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FESS/Engineering Project No. 10-8-1

Office, Technical, & Education Building

PP

Project Plan for the conventional construction to construct a new building for the Illinois Accelerator Research Center as part of the Industrial Area Upgrades Program

Rev. No.	Date	Change Description	Pages Modified
Rev. 0	10/13/10	Initial Release	Not Applicable

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The Project Plan (PP) describes the management, control systems and procedures used by Fermi National Accelerator Laboratory (Fermilab) to meet the technical, cost, and schedule objectives of this project. The Project Plan is comprised of a Project Charter (PC), Conceptual Design Report (CDR) and Project Execution Plan (PEP). This controlling document establishes the basis for managing the project, throughout the projects life cycle including, initiating, planning, executing, monitoring/controlling and closing.

This project will be managed based on the principles provided in DOE Manual 413.3-1. This manual is not the sole source for all requirements and guidance that apply to the acquisition of capital assets. Other DOE Orders and Manuals, especially regarding design, engineering, management reserve and indirect costs have been used as guidance to determine the basis for estimating costs and establishing baselines. This identification, implementation and compliance with other relevant Orders, Manuals and requirements are the responsibility of the Integrated Project Team.

The Project Plan is to be viewed as a “living document,” and as such, will be revised when necessary. The Fermilab Project Manager is authorized to approve design refinement (CDR) and non-substantive changes to the Project Plan (e.g. name changes to the positions stated in the Project Plan), but will inform the Industrial Area Upgrades Program Management Group (IAU-PMG) via electronic mail of such changes. Change Control will be via the IAUP-PMG.

Section 1 – Project Charter (PC)

The Project Charter (PC) formally authorizes the project. The Project Charter incorporates the signed U.S. Department of Energy Work For Others FRA-2010-0002 authorization as part of this document. The Project Charter states the project justification within the framework of the Fermilab’s strategic goals. The Project Charter defines the roles and identifies the Fermilab Project Director and the Fermilab Project Manager as well as other key members of the Integrated Project Team.

Section 2 – Conceptual Design Report

The Conceptual Design Report (CDR) is intended to be a self-consistent basis for a project baseline scope, cost estimate and schedule. It is not a Title 1 report and has not answered every technical design question. The current level of contingency is believed to be consistent with the degree of technical confidence in the design at this stage. It is recognized that some basic construction concerns will be reviewed and optimized during the remaining stages of the project.

Section 3 – Project Execution Plan

The Project Execution Plan (PEP) defines the Enterprise Environmental Factors and Fermilab’s Organizational Process Assets that provides project management the methodology which defines the process.

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SECTION 1 PROJECT CHARTER

1.1 PROJECT JUSTIFICATION

1.2 EXECUTIVE SUMMARY

1.3 PROJECT ORGANIZATIONAL STRUCTURE

- 1.3.1 DOE Management
- 1.3.2 Fermi Research Alliance, LLC – M&O Contractor (FRA)
- 1.3.3 Fermilab Organizational Process Assets

1.4 ALTERNATIVE ANALYSIS

SECTION 2 CONCEPTUAL DESIGN REPORT

2.1 DETAILED DESCRIPTION

- 2.1.1 Overview
- 2.1.2 Existing Conditions
- 2.1.3 Building Program
- 2.1.4 Building Design
- 2.1.5 Site Design
- 2.1.6 Code Analysis
- 2.1.7 Structural System
- 2.1.8 Mechanical Systems
- 2.1.9 Plumbing Systems
- 2.1.10 Fire Protection System
- 2.1.11 Electrical Systems

2.2 PERFORMANCE REQUIREMENTS

- 2.2.1 Reference Materials
- 2.2.2 General Project Requirements
- 2.2.3 Sustainable Requirements
- 2.2.4 Site and Utilities
- 2.2.5 Structural
- 2.2.6 Mechanical
- 2.2.7 Plumbing
- 2.2.8 Electrical
- 2.2.9 Fire Protection

2.3 ADJUNCT REQUIREMENTS AND ASSESSMENTS

- 2.3.1 Safeguards and Security
- 2.3.2 Health and Safety
- 2.3.3 Environmental Protection
- 2.3.4 Decontamination and Decommissioning
- 2.3.5 Telecommunications
- 2.3.6 Computer Equipment
- 2.3.7 Accessibility Provisions
- 2.3.8 Emergency Shelter Provisions
- 2.3.9 Space Management Requirements
- 2.3.10 Commissioning

2.4 QUALITY LEVELS

2.5 COST ESTIMATES

2.6 SCHEDULE

SECTION 3 PROJECT EXECUTION PLAN

3.1 RESOURCE REQUIREMENTS

- 3.1.1 Funding
- 3.1.2 Human Resources

3.2 PROJECT BASELINE

- 3.2.1 Scope Baseline
- 3.2.2 Work Breakdown Structure (WBS) Dictionary
- 3.2.3 Baseline Project Costs
- 3.2.4 Management Reserve
- 3.2.5 Escalation
- 3.2.6 Baseline Project Schedule and Milestones

3.3 ACQUISITION EXECUTION PLAN

- 3.3.1 Design
- 3.3.2 Construction

3.4 MONITORING AND CONTROLS

- 3.4.1 Cost Control
- 3.4.2 Schedule Control
- 3.4.3 Change Control Procedures and Authorities

3.5 ORGANIZATIONAL PROCESS ASSETS

- 3.5.1 Integrated Safety Management (ISM)
- 3.5.2 Quality Assurance
- 3.5.3 High Performance Building Design
- 3.5.4 Reliability and Maintainability
- 3.5.5 Value Management
- 3.5.6 Design Reviews

3.6 RISK MANAGEMENT

3.7 REPORTING AND REVIEW

- 3.7.1 Reporting
- 3.7.2 Reviews

APPENDIXES

APPENDIX A

- Conceptual Drawings
- Soil Borings

APPENDIX B

- URL List of referenced DOE Directives and Guides
- URL List of referenced Fermilab Policies, Procedures and Guidance
- Integrated Project Team Responsibility Matrix
- Environmental Documentation
 - o Environmental Engineer/NEPA Compliance Coordinator approval notification
 - o DOE FSO NEPA Categorical Exclusion Approval
 - o NEPA Environmental Evaluation Notification Form (EENF)
- LEED 2009 Checklist
- HPSB Assessment and compliance - Preliminary
- Whitestone Building and Repair Cost Reference Information
- Fermilab Work Smart Set, Chapter 1070 of FESHM
- Multi-Organization Construction Site Safety Walkthrough Procedure
- Stakeholder Input
 - o Comment and Compliance Review Request
 - o Stakeholder Comments

APPENDIX C

WFO and Grant Documents

- U.S Department of Energy Work For Others Agreement with Non-Federal Sponsors, WFO FRA-2010-0002, with transmittal letter to DOE
- Illinois Department of Commerce and Economic Opportunity Grant No. 10-203828
- Illinois Department of Commerce and Economic Opportunity Grant No. 10-203829
- State Welcome Package Grant No. 10-203828 (Reports Deliverable Schedule)
- State Welcome Package Grant No. 10-203829(Reports Deliverable Schedule)
- Illinois Historic Preservation Agency sign-off
- Illinois Department of Natural Resources sign-off

APPENDIX D

Alternative Evaluations

- Sites Evaluation Location Key
- Sites Evaluation Matrix
- Pre-Conceptual Building Massing Studies
- Functional Review Committee Charge and Comments
- Director's Presentation Images