIRONMENTAL MANAGER

CHIEF ENGINEER

F. Attachments

- 1. DD Form 1391 and AF Form 1178**
- 2. Maps, Plans and Special Studies**
- 3. Sketches, Photos and Definitive Drawings**
- 4. Installation Design Guidelines and Standards**

Attachment 1

DD Form 1391 and AF Form 1178

Insert a complete, dated copy of the DD Form 1391 package. Also attach a copy of the AF Form 1178 , if available.

Attachment 2

Maps, Plans and Special Studies

This section should include pertinent base comprehensive plan maps, utility maps, IRP site information, AICUZ information etc.

Area Map

Scale 1:24,000 or as appropriate to show proximity to heavy population centers and general topographical features. Excerpts from state or city road maps are recommended. Highlight the following:

- Base boundaries.
- Main Gate.
- Off-base borrow/spoil areas or routes to them (if applicable).
- Construction debris disposal sites.
- Distance and direction to closest commercial airport (if applicable).

Base Map

Scale to fit 8-1/2" by 11" size with no more than one fold. Show the following items:

- Main Gate.
- Fire Station.
- Security Police.
- Base Civil Engineering.
- Haul routes.
- Off-limits/controlled access areas.
- Known hazardous waste sites (if applicable).
- Areas available to the contractor for staging and storage.
- Borrow/spoil areas.
- Project site.

Area Plan

Recommend scale of 1:100, fold if necessary to 8-1/2" by 11" size. Recommend this map be a composite.

- Show locations for all future development projects (title and FY) within the area.
- Indicate special land use categories, including AICUZ contours and explosive safety clear zones.
- Note preferred construction routes and potential contractor staging areas.

Attachment 2 (cont'd)

Maps, Plans and Special Studies

Composite Plan

Most bases have current, accurate information available with utility sizes and excess capacities; if so, include it here. If not, provide a source and point of contact for further information. Recommend scale of 1:50, fold if necessary to 8-1/2" by 11" size. Show the following items. If necessary use separate drawings for different utility systems; however, a Composite Plan provides the best information.

- Existing contours.
- Proposed facility footprint.
- Pavements included in the project and existing.
 - Streets, parking lots, sidewalks.
 - Runways, taxiways, aprons, overruns, shoulders.
- Bridges and fences.
- Structures.
- Railroads.
- Sanitary and industrial wastewater sewers (size, location, and manhole inverts).
- Storm sewers, drainage ditches.
- Natural gas service lines.
- Communication and telephone ducts and lines.
- Electrical service lines.
- Steam and hot water lines.
- Chilled water lines.
- POL lines.
- Fire hydrants and mains.
- Limits on contractor work area.
- Graphic symbols of site considerations:
 - Views.
 - Prevailing winds.
 - Solar orientation.
 - Tree cover.
- Water service mains:
 - Potable.
 - Non-potable.

Attachment 3

Sketches, Photos and Definitive Drawings

Provide any sketches, photos, or definitive drawings which will help the designer understand the project; however, recommend not including a floor plan unless critical relationships must be understood.

Attachment 4

MAJCOM/Installation Design Guidelines and Standards

The purpose of this section is to incorporate key elements from the Base Comprehensive Plan and MAJCOM/Installation Design Guides with knowledge from base personnel most familiar with installation problems and systems. This section should clarify MAJCOM/Installation requirements. This information can be included by reference if the DA is provided copies of referenced standards.