

**MPR 8820.1  
REVISION A**

**EFFECTIVE DATE: September 27, 2004  
EXPIRATION DATE: September 27, 2009**

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# **MARSHALL PROCEDURAL REQUIREMENTS**

**AD01**

## **FACILITY PROJECT PLANNING PROCESS**

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<b>Marshall Procedural Requirements AD01</b>		
<b>Facility Project Planning Process</b>	<b>MPR 8820.1</b>	<b>Revision: A</b>
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### DOCUMENT HISTORY LOG

Status (Baseline/ Revision/ Canceled)	Document Revision	Effective Date	Description
Baseline		2/6/02	
Revision	A	9/27/2004	Converted from Marshall Procedures and Guidelines (MPG) to Marshall Procedural Requirements (MPR) document and changed references to MPR and NPR throughout the document. Requirements distinguished by use of the word "shall." Changed footer to reflect current URL and changed font to Times New Roman. Document also reflects minor editorial changes.

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## PREFACE

### **P.1 PURPOSE**

This procedure defines the methods and responsibilities for facility project planning at the Marshall Space Flight Center (MSFC).

### **P.2 APPLICABILITY**

This procedure applies to facility planning activities performed at or under the direction of MSFC for projects exceeding local approval authority.

### **P.3 AUTHORITY**

None

### **P.4 APPLICABLE DOCUMENTS**

- a. NPR 1441.1, "NASA Records Retention Schedules"
- b. NPR 8820.2, "Facility Project Implementation Guide"
- c. MPD 1280.1, "Marshall Management Manual"
- d. MPR 8823.1, "Design Control of Facilities"
- e. MPR 1440.2, "MSFC Records Management Program"

### **P.5 REFERENCES**

None

### **P.6 CANCELLATION**

MPG 8820.1 dated February 6, 2002

Original signed by  
Robin N. Henderson for

David A. King  
Director

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## DOCUMENT CONTENT

### 1. DEFINITIONS

1.1 Facility. Land, buildings, structures, and other real property improvements including utility systems and collateral equipment. The term does not include operating materials, supplies, special tooling, special test equipment, flight hardware, and noncapitalized equipment. The term facility is used in connection with land, buildings (facilities having the basic function to enclose usable space), structures (facilities having the basic function of a research or operational activity), and other real property improvements.

1.2 Output User. The MSFC or contractor organization recognized as the beneficiary of the planning output.

1.3 Planning Input. Functional, special, and time requirements the product must address including budgetary requirements, if applicable. These are normally the user's requirements.

1.4 Planning Organization. The MSFC or contractor organization responsible for facility planning.

1.5 Planning Output. Result of the planning process such as requirements for design and the 5-year Construction of Facilities (CoF) plan. The planning output is the resulting product of a completed work action. The planning output is used to establish the product user's requirements for design, which constitutes part of the input for -MPR 8823.1, "Design Control of Facilities."

1.6 Planning Process. A systematic approach to evaluating/analyzing facilities issues and user-stated needs leading to the development of (planning output) requirements definition, recommendations to management, and implementation strategies.

1.7 Planning Review/Verification. Confirmation by examination of objective evidence that specified requirements for the planning product has been fulfilled during the planning process. Planning review/verification is performed at the appropriate stages of planning.

1.8 Planning Validation. Confirmation by examination of objective evidence that specified requirements for the planning output/product are fulfilled. Planning validation is performed after completion of planning process.

### 2. RESPONSIBILITIES

2.1 Output user shall:

2.1.1 Request facility project planning services from the planning organization. Planning requests must be documented by memorandum or Facilities Work Request (MSFC Form 199.)

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2.1.2 Provide detailed functional, special, and time requirements to include budgetary requirements, if applicable. Output requirements shall be complete, unambiguous, and compatible with each other. Output requirements shall be documented.

2.1.3 Participate in the facility project planning process to verify that the planning output meets all known user's requirements at the various stages of the planning process.

2.1.4 Validate the facility project requirements documentation to ensure user's requirements are properly documented. Facility project requirements validation shall be documented.

2.2 Planning organization shall:

2.2.1 Establish and maintain procedures to control facility project planning to ensure user's requirements are satisfied. Procedures shall:

2.2.1.1 Define the facility project planning steps and appropriate review, verification, and validation phases.

2.2.1.2 Define appropriate responsibilities and authorities for facility project planning.

2.2.1.3 Provide steps for updating the planning output as the facility project progresses.

2.2.1.4 Be documented by the planning organization and approved by the Manager, Facilities Engineering Department (FED).

2.2.2 Assign planning personnel to each facility project planning activity.

2.2.3 Lead the development of facility project planning input requirements related to the output, including facility and other requirements essential for facility project planning. Where applicable, facility project planning input requirements shall include information derived from previous similar plans or standard checklists. Facility project planning input requirements shall be reviewed for adequacy and documented.

2.2.4 Review user's requirements for potential conflicts with other facility activities consistent with MSFC missions and goals. Resolve conflicting requirements with the responsible organizations.

2.2.5 Conduct and participate in project planning verification reviews to verify that the plan meets all input requirements and to identify problems requiring necessary action.

2.2.6 Manage interfaces between different groups involved in facility project planning to ensure communication and clear definition of responsibilities.

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2.2.7 Ensure planning output documents are reviewed and validated by appropriate organizations prior to release.

2.2.8 Ensure the output documents fulfill the requirements for the specified or intended use.

2.2.9 Ensure the planning output is documented.

2.2.10 Review, verify, validate, and approve designated planning changes, as appropriate, before implementation. The review of the plan changes includes evaluation of the impact of change to the final output. Records of the results of review of changes and any necessary actions shall be documented.

2.2.11 Ensure that the responsible organizations are informed of plan changes that affect the responsible organization's plan input.

2.2.12 Establish the records retention and disposition schedules and the records custodian or a link where this information is available.

2.3 Manager, FED, or designee, shall review and approve the facility project planning organization's procedures for control, verification, and validation of facilities project planning.

2.4 Manager, Environmental Engineering, or designee shall:

2.4.1 Provide environmental facility project planning requirements input related to the output, including applicable statutory and regulatory requirements and environmental requirements essential for planning to identify environmental concerns as early as possible. Environmental facility project planning input requirements shall be documented.

2.4.2 Participate in facility project planning reviews to verify the plan meets environmental statutory and regulatory requirements at the various stages of the planning process.

2.4.3 Review and concur with facility project planning output prior to release by the planning organization when required by the organization's approved procedures. Concurrence shall be documented.

2.5 Director, Safety and Mission Assurance (S&MA) or designee shall:

2.5.1 Provide institutional safety input requirements related to the output, including applicable statutory and regulatory requirements and institutional safety requirements essential for facility project planning. Safety facility project planning input requirements shall be documented.

2.5.2 Participate in facility project planning reviews to verify the plan meets institutional safety statutory and regulatory requirements at the various stages of the planning process.

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2.5.3 Review and concur with facility project planning output prior to release by the planning organization when required by the planning organization's approved procedures. Concurrence shall be documented.

2.6 Design and Construction Organization or designee shall provide the planning organization with technical advice related to facilities project designs.

### 3. PROCEDURES

#### 3.1 Facility Project Planning

##### Actionee

##### Action

Planning organization shall establish and maintain procedures to plan and control the facility project planning in order to ensure the product user's requirements are met. The procedures shall address the management of interfaces among groups involved in the facility project planning to ensure communication and clear definition of responsibilities. Procedures shall determine the responsibilities and authorities for planning and shall be documented by the planning organization and approved by the Manager, FED.

#### 3.2 Facility Project Planning Input

##### Actionee

##### Action

Output User

3.2.1

Shall request facility project planning services from the planning organization.

3.2.2

Shall provide the planning organization with the functional, special, and time requirements that the output must meet including budgetary requirements, if applicable.

Environmental

3.2.3

Shall provide the planning organization with environmental planning input requirements related to the output, including



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3.4.2 Shall verify the planning output meets the planning input requirements.

3.4.3 Shall ensure that the facility project planning output includes the appropriate information for design.

3.4.4 Shall ensure the planning output documents are reviewed and validated by the appropriate organizations prior to release for facility project design.

Product User/  
Design  
Environmental/Safety

3.4.5 Shall review and validate output prior to release when required by the planning organization's approved procedures.

### 3.5 Facility Project Plan Changes

Actionee

Action

Planning Organization

3.5.1 Shall review, verify, validate, and approve designated planning changes, as appropriate, before implementation. Shall evaluate impact of the changes on the final output.

3.5.2 Shall ensure that the responsible organizations are informed of the plan changes that affect the responsible organization's planning input.

### 3.6 Facility Design

Actionee

Action

Design Organization

3.6.1 Shall design facility project in accordance with MPR 8823.1. The project planning output shall be used as the project requirements for facility design.

3.6.2 Shall ensure that the responsible organizations are informed of plan changes and coordinates these changes with the user and the planning organization.

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#### **4. RECORDS**

Records shall be retained in accordance with NPR 1441.1 and MPR 1440.2. The records required by other procedures referenced herein are not included in this section. The records retention schedules, disposition, and records custodians or a link (identification) to where this information is available shall be defined in the planning organization’s plans and procedures (see paragraph 2.2.10 or 2.2.12). The records required by these procedures are as follows:

4.1 “Facility Project Planning Requests” (paragraph 2.1.1). The record control organization for this record is the planning organization.

4.2 “Product Requirements” (paragraphs 2.1.2, 2.2.3, 2.4.1, and 2.5.1). The record control organization for this record is the planning organization.

4.3 “Planning Verification/Requests” (paragraphs 2.1.3, 2.2.5, 2.4.2, and 2.5.2). The record control organization for this record is the planning organization.

4.4 “Planning Validation” (paragraphs 2.1.4, 2.2.7, 2.4.3, and 2.5.3). The record control organization for this record is the planning organization.

4.5 “Planning Changes” (paragraph 2.2.10). The record control organization for this record is the planning organization.

#### **5. FLOW DIAGRAM**

None