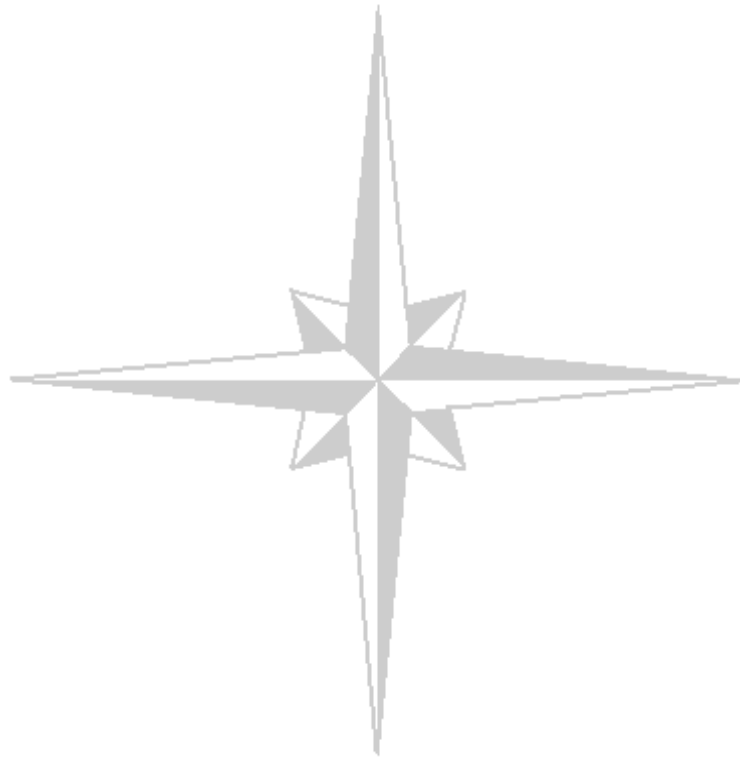


***METROPOLITAN WASHINGTON AIRPORTS
AUTHORITY
BUILDING CODES MANUAL***



***PREPARED BY:
BUILDING CODES/ENVIRONMENTAL DEPARTMENT
OFFICE OF ENGINEERING***

**METROPOLITAN WASHINGTON
AIRPORTS AUTHORITY**

BUILDING CODES MANUAL

Prepared by:

**MA-38
Office of Engineering
Building Codes / Environmental Department
Revise November 2013**

Approved By:

**Frank D. Holly, Jr.
Vice President for Engineering**

Table of Contents

| <u>Section</u> | <u>Page</u> |
|---|--------------------|
| 1.0 INTRODUCTION | 1 |
| 1.1 REFERENCED STANDARDS | 1 |
| 1.2 BUILDING CODES ORGANIZATION | 1 |
| 1.2.1 Building Official | 1 |
| 1.2.2 Manager, Building Codes/Environmental Department | 1 |
| 1.2.3 Building Codes Plans Examiner | 1 |
| 1.2.4 Building Codes Inspectors/Plans Examiners | 2 |
| 1.3 CONSTRUCTION PERMITS | 2 |
| 1.3.1 Pre-Application Requirements | 2 |
| 1.3.2 When Construction Permits are Required | 2 |

| | | |
|--------|---|-----------|
| 1.3.3 | Exceptions | 3 |
| 1.3.4 | Requirements for Construction Documents | 3 |
| 1.3.5 | Building Code Guidelines for Project Submittals | 5 |
| 1.3.6 | Application for Construction Permit..... | 5 |
| 1.3.7 | Review of Construction Documents | 5 |
| 1.3.8 | Approved Plans for Construction Permits | 5 |
| 1.3.9 | Review of Plans by Other Agencies | 6 |
| 1.3.10 | Issuing Construction Permits | 6 |
| 1.3.11 | Airport Work Permit in Lieu of Construction Permit..... | 6 |
| 1.3.12 | Third Party Plans Review | 7 |
| 1.4 | BUILDING CODE INSPECTION | 8 |
| 1.4.1 | Minimum Inspections | 9 |
| 1.4.2 | Special Inspections | 9 |
| 1.4.3 | Inspection Notification by Permit Holder | 9 |
| 1.4.4 | Requests for Inspections | 9 |
| 1.4.5 | Inspections to be Prompt | 9 |
| 1.4.6 | Inspection of Fire Protection Systems | 10 |
| 1.4.7 | Interagency Inspections | 10 |
| 1.4.8 | Posting Buildings | 10 |
| 1.4.9 | Project Completion | 10 |
| 1.4.10 | Third Party Inspections..... | 10 |
| 1.5 | CERTIFICATE OF OCCUPANCY | 11 |
| 1.5.1 | Temporary Use and Occupancy | 11 |
| 1.5.2 | Final Inspections | 11 |
| 1.6 | ELEVATORS, ESCALATORS AND MOVING WALKS | 13 |
| 1.6.1 | Fire Protection for Elevators..... | 13 |
| 1.6.2 | Acceptance Testing..... | 13 |
| 1.6.3 | Certificate of Compliance..... | 13 |
| 1.6.4 | Posting Certificates of Compliance..... | 13 |
| 1.6.5 | Periodic Testing..... | 13 |
| 1.6.6 | Frequency of Tests and Inspections | 14 |
| 1.6.7 | Repairs and Alterations | 14 |
| 1.6.8 | Accidents Reported and Recorded | 14 |

APPENDICES

- APPENDIX 1 NOT USED
- APPENDIX 2 METROPOLITAN WASHINGTON AIRPORTS AUTHORITY ORDER & INSTRUCTION 6-3-1C "CONSTRUCTION, ALTERATIONS AND REPAIRS TO BUILDINGS AND STRUCTURES"
- APPENDIX 3 REQUIREMENTS FOR AUTOMATIC SPRINKLER SYSTEMS
- APPENDIX 4 BUILDING CODE GUIDELINES FOR PROJECT SUBMITTALS
- APPENDIX 5 APPLICATION FOR MWAA CONSTRUCTION PERMIT
- APPENDIX 6 CONSTRUCTION PERMIT
- APPENDIX 7 AIRPORT WORK PERMITS
- APPENDIX 8 NOT USED
- APPENDIX 9 BUILDING CODE INSPECTION REPORT
- APPENDIX 10 CERTIFICATE OF USE AND OCCUPANCY
- APPENDIX 11 RESERVED
- APPENDIX 12 GUIDELINES FOR ELEVATOR FIRE PROTECTION SYSTEMS
- APPENDIX 13 CERTIFICATE OF COMPLIANCE (ELEVATORS, ESCALATORS AND MOVING WALKS)
- APPENDIX 14 SPECIAL INSPECTIONS FORMS/DATA SHEETS
- APPENDIX 15 PERMIT APPLICATION CHECK LIST
- APPENDIX 16 THIRD PARTY INSPECTIONS DATA SHEET

1.0 INTRODUCTION

This Building Codes Manual describes and formalizes the policies and procedures implemented by the Metropolitan Washington Airports Authority to enforce the Virginia Uniform Statewide Building Code (USBC) for all construction projects at Ronald Reagan Washington National Airport (DCA) and Washington Dulles International Airport (IAD).

1.1 REFERENCED CODES AND STANDARDS

The applicable addition of the Uniform Statewide Building Code (USBC), as established by the State Board of Housing and Community Development, will be the governing code.

The following major subsidiary model codes are included by reference as part of the USBC:

- International Building Code (IBC)
- International Plumbing Code (IPC)
- International Mechanical Code (IMC)
- International Private Sewage Disposal Code
- NFPA 70, National Electrical Code (NEC)
- ICC/ANSIA117.1, Accessible and Usable Building and Facilities
- International Energy Conservation Code

1.2 BUILDING CODES ORGANIZATION

The Building Codes functions and lines of responsibility are described below.

1.2.1 Building Official

The Building Official is the Vice President for Engineering, Office of Engineering; he is responsible for enforcing the USBC on Authority property. The Building Official has delegated the authority to issue all Construction Permits to the Building Codes/Environmental Department Manager. The Building Official signs Certificates of Occupancy for all applicable projects when he is satisfied that provisions of the USBC have been fulfilled. Only the Building Official may grant a modification to the USBC. In this manual, the term "Building Official" shall mean the Building Official or an authorized representative.

1.2.2 Manager, Building Codes/Environmental Department

The Manager, Building Codes/Environmental Department develops policies for the enforcement of the USBC and coordinates code concerns with other departments and offices of the Authority. He signs Construction Permits for all construction projects that are covered by the USBC. He keeps the Building Official advised of all code issues that impact design and construction at both airports.

1.2.3 Building Codes Plans Examiner

The Building Codes Plans Examiner oversees and monitors the daily operation of the Building Codes Department and maintains records that document all required plan reviews and construction inspections, in accordance with the USBC. The Building Codes Plans Examiner manages the elevator program and third party building code consultants.

1.2.4 Building Codes Inspectors/Plans Examiners

The Building Codes Inspectors/Plans Examiners review plans prior to issuance of the Construction Permit and conduct on-site building code inspections of the work in progress for compliance with the USBC. Inspectors are certified through the Commonwealth of Virginia, in their fields of expertise.

1.3 CONSTRUCTION PERMITS

1.3.1 Pre-Application Requirements

In the life cycle of a construction project, many events must transpire before a Construction Permit may be requested. All projects must be submitted in accordance with Authority requirements, as outlined in Order & Instruction 6-3-1C (Appendix 2). The Airport Manager must accept the appropriateness of the project and the design of the project must comply with the Authority Design Manual, as well as the USBC. The O&I project procedures require more copies of project submittals and different reviews than the building code requirements. Often the Design Manual will require more stringent fire protection systems and construction features than the USBC. The Construction Permit applicant must also coordinate with:

- Office of Engineering for planning, aesthetics and proper signage,
- Utility Shops for compatibility and capacity,
- Fire Department for restrictions and operational issues, and
- Other related Agencies including those listed in Section 1.3.9, below.

The Building Codes Department is available for consultation during this pre-application period. For major projects, the Building Codes Department welcomes the opportunity to review the progress at significant stages of design to minimize changes to the final construction documents. After the construction documents have been successfully bid and a Construction Contractor identified, but before any construction starts, a Construction Permit must be obtained.

1.3.2 When Construction Permits Are Required

1.3.2.1 Constructing, enlarging, altering, repairing, or demolishing a building or structure

1.3.2.2 Changing the use of a building either within the same Use Group or to a different Use Group when the new use requires greater degrees of structural strength, fire protection, exit facilities, ventilation or sanitary provisions.

1.3.2.3 Installing or altering any equipment that is regulated by the USBC.

1.3.2.4 Removing or disturbing any asbestos containing materials during demolition, alteration, renovation of or additions to buildings or structures.

1.3.2.5 Installing, altering, removing or closing (either temporarily or permanently) any underground or aboveground storage tank.

1.3.3 Exceptions

1.3.3.1 Ordinary repairs, which do not involve any violation of the USBC, shall be exempt from this provision. Ordinary repairs shall not include the removal, addition or relocation of any wall or partition; or the removal or cutting of any structural beam or bearing support; or the removal, addition or relocation of any parts of a building affecting the means of egress or exit requirements. Ordinary repairs shall not include the removal, disturbance, encapsulation, or enclosure of any asbestos containing material. Ordinary repairs shall not include additions, alteration, replacement or relocation of the plumbing, mechanical, or electrical systems, or other work affecting public health or general safety. The term "ordinary repairs" shall mean the replacement of the following materials with like materials:

- Painting,
- Roofing when not exceeding 100 square feet of roof area,
- Glass when not located within specific human impact loads and hazardous locations as defined in Section 2406 of the USBC,
- Doors, except those in fire-rated wall assemblies or exit ways,
- Floor coverings and porch floorings,
- Repairs to plaster, interior tile work, and other wall coverings,
- Cabinets installed in residential occupancies, and
- Wiring and equipment operating at less than 50 volts,

1.3.3.2 A Construction Permit is not required to install wiring and equipment, which operates at less than 50 volts, provided the installation is not located in a noncombustible plenum, is not penetrating a fire-resistance rated assembly or is not part of any of the following systems;

- Fire Alarm
- Fire Detection
- Fire Suppression
- Smoke Control
- Elevator control
- Egress Control

1.3.3.3 Detached utility sheds 150 square feet or less in area and eight feet six inches or less in wall height, when accessory to any Use Group building except, Use Groups H and F.

1.3.3.4 All tents and air-supported structures that cover an area of 900 square feet or less, including all connecting areas or spaces with a common means of egress or entrance and with an occupant load of 50 or less persons.

1.3.3.5 The Building Official may authorize work to commence pending receipt of written application.

1.3.4 Requirements for Construction Documents

Plans and specifications for projects shall provide a detailed description of the work, its location; the use of all parts of the building, and of all portions of the site not covered by the building, and such additional information as may be required by the Building Official.

Where applicable, include the following:

1.3.4.1 Site Plan. A site plan showing to scale the size and location of all the proposed new construction and all existing utilities and buildings on the site, distances from lot lines, the established street grades and the proposed finished grades. Indicate sedimentation and erosion controls, such as silt fences and vehicular mud traps. In the case of demolition, show treatment of utility lines.

1.3.4.2 Code Data Sheet. A Code Data sheet shall be included with the drawings that includes but is not limited to:

- An egress plan showing the number of exits required, the number of exits provided, the required width of exits, the width provided, the path of egress and the travel distance.
- Occupancy information stating the square footage, the type of occupancy and the number of occupants.
- Building information showing the Use Group, type of construction, total square footage of the building, square footage of each floor and the number of floors.
- Code information stating the code and version of the code to which the project was designed.
- Fire rated construction information with a drawing showing the location and rating of all fire rated construction.

1.3.4.3 Engineering Details. The Building Official may require adequate details of structural, mechanical, plumbing, and electrical work to be filed, including computations, stress diagrams and other essential technical data. All engineering plans and computations shall include the signature of a professional engineer or architect licensed in the Commonwealth of Virginia who is responsible for the design. For buildings more than two stories in height, indicate where floor penetrations will be made for pipes, wires, conduits, and other components of the electrical, mechanical, and plumbing systems. The plans shall show the material and methods for protecting such openings so as to maintain the required structural integrity, fire resistance ratings, and fire stopping affected by such penetrations.

1.3.4.4 NFPA 13 Systems. The USBC, through the adopted International Building Code, requires that where an automatic sprinkler system is required throughout a building, it shall be designed, installed and tested in accordance with NFPA Standard 13, "Standards for Fire Sprinkler Systems." NFPA Standard 13 lists specific requirements for shop drawings, to be submitted for approval, which are included as Appendix 3, "Requirements for Automatic Fire Sprinkler Systems."

1.3.5 Building Code Guidelines for Project Submittals

Construction projects vary from very simple interior remodeling to major new construction of detached buildings. In all cases, certain basic information is required to obtain a Construction

Permit. Appendix 4, "Building Code Guidelines for Project Submittals," lists the essential data to be provided when applying for a Construction Permit.

1.3.6 Application for Construction Permit

The owner, lessee of, shall make all applications for Construction Permits in writing the building or agent of either, including instances where tenants are allowed to do direct contracting. Requests for Construction Permits must be submitted on "Application for MWAA Construction Permit" (Appendix 5).

The permit application shall include a Permit Application Checklist (Appendix 15) and all the information requested on the check list.

A Construction Permit shall not be issued allowing a building to be renovated or demolished until the Building Codes Department receives certification from the Permit Applicant that the affected portions of the building have been inspected for the presence of asbestos by an individual license to perform such inspections pursuant to Section 54.1-503 of the Code of Virginia and that no asbestos-containing materials were found or that appropriate response actions will be undertaken in accordance with the requirements of the Clean Air Act, National Emission Standard for the Hazardous Air Pollutant (NESHAPS).

1.3.7 Review of Construction Documents

The Building Official shall examine all construction documents submitted with Construction Permit applications within a reasonable time after filing (usually 10 working days). If the plans or specifications do not conform to the requirements of the USBC and an agreement for a safe solution to the building code deficiencies cannot be reached, the Building Official shall send a letter to the Permit Applicant, through the Airport Manager, rejecting the construction documents, stating the reasons and citing the building code sections for the rejection. Where the plans contain major deficiencies, the plans examiners shall require that the plans be revised and resubmitted.

1.3.7.1 Minor Changes. Where minor changes to the plans are required, the plans examiners may recommend that a Construction Permit be issued with corrective action noted on approved plans. The Permit Applicant will then ensure that the project is constructed in accordance with the revised plans.

1.3.7.2 Partial Plans. The Building Official may issue a Construction Permit for the foundations or any other part of a building before the plans and specifications for the entire building have been submitted, provided adequate information and detailed statements have been filed, indicating compliance with the pertinent requirements of the USBC. All portions of partial plans submitted for approval shall be 100% complete. The holder of such a Construction Permit for the foundations or other part of a building may proceed with construction at the holder's risk, and without assurance that a Construction Permit for the entire building will be granted.

1.3.7.3 Phased Construction. Projects involving phased construction shall be issued one Construction Permit with subsequent amendments for each phase of the work, so long as all work is, performed by the same General Contractor. If work is phased and multiple contracts are awarded, individual Construction Permits must be issued for each phase.

1.3.8 Approved Plans for Construction Permits

When the plans examiners have approved the construction documents, the Building Codes/Environmental Department Manager shall stamp "approved" on two sets of plans and shall sign the cover sheet of each set. One set of such approved plans shall be retained by the Building Codes Department. The other set shall be kept at the construction site, available for inspection by building code officials at all reasonable times.

1.3.9 Review of Plans by Other Agencies

Plans for restaurants, food/drink preparation facilities, waterline construction, sewer line construction and pump/haul sanitation systems require review by outside agencies, as specified below. It is the responsibility of the tenant or his agent to submit plans for such facilities to the appropriate agency for review prior to applying for a Construction Permit.

1.3.9.1 Local Food Service Facilities. Plans for food service facilities at Washington Dulles International Airport shall be submitted to the Loudoun County Department of Environmental Health or the Fairfax County Health Department for review, depending upon the geographical location of the facility. Plans for food service facilities at Ronald Reagan Washington National Airport shall be submitted to the Arlington County Environmental Health Bureau for review.

1.3.9.2 Interstate Food/Sanitation Facilities. Plans for food service facilities, potable water systems or sanitary disposal systems (tritulators) involved in inter-state commerce, shall be submitted to the U.S. Public Health Service, Food and Drug Administration.

1.3.9.3 Waterline construction. Any modification to the existing water works affecting capacity, hydraulic conditions, operating units, or the quality of the water, requires plans and specifications along with hydraulic calculations to be submitted to the Virginia Department of Health for review and approval.

1.3.9.4 Sewer line construction. Any modification to the existing public sewer system requires plans and specifications along with calculations to be submitted to the Virginia Department of Environmental Quality.

1.3.9.5 Pump/Haul Sanitation Systems. Pump and haul sewage disposal systems shall conform to the requirements of the International Private Sewage Disposal Code. Submit plans to the geographic county having jurisdiction.

1.3.10 Issuing Construction Permits

Upon approval of the construction documents, the Building Official will issue a Construction Permit (Appendix 6) and forward it to the Airport Manager or his designee. When the Project Manager is satisfied that all other required approvals have been obtained he will forward the Construction Permit to the Contractor. The signature of the Building Official or his authorized representative shall appear on every Construction Permit. A copy of the Construction Permit shall be kept in plain view on the construction site for public inspection until the work is completed.

1.3.11 Airport Work Permit in Lieu of Construction Permit

Engineering & Maintenance Departments at either Airport may require an "Airport Work Permit" (Appendix 7) for activities related to underground utilities, paving and other flat earthwork, and for projects listed above in "1.3.3 Exceptions." Airport Work Permits allow the Engineering & Maintenance Departments to control work on their respective airports, but are not a requirement of USBC.

1.3.12 Third Party Plan Reviews

Third Party plan reviews for compliance with the requirements of the USBC may be allowed by the Building Codes Department to facilitate the review process. Third Party reviews shall be submitted to the Codes Department with an Application for MWAA Construction Permit. The Building Codes Department Plans Examiner will review the documents for completeness and forward them to the Building Codes Manager for signature.

The requirements for Third Party plan reviews are outlined below.

1.3.12.1 Plans Examiner Requirements

Persons performing plan reviews for the Building Codes Department must meet the following requirements. Only those persons meeting the qualifications below and approved by the Building Codes department will be allowed to perform code reviews. A list of approved Plans Examiners will be kept on file in the Building Codes Department. Each plans examiner must hold a valid and current license in the Commonwealth of Virginia as a professional engineer or a licensed architect. In addition, the licensed professional must hold an ICC certification for the disciplines in which they are performing code reviews (see table below). Professional engineers and licensed architects shall be licensed in accordance with the rules set forth by the Virginia DPOR. The licensing requirements may be obtained from the Virginia Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects at 3600 West Broad Street, Richmond, VA 23230-4917.

| Discipline | Certification |
|-----------------|---|
| Building (IBC) | Licensed Professional + Building Plans Examiner |
| Mechanical | Licensed Professional + Mechanical Plans Examiner |
| Plumbing | Licensed Professional + Plumbing Plans Examiner |
| Electrical | Licensed Professional + Electrical Plans Examiner |
| Fire Protection | Licensed Professional + Fire Protection Plans |
| Structural | Licensed Professional + Structural Plans Examiner |

1.3.12.2 Deliverables

Each permit application shall include two sets of drawings, two sets of specifications, structural calculations, plumbing calculations, electrical calculations, mechanical calculations, energy conservation calculations, a Plans Review Record for each discipline, a letter from the Engineer of Record stating the Special Inspection requirements, a letter from the Engineer of Record stating the requirements for temporary bracing and a list of drawings included in the project.

Each code review must be submitted with an appropriate plan review record and sealed by the licensed professional performing the code review. Each plans review record must include a statement that the plans and specifications have been reviewed for compliance with the Uniformed Statewide Building Code with no exceptions or with exceptions noted. The statement shall include the project title, specific drawing numbers reviewed, the date of the drawings and any revisions included in the drawings.

Sample plan review records must be submitted to the Building Codes Department for approval prior to performing plan reviews. Plan review records will be kept on file in the Building Codes Department.

The Special Inspections letter shall include a statement from the Engineer of Record stating the specific special inspections required for the project in compliance with Section 1704 of the IBC. The Engineer of Record must seal the letter.

The temporary bracing letter shall include a statement from the Engineer of Record stating what type of temporary bracing is required for steel erection, excavation shoring, concrete forms or any other construction that will require temporary bracing. The Engineer of Record must seal the letter.

The list of drawings shall include all drawings being used on the project, the date of the drawings and any revisions included in the drawings.

1.4 BUILDING CODE INSPECTIONS

The Building Official or his authorized representatives may inspect buildings for the purpose of enforcing the USBC, in accordance with the authority granted by Paragraph 36-105 of the Code of Virginia. Any building may be inspected at any time before completion and may be re-inspected when deemed necessary to enforce the provisions of the USBC.

1.4.1 Minimum Inspections

Inspections shall include but are not limited to the following:

- Inspection of footing excavations and reinforcement materials for concrete footings prior to the placement of concrete,
- Inspection of foundation systems during all phases of construction necessary to assure compliance with the code,
- Inspection of preparatory work prior to the placement of concrete,
- Inspection of structural members and fasteners prior to concealment,

- Inspection of electrical, mechanical and plumbing materials and systems prior to concealment,
- Inspection of energy conservation material prior to concealment,
- Upon completion of the building or structure, and before issuance of the Certificate of Occupancy, a final inspection shall be made and approved. All violations of the approved **construction** documents and permit shall be noted and the holder of the permit shall be notified of the discrepancies.

1.4.2 Special Inspections

The Permit Holder shall provide special inspections for construction as described in USBC Section 1704. These Special Inspections shall be conducted on work including certain steel construction, concrete construction, prepared fill and pile foundations.

1.4.2.1 The requirement for Special Inspections shall be identified on the Application for Construction Permit. The Special Inspectors shall be provided by the Permit Holder and shall be qualified and approved by the Commonwealth of Virginia for the inspection of the work described in the construction documents. Information for Special Inspectors and Testing shall be documented on the forms included as Appendix 14, as applicable. All Special Inspection reports must be sealed by the Engineer in Responsible Charge.

1.4.2.2 The Permit Holder shall schedule the Special Inspections, shall document that the Special Inspections have been accomplished in accordance with the USBC, and shall furnish a summary letter to the Building Codes Department at the completion of the project.

1.4.3 Inspection Notification by Permit Holder

It is the responsibility of the Permit Holder to notify the Building Official when the stages of construction are reached that requires an inspection under Paragraph 1.4.1, above, and for other inspections as directed by the Building Official. The Permit Holder shall provide all ladders, scaffolds, test equipment and special tools required to complete an inspection or test.

1.4.4 Requests for Inspections

Requests for building code inspections shall be made by the Contractor to the Building Code Department. Requests for Code inspections shall be sent electronically to the Building Codes Department via the Internet. Go to www.mwaa.com, click on Business Opportunities, click on Request for Inspection, fill in appropriate information and click on submit. Requests should be made 24 hours in advance of the desired inspection date.

1.4.5 Inspections to Be Prompt

The Building Code Department will respond to inspection requests without unreasonable delay, typically within 2 working days. The Building Codes Department or their authorized representatives, which may include an approved third party, will perform all building code compliance inspections. The building code inspector shall give written notice that work is approved or rejected, to the Permit Holder or the agent in charge of the work. A "Building Code Inspection Report" (Appendix 9) will be used to document all code inspections. Defects shall be corrected and the area re-inspected before any work proceeds that would conceal the required corrections.

1.4.6 Inspection of Fire Protection Systems

The inspection and testing of all building code required components of Fire Protection Systems (including sprinklers, alarms, smoke detectors, and signaling devices) that are installed or altered under a Construction Permit shall be requested through the Building Codes Department. This includes all close-in inspections and acceptance tests. A Building Codes inspector shall witness all building code required tests, performed by the contractor or his agent, including hydrostatic testing of fire lines and backflow preventers. These tests and inspections shall not be conducted unless the approved submittals and plans as required by NFPA are present at the site. Test reports shall be submitted on approved forms within 30 days of test completion.

The Utilities Branch and the Fire Department at each Airport must approve utility outages and deactivation of fire alarm systems, in advance.

1.4.7 Interagency Inspections

Inspections may be required by outside agencies including those listed in 1.3.9 above. All new boilers and pressure vessels must be inspected by the Virginia Department of Labor and Industry, who will issue a Certificate of Inspection upon approval. See 1.6 below for elevator requirements.

1.4.8 Posting Buildings

Prior to its use, every room or space that is assembly occupancy shall have the occupant load of the room or space posted by the tenant with a sign approved by the Building Official. It shall be securely fastened to the building and be readily visible. The owner shall be responsible for installing and maintaining such signs.

1.4.9 Project Completion

At the successful completion of a construction project, the responsible building code official shall sign either a "Final Inspection Report" or a Certificate of Use and Occupancy.

1.4.10 Third Party Inspection Requirements

Persons performing Third Party Inspections for the Building Codes Department must meet the following requirements. Only those persons meeting the qualifications below and approved by the Building Codes department will be allowed to perform code inspections. Third Party Inspectors must be approved by the Building Department prior to performing inspections. The Third Party Inspections firm and the inspectors shall be submitted to the Building Codes Department for Approval using Appendix 16.

Persons performing inspections shall be under the direct control and supervision of a Professional Engineer in Responsible Charge (E.R.C.). The professional engineer must hold a valid and current license in the Commonwealth of Virginia as a professional engineer.

"Direct control and personal supervision," shall be that degree of supervision by a person overseeing the work of another whereby the supervisor has both control over and detailed professional knowledge of the work prepared under his supervision and words and phrases of similar import mean that the professional shall have control over the decisions on technical matters of policy and design, and exercises his professional judgment in all professional matters

that are embodied in the work and the drawings, specifications, or other documents involved in the work; and the professional has exercised critical examination and evaluation of a(n) employee's work product, during and after preparation, for purposes of compliance with applicable laws, codes, ordinances, regulations and usual and customary standards of care pertaining to professional practice. Further, it is that degree of control a professional is required to maintain over decisions made personally or by others over which the professional exercises direct control and personal supervision

1.4.10.1 Professional engineers shall be licensed in accordance with the rules set forth by the Virginia DPOR. The licensing requirements may be obtained from the Virginia Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects at 3600 West Broad Street, Richmond, VA 23230-4917.

1.4.10.2 Inspectors shall be certified by the Virginia Department of Community Housing and Development (DHCD) or the International Code Council (ICC) in each technical area they are inspecting, such as but not limited to, plumbing, electrical, mechanical, or building general. Individuals may be certified by the DHCD or ICC in more than one technical area.

1.4.10.3 The Third Party inspector shall complete written inspection reports for each inspection and provide the reports on a timely basis to the Building Code Official or his authorized representative. The inspection form shall be submitted to the Building Codes Department for approval.

Each report shall include but is not limited to the following:

- Description each type of inspection performed
- Indicate applicable locations and areas inspected
- The date and time of each inspection
- The permit number and project title
- Each report shall include the signature of the inspector
- Each report shall be sealed by the (E.R.C.)
- Report shall indicate approval or rejection.

Inspection Reports shall be forwarded to:
The Metropolitan Washington Airports Authority
Ronald Reagan Washington National Airport
Room 155 West Building
Washington, DC 20001
Attn. Walter N. Seedlock, CBO

1.5 CERTIFICATE OF OCCUPANCY

Any building or structure constructed under the USBC shall not be used until; a "Certificate of Use and Occupancy" (Appendix 10) has been issued by the Building Official.

1.5.1 Temporary Use and Occupancy

The holder of a permit may request the Building Official to issue a Temporary Certificate of Occupancy for a building, or part thereof, before the entire work covered by the Construction Permit has been completed. The Temporary Certificate of Occupancy may be issued provided the Building Official determines that such portion or portions may be occupied safely prior to full completion of the building.

1.5.1.1 The Permit Holder shall request a Temporary Certificate of Occupancy from the Building Official. The minimum information required is:

- Area of the building to be considered for temporary use,
- The time period of the temporary use,
- Circumstances that justify temporary use,
- Provisions to ensure the safety of occupants during temporary use, and
- Potable Water Test, where applicable.

Requests for temporary use shall be submitted a minimum of two calendar weeks prior to the proposed occupancy, for review and evaluation.

1.5.1.2 The Building Official will not issue a Temporary Certificate of Occupancy if any of the following conditions exist:

- An improper means of egress. This shall include incomplete fire rated assemblies, stairs, exits, and emergency lighting.
- Incomplete building code required fire protection systems. Fire protection systems that are not required by USBC may be accepted in an incomplete form if they do not present a hazard.
- Structural conditions that may create a hazard to the occupants.

Within two calendar weeks of the expiration date of a Temporary Certificate of Occupancy, the Permit Holder shall request a final Certificate of Occupancy or an extension of the Temporary Certificate of Occupancy. In order for a final Certificate of Occupancy to be issued, the conditions that restricted approval to a Temporary Certificate of Occupancy must be corrected.

1.5.1.3 If a Temporary Certificate of Occupancy expires without resolving its restrictive conditions, the Building Codes Department will prepare a letter from the Building Official to the Permit Holder requesting that he show cause for his non-compliance with the terms of his Temporary Certificate of Occupancy. If a satisfactory response is not received, the Building Official will refer the issue to the Authority's Legal Counsel for action.

1.5.2 Final Inspections

A "Final Inspections Report" (Appendix 9) shall be used to complete the inspection and acceptance process for all projects where a Certificate of Occupancy is not required by the USBC. The Building Codes Inspector(s) will complete this form for inclusion in the permanent files.

1.6 ELEVATORS, ESCALATORS AND MOVING WALKS

All elevators, escalators and moving walks shall be designed and installed in accordance with the latest edition of the American Society of Mechanical Engineers (ASME) Standard A17.1, "Safety Code for Elevators and Escalators."

1.6.1 Fire Protection for Elevators

Automatic fire suppression systems for elevators shall be designed on the assumption that a fire will be detected at its inception by either a smoke detector or a heat detector before the sprinkler activation threshold is reached. The system shall provide that the cab will immediately be automatically recalled to the level of discharge, and allow the occupants to exit before power to the elevator is disconnected and the sprinklers are activated. Appendix 12, "Guidelines for Elevator Fire Protection Systems," describes the steps necessary for this protocol to be followed.

1.6.2 Acceptance Testing

All new equipment shall be tested and inspected prior to start up by an approved independent third party, provided by the Permit Holder. The inspector shall be ASME QEI-1 certified, and a copy of the credentials shall be provided to the Building Codes Department. It is the responsibility of the Permit Holder to ensure that all acceptance inspections are scheduled and coordinated with the Building Codes Department, so that a Codes inspector can witness all acceptance tests and inspections.

1.6.3 Certificate of Compliance

The Building Official shall issue a "Certificate of Compliance" (Appendix 13) for all elevators, escalators, and moving walks that meet the requirements of ASME A17.1.

1.6.4 Posting Certificates of Compliance

The party responsible for elevators, escalators and moving walks shall post the last-issued Certificate of Compliance in a conspicuous place available to the Building Official.

1.6.5 Periodic Testing

Periodic testing is required on all elevators, escalators and moving walks to ensure their safety and ability to carry the capacity intended. These tests shall be performed by an approved inspector acceptable to the Building Official at the expense of the party responsible for the equipment.

1.6.6 Frequency of Tests and Inspections

The Authority has adopted the requirements for periodic testing specified in ASME A17.1 and shown in the following chart.

| Type of Test | Time Interval | Equipment |
|----------------------------------|------------------|---------------------|
| Acceptance Inspection * | Before Occupancy | All Equipment |
| Routine Inspection and Tests | 6 Months | All Equipment |
| Safety and Operational Tests | 1 Year | All Equipment |
| Hydraulic Elevator Piston Test * | 3 Years | Hydraulic Elevators |
| Full Load Test * | 5 Years | Hoist Elevators |
| Re-inspection | After Repairs | All Equipment |

** These tests shall be witnessed by the Building Codes Department. The party responsible for the equipment shall provide copies of all tests and inspections to the Building Official within 30 days of completion of inspections. The party responsible for the equipment shall immediately remove from service any equipment that poses an imminent danger to users or operators.*

1.6.7 Repairs and Alterations

The party responsible for the equipment shall have 30 days to take corrective action on repairs and modifications identified in the periodic inspection reports. He shall furnish evidence of satisfactory compliance by means of re-inspection reports.

1.6.8 Accidents Reported and Recorded

The *owner* of the building shall immediately notify the code official of every accident involving personal injury or damage to apparatus on, about, or in connection with any equipment covered by this chapter, and shall afford the code official every facility for investigating such accident. When an accident involves the failure, breakage, damage or destruction or any part of the apparatus or mechanism, it shall be unlawful to use such device until after an examination by a third-party inspector is made and approval of the equipment for continued use is granted by the Code Official.

APPENDIX 2

METROPOLITAN WASHINGTON AIRPORTS AUTHORITY ORDER & INSTRUCTION 6-3-1C "CONSTRUCTION, ALTERATIONS AND REPAIRS TO BUILDINGS AND STRUCTURES"

APPENDIX 3

REQUIREMENTS FOR AUTOMATIC SPRINKLER SYSTEMS

REQUIREMENTS FOR AUTOMATIC FIRE SPRINKLER SYSTEMS

Automatic Fire Sprinkler Systems shall be designed and installed in accordance with NFPA 13, "Installation of Sprinkler Systems." The following is excerpted from NFPA 13, and lists the requirements of plans submitted for approval.

6-1 Working Plans.

6-1.1 Working plans shall be submitted for approval to the authority having jurisdiction before any equipment is installed or remodeled. Deviation from approved plans will require permission of the authority having jurisdiction.

6-1.1.1 Working plans shall be drawn to an indicated scale, on sheets of uniform size, with a plan of each floor, and shall show those items from the following list that pertain to the design of the system.

- (a) Name of the owner and occupant.
 - (b) Location, including street address.
 - (c) Point of compass.
 - (d) Full height cross-section, or schematic diagram, if required for clarity; including ceiling construction and method of protection for nonmetallic piping.
 - (e) Location of partitions.
 - (f) Location of firewalls.
 - (g) Occupancy class of each area or room.
 - (h) Location and size of concealed spaces, closets, attics, and bathrooms.
 - (i) Any small enclosures in which no sprinklers are to be installed.
 - (j) Size of city main in street and whether dead-end or circulating; and, if dead-end, direction and distance to nearest circulating main, city main test results and system elevation relative to test hydrant.
 - (k) Other sources of water supply, with pressure or elevation.
 - (l) Make, type, and nominal orifice size of sprinkler.
 - (m) Temperature rating and location of high-temperature sprinklers.
 - (n) Total area protected by each system on each floor.
 - (o) Number of sprinklers on each riser per floor.
 - (p) Total number of sprinklers on each dry pipe system, pre-action system, combined dry pipe-pre-action system, or deluge system.
 - (q) Approximate capacity in gallons of each dry pipe system.
 - (r) Pipe type and schedule of wall thickness.
 - (s) Nominal pipe size and cutting lengths of pipe (or center-to-center dimensions).
- NOTE. Where typical branch lines prevail, it will be necessary to size only one typical line.
- (t) Location and size of riser nipples.
 - (u) Type of fittings and joints and location of all welds and bends. The contractor shall specify on drawing any sections to be shop welded and the type of fittings or formations to be used.
 - (v) Type and location of hangars, sleeves, braces, and methods of securing sprinklers when applicable.
 - (w) All control valves, check valves, drain pipes, and test connections.
 - (x) Make, type, model, and size of alarm or dry pipe valve.

Requirements for Automatic Fire Sprinkler Systems Page 2

- (y) Make, type, model, and size of pre-action or deluge valve.
- (z) Kind and location of alarm bells.
- (aa) Size and location of hose outlets, hand hose, and related equipment.
- (bb) Underground pipe size, length, location, weight, material, point of connection to city main; the type of valves, meters, and valve pits; and the depth that top of the pipe is laid below grade.
- (cc) Provisions for flushing Piping.
- (dd) When the system is to be installed as an addition to an existing system, enough of the existing system indicated on the plans to make all conditions clear.
- (ee) For hydraulically designed systems, the information on the hydraulic data nameplate.
- (ff) A graphical representation of the scale used on all plans.
- (gg) Contractor's name and address.
- (hh) Hydraulic reference points shown on the plan shall correspond with comparable reference points on the hydraulic calculation sheets.
- (ii) The minimum rate of water application (density), the design area of water application, in-rack sprinkler demand, and the water required for hose streams both inside and outside.
- (jj) The total quantity of water and the pressure required noted at a common reference point for each system.
- (kk) Relative elevations of sprinklers, junction points, and supply or reference points.
- (ll) If room design method is used, all unprotected wall openings throughout the floor protected.
- (mm) Load calculations for sizing of, and details of sway bracing.
- (nn) The settings for pressure reducing valves.
- (oo) Information about backflow preventers such as manufacturer, size, type.
- (pp) Information about antifreeze solution used such as type and amount. In addition, hydraulic calculations and water supply information shall be submitted in accordance with NFPA 13, Section 6-2 and Section 6-3, respectively.

APPENDIX 4

BUILDING CODE GUIDELINES FOR PROJECT SUBMITTALS

BUILDING CODE GUIDELINES FOR PROJECT SUBMITTALS

All projects shall be designed in accordance with the latest adopted edition of the Virginia Uniform Statewide Building Code (USBC). Drawings and specifications shall include the seal and signature of the architect or engineer licensed in Virginia under whose supervision they were prepared, or if exempt under the provisions of state law, shall include the name, address and occupation of the individual who prepared them. In addition, the following items shall be included with each permit application:

- A copy of the prime contractor's and all subcontractor's statewide contractor's license.
- A copy of the prime contractor's business license for the county where the work is being performed. (DCA-Arlington; IAD-either Fairfax or Loudon)
- All drawings must be numbered and dated.
- A letter from the Engineer of Record stating whether or not Special Inspections are required by IBC 1704. When Special Inspections are required a list of the required inspections shall be included in the letter.
- All drawings using the Authority's title block must have the proper signatures.
- Any set of drawings more than 5 pages must have a list of drawings on an 8 1/2 x 11 sheet of paper attached with the application.
- A cover letter, speed memo or LOT shall accompany all permit applications.
- As a general rule, PE sealed drawings are required for any work involving structural framing, foundations or sprinkler work.

Drawing Size and Scale

Drawings should measure a minimum 24" x 36" and be at a scale of 1/8" equals 1'-0" or larger. Site plans should be at a scale appropriate to identify any site work. Projects of a minor nature may be submitted on 8 1/2" x 11" sheets. Additional requests may be identified in the Authority's Design Manual.

Architectural Information

1. Name of Building and Project, Name of Occupant.
2. Use Group and Type of Construction. All components of construction shall be called out including but not limited to wall, ceiling and floor assemblies.
3. Furniture plan including occupant load and code analysis.
4. If located within a building, a key plan at a reduced scale showing the project's location within the building. If the egress system is dependent upon existing doors or stairs they shall be accurately located and identified on the key plan. Indicate the floor on which construction is to occur.
5. Overall dimensions of project space and egress components, including exit access corridors and doors. Identify the use of all rooms. Dimensions for each area or provide square footage.
6. Where fire rated assemblies are required, provide UL design numbers and a description of the system.
7. For fire rated doors, provide a schedule including frame and hardware.
8. Note interior finishes. List materials used with smoke developed rating and flame spread classification.

9. Provide any cross sections required to accurately depict the construction details.

Mechanical Information

1. Show connections to building systems, fire dampers, air volumes, and outside air requirements.
2. For new equipment provide:
 - a. Make, model and capacity
 - b. Location and electrical requirements.
3. Indicate return air systems. If the space between the ceiling and the structure is to be used as an environmental plenum, the designer must ascertain that no combustibles exist within the plenum.
4. For alterations to existing systems, provide ductwork or piping layouts with capacity of main lines.
5. Food and beverage facilities should include detailed plans/specifications for kitchen hoods and exhaust systems.

Plumbing Information

1. Where existing toilets are to be used, indicate location on key plan.
2. For all new plumbing fixtures, provide a floor plan and riser diagram. New fixtures shall meet applicable accessibility requirements.
3. Show all connections of new systems to existing. Note materials of all pipes and vents.
4. Show connections on site plan if necessary to describe system.

Electrical Information

1. Show existing or new panel locations with schedules.
2. Show tie-in to existing panels and protective devices.
3. Provide load calculations as required.
4. Show connections on site plan if necessary to describe system.

Fire Protection Systems

1. Show existing fire protection systems and any alterations and additions thereto, including:
 - a. Sprinklers and associated piping to the water source
 - b. Smoke detectors
 - c. Heat detectors
 - d. Pull stations
 - e. Alarm bells
 - f. Control panels
 - g. Extinguishers
2. Show interior fixtures, shelving, etc. that may affect sprinkler discharge or other fire protection equipment.
3. List hazardous materials that may be used, handled or stored on the premises.
4. Submit shop drawings for all new fire protection systems and equipment in accordance with NFPA 13.

APPENDIX 5

APPLICATION FOR MWAA CONSTRUCTION PERMIT

APPLICATION FOR MWAA CONSTRUCTION PERMIT

Submit To: Building Codes/Environmental Department
Washington National Airport
Washington, D.C. 20001

Date of Application _____ Permit No. _____

(Issued by MWAA)

I. Project _____ DCA IAD
Location _____

Description of Project _____

(Y/N) Project will require excavation on the AOA at DCA *Est. Const. Cost \$

**This cost data may be furnished to Arlington or Loudoun Counties.*

II. Asbestos Certification for Alteration Projects (check one).

____ Original building was permitted after 1/1/85 and has no Asbestos Containing Materials (ACM) in the Project area.

____ Building was permitted before 1/1/85 and an Asbestos report or letter is attached in accordance with the USBC.

III. Hazardous Materials Certification

____ (Y/N) Hazardous materials are anticipated. Attach list of hazardous materials and quantities.

IV. ____ (Y/N) This project will require Special Inspection, in accordance with USBC Sec. 1704.

V. Name of Applicant _____

Address _____

City _____ State _____ Zip _____

Contact _____ Phone # _____

Signature _____ E-mail _____

VI. Name of Contractor _____

Address _____

City _____ State _____ Zip _____

Contact _____ E-mail _____ Phone # _____

VA Contr. License*: Class _____ No. _____ Expiration Date _____

Classifications _____

Plumbing Contractor* Sprinkler Subcontractor* Electrical Subcontractor* Mechanical Subcontractor*

**Attach photocopy of current VA Contractors License for the prime and all subcontractors.*

The law requires all contractors performing physical work on Airport property must have a valid Virginia contractor's license.

VII Architect/Engineer _____

Address _____

City _____ State _____ Zip _____

Contact _____ Phone # _____ E-mail _____

APPENDIX 6
CONSTRUCTION PERMIT

Metropolitan Washington Airports Authority
CONSTRUCTION PERMIT

DULLES
 NATIONAL

| | |
|-------------------------------|---------------|
| PROJECT TITLE / WORK LOCATION | PERMIT NUMBER |
|-------------------------------|---------------|

DESCRIPTION OF WORK

APPLICANT NAME

ADDRESS

CONTACT NAME AND TELEPHONE NUMBER

For Information

CONSTRUCTION COMPANY'S NAME

ADDRESS

CONTACT NAME AND TELEPHONE NUMBER

Only

VIRGINIA CONTRACTOR LICENSE:

| Classifications | Class | License Number | License Expiration Date |
|-----------------|-------|----------------|-------------------------|
| | | | |

Special inspections Required 49CFR 192 Gas Line (Third Party Inspection required)

"Certificate of Use and Occupancy" required. "Final Inspection" required.

"Health Department Approval" required: N/A Arlington Loudoun FDA

THIS PERMIT IS ISSUED BY MWAA AS AUTHORIZATION TO PERFORM APPROVED CONSTRUCTION ACTIVITIES AS DESCRIBED AND SHOWN ON LISTED PLANS.

| PLAN NUMBER | DATE | DESCRIPTION |
|-------------|------|-------------|
| | | |

NOTE: The comments and conditions are required by Virginia Uniform Statewide Building Code, tenant lease agreement, Authority policy or other requirements of law.

| | |
|---|------------------|
| APPROVED (MANAGER, BUILDING CODES/ENVIRONMENTAL DEPARTMENT) | DATE OF APPROVAL |
| Walter N. Seedlock | |

POST IN CONSPICUOUS PLACE AT JOB SITE

MWAA FORM ED-02 (1/11)

APPENDIX 7
AIRPORT WORK PERMIT

**Metropolitan Washington Airports Authority
Washington Dulles International Airport
AIRPORT WORK PERMIT**

| | | | |
|--|--------------|-----------------------|-------------------------|
| APPLICANT AND TELEPHONE NUMBER: | | | |
| | | | |
| ADDRESS: | | | |
| | | | |
| CONSTRUCTION COMPANY'S NAME (IF APPLICABLE): | | | |
| | | | |
| VIRGINIA CONTRACTOR LICENSE: | CLASS | LICENSE NUMBER | EXPIRATION DATE |
| | | | |
| ADDRESS: | | | |
| | | | |
| CONTACT PERSON AND TELEPHONE NUMBER | | | |
| | | | |
| PROJECT TITLE/WORK LOCATION: | | | |
| | | | |
| DESCRIPTION OF WORK: | | | |
| | | | |
| THIS PERMIT IS ISSUED BY MWAA AS AUTHORIZATION TO PERFORM APPROVED CONSTRUCTION ACTIVITIES AS DESCRIBED AND SHOWN ON LISTED PLANS. THIS PERMIT IS SUBJECT TO THE COMMENTS AND CONDITIONS IN COVER LETTER. | | PERMIT NUMBER | EXPIRATION DATE |
| | | | |
| PLAN NUMBER: | DATE: | DESCRIPTION: | |
| | | | |
| APPROVED (MANAGER, ENGINEERING & MAINTENANCE DIVISION) | | | DATE OF APPROVAL |
| | | | |

POST IN CONSPICUOUS PLACE AT JOB SITE

MWAA FORM ED-02 (5/07)

**Metropolitan Washington Airports Authority
 Ronald Reagan Washington National Airport
 AIRPORT WORK PERMIT**

| | | | |
|--|--------------|-----------------------|-------------------------|
| APPLICANT AND TELEPHONE NUMBER: | | | |
| | | | |
| ADDRESS: | | | |
| | | | |
| CONSTRUCTION COMPANY'S NAME (IF APPLICABLE): | | | |
| | | | |
| VIRGINIA CONTRACTOR LICENSE: | CLASS | LICENSE NUMBER | EXPIRATION DATE |
| | | | |
| ADDRESS: | | | |
| | | | |
| CONTACT PERSON AND TELEPHONE NUMBER | | | |
| | | | |
| PROJECT TITLE/WORK LOCATION: | | | |
| | | | |
| DESCRIPTION OF WORK: | | | |
| | | | |
| THIS PERMIT IS ISSUED BY MWAA AS AUTHORIZATION TO PERFORM APPROVED CONSTRUCTION ACTIVITIES AS DESCRIBED AND SHOWN ON LISTED PLANS. THIS PERMIT IS SUBJECT TO THE COMMENTS AND CONDITIONS IN COVER LETTER. | | PERMIT NUMBER | EXPIRATION DATE |
| | | | |
| PLAN NUMBER: | DATE: | DESCRIPTION: | |
| | | | |
| APPROVED (MANAGER, ENGINEERING & MAINTENANCE DIVISION) | | | DATE OF APPROVAL |
| | | | |

POST IN CONSPICUOUS PLACE AT JOB SITE

MWAA FORM ED-02 (5/07)

APPENDIX 8
Not Used

APPENDIX 9
BUILDING CODE INSPECTION REPORT

APPENDIX 10
CERTIFICATE OF USE AND OCCUPANCY

| | | | | |
|--|-------------------------|--|-----------------|----|
| Metropolitan Washington Airports Authority Office of Engineering, MA-30 Ronald Reagan Washington National Airport Washington, D.C. 20001-4901 | CERTIFICATE NO. | | | |
| | DATE APPLIED FOR | | | |
| CERTIFICATE OF USE AND OCCUPANCY | | | | |
| Virginia Uniform Statewide Building Code Compliance | | | | |
| | | DULLES | NATIONAL | |
| BUILDINGS | | CONST. PERMIT NO. | DATE ISSUED | |
| APPROVED | | APPLICANT | | |
| TITLE | DATE | CONTACT PERSON | PHONE | |
| REMARKS | | PROJECT TITLE | | |
| M E C H A N I C A L | | | | |
| | | BUILDING/LOCATION WITHIN BUILDING | | |
| APPROVED | | | | |
| TITLE | DATE | USE GROUP | | |
| REMARKS | | NO. OF OCCUPANTS | | |
| | | TYPE OF CONSTRUCTION | | |
| E L E C T R I C A L | | | | |
| | | PRIOR USE, IF APPLICABLE | | |
| APPROVED | | SPRINKLER SYSTEM PROVIDED | YES | NO |
| TITLE | DATE | SPRINKLER SYSTEM REQUIRED | YES | NO |
| REMARKS | | SPECIAL CONDITIONS (IF MODIFICATION HAS BEEN GRANTED, ATTACH COPY TO THIS FORM). | | |
| P L U M B I N G | | | | |
| APPROVED | | | | |
| TITLE | DATE | | | |
| REMARKS | | | | |
| F I R E P R O T E C T I O N | | | | |
| | | F I R E M A R S H A L | | |
| APPROVED | | COORDINATED | | |
| TITLE | DATE | TITLE | DATE | |
| REMARKS | | REMARKS | | |
| This is to certify that the above described building or space is in substantial compliance with applicable provisions of the Virginia Uniform Statewide Building Code and permission to occupy said space is hereby granted subject to any conditions noted above. | | | | |
| TEMPORARY OCCUPANCY APPROVED | | FINAL OCCUPANCY APPROVED | | |
| DATE | EXPIRES | DATE | | |
| MANAGER, BUILDING CODES / ENVIRONMENTAL DEPT. | | MANAGER, BUILDING CODES / ENVIRONMENTAL DEPT. | | |
| Walter N. Seedlock | | Walter N. Seedlock | | |
| BUILDING OFFICIAL | | BUILDING OFFICIAL | | |
| Frank D. Holly, Jr. | | Frank D. Holly, Jr. | | |

APPENDIX 12

**GUIDELINES FOR
ELEVATOR FIRE PROTECTION SYSTEMS**

GUIDELINES FOR ELEVATOR FIRE PROTECTION SYSTEMS

Fire protection systems for elevators shall comply with the latest edition of the American Society of Mechanical Engineers (ASME) Standard A17.1, "Safety Code for Elevators and Escalators." The following construction features are required to implement the protocol outlined in Sec. 1.7.1 of this manual.

1. Provide a smoke detector and a heat detector (2 separate devices) at the top of the elevator hoistway, and in the hoistway pit if a sprinkler head is required. Heat detectors shall be mounted within 24" of the sprinkler heads in the hoistway and machine rooms.
2. Provide a smoke detector and a heat detector (2 separate devices) in the elevator machine room.
3. Provide a smoke detector at each landing.
4. Smoke detectors shall operate as prescribed by Section 2.27 of ASME Standard A17.1. The activation of a smoke detector in any landing area, the hoistway or the machine room will recall the elevator car to the designated level of exit discharge. If the smoke detector at the designated level of discharge is activated, the elevator will recall to the alternate level designated by the Building Official.
5. Heat detectors in the hoistway and the machine room shall recall the elevator car to the designated level of exit discharge. If the heat detector in the elevator pit is activated, the elevator will recall to the alternate level designated by the Building Official.
6. Sprinklers shall be installed as required by Section 8.14.5 of NFPA 13.
7. Sprinkler heads in the hoistways shall be of the high temperature type, rated at 212 degrees. Sprinkler heads in Elevator Machine Rooms shall be of the ordinary temperature classification.
8. Provide supervised control valves for the sprinkler heads in the hoistway and in the machine room.
9. Provide an automatic means to disconnect the main line power after the elevator has been recalled to the level of exit discharge and before application of water (e.g., shunt trip breaker with a time delay). The Building Official will designate the time delay after timing the recall operation during the acceptance test.
10. The shunt trip breaker or other automatic means of disconnect to the main line power shall be activated by the heat detectors prior to the application of water from the sprinklers.

APPENDIX 13

**CERTIFICATE OF COMPLIANCE FOR
ELEVATORS, ESCALATORS AND MOVING WALKS**



Metropolitan Washington Airports Authority



Certificate of Compliance for Elevators, Escalators and Moving Walkways

Washington National Airport

Dulles International Airport

This certifies that this equipment is in compliance with ASME Standard No. A17.1

Name of Building _____

Owner or Agent _____

Type of Equipment _____

Date Inspected _____

Unit No. _____

Expiration Date _____

Power rain _____

Rated Capacity _____

Speed _____

Inspector _____

Building Code Official _____

Frank D. Holly, Jr.

APPENDIX 14

SPECIAL INSPECTIONS FORMS/DATA SHEETS

USBC 1704 SPECIAL INSPECTIONS AND TESTING

PROJECT DATA SHEET

This information should be provided for each project where Special Inspections are required by the USBC.

If there is more than one lab or inspection firm performing Special Inspections on one project, a form for each firm is required.

| | |
|----------------------------------|---------------|
| Project | Permit Number |
| Contractor | Phone Number |
| Contractor QC Representative | Phone Number |
| MWAA Project Manager | Phone Number |
| PMC Lead Inspector | Phone Number |
| Structural Engineer of Record | |
| Structural Contact | Phone Number |
| Geo-technical Engineer of record | |
| Geo-technical Contact | Phone Number |
| Information Prepared By | Phone Number |

INSPECTION AND TESTING AGENCY

Include copies of Certifications and Résumés

| | |
|--------------------------------|--------------|
| Special Inspection Agency | Phone Number |
| Engineer in Responsible Charge | Phone Number |
| Field Inspector / Technician | Phone Number |
| Field Inspector / Technician | Phone Number |
| Field Inspector / Technician | Phone Number |
| Field Inspector / Technician | Phone Number |
| Field Inspector / Technician | Phone Number |
| Field Inspector / Technician | Phone Number |
| Field Inspector / Technician | Phone Number |
| Field Inspector / Technician | Phone Number |
| Field Inspector / Technician | Phone Number |
| Field Inspector / Technician | Phone Number |
| Field Inspector / Technician | Phone Number |
| Field Inspector / Technician | Phone Number |

LABORATORY AND EQUIPMENT INFORMATION

Attach latest Laboratory Certification

Laboratory Manager

Phone Number

Provide a list of all equipment in use for Special Inspections attach the latest certificate of calibration as applicable for each device.

This might include Air Meters, Cylinder Break Machines, Nuclear Gauges, etc.

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Device Description (include serial numbers)

Calibration Date

Identify the inspectors performing the following inspections include copies of Certifications and résumés:

Concrete Construction
Shop Inspection

- Quality Control
- Review Mfr. Test Reports
- Pre-cast Inspections
- Equipment Calibration

Laboratory Testing

- Concrete Materials
- Reinforcing or Pre-stress Strength
- Concrete Strength

Field Inspection

- Reinforcement
- Formwork
- Strength Field Test
- Concrete Placement
- Concrete Finishing
- Concrete Curing
- Pre-stress or Post-tensioning Elongation

Identify the inspectors performing the following inspections include copies of Certifications and résumés:

STRUCTURAL STEEL INSPECTION AND TESTING

Shop Fabrication

_____ Check here if AISC plant certification is used. Attach a copy of AISC Certification

- _____ Quality Control Procedures
- _____ Shop Welding Procedures
- _____ Material Certifications
- _____ Dimensional Checks
- _____ Bolt Installation
- _____ Non-destructive Testing
- _____ Shop Coatings

Field Inspection

- _____ Erection Procedures
- _____ Welder Qualifications
- _____ Field Welding
- _____ Dimensional Checks
- _____ Bolt Installation
- _____ Field Testing
- _____ Field Coatings
- _____ Column Plumb ness
- _____ Roof and Floor Decking
- _____ Pre-cast Connections

Identify the inspectors performing the following inspections include copies of Certifications and résumés:

Masonry Construction Inspection and Testing

Field Inspection

- Mortar Mix
- Unit Placement
- Reinforcement
- Hot Weather Precautions
- Cold Weather Precautions
- Units and Finished Work

Pile Foundations

Only field inspections are listed. A project involving the installation of piles requires submission of the Information Sheet for Pile Foundations.

Field Inspections

- Load Test Set-up and Reading
- Blow Count
- Cut-off and Tip Elevation
- Plumb ness
- Assist with Driving Criteria
- Monitor Overdrive Damage
- Conformity of Driving Head

CAISSON FOUNDATIONS

Field Inspections

| | |
|-------|---|
| _____ | Material |
| _____ | Rock Socket Dept, Suitability & Bedding |
| _____ | Reinforcement |
| _____ | Strength |

SPRAYED ON FIREPROOFING MATERIALS

Field Inspections

| | |
|-------|--------------------|
| _____ | Surface Conditions |
| _____ | Application |
| _____ | Thickness |
| _____ | Density |
| _____ | Bond Strength |

APPENDIX 15
PERMIT APPLICATION CHECK LIST

Permit Check List

- 1. Completed permit application.
- 2. List of drawings on 8-1/2 x 11 sheets attached with the application.
- 3. A copy of all subcontractors' licenses.
- 4. A copy of the prime contractor's business license.
- 5. All drawings must be numbered, dated, and bound.
- 6. PE sealed drawings for structural framing, foundations, or sprinkler work.
- 7. Name, address, and occupation of person preparing drawings if no seal is required.
- 8. Title block with appropriate signatures.
- 9. Special Inspections letter stating which are required by IBC 1704.
- 10. A copy of the prime contractor's license.
- 11. Accessibility Compliance form.
- 12. A drawing indicating the location of the mop sink and the employee toilet facilities including the accessible facilities.
- 13. Calculations for structural, plumbing, mechanical & Electrical
- 14. Temporary bracing letter stating the requirements for bracing during construction.
- 15. A sealed letter stating that the installation complies with the International Energy Conservation Code.
- 16. An Asbestos report or letter for buildings permitted before 1/1/85.
- 17. A list of Hazardous Materials and quantities.
- 18. An egress plan showing occupant loads, travel distances, existing use vs proposed use, number of exits required, etc.
- 19. Plans submitted to Health Department (Date:)

APPENDIX 16

THIRD PARTY INSPECTIONS DATA SHEET

THIRD PARTY INSPECTIONS

PROJECT DATA SHEET

This information should be provided for each project where Third Party Inspections are being performed.

Include copies of Certifications and Résumés

| | |
|---|---------------|
| Project | Permit Number |
| Contractor | Phone Number |
| Contractor QC Representative | Phone Number |
| MWAA Project Manager | Phone Number |
| Information Prepared By | Phone Number |
| Third Party Inspection Agency | Phone Number |
| Engineer in Responsible Charge | Phone Number |
| Field Inspector /Commercial Building Inspector | Phone Number |
| Field Inspector / Commercial Mechanical Inspector | Phone Number |
| Field Inspector / Commercial Plumbing Inspector | Phone Number |
| Field Inspector/ Commercial Electrical Inspector | Phone Number |
| Field Inspector / Fire Protection Inspector | Phone Number |
| Field Inspector / Elevator Inspector | Phone Number |