DESIGN AND CONSTRUCTION MANUAL
TABLE OF CONTENTS

TABLE OF CONTENTS

FOREWORD

PART I: ADMINISTRATION

CHAPTER 1 – INTRODUCTION, BUILDING COMMITTEE, PROJECT REVIEW BOARDS, AND THE UNIVERSITY BUILDING OFFICIAL

SECTION 1.1 GENERAL
SECTION 1.2 DESIGN PHILOSOPHY
SECTION 1.3 FORMS
SECTION 1.4 INDEX
SECTION 1.5 BUILDING COMMITTEE
SECTION 1.6 PROJECT REVIEW ORGANIZATIONS
SECTION 1.7 UNIVERSITY DESIGN REVIEW BOARD
SECTION 1.8 STATE ART AND ARCHITECTURE REVIEW BOARD
SECTION 1.9 CODE REVIEW AND THE DIVISION OF ENGINEERING & BUILDINGS
SECTION 1.10 UNIVERSITY CODE OFFICIALS
SECTION 1.11 REAL PROPERTY TRANSACTIONS
SECTION 1.12 PROJECT MANAGEMENT SOFTWARE
SECTION 1.13 CONFLICTS OF INTEREST; PROHIBITIONS
SECTION 1.14 ETHICS IN PUBLIC CONTRACTING

CHAPTER 2 – TERMS AND DEFINITIONS

SECTION 2.1 GENERAL
SECTION 2.2 ACRONYMS AND ABBREVIATIONS
SECTION 2.3 DEFINITIONS

PART II: PLANNING

CHAPTER 3 – COMPREHENSIVE CAMPUS PLANS, SITE AND UTILITY DRAWINGS

SECTION 3.1 CONFORMANCE WITH EXISTING COMPREHENSIVE PLANS
SECTION 3.2 SITE AND UTILITY DRAWINGS
SECTION 3.3 COMPREHENSIVE CAMPUS PLANS AND REQUIREMENTS

CHAPTER 4 – PROJECT IDENTIFICATION AND APPROVALS

SECTION 4.1 GENERAL

SECTION 4.2 FUNDING CATEGORIES (REFER TO FIGURE 4-1)

SECTION 4.3 PROJECT IDENFICATION AND NOMINATION

SECITON 4.4 PREPARATION OF THE COMMONWEALTH'S SIX YEAR CAPITAL OUTLAY PLAN

SECTION 4.5 CAPITAL PROJECT APPROVAL

SECTION 4.6 MAINTENANCE RESERVE AND NON-CAPITAL PROJECT APPROVAL

SECTION 4.7 ACQUISITIONS AND LEASED AND TEMPORARY FACILITIES

SECTION 4.8 PROJECT EXECUTION AUTHORITY AND FORMS

Figure 4-1 Project Authorization and Funding Matrix

Figure 4-2 Project Authorization and Forms Summary

PART III: DESIGN SERVICES

CHAPTER 5 – DESIGN SERVICES: GENERAL TERMS AND CONDITIONS

SECTION 5.1 GENERAL TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

SECTION 5.2 INTERIOR DESIGN SERVICES

CHAPTER 6 – DESIGN SERVICES: PROCUREMENT PROCEDURES

SECTION 6.1 GENERAL

SECTION 6.2 PROCUREMENT OF RELATED CONSULTANTS

SECTION 6.3 PROJECT SCOPE OF WORK

SECTION 6.4 ADVERTISEMENTS FOR PROFESSIONAL SERVICES

SECTION 6.5 REQUESTS FOR PROPOSALS

SECTION 6.6 SMALL BUSINESSES AND BUSINESSES OWNED BY WOMEN AND MINORITIES (SWaM)

SECTION 6.7 SWaM PROCUREMENT PLAN

SECTION 6.8 PROCEDURES FOR PROFESSIONAL SELECTION (A/E SELECTION)

SECTION 6.9 TERM CONTRACTS

SECTION 6.10 TERM PROJECT MANAGEMENT CONTRACTS

SECTION 6.11 CONTRACT FORMS TO BE USED

SECTION 6.12 GENERAL TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

CHAPTER 7 – DESIGN SERVICES: CONTRACT ADMINISTRATION, FEES, AND PAYMENTS

SECTION 7.1 ARCHITECTURAL AND ENGINEERING FEES

SECTION 7.2 A/E FEE PROPOSAL STANDARDS AND GUIDES

SECTION 7.3 A/E FEE PROPOSAL WORKSHEET (HECO-2.3)

SECTION 7.4 PROPORTIONING OF THE A/E FEE AND PAYMENTS
SECTION 7.5 DETERMINING CHARGES FOR CHANGES IN THE SCOPE OF WORK
SECTION 7.6 APPROVAL OF CHANGES TO THE A/E CONTRACT
SECTION 7.7 CONTRACTURLA DISPUTES (UNIVERSITY PROCUREMENT RULES)

CHAPTER 8 – DESIGN SERVICES: CODES, STANDARDS, AND POLICIES
SECTION 8.1 GENERAL
SECTION 8.2 CODES AND POLICIES
SECTION 8.3 SEPARATE CONTRACTS FOR MATERIAL AND/OR EQUIPMENT
SECTION 8.4 PROCUREMENT OF FURNISHINGS AND LOOSE EQUIPMENT
SECTION 8.5 BUILT-IN EQUIPMENT
SECTION 8.6 CHESAPEAKE BAY PROGRAM

CHAPTER 9 – DESIGN SERVICES: CONTRACT DOCUMENT REQUIREMENTS
SECTION 9.1 GENERAL
SECTION 9.2 DOCUMENT STANDARDS
SECTION 9.3 DRAWING STANDARDS
SECITON 9.4 PROJECT MANUAL STANDARDS
SECTION 9.5 COST ESTIMATE STANDARDS
SECITON 9.6 PRE-DESIGN CONFERENCE / DESIGN READINESS
SECITON 9.7 SCHEMATIC DESIGN / PROJECT CRITERIA
SECTION 9.8 PRELIMINARY DESIGN (DESIGN DEVELOPMENT) PHASE
SECITON 9.9 WORKING DRAWING (CONSTRUCTION DOCUMENT) PHASE
SECTION 9.10 BID FORMS AND PROCEDURES
SECTION 9.11 ADDITIVE BID ITEMS
SECTION 9.12 SUBMISSIONS
SECITON 9.13 CODE REVIEWS AND APPROVALS
SECTION 9.14 RELEASE OF BID DOCUMENTS
SECTION 9.15 QUALITY CONTROL / QUALITY ASSURANCE
SECITON 9.16 VALUE ENGINEERING (VE) AND VALUE MANAGEMENT (VM)
SECTION 9.17 STRUCTURAL AND SPECIAL INSPECITONS
SECTION 9.18 COMMISSIONING OF HVAC SYSTEMS

CHAPTER 10 – DESIGN SERVICES: COORDINATION AND QUALITY ASSURANCE
SECTION 10.1 GENERAL
SECTION 10.2 QUALITY ASSURANCE PROCESS

SECTION 10.3 QUALITY PROCESS
SECITON 10.4 PURPOSE
SECTION 10.5 PRE-DESIGN PHASE
SECTION 10.6 DESIGN PHASE
SECTION 10.7 CONSTRUCTION PHASE

PART IV: CONSTRUCTION SERVICES

CHAPTER 11 – CONSTRUCTION SERVICES: PROCUREMENT PROCEDURES
SECTION 11.1 GENERAL
SECTION 11.2 SMALL PROJECT PROCUREMENT PROCEDURES
SECTION 11.3 CONSTRUCTION BIDS
SECTION 11.4 AUTHORITY TO AWARD A CAPITAL OUTLAY PROJECT CONTRACT
SECTION 11.5 EXECUTION OF CONTRACTS

CHAPTER 12 – CONSTRUCTION SERVICES: SPECIAL PROJECT DELIVERY PROCEDURES
SECTION 12.1 GENERAL
SECTION 12.2 DESIGN-BUILD (DB) PROCEDURES
SECTION 12.3 CONSTRUCTION MANAGEMENT (CMAR or CM@R) PROCEDURES
SECTION 12.4 COMPETITIVE NEGOTIATION PROCEDURES – GENERAL CONTRACTOR
SECTION 12.5 PREQUALIFICATION PROCEDURES
SECTION 12.6 DEMOLITION
SECTION 12.7 EMERGENCY PROCEDURES
SECTION 12.8 TERM GENERAL / SPECIALTY CONTRACTOR (DESIGN AUGMENT) SERVICES CONTRACTS

CHAPTER 13 – CONSTRUCTION CONTRACT ADMINISTRATION, FEES AND PAYMENTS
SECTION 13.1 GENERAL
SECTION 13.2 CONSTRUCTION CONTRACT ADMINISTRATION
SECTION 13.3 CONSTRUCITON MEETINGS (OWNER-ARCHITECT-CONTRACTOR MEETINGS)
SECTION 13.4 SCHEDULE OF VALUES AND CERTIFICATE FOR PAYMENTS
SECTION 13.5 INSPECTION OF WORK
SECTION 13.6 CONSTRUCTOIN CHANGE ORDERS
SECTION 13.7 DOCUMENTATION OF “AS BUILT” CONDITIONS
SECTION 13.8 INSPECTION FOR SUBSTANTIAL COMPLETION
SECTION 13.9 BENEFICIAL OCCUPANCY AND FINAL COMPLETION
SECTION 13.10 PROJECT CLOSE-OUT DELIVERABLES

SECTION 13.11 CONTRACTURAL DISPUTES (UNVERSITY PROCUREMENT RULES)
SECTION 13.12 CONSTRUCTION RELATED FORMS AND FORMATS

CHAPTER 14 – CONSTRUCTION SERVICES: PROJECT CLOSE-OUT
SECTION 14.1 GENERAL
SECTION 14.2 SUBSTANTIAL COMPLETION
SECTION 14.3 OCCUPANCY
SECTION 14.4 FINAL COMPLETION
SECTION 14.5 PROJECT CLOSE-OUT DOCUMENTATION
SECTION 14.6 TEN MONTH WARRANTY INSPECTION
SECTION 14.7 WARRANTY ITEM COMPLETION
SECTION 14.8 PROJECT BUDGET CLOSE-OUT
SECTION 14.9 EVALUATIONS
Figure 14-1 Project Close-Out Checklist
Figure 14-2 Annual Permit Project – Project Close-Out Checklist

PART V: PERFORMANCE REPORTS AND PROCESSES

CHAPTER 15 – UNIVERSITY PERFORMANCE REPORTS AND PROCESS FLOW CHARTS
SECTION 15.1 PERFORMANCE REPORTS
SECTION 15.2 TRANSACTION REPORTS
SECTION 15.3 CAPITAL APPROPRIATIONS REPORT
SECTION 15.4 PROJECT PROCESS FLOW CHARTS

APPENDICIES AND SUPPLEMENTAL INFORMATION

Many of the following appendices simply refer to a document available at the University Architect or other website. The appendix may be used as a place to print and attach the associated document for handy reference.

APPENDIX A – SUPPORTING DOCUMENT

APPENDIX B – DETERMINATION AND FINDINGS

APPENDIX C – PROCUREMENT RULES

APPENDIX D – WILLIAM & MARY TECHNICAL STANDARDS

APPENDIX E – PARAMETERS FOR CALCULATING LIFE CYCLE COSTS AND ENERGY ANALYSES

APPENDIX F – WILLIAM & MARY DESIGN GUIDELINES

APPENDIX G – BUILDING PERMIT AND PROJECT PERMIT POLICY

APPENDIX H – PROJECT FORMS AND FORMATS

APPENDIX I – GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT, SUPPLEMENTAL GENERAL CONDITIONS, AND STANDARD INSTRUCTIONS TO BIDDERS

APPENDIX J - PROJECT INITIATION / DELEGATED DESIGN PLAN

APPENDIX K - STRUCTURAL AND SPECIAL INSPECTIONS

APPENDIX L - SPECIAL PROVISIONS FOR WORK FOR WORK AT WILLIAM & MARY

APPENDIX M – COST ESTIMATING REQUIREMENTS AND FORMATS

APPENDIX N – DESIGN AND CONSTRUCTION CHECKLISTS

APPENDIX O – DUTIES OF THE UNIVERSITY PROJECT INSPECTOR

APPENDIX P – CHECK LIST FOR RECEIVING AND OPENING BIDS

APPENDIX Q – PRE-CONSTRUCTION CONFERENCE AGENDA

APPENDIX R – CONSTRUCTION CHANGE ORDER PROCEDURE GUIDELINES

APPENDIX S – SAMPLE FORMS AND FORMATS

APPENDIX T – ROOF INSPECTION FORMS AND PROCEDURES

APPENDIX U – PROJECT PROCESS FLOWCHARTS