Audit Report



OIG-05-042 (Interim Report)

TBARR: While Progress Has Been Made On The Main Treasury Renovation, Code Violations And Other Deficiencies Need To Be Corrected

July 29, 2005

Office of
Inspector General

Department of the Treasury

AUTHENTICATED
U.S. GOVERNMENT
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Contents

Section I OIG Audit Report

Audit Report 1

Background 3

Summary of Inspection Findings 3

Recommendation 7

Appendices

Appendix 1: Objective, Scope, and Methodology 9
Appendix 2: Management Response 10
Appendix 3: Major Contributors To This Report 14
Appendix 4: Report Distribution 15

Section II CMDR Associates, Inc., Report

Section III Office of Management Matrix of Findings, Corrective Actions and Target Dates

Matrix
OIG Comments

Abbreviations

CMDR	CMDR Associates, Inc.
H.R.	House Report
OIG	Office of Inspector General
TBARR	Treasury Building and Annex Repair and Restoration
Treasury	Department of the Treasury

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SECTION I

OIG AUDIT REPORT

July 29, 2005

Paul W. Curry
Acting Assistant Secretary for Management

This fourth Interim Audit Report from our continuing audit oversight of the Treasury Building and Annex Repair and Restoration (TBARR) Project provides the results of an independent inspection of the Main Treasury building.[1] The Conference Report (H.R. 108-792) and related House Report (H.R. 108-671) to the Consolidated Appropriations Act, 2005, directed that our audit of the TBARR Project include, but not be limited to, the inspection of the Main Treasury building to determine whether the renovation work conformed to applicable building codes.[2]

To address this mandate, we contracted with CMDR Associates, Inc. (CMDR), an engineering and construction consultant, to assess the Main Treasury building's compliance with national, federal, and local building codes. CMDR performed this task during June and July 2005 and issued its inspection report to us on July 15, 2005. In accordance with the scope of work established, CMDR:

[1] We began our work in February 2004 in response to a congressional mandate that our office comprehensively audit the TBARR Project. During Fiscal Year 2004, we issued two interim audit reports entitled *GENERAL MANAGEMENT: Management of the Treasury Building and Annex Repair and Restoration Program Needs to Be Strengthened* (OIG-04-039, dated August 9, 2004) and *GENERAL MANAGEMENT: Treasury Building and Annex Repair and Restoration Program Procurement Practices Need to be Improved* (OIG-04-043, dated September 23, 2004). During fiscal year 2005, we issued another interim report entitled *TBARR: Cost of Employee Move Delays During Main Treasury Building Renovation Could Not Be Determined* (OIG-05-035, issued April 1, 2005). These reports may be found on our Website at www.ustreas.gov/inspector-general/.

[2] The Conference Report directed our office to complete the audit of the TBARR Project, including building code compliance, by April 4, 2005. In a letter dated March 21, 2005, and subsequent meetings, we informed the Senate and House Committees on Appropriations that we would issue our report on building code compliance by July 29, 2005.

(1) conducted visual, non-intrusive and non-destructive inspections of the renovation work that had been completed under the TBARR Project for phases 1 through 3; and (2) reviewed documents such as structural drawings, mechanical design documents, engineering reports, asbestos and abatement drawings, and contract drawings. CMDR also interviewed TBARR Project engineers. Additionally, CMDR inspected 4 of the 5 building elevators. Appendix 1 provides additional information on our objective, scope, and methodology for accomplishing the inspection mandate in the Conference Report.

In brief, CMDR noted that the TBARR Project renovation contractors have exerted extraordinary effort in bringing this project to its current stage. However, CMDR found building code violations and other deficiencies in the following areas: (1) accessibility, (2) life safety, (3) structural, (4) environmental, (5) vertical conveyance (elevators), (6) mechanical, (7) fire protection, (8) electrical, and (9) fire alarm. CMDR did not report any building code violations or deficiencies with the telecommunications/data systems and security. CMDR's inspection report is included in its entirely in Section II.

We are recommending that appropriate actions be taken to address CMDR's findings and recommendations to remedy or mitigate the building code violations and other deficiencies. In its response, management generally agreed with our recommendation (see Appendix 2). Management also provided a matrix with its response showing completed or planned actions on CMDR's detailed recommendations to address the conditions noted. In certain instances, management indicated that implementation of the CMDR recommendation was contingent on funding. As shown in the matrix, management did not concur with 10 of the 58 CMDR recommendations. We assessed the basis for the non-concurred recommendations and believe action is still warranted in one instance involving handrails that could pose a potential hazard to handicapped individuals. The matrix and our assessment of the non-concurred recommendations are provided in Section III of this report.

Pursuant to the Conference Report, we will be providing copies of this Interim Audit Report to the Senate and House Committees on Appropriations.

Background

After a June 1996 roof fire resulted in major damage to the Main Treasury building, Treasury decided to modernize the building. The TBARR Project was established in August 1998 for the purpose of: (1) repairing and restoring the Main Treasury building to correct the damage caused by the roof fire, (2) restoring the historic fabric of the building, and (3) modernizing the building and its systems to comply with current codes and standards. At the same time, Treasury established the TBARR Program Office within the Office of Management to procure related services, oversee the design and construction activities, and coordinate employee moves during the renovation.

Starting with emergency funding received in Fiscal Year 1996 for the fire damage, Treasury has received funding each year since, in accordance with no-year and multi-year spending plans. Through fiscal year 2005, Congress appropriated a total of $237 million for the TBARR Project.

The renovation design plan provided that the interior building renovation would be carried out in 4 phases. Three phases had been completed at the time of the inspection. In our April 1, 2005, Interim Audit Report, we reported that the TBARR Project was expected to be completed in December 2005. This date has further slipped.[3]

Summary of Inspection Findings

Following is a summary of CMDR's findings of code violations and other deficiencies noted from its inspection and review of TBARR Project documents. While this summary of CMDR's findings is

[3] The President's Fiscal Year 2006 Budget requested an appropriation of $10 million as the final investment in the TBARR Project. According to the TBARR Director, the revised date for completing the TBARR Project, contingent on receiving the funding request, is now July 2006.

principally highlighting exceptions, it is important to note that CMDR's inspection found that much of the renovation work did conform with code requirements and was of high quality. Additionally, CMDR caveats in its report that some code requirements were waived when interfering with the historical restoration or when they were deemed infeasible due to cost or structural modifications required. In other areas of the building, CMDR notes that the renovation designers sought to meet as many of the current building codes for life safety and handicapped accessibility as possible without sacrificing important historic elements. Furthermore, CMDR notes that building code provisions relating to alterations and repair of historic structures are not mandatory. In some instances, alternatives to the requirements were proposed and undertaken as a compromise or to comply with the intent of the requirements. These caveats are discussed in more detail in the Project Background section of CMDR's report (See Section II, pages 4 and 5).

Accessibility

The Main Treasury building did not conform with certain Americans with Disabilities Act requirements and guidelines regarding: (1) office and bathroom clearances, (2) drinking fountains, (3) toilet rooms, (4) signage, and (5) ramps. CMDR-reported issues included, for example, a lack of minimum width of the doors, lack of handrails for ramps, incorrect signage on toilet rooms, and protruding objects which create a hazard. CDMR made 5 recommendations to correct these accessibility conditions. (See Section II, pages 7 to 9).

Life Safety

CMDR found building code violations in the following areas: (1) corridors and horizontal exits, (2) exit stairs, (3) monumental stairs, (4) the Cash Room, (5) fire ratings, (6) floor surfaces, and (7) a basement access door. For example, CMDR found handrail violations, irregularities in the floors, and furniture in passage ways that could impede exiting the building quickly and safely in an emergency. CMDR made 9 recommendations to address these conditions. (See Section II, pages 10 to 15).

Structural

Regarding its structural inspection, CMDR found that a new stair shaft was added to support a section of brick that projected into the shaft. A small portion of the brick adjacent to the beam was unsupported. CMDR recommended that this condition be investigated further and additional support be considered to correct the condition. Also, CMDR noted that project drawings showed a possible instance of an extruded aluminum plank supported by steel framing without a spacer to prevent galvanic corrosion between the two dissimilar materials. CMDR found no evidence that the building was evaluated for seismic safety as a part of the design of the project, as required. CMDR made 5 recommendations to address these and other conditions, including verification that the appropriate code was followed at the time the project drawings were prepared. (See Section II, pages 16 and17).

Environmental

CMDR found that asbestos abatement activities for phases 1 through 3 and some portions of phase 4 were carried out in compliance with federal and local rules and regulation. The remaining asbestos abatement under phase 4 is planned to be completed. CMDR recommended that upon completion of the TBARR Project, an independent, third-party inspect the building to confirm environmental compliance.

In the basement areas under construction, CMDR observed numerous indications of the possible presence of lead-based paint in the building. CMDR recommended that a Certified Risk Assessor conduct a proper sampling and assessment at this point. If testing confirms the presence of lead-based paint, CMDR further recommended abating the lead-based paint in accordance with regulatory guidelines. (See Section II, pages 18 and19).

Vertical Conveyance (Elevators)

Overall, CMDR found that the 4 inspected elevators met applicable code and safety requirements. Due to ongoing construction work and security issues, CMDR was unable to access and inspect the 5th elevator. CMDR did identify issues considered minor for the

4 elevators that it was able to inspect. These issues included missing screws and missing fire service jewels. CMDR made 10 recommendations to address these issues. (See Section II, pages 20 and 21).

Mechanical

In general, in CMDR's opinion, the building's mechanical system including plumbing, water supply, heating, and cooling components, appear to be well designed and maintained. During its visual survey, CMDR did not identify any major mechanical deficiencies. However, CMDR observed issues related to (1) temperature, humidity levels, and air circulation in the building basement; and (2) air circulation on the 5th floor. CMDR made 11 recommendations both to address these conditions as well as to save energy costs and prolong the life expectancy of certain equipment. (See Section II, pages 22 to 24).

Fire Protection

CMDR's review of project documents and visual inspection of the installation did not reveal any major code violations. All fire protection work under the TBARR Project for phases 1 through 3 appeared to have been completed in accordance with the construction contract documents. However, CMDR noted that the basement fire pump room was cluttered with construction materials. This room should remain clear to allow easy access for fire pump maintenance. (See Section II, page 25)

Electrical

The electrical system at the Main Treasury building, which was last modernized in 1999, is scheduled to be completed by the end of 2005. In CMDR's opinion, the electric system was a first class, state of the art system and the craftsmanship was commendable. However, CMDR noted a number of issues that should be corrected. (See Section II, pages 26 to 28).

Fire Alarm

Treasury installed a new fire alarm system in the building. CMDR found that the new fire alarm system had been well designed. There were no major deviations from the code and contract requirements. However, CMDR found that since the building is over 75 feet high, it is classified as a high-rise. Accordingly, CMDR is recommending adding additional features to the fire alarm system, such as a voice evacuation system. (See Section II, page 29).

Recommendation

The Assistant Secretary for Management and Chief Financial Officer should ensure that appropriate actions are taken to address CMDR's findings and recommendations to remedy or mitigate the building code violations and other deficiencies observed.

Management Response In its response, management generally agreed with our recommendation. Management also provided a matrix with its response showing completed or planned actions on CMDR's detailed recommendations to address the conditions noted. In certain instances, management indicated that implementation of the CMDR recommendation was conditioned on funding. As shown in the matrix, management did not concur with 10 of the 58 CMDR recommendations.

OIG Comment We assessed the basis for the non-concurred recommendations and believe action is still warranted in one instance involving handrails that could pose a potential hazard to handicapped individuals. Our assessment is provided in Section III.

* * * * *

We appreciate the courtesies and cooperation provided to our staff and CMDR. If you wish to discuss this report, you may contact me at (202) 927-5400 or Thomas E. Byrnes, Director, Procurement Audits, at (202) 927-5904. Major contributors to this report are listed in Appendix 3.

Marla A. Freedman
Assistant Inspector General for Audit

Our objective pursuant to Conference Report H.R. 108-792 was to determine whether the Main Treasury building renovation conformed to applicable (1) national, federal, and local codes; and (2) industry standards. To accomplish this objective, we contracted with an independent, qualified engineering and construction consultant, CMDR, and monitored its work.

The scope of CMDR's inspection and review was generally limited to the 3 completed phases of this 4 phase renovation project. It should be noted that the Main Treasury building has certain highly secure areas that we excluded from the scope of CMDR's inspection and review. Instead, we made inquiries of management for operating units located in those highly secure areas as to whether they had encountered any problems or otherwise had concerns with the renovation of the highly secured areas. No such problems or concerns were brought to our attention.

We are conducting our audit of the TBARR Project, and prepared this interim report, in accordance with generally accepted government auditing standards.

DEPARTMENT OF THE TREASURY
WASHINGTON, D.C.

ASSISTANT SECRETARY

JUL 25 2005

MEMORANDUM FOR MARLA FREEDMAN
ASSISTANT INSPECTOR GENERAL FOR AUDIT

FROM: Paul W. Curry
Acting Assistant Secretary for Management

SUBJECT: Draft Interim Audit Report - General Management: While Progress Has Been Made on the Main Treasury Renovation. Code Violations and Other Deficiencies Need to be Corrected

Please see the attached response to the Office of the Inspector General's Draft Interim Audit Report on the TBARR program dated July 18, 2005.

If you have any questions, please let me know.

Attachments

Response to:
Draft Interim Audit Report – TBARR: While Progress Has Been Made on the Main Treasury Renovation. Code Violations and Other Deficiencies Need to be Corrected
Dated: July 18, 2005

The purpose of this correspondence is to provide the Office of Management's response to the Office of the Inspector General's Draft Interim Audit Report entitled "TBARR: While Progress Has Been Made on the Main Treasury Renovation, Code Violations and Other Deficiencies Need to be Corrected" dated July 18, 2005. The response includes action we have taken or plan to take and target dates for action, where applicable as required by Treasury Directive 40-01.

The Office of Management, in general, accepts the recommendation made by the Office of the Inspector General in the Report.

The report provided by CMDR Associates, Inc (CMDR) was both informative and detailed. The CMDR report identified 67 items which resulted in 58 recommendations for the Department. In addition to 34 program deficiencies it identified 33 opportunities for increased efficiencies in areas that were noted as compliant. As acknowledged in the OIG summary finding, we agree that "much of the renovation work did conform with code requirements and was of high quality."

The Department's response will separate the responsibility for corrective action or comments into five categories. These categories include; Building elements protected by the Historical Preservation Act, items under the cognizance of other DO service providers such as Operations and Maintenance (non TBARR program), items that are dependent upon Phase IV completion, items that require additional action by the TBARR program office and items that do not require any further action. A summary of the Department's analysis of the recommendations is provided in chart one below. In addition, the attached matrix, enclosure one, addresses each of the 67 items identified, each of the 58 recommended corrective actions where necessary and target completion dates.

Chart 1

Category	Total Items	Recom-mendation	Deficient	Compliant	HPA	Maintenance Work	Planned Phase IV TBARR	Additional TBARR Action	No Action Required	Concur with CMDR
Accessibility	7	5	5	0	2	3	0	2	0	7
Life Safety	14	7	7	2	4	4	1	0	5	12
Structural	5	5	2	3	0	2	1	0	2	5
Environmental	2	2	0	2	0	1	1	0	0	2
Vertical Conveyance	9	9	6	3	0	6	3	0	0	8
Mechanical & Plumbing	11	11	2	8	0	4	5	0	1	7
Fire Protection	2	2	1	1	0	1	0	0	1	1
Electrical	14	14	3	11	0	4	8	0	2	12
Fire Alarm	3	3	0	3	0	0	1	1	1	1
Telecommunications	0	0	0	0	0	0	0	0	0	0
Security	0	0	0	0	0	0	0	0	0	0
Subtotals	67	58	34	33	6	25	20	3	12	55

1

OIG Note: The referenced matrix in the Management Response is included in Section III.

The following paragraphs summarize the results in each of the nine areas reviewed by CMDR. An explanation of the corrective action and time table for completion are included in enclosure one.

Accessibility

CMDR identified seven items of concern and recommended five corrective actions in the Accessibility Section. Of the five recommendations, two items require additional action by the TBARR Office and the remaining three will be performed the Facilities Management Office.

Life Safety

CMDR identified 14 items of concern and recommended seven corrective actions in the Life Safety Section. Of the seven recommendations one is a TBARR punch list item, one does not require further action and one is protected by the Historic Preservation Act, the remaining four items will be completed by the Facilities Management Office, the Environmental Safety and Health Office, and the Special Events Office.

Structural

CMDR identified five items of concerns and recommended five corrective actions in the Structural Section. One of the five recommendations will be corrected with the Phase IV work. The remaining recommendations include two that do not require additional action and two that will be completed by the Facilities Management Office.

Environmental

CMDR identified two items of concern and recommended two corrective actions in the Environmental Section. One recommendation will be completed by the Environmental Safety and Health Office and the second will be completed at the conclusion of Phase IV construction.

Vertical Conveyance

CMDR identified nine items of concern and recommended nine corrective actions in the Vertical Conveyance Section. Three of the nine recommendations are contingent upon completion of Phase IV. The remaining six recommendations will be completed by the Facilities Management Office.

Mechanical and Plumbing

CMDR identified 11 items of concern and recommended 11 corrective actions in the Mechanical and Plumbing Section. Five of the 11 recommendations will be completed at the conclusion of Phase IV, one recommendation does not require further action and

the remaining five recommendations will be completed by the Facilities Management Office.

Fire Protection

CMDR identified two items of concern recommended two corrective actions in the Fire Protection Section. One recommendation will be completed by Facilities Management Office and the remaining recommendations do not require further action.

Electrical

CMDR identified 14 items of concern and recommended 14 corrective actions in the Electrical Section. Eight recommendations will be completed at the conclusion of Phase IV, two recommendations does not require further action, and the remaining four recommendations will be completed by the Facilities Management Office.

Fire Alarm

CMDR identified three items of concern and recommended three corrective actions in the Fire Alarm Section. One requires additional action by the TBARR Office, one will be completed at the conclusion of Phase IV and one does not require further action.

Telecommunications

CMDR made no recommendations in the Telecommunication Section.

Security

CMDR made no recommendations in the Security Section

3

Office of Inspector General

Thomas E. Byrnes, Director, Procurement Audits
Delores V. Dabney, Audit Manager
Donna F. Joseph, Audit Manager
Andras O. Schneider, Auditor
Kenneth D. Harness, Referencer

CMDR Associates, Inc.

Department of the Treasury

Acting Assistant Secretary for Management
Acting Chief Financial Officer
Assistant Secretary for Legislative Affairs
Office of Accounting and Internal Control
Office of Strategic Planning and Performance Management

Office of Management and Budget

OIG Budget Examiner

United States Congress

Senate Committee on Appropriations
Senate Committee on Appropriations, Subcommittee on Transportation, Treasury, the Judiciary, Housing and Urban Development, and Related Agencies

House Committee on Appropriations
House Committee on Appropriations, Subcommittee on Transportation, Treasury, and Housing and Urban Development, The Judiciary, District of Columbia

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SECTION II

CMDR Associates, Inc. Report

Prepared for:

U.S. Department of Treasury
Office of Inspector General
740 15th Street, N.W.
Washington, DC 20220

Final Building Code Compliance Report



TASK TITLE: Construction Inspection/Review Services for the Treasury Building and Annex Repair and Restoration Program (Phases I through III)

LOCATION: 1500 Pennsylvania Avenue, N.W.
Washington, D.C. 20220

Prepared by:
CMDR Associates, Inc.
8229 Boone Blvd., Suite 280
Vienna, VA 22182

July 15, 2005

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TABLE OF CONTENTS

EXECUTIVE SUMMARY ***EXHIBIT A (2-3)***

PROJECT BACKGROUND ***EXHIBIT B (4-5)***

FINDINGS AND RECOMMENDATIONS ***EXHIBIT C (6-31)***

SOURCE DOCUMENTS ***EXHIBIT D (32-37)***

CODES & INTERPRETATIONS ***EXHIBIT E (38-43)***

SUPPORTING DOCUMENTS ***EXHIBIT F (44-73)***

- *PROJECT PHASING PLAN*
- *SITE PHOTOGRAPHS*
- *ASBESTOS ABATEMENT SUMMARY*
- *ELEVATOR INSPECTION REPORTS*
- *MECHANICAL SCHEMATIC DIAGRAMS*

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Executive Summary

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EXECUTIVE SUMMARY

The Department of Treasury's Office of Inspector General (OIG) has retained the services of CMDR Associates, Inc. to assist in evaluating the effectiveness, efficiency, and economy of contractors who are responsible for repairing and renovating the Main Treasury Building located at 1500 Pennsylvania Avenue, N.W., Washington, D.C. 20220. Specifically, CMDR's task was to provide an assessment of the Main Treasury Building's compliance with national, federal, and local building codes.

To accomplish this task, CMDR's engineers conducted series of thorough visual inspections of the exterior and interior repair and restoration work and reviewed the project documents to determine compliance with the applicable building codes (*Exhibit F, Codes and Interpretations*) and provisions of the approved plans and construction documents (*Exhibit E, Source Documents*). At the time of conducting this review, as-built drawings with the exception of the as-built fire alarm drawings were not available and were not considered in this review. CMDR's engineers reviewed the fire alarm as-built drawings and all other project documents supplied by the Treasury Building and Annex Repair and Restoration (TBARR) Program office.

The inspection process included an objective visual examination of the as-built conditions and independent review of the relevant source documents. The work under this task order was limited to the areas that have been subject to alteration, repair or modernization under the three completed phases of the Treasury Building and Annex Repair and Restoration (TBARR) Program (Phases I, II and III). The Main Treasury Building's interior and exterior historic significance was a major factor in assessing this renovation project.

The phasing is vertically planned from the basement and up (*Exhibit F, Project Phasing Plan*). Since major utility interconnections (water piping, drain piping, power feeder lines, etc.) are located in the basement, construction in this area has not yet been completed. This four-phase project began in 1998 and is scheduled to be completed after 2005. At this time, Phases I, II and III have been completed. Construction under Phase IV is in progress.

Managing construction of this magnitude and complexity commands a tremendous amount of effort. After completing our building inspections and review, we were convinced that the TBARR Program contractors have exerted extraordinary effort in bringing this project to its current stage.

This report presents the findings we made as a result of the building inspections and project document review, including observed building code violations and any other deficiencies. When appropriate, we also provided our recommendations for correcting the deficient items.

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Project Background

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PROJECT BACKGROUND

The Treasury Building is a national landmark listed on the National Register of Historic Places. The original construction in 1836-1842 comprises the east wing of the current building. The larger building added to the original was constructed in 1855-1869 and makes up the north, south, and west wings of the current building. Many of the building's basic infrastructure systems dated from the early 1900's, and had outlived their useful life. The building had suffered fire damage in 1996 and had never received any comprehensive renovation. The condition of office space was generally poor. Due to its age, the building did not meet most of the current building, life safety and accessibility requirements. These conditions necessitated major repair and modernization of the entire building.

The Treasury Building and Annex Repair and Restoration (TBARR) Program was initiated in August 1998 to renovate and modernize the historic Main Treasury Building. The stated purpose for TBARR was to (1) repair and restore the Main Treasury Building to correct the damage caused by the roof fire; (2) restore the historic fabric of the building; and (3) modernize the building and its systems to comply with current codes and standards. The major objectives of this program were to correct major building code; life-safety code and Americans with Disabilities Act code deficiencies, to replace all major utility systems, fire alarm and security systems, lighting, and elevators, and to conduct selective historic restoration. Additionally, new modular partitions and furniture would be installed to create an open office environment.

As in most historic modernization and renovation undertakings, one of the project designers' stated goals was to meet modern functional needs while retaining the architectural details and character. The interior spaces that were identified as possessing architectural historic significance were restored to reflect their original condition. Some code requirements were waived when interfering with the historical restoration or when they were deemed infeasible due to cost or structural modifications required. In other areas of the building, the renovation designers sought to meet as many of the current building codes for life safety and handicapped accessibility as possible without sacrificing important historic elements.

Building code provisions relating to alterations and repair of historic structures are not mandatory (BOCA 3406.1.) The renovation designers have indicated specific code requirements for which compliance waivers would be requested in order to maintain the building's historic character. These waivers involved both life safety and handicapped accessibility requirements. In some instances, alternatives to the requirements were proposed and undertaken as a compromise or to comply as much as possible with the intent of the requirements.

It was determined that the public corridors, lobbies, monumental stairs, Cash Room, and selected private offices were highly significant to the building's historic nature and thus would require restoration. Most remaining interior offices were designated as significant and had as few visual intrusions to the architectural character as possible.

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Findings and Recommendations

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FINDINGS AND RECOMMENDATIONS

ACCESSIBILITY

All offices, public spaces, and exits must be part of accessible routes throughout the building. The second through fifth floors of the building are on one level providing accessibility from corridors. Elevators provide access between floors. A first floor entrance from 15th Street gives access to the building in lieu of the monumental stairs found at the north and south entrances of the building *(Exhibit F, Site Photographs, Picture A01)*. The first floor east wing contains three steps at the north and south ends. Due to the historic nature of the interior spaces, no ramps are provided adjacent to the First Floor east wing corridor level changes (*Exhibit F, Site Photographs, and Pictures A02 & A03*). An accessible route is provided, but the route is inconvenient and involves using the west wing (currently under renovation) to the central corridor and the ramp provided there. Another more cumbersome route involves using elevators to the second floor and a different elevator back to the first floor.

The widths of most doors off the corridors complied with accessibility guidelines, however, throughout the building; operating hardware consists of knobs instead of levers due to the attempt to provide historical accuracy.

Renovated toilet rooms were made fully compliant with accessibility guidelines. One pair is located on each floor in the center of the west wing, and two pairs are located on each floor in the east wing. Operating hardware on toilet room doors consists of push-pulls, and signage integrated into the corridor door plates (*Exhibit F, Site Photographs, and Picture A04*).

FINDINGS

Offices

a. The minimum width of doors leading to offices from corridors was found to be 34 inches. Most were 36 inches or greater, meeting the opening clearances required by accessibility guidelines. Most doors swing from the offices into the corridors and are recessed from the face of corridor walls. The recess does not conform to 18” minimum maneuvering clearances on the pull side of the doors (Americans with Disabilities Act Accessibility Guidelines (ADAAG) 4.13.6.)
b. Office door thresholds were found to vary in height throughout the building due to the finished floor levels in the offices being higher than the existing corridor floor levels. Many doors contained a metal threshold exceeding the 1/2” maximum allowed (ADAAG 14.13.8.) (*Exhibit F, Site Photographs, Picture A05*). Others presented a 1/2 to 3/4” slope within the corridor recess up to the metal threshold at the door (*Exhibit F, Site Photographs, and Picture A06*). The renovation designers have determined that correction of these deficiencies is technically infeasible due to the high cost and structural modification required, as well as to the disruption of the historic floor finishes.

Toilet Rooms

a. Men's and women's toilet rooms are found in three locations on each floor. These were found to be in compliance with all accessibility guidelines in all instances except for required door opening clearances. As with office doors, maneuvering clearances on the pull sides of the corridor doors did not meet the ADA accessibility guidelines in all locations (*Exhibit F, Site Photographs, and Pictures A04 & A07*). One men's and women's room on each floor at the north end of the east corridor were equipped with power door openers on the corridor and the vestibule doors, in lieu of providing the required maneuvering clearances.

Drinking Fountains

a. Drinking fountains are located in the east wing and the west wing on each floor. Each consists of a low bowl for persons in wheelchairs as well as a higher bowl for those with difficulty bending. The drinking fountains are of proper heights (ADAAG 14.15) and are located in alcoves on the first through fifth floors. The alcoves are not sufficiently deep enough or low enough to the floor on the First through Fourth Floors, and allow the drinking fountains to create a protruding object hazard in violation of ADAAG 4.4.1. (*Exhibit F, Site Photographs, Picture A08*). The fifth floor drinking fountains are sufficiently recessed into an alcove to meet the accessibility guidelines (*Exhibit F, Site Photographs, Picture A09*).

Signage

a. Signage in the building consists of wall signs located in corridors identifying room numbers and names, stairway identification wall plaque signs, and exit stair wall plaque signs. The room signs are mounted at 59" from their bottom, in conformance with the accessibility guidelines (*Exhibit F, Site Photographs, Picture A10*). Room signs consist of plastic holders containing the room number, with an insert for a room name card. Lettering size, the lack of raised lettering, and the lack of Braille are not in conformance with ADAAG 4.30 (*Exhibit F, Site Photographs, Picture A11*).

b. Stairwell and exit identification signage is found on the walls at the monumental stairs as well as the two new stairs. Signs in both locations are wall-mounted plaques with raised lettering and Braille, and conform to accessibility guidelines (*Exhibit F, Site Photographs, Picture A12*).

c. Toilet rooms are identified with the same corridor signage used for room identification. It contains small text, no raised lettering, and no Braille (*Exhibit F, Site Photographs, Picture A13*). In addition, a plate is mounted on the pull side of the corridor doors as a sign identifying the toilet room sex (*Exhibit F, Site Photographs, Pictures A04 & A13*). Other than its Braille, it does not meet the ADA accessibility guidelines since the lettering is not raised sufficiently, is written vertically, is placed on the door swing side, and is not sans serif.

Ramps

a. Corridor ramps are located along accessible routes that connect the north court building to the lower floor elevation in the east and west wings on the second floor. These ramps do not have

handrails on any side wall surface as required for ramps rising more than 6 inches (ADAAG 4.8.5) The ramps meet the length and surface finish requirements.

b. The ramp in Corridor 2049 at the east wing has a wall mounted lock box installed on the north wall. This protrudes 18 inches from the wall, and is mounted with 30 inches clear below it (*Exhibit F, Site Photographs, Picture A14*). This arrangement violates the requirements for clearances below protruding objects in paths of travel, and creates a dangerous hazard to the visually impaired (ADAAG 4.4.)

RECOMMENDATIONS

a. The thresholds of the office doors from the public corridors were greater than 1/2 inch. The pull (corridor) side of the doors does not have the required maneuvering clearances. We would recommend reducing all corridor door threshold heights and altering the corridor walls for maneuvering clearances. However, this would be technically and economically infeasible given the historic significance and the amount of structural modification needed. Thus, the renovation designers suggested that persons having trouble with the threshold height be located to rooms and areas where thresholds meet the requirements.

b. Drinking fountains on the first through fourth floors protrude into the corridors creating a hazard. This drinking fountain model should have been installed in a small niche or corridor recess. Constructing wing walls at each side of the drinking fountain to meet the accessibility guidelines is not recommended due to the historic nature of the corridors. A small extension added to the bottom of the drinking fountain to bring it to within 27 inches of the floor would satisfy the guidelines.

c. Room signage does not meet the accessibility guidelines for raised letters, size, and Braille. It is not known if the current system frame is a replica of the original building signage. The system can be easily modified to employ raised room number characters with Braille. Replacing all signs would be costly at this stage. We recommend that the current signage system be modified for the last construction phase. The modification should include use of raised characters and Braille for room numbers. We also recommend that existing installed signs be replaced for the public rooms, toilet rooms, and larger departments in the same manner.

d. Signs identifying toilet rooms do not follow the accessibility guidelines for placement, raised characters, and Braille. The current signage applied to the door creates a hazard when the door swings open. We recommend that the existing corridor wall signs be replaced with the signs of the same appearance, but containing raised letters and Braille.

e. Ramps in the corridors on the Second Floor do not have handrails. A wall mounted box protrudes from the ramp wall creating a hazard to the visually impaired. We recommend that handrails be installed at each side of the ramps leading to the center court building. The lock box can be relocated to the upper or lower landing of the ramp. We also recommend that the lock box be installed with a skirt at its bottom to within 27 inches of the floor landing, or be installed on a pedestal.

LIFE SAFETY

Occupancy

To determine required facilities and existing capacity, the occupant load of the entire building is calculated based on the building's area. For office use, the occupancy is calculated based on 100 gross square feet per person (BOCA 1008.1.2.) This calculation yields a much greater number than can be realistically accommodated in the existing building, and requiring major modifications to the building's means of egress systems. The designers have selected to subtract the circulation spaces of elevators, corridors, and stairwells from the building's area to determine the building's occupant load. This is reasonable, considering that the existing building's circulation areas are large and will not be occupied with employees, and that the actual number of occupants will be less than 100 sq ft/person given the small private enclosed offices found flanking most corridors in the building.

Construction Classification

With the steel structure, masonry, and plaster finishes, the existing building largely qualifies as Type 2A construction. However, the new sprinklers, alarm systems, emergency power, exterior and interior fire department access, and high-rise classification were used by the renovation designers to justify a classification of 2B. This allows the fire rating requirements of some building components to be reduced. Considered as a high-rise building with street access and sprinkler systems, it increases area allowed for each floor. This is reasonable considering the visually open nature of the circulation system acting as an exit, and the sprinkler detection system being installed.

The construction classification 2B requires floor construction and structural members with a 1-hour fire resistance rating (BOCA 603.1.) The renovated building does not fully meet this requirement since it contains decorative plaster on iron and steel structural members exposed to view in a few corridor ceilings. These elements are important to the historic character of the building interior and are left exposed.

Means of Egress

The building code requires a minimum of two exits per floor when the occupant load is 500 or less (BOCA 1010.2). A quick calculation of the occupant load per floor gives about 390 persons, or 38,720 net sq ft ÷ 100 sq ft/person. The minimum door and corridor width for the building with the sprinkler system and occupant load would be 39 inches, or 390 persons ÷ 2 exits x 0.2 inches/person (BOCA 1009.2.) The minimum exit stair width would be 44 inches minimum (BOCA 10.14.3.) Exit stairs are required to be enclosed with 2 hour rated construction.

Two new enclosed exit stairs are constructed at the northeast corner and southeast corner of the east wing, connecting all floors and providing eventual access to exterior exit at grade. These meet the requirement for accommodating the building occupant load and the number of exits from the building. No rating of corridor walls is required with a sprinkler system in the building (BOCA 1011.4.)

There are six open monumental stair cores connecting the first floor to the fifth floor. Interior exit stairs are required to be enclosed with fire resistance ratings (BOCA 1014.11). Since the two new stairs meet

the exiting capacity for the occupant load, the monumental stairs are not considered part of the exit access.

Since the monumental stairs create floor openings connecting two or more stories in a building with sprinklers, they are required to be enclosed, and not part of the means of egress (BOCA 713.3.). The renovation designers have determined that enclosing the stairs is not feasible given their contribution to the historic nature of the building. Other requirements of open monumental stairs attempt to be met. Existing decorative plaster ceiling beams around the stair openings provide draft stopping as required by NFPA 4-13.3.4 (*Exhibit F, Site Photographs, Picture A15*). Enclosures around the stair lobbies at the fifth and basement levels serve to provide some protection by limiting the number of unprotected stories in each stair to four.

The BOCA code requires the length of exit access travel to be 250 feet maximum in the building with a sprinkler system (BOCA 1006.5.). Three horizontal exits are provided near the northeast and southeast corners of the building adjacent to the existing monumental stairs, and at the center of the west wing (*Exhibit F, Site Photographs, Picture A14*). These exits are used to separate the corridor system on the first through fourth floors into four compartments, making the maximum travel distance to an exit 161 feet.

FINDINGS

Means of Egress

Corridors & Horizontal Exits

a. Each floor contains three horizontal exits dividing the floor into three compartments. The horizontal exits comply with requirements for door swings, width, and fire resistance separation. At least one exit on each side of a horizontal exit must not be a horizontal exit (BOCA 1019.4) The area of refuge encompassing the east wing and central corridor does not meet this requirement as its own exit as required.

b. Three risers are found in the First Floor east corridor at the north and south ends. Each side of the stair contains a handrail of proper dimension and height. These handrails jog around structural pilasters, and are not continuous and uninterrupted as required (BOCA 1022.2.) (*Exhibit F, Site Photographs, Pictures A02 & A03*).

Exit Stairs

a. The new exit stairs (Stair #1 and Stair #2) in the east wing appear to meet exiting requirements for means of egress. Intermediate landings are provided between each floor. Stairway widths, landing sizes, handrails, guardrails, and treads and risers meet requirements. Doors are adequate in size, fire rating, and required operating hardware. Both stairs terminate at the First Floor and have a rail barrier at the level of exit discharge (BOCA 1006.3.1.) (*Exhibit F, Site Photographs, Picture A17*).

b. Both stairs discharge into an exit passage that leads to the exterior. The exit passages are protected from occupied spaces by rated doors with closers. However, the exit discharge for

Stair #2 contains furniture, and the rated office doors opening to the passage were propped open by the building occupants, negating the fire and smoke ratings of the doors and partitions (*Exhibit F, Site Photographs, Picture A18*). Furniture should not be allowed in exit passages since it creates a possible hazard to persons exiting the building quickly and safely. Rated doors (with hardware) are meant to remain in a closed position to keep the exit passage separate from the building in case of emergency evaluation.

Monumental Stairs

a. The historic monumental stairs are not considered part of the means of egress, and are not part of an accessible route, thus conformance with means of egress and accessibility guidelines are not necessary. Components of stairs that do not conform to requirements and present a safety hazard are noted.

b. Handrails at the proper height are found against the walls only at one side of each stair run - the outside curve. A handrail is required on the most direct path - or the inside curve (BOCA 1014.7.) The existing guardrail at this side is too high to qualify as a handrail. The treads and risers meet height and width requirements for the most part (*Exhibit F, Site Photographs, Pictures A02 & A03*). The first riser on the first floor of Stair B and Stair C is 5-1/2" high, while the remaining risers measure 6-3/4". The difference is greater than 3/8" allowed (BOCA 1014.6.2), and creates a tripping hazard *(Exhibit F, Site Photographs, Picture A19)*. The top landing of Stair B at the fourth floor has a depression at the worn stone tread and the vinyl edge band is not a transitional band. This creates a 1" total difference in the walking surface between the stone and vinyl tile at one point, and can be considered a trip hazard (*Exhibit F, Site Photographs, Picture A20*).

c. Each circular stair run travels a vertical distance of 13', 15', 14', and 14' from the first to fifth floors. Stairs with a vertical run greater than 12' should have an intermediate landing (BOCA 1014.5.)

d. Monumental stairs are separated from the remaining building at the Fifth Floor stair lobbies by rated doors and partitions. However, fire rated doors in these enclosures were propped in open positions in all but two instances by the building occupants, thus compromising the fire and smoke ratings of the doors and partitions (*Exhibit F, Site Photographs, Picture A21*).

Cash Room

a. The Cash Room was an historical restoration on the second floor. Because of its use, it is considered an assembly space for determining exiting and occupant load. The occupant load would be 291 persons, or 2,040 net sq ft ÷ 7 sq ft/person (BOCA 108.1.) The three pairs of door grilles from the Cash Room are each 24 inches in width and have no exit hardware, panic hardware, or accessibility hardware (*Exhibit F, Site Photographs, Picture A22*). The 48 inches at each door opening provides the exit capacity required, but each exit doors must be at least 32 inches in width.

b. At least two remote exit access doors are required from the Cash Room due to the occupant load being greater than 50 (BOCA 1017.2.) and must swing in the direction of travel. The three exits

from the room are located along the center of the north wall, are not considered remote from one another, and open into the room. There were no maximum occupant load signs observed as required (BOCA 1003.3).

c. Guard rails at balconies and upper floors are required to be 42 inches high (BOCA1021.2.) The balcony railing in the Cash Room does not meet this requirement, however, it appears to be used for lighting maintenance only, and is not available to building occupants (*Exhibit F, Site Photographs, Picture A23*).

Fire Ratings

a. Fire resistance ratings and hardware on exit doors in horizontal exits, rated enclosures, and exit stairs were reviewed. The exit hardware consisting of closers, hold-open devices, and panic bars were adequate and performed as intended. Rating labels found on doors was reviewed and found to be adequate; however, the attached labels on fire doors were painted over in all but the doors leading to exit stairs.

b. The construction Type 2B requires a 1 hour fire resistance rating on structural elements. The new electrical utility vault constructed off the north wing basement consisted of an exposed steel structure coated with spray fireproofing. In once instance, the fireproofing material had been removed, exposing the steel beam (*Exhibit F, Site Photographs, Picture A24*).

Floor Surfaces

a. Three floor finishes are installed in the corridors. The corridor finishes on the first through fourth floors were either the original stone tile or new vinyl tile. The corridor finishes on the fifth floor are carpeted in the areas outside the monumental stairs. The existing stone flooring was restored, and missing or damaged tiles were replaced.

b. The corridor vinyl tiles appear to have been installed over the original stone flooring without a leveling agent or without sanding the stone to create a smooth uniform subsurface. Many irregularities were noticed in the vinyl tile where the tile has taken the shape of the uneven stone beneath, creating an irregular finish with differences up to 1/2 inch in rises and depressions.

Access Door

A pair of metal doors to the Basement Steam Room in the south wing was noted as being 69 inches high, and too low for use by building occupants (*Exhibit F, Site Photographs, Picture A25*).

RECOMMENDATIONS

Means of Egress

a. A horizontal exit does not contain at least one exit that is not a horizontal exit. No new stairs are planned for the final phase of construction. Therefore, we recommend that one of the areas of refuge (horizontal exit) not be considered as a horizontal exit for the purpose of calculating travel distances and occupant load. This would effectively create only zones or areas of refuge

in the building, with each having its own exit stair to the exterior. The rated enclosure can be considered as a way to separate the open monumental stairs from each other on each floor. An additional solution would be to waive the requirement for an exit to the exterior from the area of refuge that does not currently have one, on the basis of the building's historic designation.

b. Handrails at the first floor corridor stairs are not continuous. These handrails can be constructed as continuous along the furthest projection of each structural pilaster, and then return to the corridor wall at the top and bottom of the stair runs.

c. Doors are held open in the exit passage at the level of exit discharge in Stair #2. Magnetic hold open devices tied to the building's alarm system can be installed on these doors as they are on the corridor horizontal exit doors. The doors can also be kept closed with better enforcement and by informing the occupants of the dangers of circumventing the building's fire protection.

d. Furniture installed in the exit passage at the level of exit discharge in Stair #2. Furniture can be removed with better enforcement and by informing the occupants of the dangers of circumventing the building's fire protection.

e. Handrails are not installed at proper heights on the inside curve of the monumental stairs. Additional handrails would alter the historic nature of the stairs, and would therefore not be recommended.

f. First riser of Stair B and Stair C on the first floor is much different from the remaining stair riser dimensions. Altering the stair run is not technically and economically feasible and would alter the stair's historic nature. Many of the occupants become familiar with the building and may become accustomed to the hazard, and thus not require a warning. If the problem is to be corrected, we recommend that some warning be posted or that the last tread or floor surface at the bottom of the stair be colored differently to focus attention to the last step.

g. Stair B has a tripping hazard at the fourth floor landing. A better low profile vinyl edge band transition between the vinyl tile and stone treads of the stairs can help reduce the abrupt change in flooring finish. The worn depression in the top stone tread is exacerbated by the high vinyl edge band. We would recommend replacing the stone tread. However, this would alter the historic nature of the stair, and is therefore not feasible.

h. Fire rated doors protecting monumental stair enclosures at the Fifth Floor are held open by the occupants. Magnetic hold open devices tied to the building's alarm system can be installed on these doors as they are on the corridor horizontal exit doors. The doors can also be kept closed with better enforcement and by informing the occupants of the dangers of circumventing the building's fire protection.

i. The Cash Room exit doors are not remote. The Cash Room doors do not have panic hardware, and do not swing in the direction of travel. The Cash Room does not contain a maximum occupancy sign. The Cash Room balcony railing height is below the 42 inch requirement. Altering the metal grille doors on the Cash Room is not recommended due to the historic nature of the room. We recommend that when the Cash Room is in use, that the heavy doors be

secured in an open position to allow easy exiting in emergencies. We recommended that the balcony remain as is due to its historic nature, and due to the fact that it is not used by occupants.

Fire Ratings

a. Fireproofing is missing from structural steel framing in the basement electrical vault room. Provide fireproofing at all exposed structure of the utility vault where it has been damaged or destroyed by installation of equipment.

Floor Surfaces

a. The corridor flooring is uneven where new vinyl tile is installed over existing stone tile. We recommend that the vinyl tile floor remain, since the uneven surface creates no abrupt tripping hazard. The vinyl tile will eventually need to be replaced since it will wear more quickly at raised portions. At that time, a leveling compound may be used over the stone below, or the stone can be ground to a more uniform surface. We recommend that any stone tile to have vinyl tile installed over it in the remaining phase of work be treated this way.

Access Door

a. Metal doors to the Basement Steam Room have a head height too low. These can be considered as equipment access doors. An additional pair of 84 inch high doors to the room is found from an adjacent corridor, providing safe access.

STRUCTURAL

FINDINGS

CMDR has conducted visual, non-destructive structural surveys in the building exterior and interior portions covered by the TBARR Program phases I through III and reviewed the structural drawings. The majority of the exterior work has been completed between 1999 and 2000. The façade was inspected only for deficiencies since there are no codes or standards for stone restoration. The following are our findings:

Exterior

a. Visual inspection of the stone façade indicates that most of the deterioration shown in the project documents has been repaired. However, there are still many locations where staining marks are evident especially at the joint locations in the stone.

b. Some structural items of concern were observed at the underside of the bridge at the secretary's entrance. Corroded rebar was evident on the soffit slab at two spall locations (*Exhibit F, Site Photographs, Pictures ST02 & ST03*) and delamination was observed on one of the columns supporting the bridge structure.

c. The steel spandrel beam supporting the two sides of the bridges is corroded and requires repair (*Exhibit F, Site Photographs, Pictures ST04 & ST05*).

d. At the south portico on the east elevation, there are several locations where small portions of the existing stone façade have spalled.

e. At the underside of the balcony above the portico, there are two locations where rust stains are visible on the soffit. This could be caused by corroded rebar (*Exhibit F, Site Photographs, Pictures ST06, ST07, ST08 & ST09*).

f. There are signs of minor deterioration of the cornice located at the top of the column capitals in several locations (*Exhibit F, Site Photographs, Pictures ST08 & ST09*).

Interior

a. The existing building consists of two different structural systems. The original building is constructed with arched brick groin vaults topped with a concrete slab. The addition is constructed with brick arches spanning between cast iron or steel beams spaced at about 8 feet on center with a concrete topping slab above the brick.

b. Much of the original construction work from the previous phases of work is covered by architectural finishes and is no longer visually accessible.

c. Inspection of the new stair and elevator locations has revealed that at the new stair shaft on the second floor, a new steel beam was added to support a section of brick which projected into the shaft. A small portion of the brick adjacent to the beam is unsupported *(Exhibit F, Site Photographs, Picture ST01)*.

d. An additional survey was performed in the basement area. The elevator pit structure and structural work at the switchgear vault were examined. The concrete underpinning used to lower the basement level slab was evident as where the soldier piles at the retaining wall extension. We did not observe any structural defects in the area.

RECOMMENDATIONS

Exterior

We recommend performing a detailed exterior survey to identify any additional areas that may require additional repair and restoration. The deteriorated areas need to be cleaned or repaired in order to prevent any further damage to the stone.

Interior

a. During review of the project documents, we have noted that all drawings are based on the BOCA code. However, the current code for the District of Columbia is 2000 IBC. We recommend verifying with the incumbent project personnel that BOCA was the appropriate code at the time the drawings were permitted.

b. A detail on drawing S4.05 shows extruded aluminum plank supported by steel framing. However, aluminum and steel are not permitted to be in contact due to galvanic corrosion which occurs between the two dissimilar materials. We have not found any indication in the project documents that a spacer had been provided between the two materials. We recommend confirming with the incumbent project personnel that a spacer or any equivalent means was or is planned to be provided.

c. For renovation projects of this magnitude, Executive Order 12941 and document ICSSC RP 5 require that all federally owned buildings be evaluated for seismic safety with a cost estimate provided to FEMA for the required seismic mitigation. We have not found any indication that this work was performed as a part of the design of the project. We recommend confirming with the incumbent project personnel that this evaluation has been or is planned to be performed.

d. We noted that at the new stair shaft on the second floor, a new steel beam was added to support a section of brick which projected into the shaft and a small portion of brick adjacent to the beam is unsupported. We recommend conducting an additional investigation by the structural engineer of record (SER) and, possibly, installing additional support to correct this condition.

ENVIRONMENTAL

FINDINGS

CMDR has conducted visual inspections in the building areas determined as areas of asbestos containing material (ACM) under the TBARR Program phases I through III. We reviewed the project documents (engineering reports and asbestos abatement drawings) and interviewed the TBARR Program engineers to verify that asbestos removal was performed in accordance with federal and municipal rules and regulations for asbestos abatement. CMDR also examined other environmental issues not identified in the project documents, including lead-based paint presence. Our evaluation is based solely on the visual assessment of the completed phases. Inaccessible and covered areas were assumed to be abated in accordance with the contract documents. The following are our findings:

Asbestos Containing Material (ACM)

a. Carpeted floors in the office rooms were identified as LCA (limited access below carpet). Therefore, these areas are suspected for non-friable ACM presence.
b. Pipe joints in the bathrooms, mechanical rooms, and the pipe galleries are marked as MJ (mudded joints). These areas are suspected for ACM presence.
c. The piping in the mechanical rooms and the pipe galleries are marked as PI (pipe insulation), MJ (mudded joint), DI (duct insulation) and VJ (vibration joint). This indicates that the piping and duct insulation material have been identified to contain friable ACM.
d. Some floors in the hallways and rooms are marked as FM (floor mastic) or FT (floor tile). This indicates presence of non-friable ACM.
e. Some ceiling tiles (CT) are identified in the drawings to contain ACM.
f. Based on the interviews with the TBARR Program engineers, we concluded that aside from the findings in the contract drawings, other ACMs have been encountered in the course of construction and have been removed as a result of several change orders. Therefore, asbestos abatement areas, in addition to those required by the contract drawings, were extensive.

We have summarized the asbestos abatement work completed under the TBARR Program phases I through III in a table (*Exhibit F, Asbestos Abatement Completed under the TBARR Program*).

Lead-Based Paint (LBP)

We did not find any indication of lead-based paint (LBP) presence in the engineering reports and contract drawings. However, during the inspections we have observed the following conditions:

a. In the completed phases I through III, and parts of phase IV, the walls, ceilings, doors and windows were freshly painted and there were no visual signs of dust lead-paint hazard in the finished areas.

b. Visual inspection of the incomplete renovation work in phase IV indicates the possibility of lead-based paint presence in the building.

c. In the basement area, where construction is still in progress, we have found numerous areas of deteriorated paint on the walls, ceilings, doors and windows (*Exhibit F, Site Photographs*,

Pictures ENV01, ENV02, ENV03 & ENV04). The TBARR project engineer indicated that they planned to remove the paint repaint the walls upon completion of all phases.

RECOMMENDATIONS

Asbestos Containing Material (ACM)

We have found that asbestos abatement activities under the TBARR Program phases I through III and some portions of phase IV have been carried out in compliance with the federal and local rules and regulations (U.S. EPA regulations for asbestos inspection and abatement, National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR Part 61, the District of Columbia Municipal Regulations (20 DCMR), Section 800 "Control of Asbestos"), in terms of removal and/or containment and encapsulation of all friable and non-friable ACM. The remaining asbestos abatement under phase IV is planned to be completed similarly. However, full environmental compliance verification is still dependent upon completion of the job. Therefore, we recommend initiating independent, third-party inspections upon completion of the TBARR Program phase IV to confirm environmental compliance.

Lead-Based Paint (LBP)

In the basement areas under construction, we have observed numerous signs indicating possible presence of lead-based paint in the building. Based on our findings, we recommend conducting a proper sampling and assessment by a Certified Risk Assessor at this point. If testing confirms the presence of lead-based paint, we further recommend abating the lead-based paint in accordance with the regulatory guidelines in order to avoid any OSHA liabilities for the construction workers and lead-based paint hazards for the building occupants.

VERTICAL CONVEYANCE

FINDINGS

CMDR has performed detailed annual elevator inspections on the four elevators (elevator Nos. 6, 7, 8 and 10) and reviewed the project documents. Due to ongoing construction work and security issues, we were unable to access and inspect the fifth elevator. The comprehensive inspections were performed in accordance with the ASME A17.2.1 Safety Code Manual for Electric Elevators. We did not observe any major safety code violations. However, we have identified the following minor issues:

Elevator No. 6

1. Pit needs cleaning;

2. Machine room is under renovation and requires cleaning;

3. Fire service jewel (indicator light with fire head) is missing on main return landing fire service panel (ASME AS17.1, Rule 2.27.3.1.6)

Elevator No. 7

1. A screw is missing in door gib (slot above elevator doors) at 2nd landing;

2. Fire service jewel is missing on main return landing fire service panel (ASME AS17.1, Rule 2.27.3.1.6)

Elevator No. 8

1. A screw is missing in two door gibs at 3rd landing;

2. Fire service jewel is missing on main return landing fire service panel (ASME AS17.1, Rule 2.27.3.1.6).

3. Car flooring was not inspected since the elevator floor was covered.

Elevator No. 10

1. Pit stop switch is mounted on pit ladder;

2. Machine room is under renovation and requires cleaning;

3. Fire service jewel is missing on main return landing fire service panel (ASME AS17.1, Rule 2.27.3.1.6);

4. Outlet cover is missing on box located next to door in machine room.

General

The overall operational performance of the four inspected elevators meets ASME code and safety requirements. All four inspected elevators are fully compliant with the ADA and Elevator Safety Code requirements as specified in the construction contract documents. Individual elevator inspection reports (*Exhibit F, Elevator Inspection Reports*) provide detailed outline of the inspected items and observed deficiencies.

RECOMMENDATIONS

We recommend correcting the minor code violations observed during the elevator inspections to ensure full compliance with ASME A17.1. These issues need to be addressed as follows:

Elevator No. 6

1. We recommend testing emergency power transfer operation.

Elevator No. 7

1. We recommend replacing a screw in door gib at 2nd landing.

Elevator No. 8

1. We recommend replacing screws in two door gibs at 3rd landing.

2. We recommend inspection of the car flooring once the floor cover is removed.

Elevator No. 10

1. We recommend relocating a pit stop switch in accordance with ASME A17.1, Rule 5.6.1.8(a) by mounting it on the wall and not on a run of a ladder step.

2. We recommend installing an outlet cover on the box located next to the door in machine room.

3. We recommend testing emergency power transfer operation.

General

1. In all elevators, we recommend testing smoke detectors and observing response of elevators.

2. In all four elevators, we recommend installing fire service jewel on main return landing fire service panel (ASME AS17.1, Rule 2.27.3.1.6).

3. Upon completion of all construction work, we recommend cleaning of the elevator pits and machine rooms.

MECHANICAL

FINDINGS

We have reviewed the mechanical design documents and performed detailed inspections of the mechanical renovation work had been completed under the TBARR Program phases I through III. In general, the building mechanical system, including plumbing, water supply, heating, and cooling components, appears well designed and maintained. We have reviewed the plumbing drawings and specifications. However, at the time of our inspections in June and July 2005, the majority of the plumbing components were already concealed. Therefore, we were able to inspect only the exposed plumbing components.

During our visual survey, we have not identified any major deficiencies. However, we have observed the following issues, which may need to be addressed:

Heating, Ventilation & Air Conditioning (HVAC)

a. There are four water cooled centrifugal chillers in the basement chiller room: two chillers at 750 ton cooling capacity and two at 350 ton cooling capacity. Four chillers hooked up in parallel fashion are feeding chilled water to the primary and secondary loops. The secondary loop supplies chilled water directly to all fan coil units throughout the Main Treasury Building and also to the air handler units in the Annex Building. The primary loop has four variable speed drive pumps and the secondary loop has two constant speed drive pumps.

b. The low pressure steam pressure reducing station in the southwest corner of the chiller room has a 3" low pressure steam safety relief valve. This valve is causing high temperature in the room. There is no ventilation and exhaust system provided in the room (*Exhibit F, Site Photographs, Pictures M01, M02 & M03*).

c. There are five cooling towers in the north courtyard of the building. Each cooling tower is rated at 400 Ton capacity. Five cooling towers are connected in parallel mode are feeding a condensate water loop to cool the chillers. There is no economizer loop (*Exhibit F, Site Photographs, Picture M04*).

d. The high pressure steam reducing station in the basement southeast wing is very hot and stuffy. This is causing the paint to peel off the walls and ceiling in this area (*Exhibit F, Site Photographs, Pictures M05, M06, M07 & M08*).

e. We have noted the high humidity level and lack of air circulation in the basement of the building.

f. There are ten 100% outside air handling units in the building, which supply outside air at 70 degree Fahrenheit to all fan coil units throughout the building. These units are operated for twenty-four hours a day, seven days a week. The units can be operated in a more energy-efficient mode.

g. The 100% outside air system is using the same chilled water as the fan coil units in the building which uses 42 degree Fahrenheit supply chilled water and return chilled water is at 51 degree F. This system can be operated more efficiently.

h. In the mechanical room (AHU #7, 100% outside air unit), the condensate trap for the cooling coil is installed in a fashion that creates a double trap for the re-heat coil (*Exhibit F, Site Photographs, Picture M09*).

i. 5th floor storage room Nos. 5011 and 5015 are used for storing vacuum cleaners and trash containers. There is no ventilation air and exhaust air system provided in this room. This creates unsanitary conditions in these areas (*Exhibit F, Site Photographs, Picture M10*).

j. There is no ventilation air and exhaust air system provided in the 5th floor utility room next to the women's restroom and telephone closet No. 5059. This creates unsanitary conditions in this space (*Exhibit F, Site Photographs, Picture M11*).

Plumbing

a. Men and women restrooms do not have hose bibs that janitorial staff can use to clean the restrooms.

RECOMMENDATIONS

Heating, Ventilation & Air Conditioning (HVAC)

Although, the overall building Heating, Ventilation and Air Conditioning (HVAC) system is well maintained and demonstrates good design, we have identified some conditions that can be corrected. We are recommending the following solutions to alleviate or eliminate these conditions:

a. In the basement chiller room, we recommend replacing two constant speed drive pumps at the secondary loop with variable speed drive pumps to match the primary loop pumps.

b. We recommend relocating the 3" low pressure steam safety relief valve in the southwest corner of the chiller room to the outside of the room. This will help keep the room temperature down even in the absence of the ventilation and exhaust system in this room.

c. We recommend adding an economizer loop to the condensate water loop at the cooling towers in the north courtyard. This will allow utilization of free cooling when ambient temperature is 40 to 50 degrees Fahrenheit in accordance with the energy conservation codes.

d. We recommend adding ventilation and exhaust air system at the high pressure steam reducing station in the basement southeast wing. This will help keep the temperature at more comfortable level and allow air circulation in this area. We also recommend repairing the damaged insulation on some piping and equipment, cleaning and repainting the room.

e. We recommend increasing the ventilation air and exhaust air system capacity in the basement in order to reduce humidity and increase air circulation.

f. We recommend shutting down the outside air supply units in the building between 6 PM and 6 AM since the building is not occupied during this hours. This would result in significant energy savings, prolonged life expectancy of the equipment and less frequent maintenance.

g. We recommend dedicating a high efficiency chiller to serve all 100% outside air handling units. A chiller would provide 35 degree Fahrenheit chilled water to the air handler cooling coils. At this low temperature the cooling coils would be able to remove most of moisture from the air eliminating a need to heat outside air supply to 70 degree Fahrenheit in order to avoid water condensation outside the supply air ductwork. As an alternate, use of a desiccant wheel in the outside air intake duct could help reduce moisture in the air before it reaches the AHU chilled water cooling coils.

h. In the mechanical room (AHU No. 7), we recommend installing the condensate trap for the cooling coil at its own branch of piping to eliminate existing double trap for the re-heat coil.

i. We recommend adding the ventilation air and exhaust air system in the storage room Nos. 5011 and 5015 to ensure compliance with the Board of Health requirements.

j. We recommend adding the ventilation air and exhaust air system in the utility room next to the women's restroom and telephone closet No. 5059 needs to ensure compliance with the Board of Health sanitation requirements.

Plumbing

a. We recommend installing hose bibs in all restrooms to facilitate cleaning in these areas.

FIRE PROTECTION

FINDINGS

Our review of the project documents and visual inspections of the installations did not reveal any major code violations. All fire protection work under the TBARR Program phases I through III appears to have been completed in accordance with the construction contract documents. Our fire protection findings are limited to the following:

a. Emergency exit stairwell Nos. 1 and 2 on the 5th floor have an elevation of over 78 feet 5 inches above the basement level, which is approximately the same as the street level. These stairwells need to be pressurized to meet the smoke proof requirement per IBC 2000, Section 1005.3.2.5.

b. The basement fire pump room is cluttered with construction materials. The fire pump room area must remain clear to allow easy access for fire pump maintenance (*Exhibit F, Site Photographs, Picture M12*).

RECOMMENDATIONS

In reviewing the completed fire protection work, we did not any obvious deviations from the contract requirements.

a. We recommend pressurizing the emergency exit stairwell Nos. 1 and 2 on the 5th floor to meet the smoke proof requirement per IBC 2000, Section 1005.3.2.5.

b. We recommend removing the construction materials from the fire pump room. This room should not be used as a storage area.

ELECTRICAL

FINDINGS

Modernization of the building electrical system began in 1999 and is scheduled for completion in late 2005. Prior to 1999, the building was served from the north transformer vault and the south transformer vault. Under the TBARR Program phases I, II and III, a new vault B-94 replaced the north vault, a new vault B-302 replaced the south vault. Also, installation of a new 480v, 120v distribution system, fire alarm, lighting, receptacles and telecommunication system will be completed under the phase IV. In vault B-94, incoming service consists of 3 Utility 13.8KV feeders (PEPCO Nos. 14618, 14616 and 14617). Three network transformers (1500kva, 13.8kv/480v) were used to feed switch gear A (3000A, 480v, three sections with tie breakers). Feeders from switch gear A to all loads are bus ducts. Vault B-302 is fed from a medium voltage switch gear in vault B-94. Three identical network transformers (1000kva, 13.8kv/480v) were installed to feed switch gear B (2500A, 480v, three sections with tie breakers). Feeders from switch gear B to all loads are bus ducts (*Exhibit F, Site Photographs, Pictures E01 & E02*). The electrical system in this facility is a first class, state-of-the-art system. The overall quality of electrical installation is commendable. However, we have observed the following issues:

a. Some of the exit signs are chain hung, specified as self-illuminated (without electrical power). These fixtures should be located near emergency light fixtures as shown on construction document. The lighting fixtures are UL-listed; therefore, they should be manufacturer tested.

b. Drawing E-01, note 5 requires a 3" concrete curb around bus duct riser floor penetration. We did not see a curb in that location. This curb should be installed to prevent any flood water from entering the bus.

c. Drawing E-01 riser diagram specifies a 480/277v bus duct that supplies power to the computer panel (CP) riser to have isolated ground. This is not necessary on primary side of the CP transformers.

d. Some floor outlets need circuit information per contract drawing E6-04.

e. In electric closet NE-1, some core drills through ceiling do not have fireproofing (*Exhibit F, Site Photographs, Pictures E03 & E04*).

f. Some branch circuits to panel boards are MC cable. Specifications require EMT cable (*Exhibit F, Site Photographs, Picture E05*).

g. Emergency switchboard has temporary cable. This should be changed to conduits (*Exhibit F, Site Photographs, Picture E05*).

h. Switch board in south switchgear room still has temporary plywood on the back cover (*Exhibit F, Site Photographs, Picture E06*).

i. In basement, various permanent and temporary cables are hanging too low for head room. They need to be raised or removed if unused (*Exhibit F, Site Photographs, Picture E07*).

j. Wire troughs at panels MP-2 and PP-B2 need a cover.

k. Both electric vaults have sprinklers. Spray shields are needed over all electrical equipment and bus ducts. (NEC Art. 110-27) (*Exhibit F, Site Photographs, Pictures E08, E09, E10 & E11*).

l. The bus duct in basement elevator No. 2 is too low and must be raised (*Exhibit F, Site Photographs, Picture E12*).

m. In vault B-302, there is a water puddle on the floor under battery rack, apparently due to condensation. This condition must be addressed (*Exhibit F, Site Photographs, Pictures E14 & E15*).

n. Vault B-302 has two exit doors. However, one door is blocked by an air handling unit. The air handling unit must be relocated comply with NEC 110-26(c).

o. The floor areas around 15kv electrical equipment must be covered with insulation mats to comply with NEC -110-27.

RECOMMENDATIONS

a. We recommend relocating chain hung, self-illuminated exit signs to areas near emergency light fixtures to comply with the construction documents. We also recommend that these UL-listed lighting fixtures are manufacturer tested.

b. We recommend installing a 3” curb as indicated on Drawing E-01, note 5 to prevent any flood water from entering the bus.

c. We recommend that circuit information is provided on floor outlets per contract drawing E6-04.

d. We recommend that fireproofing is provided in core drills in electric closet NE-1.

e. We recommend replacing MC cable on branch circuits to panel boards with EMT cable to comply with the specifications.

f. We recommend replacing temporary cable in emergency switchboard with conduits.

g. We recommend that temporary plywood is removed from the back cover of the switch board in south switchgear room.

h. In basement, various permanent and temporary cables are hanging too low for head room. They need to be raised or removed if unused (*Exhibit F, Site Photographs, Picture E07*).

i. Wire troughs at panels MP-2 and PP-B2 need a cover.

j. Both electric vaults have sprinklers. Spray shields are needed over all electrical equipment and bus ducts. (NEC Art. 110-27) (*Exhibit F, Site Photographs, Pictures E08, E09, E10 & E11*).

k. The bus duct in basement elevator No. 2 is too low and must be raised (*Exhibit F, Site Photographs, Pictures E25, 26, 37*).

l. In vault B-302, there is a water puddle on the floor under battery rack, apparently due to condensation. This condition must be addressed (*Exhibit F, Site Photographs, Pictures E14 & E15*).

m. We recommend relocating the air handling unit in vault B-302 to comply with NEC 110-26(c).

n. We recommend that all floor areas around 15kv electrical equipment are covered with insulation mats to comply with NEC -110-27.

FIRE ALARM

FINDINGS

A new fire alarm system had been installed in the building. This new system consists of a pull station, strobe lights, speakers located throughout the building, and a graphic annunciator monitor in the first floor security control room. We have reviewed in detail the design drawings, as-built drawings prepared by the fire alarm contractor, and monthly test reports. We have also visually inspected all newly installed fire alarm devices to confirm that installation met the fire alarm code requirements. According to the results of the monthly fire alarm test reports, all devices are fully functional and are in good working condition. We have not identified any deficiencies or code violations.

RECOMMENDATIONS

The new fire alarm system had been well designed. We did not observe any major deviations from the code and contract requirements. However, since the building is over 75 feet high, it is classified as a high-rise. Therefore, we recommend adding the following features to the building fire alarm system:

a. Fire alarm voice evacuation system (fire alarm system speakers);
b. Smoke control system at two new emergency stairwells;
c. Smoke hatch on roof at all existing ornamental stairs.

TELECOMMUNICATIONS & DATA SYSTEMS

FINDINGS

Our review of the construction documents (specifications & drawings) revealed that the new design requirements for the telecommunications and data systems under the TBARR Program phases I through III were limited to installation of a cable tray and empty cable troughs throughout the building. We did not identify any deficiencies during visual inspection of the cable tray and trough installations.

RECOMMENDATIONS

We do not have any recommendations with regards to the current telecommunications and data system installations. Our only recommendation is to conduct additional inspection and review upon completion of work under the TBARR Program phase IV.

SECURITY

FINDINGS

Our review of the construction documents (specifications & drawings) revealed that the new design requirements for the security system under the TBARR Program phases I through III were limited to installation of EMT cable tray and empty cable troughs throughout the building. We did not identify any deficiencies during visual inspection of the cable tray and trough installations.

RECOMMENDATIONS

We do not have any recommendations with regards to the current security system installations. Our only recommendation is to conduct additional inspection and review upon completion of work under the TBARR Program phase IV.

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Source Documents

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SOURCE DOCUMENTS

A. REPORTS

1. Scope of Architect/Engineer Work (November 5, 1998)
   Modernization of the Department of the Treasury Main Building Interior
   Washington, D.C.

2. Concepts Design Narrative
   Concepts Submission (June 29, 1999)
   Prepared by Shalom Baranes Associates, PC

3. Responses to Comments on Concepts Submission
   Tentatives Submission (September 24, 1999)
   Prepared by Shalom Baranes Associates, PC

4. Accessibility Study
   95% Submission (April 20, 1999)
   Prepared by Shalom Baranes Associates, PC

5. Vertical Conveyance Study
   100% Submission (May 18, 1999)
   Prepared by William Huntt & Associates
   For Shalom Baranes Associates, PC

6. Fire Protection/Life Safety Study
   100% Submission (May 18, 1999)
   Prepared by Ferguson Engineering Inc.
   For Shalom Baranes Associates, PC

7. Utilities Upgrade Equipment Procurement
   Final Submission for Review (May 25, 1999)
   Prepared by Shalom Baranes Associates, PC

8. Utilities Upgrade Project Manual, Volumes I & II
   Final Submission (August 24, 1999)

9. Structural Analysis Study
   50% Submission (March 25, 1999)
   Prepared by James Madison Cutts Inc.
   For Shalom Baranes Associates, PC

10. Structural Calculations
    Final Submission (August 24, 1999)
    Prepared by Shalom Baranes Associates, PC

B. DRAWINGS

Phase I Documents

Architectural, Structural & Abatement Drawings

Sheet No.	Description
G0.00 through G0.02	General
C1.01 through C1.02	Civil Drawings
A0.01 through A0.31	Architectural General
AD1.00A through AD1.35B	Demolition Plans
A1.00A through A1.35B	Plans
A3.00 through A3.01	Building Sections
A4.01 through A4.73	Detail Plans and Interior Elevations
A5.01 through A5.72	Details
A6.00 through A6.20	Schedules
A7.01 through A7.05	Vertical Circulations
SG.01 through S5.02	Structural Drawings
EA1.00A through EA1.05B	Abatement Plan

Mechanical, Electrical & Plumbing Drawings

Sheet No.	Description
M.0.01 through M7.06	Mechanical Drawings
MD1.00A through MD4.02	Mechanical Demolition Drawings
P0.01 through P6.06	Plumbing Drawings
PD1.00A through PD1.07B	Plumbing Demolition Drawings
F0.01 through F6.01	Fire Protection Drawings
FD1.00A through FD1.01A	Fire Protection Demolition Drawings
E0.01 through E7.14	Electrical Drawings
ED1.00A through ED5.12	Electrical Demolition Drawings
FA0.01 through FA6.01	Fire Alarm Drawings
T0.01 through T6.02	Telecommunications Drawings
ES0.01 through ES2.01	Electrical Security Drawings

Phase II Documents

Architectural, Structural & Abatement Drawings

Sheet No.	Description
G0.00 through G0.02	General
C1.01 through C1.02	Civil Drawings
A.0.01	Architectural General
AD1.00A through AD1.35	Demolition Plans
A1.00A through A1.35	Plans
A3.00 through A3.10	Building Sections
A4.00 through A4.71	Detail Plans and Interior Elevation
A5.01 through A5.83	Details
A6.00 through A6.40	Schedules
A7.00 through A7.06	Vertical Circulations
A8.00 through A8.10	North Court Building
SG.01 through S5.01	Structural Drawings
EA1.00A through EA1.05	Abatement Plan

Mechanical, Electrical & Plumbing Drawings

Sheet No.	Description
G0.00 through G0.01	General
M.0.01 through M7.10	Mechanical Drawings
MD1.00A through MD4.02	Mechanical Demolition Drawings
P0.01 through P6.04	Plumbing Drawings
PD1.00A through PD1.07	Plumbing Demolition Drawings
F0.01 through F6.01	Fire Protection Drawings
FD1.00A through FD1.00D	Fire Protection Demolition Drawings
E0.01 through E7.19	Electrical Drawings
ED1.00A through ED5.22	Electrical Demolition Drawings
FA0.01 through FA6.01	Fire Alarm Drawings
T0.01 through T6.02	Telecommunications Drawings
ES0.01 through ES2.01	Electrical Security Drawings

Phase III & Phase IV Documents

Architectural, Structural & Abatement Drawings

Sheet No.	**Description**
G0.00 through G0.02	General
C1.01 through C1.02	Civil Drawings
A0.01 through A0.11	Architectural General
AD1.00A through AD1.35C	Demolition Plans
A1.00A through A1.35C	Plans
A3.00 through A3.13	Building Sections
A4.00 through A4.72	Detail Plans and Interior Elevations
A5.01 through A5.95	Details
A6.00 through A6.40	Schedules
A7.01 through A7.12	Vertical Circulations
SG.01 through S5.03	Structural Drawings
EA1.00A through EA1.05C	Abatement Plan

Mechanical, Electrical & Plumbing Drawings

Sheet No.	**Description**
G0.00 through G0.01	General
M.0.01 through M7.09	Mechanical Drawings
MD1.30D through MD1.45C	Mechanical Demolition Drawings
P0.01 through P6.05	Plumbing Drawings
PD1.30D through PD1.47C	Plumbing Demolition Drawings
F0.01 through F6.01	Fire Protection Drawings
E0.01 through E7.50	Electrical Drawings
ED1.00A through ED5.42	Electrical Demolition Drawings
FA0.01 through FA6.02	Fire Alarm Drawings
T0.01 through T6.02	Telecommunications Drawings
ES-01 through ES-20	Electrical Security Drawings

C. FIRE ALARM SYSTEM AS-BUILT DRAWINGS

Sheet No.	**Description**
0045A1 through 0045A9	Fire Alarm System As-Built Drawings

D. SPECIFICATIONS

Specification Volumes 1 through 3
Compiled Version, Current for all construction phases
Prepared by Shalom Baranes Associates

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Codes & Interpretations

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CODES & INTERPRETATIONS

APPLICABLE CODES, STANDARDS & REQUIREMENTS

National Codes

a. The National Building Code (Building Officials and Code Administrators (BOCA) 1996 Edition International, Inc.
b. The BOCA National Mechanical Code, 1996
c. National Electrical Code (NEC) (NFPA), 1999
d. Elevator Code-ASME A17.1 and ASME A17.5 with supplements
e. The BOCA National Plumbing Code, 1996
f. National Fire Protection Association (NFPA) Standards
g. Occupational Safety and Health Regulations for Construction; 29 CFR
h. Environmental Protection Agency Regulations

Federal Codes

a. Uniform Federal Accessibility Standards; Federal Standard 759, April 1, 1988, and supplements
b. Americans with Disabilities Act (ADA), 42 U.S.C. 4151, Title III Standards, by the Department of Justice including ATBCB Accessibility Guidelines

Local Codes

a. District of Columbia Municipal Regulations (DCMR) 11, Zoning
b. District of Columbia Municipal Regulations (DCMR) 12, Construction Codes
c. National Capital Planning Commission, Comprehensive Plan for the National Capital, Federal Elements

Industry Standards

a. Occupational Safety and Health Standards
b. American National Standards Institute (ANSI) Publications.
c. The Institute of Electrical and Electronics Engineers (IEEE), Inc. Publications
d. National Electrical Manufacture Association (NEMA) Publications
e. Illumination Engineers Society Standards (IES)
f. Electronic Industries Association (EIA) Publications, particularly:
    i. Commercial Building Telecommunications Wiring Standard, EIZ/TIA-568
    ii. ASHRAE Handbooks, ASHRAE 62-89, ASHRAE Standard 5-92, and ASHRAE S I Guide
g. National Roofing Contractors Association, “Roofing and Waterproofing Manual”
h. SMACNA, Architectural Sheet Metal Manual
i. ASTM E 497-89 “Standard Practice for Installing Sound Isolating Lightweight Partitions”

Government Requirements

a. Federal Acquisition Regulation, Subchapter H, Clause 52-248-2, Value Engineering-Architect-Engineer (March 1990)
b. Energy Policy Act of 1992 (Public Law 102-486)
c. Life-Cycle Costing Manual for the Federal Energy Management Program (NIST Handbook 135), dated 1987 and updates
d. Technical Specifications for Voice, Data, Video, and Low Voltage Building Controls, dated June 13, 1997
e. Requirements for Preparing Construction Specifications for PBS Projects, dated April 29, 1988: AIA MasterSpec Specifications with GSA Supplements and the following Treasury and/or GSA Regional Specifications (see PBS Documents Disc, No. 13a, March 1998, for supplemental specifications):
    *Supplementary Instructions to Bidders, Section 00120
    *Supplementary Conditions, Section 00800
    *Competency of Clauses for Bidders and All Specialties, Section 0900 series
    *Safety and Health, Section 01546
    *Asbestos Abatement Roofing Removal Procedures, Section 02805R
    *PCB light ballast removal, section 0289P
f. Letter dated April 1, 1991 concerning the use of Fireproofing Specifications
g. The Secretary of the interior's Standards and Illustrated Guidelines for Rehabilitating Historic Buildings, Revised 1992 (36 CFR 67)
h. Executive Order No. 12902, Energy Efficiency and Water Conservation at Federal Facilities
i. The National Historic Preservation Act of 1996, as amended, and Executive Order 11593

CODE INTERPRETATIONS

The design of this project conforms to the following applicable codes and Government requirements, except as noted in the following code interpretations:

Interpretation	Section:	Issue
1. Occupant Load Calculations		Required: Calculation of building occupant load based on 1 person/ 100 SF of gross floor area. Provided: Non-simultaneous use areas (Corridor, stairs, and elevators) subtracted from gross area prior to calculation of load. The Room 2121 assembly load is added separately to the calculations.
2. Presence of Unprotected Wood and Steel in Building Construction (BOCA 1996)	Section 603	Required: Based on providing high-rise modifications, the building requires a minimum Type 2-B construction classification (reduction of Type of Construction from 2-A to 2-B, per Table 403.3.3.1). Existing untreated wood in framed partitions and roof decking, as well as unprotected iron and steel floor and roof framing, are not allowable under that classification. Provided: Wood Stud Framing in historic plaster partitions will remain, Wood Roof Decking will remain and where supported by noncombustible construction will be isolated from any voids over 6” Wood Roof Decking supported by Wood Framing will be protected by sprinklers to meet NFPA13 and isolated from Remaining construction to attain a 1 hour Roof / Ceiling assembly(Section 716.2)
3. Open Monumental Stairs (BOCA 1996)	Section 713.3, Exception #2	Required: Fire resistance rated shaft enclosures at floor opening, unless the opening(s); a) are not part of a required means of egress b) are not concealed within building construction; c) do not connect more than two stories d) are separated from other floor opening serving other floors by 2 hour rated construction Eighteen inch deep draft stops and sprinkler heads at max 6’ on the center at perimeter of opening to meet NFPA 13 1996, Section 4-13.3.4 Provided: Floor opening connecting four levels (First through Fourth Floors), without perimeter sprinkler protection. Smoke Detectors at corridors. Sprinklering at Fifth Floor stair halls.
4. Floor/ Ceiling Fire Resistance Rating (BOCA 1996)	Table 602	Required: One hour fire resistance rating of floor slabs, beams and supporting members for Type 2B construction Provided: Typical floor slab construction that appears to meet requirements for fire resistance, except:

		a) In north and West Wings, ornamental plaster trim at bottom surface of steel floor beams is not wire-mesh reinforced, and its anchorage is not integral to the beam construction. b) In north wing Second Floor slab (area above Room 2121 ceiling) framing is assumed to be unprotected at lower flange and adjacent web areas and is inaccessible behind ornamental plaster and wood ceiling coffer. c) In North Wing at First Floor, bottom surface of steel floor beams is exposed at Basement corridor. d) In the west wing, floor slab at levels 2, 3, 4 and 5 originally had glazed panels in the center of each bay to allow for the passage of light into the structure. These glazed areas have been infilled, probably with an iron plate, and paved over with marble. This construction is assumed to be unrated.
5. Rated Doors and Frames (BOCA 1996)	Section 717.0	Required: Door an Frames as opening protective at rated separation walls must be labeled Provide: Doors are labeled but some of the frames are historic cast iron in brick masonry walls.
6. Voids at Roof- Ventilation (BOCA 1996)	Section 721.8	Required: Ventilation of concealed roof spaces. Provided: No ventilation has been provided for small voids above corrugated metal vaulting/mortar. Existing Ventilation at eaves and ridge has been eliminated.
7. Fire Alarm System Annunciators (District of Columbia Fire Department)		Required: Fire alarm annunciator located at all major street entrances. Provided: Fire alarm annunciator at Fifteenth Street and Building Security Center building entrance only.
8. Guardrail Height (NFPA 101)	Section 5-2.2.4.6	Required: Guardrail protecting floor opening that are a minimum of 42” high. Provided: At Room 2121 balcony which is not accessible to the public, the existing historic railing is lower than 42” and will remain as-is.
9. Room 2121 Egress (NFPA 101)	Section 5-5.1.4	Required: Separation of required exists equivalent to one-third the maximum diagonal distance within the room, based on providing full automatic sprinkler system. Provided: Maximum diagonal distance within Room 2121 is approximately 80 feet. Separation of exit doors to corridor, measured from nearest edge of furthest opening is 15 feet.

10. Emergency Power for Elevators (BOCA)	Section 403.9.1.3	Required: Standby power shall be transferable to any highrise elevator. Provided: Standby power to one elevator in each fire zone: one in the East Bank and one in the West Bank.
11. East Elevator Doors	Section 717.1	Required: Rated door in elevator shaft separation assemblies at East Elevators. Provided: Sprinkler to wash surface of the doors.
12. Sprinklers in combustible plenums		Required: Sprinkler in plenums containing combustible material (wire). Provided: No Sprinklers. Treasury will replace cabling with plenum rated cables.
13. Rated doors in Existing opening (BOCA)	Section 717.1.2	Required: Opening in separation assemblies must be labeled Provided: Door in oversize opening and those in existing frames will meet the same criteria as tested doors, but will not bear labels.
14. Sprinkler piping in Elevator Shaft and Machine	ANSI A17.1 Rule 102.2(c)(1)	Required: Sprinkler piping must not run through elevator shaft or machine room. Provided: Rated drywall separation w/in shaft and room.
15. Ramps to the North Court Building ca.1935	28 CFR part 36 ADA-1994 para.4.8	Required: Ramps shall not exceed 1:12 Max rise shall not exceed 30". Provided: Ramps at 1:15 with no handrails, step (3 risers) at exit-1st floor east
16. Void at Roof (NFPA 101)		Required: Concealed space of exposed combustible construction must be protected by sprinklers. An exception is permitted if protection is provided within 6" of the combustible material. Provided: 1 hour rated gypsum board within an average of 5" from the combustible material (Varies from 0 to 10") or fill void w/ noncombustible insulation material.
17. Single Horizontal Exit at Level 1	NFPA 101 5.2.4.3.6	Required: Doors in horizontal exists must swing in direction of travel Provided: Single door in existing opening swings only in one direction.
18. Maximum threshold height	28 CFR part 36 ADA-1994 Para. 4.13.8	Required: Maximum ½" height Provided: Existing ¾" threshold retained new floor level aligned with top of thresholds.

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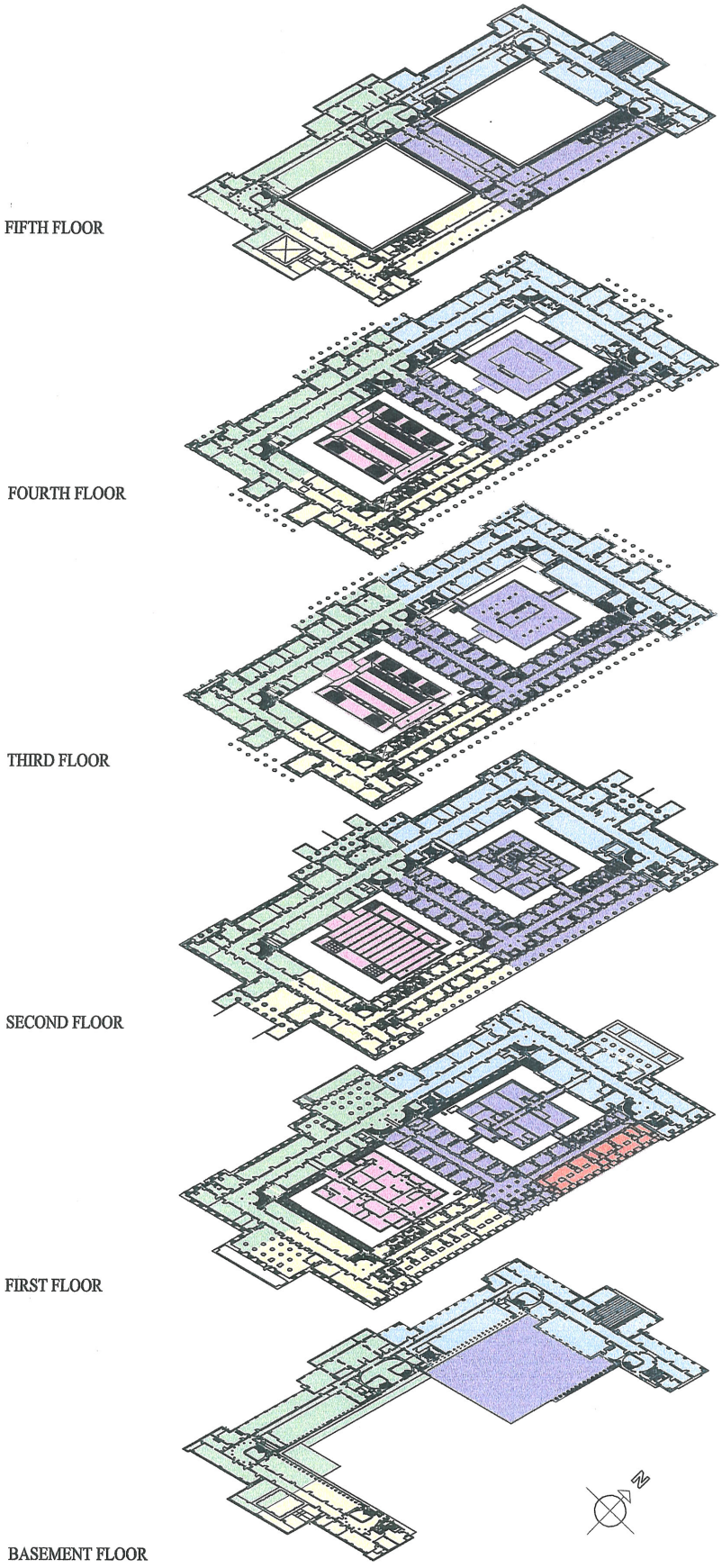
Supporting Documents

- *Project Phasing Plan*
- *Site Photographs*
- *Asbestos Abatement Summary*
- *Elevator Inspection Report*
- *Mechanical Schematic Diagrams*

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Project Phasing Plan

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Modernization of the Main Treasury Building

1500 Pennsylvania Avenue, NW, Washington, DC 20220

CMDR Associates, Inc.
Engineering & Construction Consultants
8229 Boone Blvd.
Suite 280
Vienna, Va 22182
www.cmdrassociates.com

Scale: N.T.S.	Date: 07-01-05

ORIGINAL PHASING PLAN

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Site Photographs

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A01



A02



A03



A04



A05



A06



A07



A08



A09



A10



A11



A12



A13



A14



A15



A16



A17



A18



A19



A20



A21



A22



A23



A24



A25



ST01



ST02



ST03



ST04



ST05



ST06



ST07



ST08



ST09



ENV01



ENV02



ENV03



ENV04



M01



M02



M03



M04



M05



M06



M07



M08



M09



M10



M11



M12



E01



E02



E03



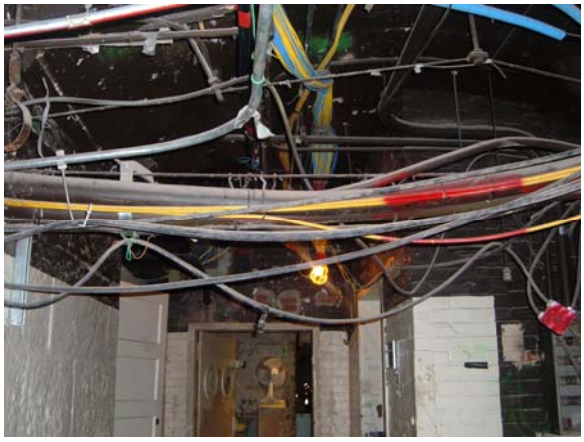
E04



E05



E06



E07



E08



E09



E10



E11



E12



E13



E14



E15

Asbestos Abatement Summary

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Summary of Asbestos Abatement Completed under the TBARR Program

FIRST FLOOR	SECOND FLOOR	THIRD FLOOR	FOURTH FLOOR	FIFTH FLOOR	BASEMENT
Carpets and flooring have been replaced	Carpets and flooring identified have been replaced	Carpets and flooring identified have been replaced	Carpets and flooring have been replaced	Carpets and flooring have been replaced	N/A
Pipe/Duct insulation in the bathroom wall chases have been encased and covered	Pipe/Duct insulation in the bathroom wall chases have been encased and covered	Pipe/Duct insulation in the bathroom wall chases have been encased and covered	Pipe/Duct insulation in the bathroom wall chases have been encased and covered	Pipe/Duct insulation in the bathroom wall chases have been encased and covered	Renovation incomplete in Phase IV
Mechanical room renovated and all pumps and piping replaced	Mechanical room renovated and all pumps and piping replaced	Mechanical room renovated and all pumps and piping replaced	Mechanical room renovated and all pumps and piping replaced	Mechanical room renovated and all pumps and piping replaced	Mechanical room renovated and all pumps and piping replaced
Ceiling tiles have been replaced	Ceiling tiles have been replaced	Ceiling tiles have been replaced	Ceiling tiles have been replaced	Ceiling tiles have been replaced	Renovation incomplete in Phase IV
Floor tiles have been replaced	Floor tiles have been replaced	Floor tiles have been replaced	Floor tiles have been replaced	Floor tiles have been replaced	N/A
Pipes and insulation in the pipe gallery have been replaced	N/A	N/A	N/A	N/A	Pipes and insulation in the tunnel have been replaced
N/A	N/A	N/A	N/A	N/A	Electric control panels and transformers have been replaced.
Fluorescent lights and asbestos containing ballasts have been replaced	Fluorescent lights and asbestos containing ballasts have been replaced	Fluorescent lights and asbestos containing ballasts have been replaced	Fluorescent lights and asbestos containing ballasts have been replaced	Fluorescent lights and asbestos containing ballasts have been replaced	There are still old lights and ballasts
N/A	N/A	N/A	N/A	N/A	Old Electric room not renovated.
N/A	N/A	N/A	N/A	N/A	Some windows at south wing (Phase IV) have not been replaced

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Elevator Inspection Reports

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ELEVATOR INSPECTION REPORT

REGION	SEMI-ANNUAL		ANNUAL & NO-LOAD TESTS	X	FULL-LOAD TESTS ANNUAL & 5-YEAR			INSPECTION DATE
03								06/23/05
BUIDING	STREET ADDRESS				CITY		STATE and ZIP CODE	
Treasury Building	1500 Pennsylvania Avenue N.W.				Washington		DC 20220	

GENERAL

1 NUMBER OF UNITS IN BUILDING:	Passenger	X	Freight		Escalator		Dumbwaiter		Other	
10										

2 THIS ELEVATOR:				
Owner's Number 6	Type (Pass., Frt., etc.) Passenger	Manufacturer MCE	Manufacturer Number	Capacity (lb) 3000
3a Contract Speed 300 fpm	b. Type of Machine (Geared, Traction, Drum, etc) Geared Basement Traction		c. No. Floors 6	d. No. Openings 6
4a Type of Control SCR Type Black Box	b. Type of Operation (C.S., P.B., Single Col. Sel) AUTOMATIC PUSH BUTTON		c. Roping 1:1	d. Year Built 2001

LANDINGS (A)	Cond.	(B)	Cond.	(C)	Cond.	(D)	Cond.
5 ENTRANCES	G	ACCESS CONTROL SWITCHES	N/A	HOISTWAY DOORS	G	EMERGENCY ACCESS KEYWAYS	G
6 THRESHOLD	G	HOISTWAY DOOR GUIDES	G	PARKING DEVICE	N/A	FRT.DOOR SAFETY ASTRAGALS	G
7 SUPERVISORY (Station) PANEL	N/A	PANEL-TELEPHONE OR INTERCOM	G	HALL POSITION INDICATOR	G	HALL LANTERNS & BUTTOMS	G
CAR *(Interior)*							
8 THRESHOLD	G	FLOOR COVERING	G	SAFETY WRENCH PLATE	G	CAR VENTILATION	G
9 WAINSCOT *(Interior Panels)*	G	BY-PASS BUTTOM	N/A	EMERGENCY EXIT (S) HINGED	G	EMERGENCY EXIT (S) CONTACTED	G
10 CAR DOOR (S) & GATE (S)	G	CAR DOOR GUIDES	G	SAFETY EDGE *(Car Gate/Door)*	N/A	DOOR DETECTOR *(Photo)*	G
11 CAR DOOR/GATE OPERATION	G	DOOR NUDGING	G	(FRT.) SEQUENCE OPERATION	G	SEQUENCE TIMING & ALARM	N/A
12 OPERATING PANEL (S)	G	ANNUNCIATOR	N/A	PANEL-TELEPHONE OR INTERCOM	G	PANEL H.ACCESS SWITCH	N/A
13 CAR POSITION INDICATOR	G	CAR LIGHTING	G	EMERGENCY LIGHT	G	CLEANLINESS	G
CAR *(Exterior)*							
14 CAR TOP OPERATOR	G	CAR TOP LIGHT & RECEPTACLE	G	CAR SHEAVE & GUARD	G	EMERGENCY LIGHT BATTERIES	G
15 ROPE HITCH	G	GOVERNOR RELEASE CARRIAGE	G	LEVELING DEVICES	G	TOP LIGHT SWITCHES	G
16 SELECTOR DRIVE	G	CAR & CWT O.H. CLEARANCE	G	O.H. DEFLECTION SHEAVES	G	SHEAVES GUARD & FAN	G
17 CAR GUIDES	G	CWT GUIDES	G	CWT SHEAVE	G	RAIL FASTENINGS	G
18 CAR DOOR/GATE OPERATION	G	DOOR CLUTCH *(vanes)*	G	CAR GATE/DOOR HANGERS	G	DOOR CONTACT	G
19 HOISTWAY DOOR OPERATOR CLOSE	G	H. DOOR LATCH ROLLERS	G	HOISTWAY DOOR HANGERS	G	INTERLOCKS	G
20 DUST COVERS & SHEAR PLATES	G	TOE GUARD APRON	G	CAR BOTTOM LIGHT	G	JUNCTION BOX & WIRING	G
21 PLATFORM SLING & SUPPORTS	G	CAR & CWT COMPRESSOR HITCH	G	CAR-BOTTOM CLEARANCE	G	CLEANLINESS	R
PIT							
22 EMERGENCY STOP SWITCH	G	PIT LADDER *(over 40')*	G	PIT LIGHT	G	BOTTOM LIMIT SWITCHES	G
23 CWT. TO BUFFER CLEARANCE	G	CWT. GUARD	G	COMPENSATION GUARD SWITCH	N/A	GOVERNOR CABLE TENSION	G
24 PIT DOOR LOCK	G	ADJ. SHAFT PROTECTION	G	HOISTWAY LIGHTING	G	CLEANLINESS	R
MACHINE ROOM							
25 MAIN SWITCH	G	VENTILATION	G	GOVERNOR	G	BRAKE SHOE PINS	G
26 MACHINE	G	MACHINE BEARNINGS	G	WORM & GEAR	G	THRUST	G
27 MOTOR BEARINGS	G	MOTOR COMMUTATOR BRUSHES	G	MOTOR WINDINGS	G	DRIVE SHEAVE GROOVES	G
28 M.G. SET BEARINGS	G	M.G. COMMUTATOR BRUSHES	G	M.G. SET WINDINGS	G	TRAVEL NUT.SLACK CABLE SWITCH	G
29 EXCITER BEARINGS	N/A	EXCITER COMMUTATOR, BRUSHES	N/A	EXCITER WINDINGS	N/A	ROTARY CONVERTER	N/A
30 CONTROLLER & PARTS	G	M.G. STARTER & PARTS	G	RELAY PANEL & PARTS	G	SELECTION PANEL & PARTS	G

CABLES	MATERIAL	NO.	SIZE	CONSTRUCTION	INST. DATE	REMARKS
31 HOIST	IRON	6	1/2	8x19 TS	2001	Good
32 CAR/CWT.						
33 DRUM/CWT.						
34 GOVERNOR	16 in	1	1/2	8x19 8/21 TS	2001	Good
35 COMPENSATION	N/A					
36 SELECTOR	VANE					
37 SAFETY TAIL ROPE						
38 TRAVELING CABLE (S)						

SAFETY (5 year & Annual Insp. Only) (A)	Cond.	(B)	Cond.	(C)	Cond.	(D)	Cond.
39 GOVERNOR TYPE 16 INCH HW TYPE	G	GOVERNOR PLATE TRIP SPEED (395fpm)	G	P.O.T. SWITCH SET (F.P.M.) (345 fpm)	G	GOVERNOR SPEED	G
40 GOVERNOR JAW MATERIAL	G	GOVERNOR SEALED	G	SAFETY TYPE "B"	G	SAFETY PLATE SPEED	G
41 SAFETY SWITCH	G	JAW CLEARANCE (left/right in.) LEFT ½ inch clearance	G	TEST WITH (LB)	N/A	TEST AT 125 %	N/A
42 RAIL MARK AVERAGE (IN)	N/A	CAR LEVEL PER FEET (in) LESS THAN ¼ INCH	G	SAFETY ROPE PULL OUT (LBS) 400 lb	N/A	TURNS ON DRUM	N/A
43 SAFETY TAGGED	G	CAR BUFFER TYPE OIL	G	COUNTERWEIGHT BUFFER TYPE OIL	G	BUFFER PLATE LOAD	G
44 BUFFER PLATE SPEED (F.P.M.)		BUFFER RUN-IN TEST (F.P.M.)	N/A	90 SECOND BUFFER RETURN	N/A	BUFFER TAGGED	G
HYDRAULIC ANNUAL TESTS	Cond.		Cond.		Cond.		Cond.
45 TEST LOAD (LB)	N/A	15 MIN. STATIC TEST-CREEP (in)	N/A	RELIEF VALVE SET (LB)	N/A	RELIEF VALVE- TAGGED & SEALED	N/A
46 EMERGENCY TOP TERMINAL SPEED LIMITING DEVICE	N/A	STATIC TEST PRESSURE	N/A	EMPTY CAR RUNNING UP PRESSURE TEST	N/A	CONTROL SWITCHES SEPARATE & INDEPENDENT	N/A
FIRE & EMERGENCY CONTROLS	Cond.		Cond.		Cond.		Cond.
47 MASTER SWITCH (floor)	R	ALTERNATE (floor) No test performed		ALL CARS RETURN NON-STOP TO SELECTED FLOOR	G	CARS PARKED – DOORS OPEN - LIGHTS ON	G
48 CAR EMERGENCY SWITCH	G	CAR RESPONSE CAR CALLS ONLY	G	CONSTANT PRESSURE DOOR OPENING	G	REOPENING DEVICES DEACTIVATED	G

49 AUTOMATIC DETECTION

RALE OF RISE ☐ FIXED TEMPERATURE ☒ IONIZATION ☐ PHOTO CELL ☐ PASSENGER NOTIFICATION ☒ INTERCOM ☐ SIGN ☐

INSTRUCTIONS (all spaces must be filled in)
Refer – A17.1 Code – All terms, definitions, and questions.
Indicate in the condition (Cond.) columns one of the following:
"G" - New or in good serviceable condition.
"F" - Serviceable but worn or obsolete.
"R" - Recommend repair or replacement (Explain each item in brief with corrective action under RECOMMENDATIONS)
"N" - Items not applicable.

RECOMMENDATIONS
Door torque is 23 flb
Deficiencies: Pit is dirty
Machine room is under renovation and is dirty.
Fire service jewel is missing on main return landing panel. ASME A17.1 rule 2.27.3.1.6
****** Test smoke detectors when convenient and monitor response of elevators********
****** Test emergency power transfer operation on elevators **********

ELEVATOR SERVICED BY Maryland Elevator Company	**TYPE OF SERVICE** Full Service Maintenance	
ELEVATOR INSPECTED BY VERNON J. IRVING QEI – 1571	**OFFICE** Admiral Elevator Company, Inc.	**PHONE NUMBER** (410) 732-1102
CONTACT Hernan Santos or Jamshid Malakouti	**PHONE NUMBER** (703) 288-5060	

ELEVATOR INSPECTION REPORT

REGION	SEMI-ANNUAL		ANNUAL & NO-LOAD TESTS	X	FULL-LOAD TESTS ANNUAL & 5-YEAR			INSPECTION DATE
								06/23/05
BUIDING	STREET ADDRESS				CITY		STATE and ZIP CODE	
Treasury Building	1500 Pennsylvania Avenue N.W.				Washington		DC 20220	

GENERAL

1 NUMBER OF UNITS IN BUILDING:	Passenger	X	Freight		Escalator		Dumbwaiter		Other	
10										

2 **THIS ELEVATOR:**				
Owner's Number **7**	Type (Pass., Frt., etc.) **PASSENGER**	Manufacturer **MCE**	Manufacturer Number	Capacity (lb) **3500**
3a Contract Speed **100 fpm**	b. Type of Machine (Geared, Traction, Drum, etc) **Roped Hydraulic (Twin Post)**		c. No. Floors **5**	d. No. Openings **5**
4a Type of Control **HMC 1000 Microprocessor**	b. Type of Operation (C.S., P.B., Single Col. Sel) **AUTOMATIC PUSH BUTTON**		c. Roping	d. Year Built **2003**

LANDINGS (A)	Cond.	(B)	Cond.	(C)	Cond.	(D)	Cond.
5 ENTRANCES	G	ACCESS CONTROL SWITCHES	N/A	HOISTWAY DOORS	G	EMERGENCY ACCESS KEYWAYS	G
6 THRESHOLD	G	HOISTWAY DOOR GUIDES	G	PARKING DEVICE	N/A	FRT.DOOR SAFETY ASTRAGALS	G
7 SUPERVISORY (Station) PANEL	N/A	PANEL-TELEPHONE OR INTERCOM	G	HALL POSITION INDICATOR	G	HALL LANTERNS & BUTTOMS	G
CAR *(Interior)*							
8 THRESHOLD	G	FLOOR COVERING	G	SAFETY WRENCH PLATE	G	CAR VENTILATION	G
9 WAINSCOT *(Interior Panels)*	G	BY-PASS BUTTOM	N/A	EMERGENCY EXIT (S) HINGED	G	EMERGENCY EXIT (S) CONTACTED	G
10 CAR DOOR (S) & GATE (S)	G	CAR DOOR GUIDES	G	SAFETY EDGE *(Car Gate/Door)*	N/A	DOOR DETECTOR *(Photo)*	G
11 CAR DOOR/GATE OPERATION	G	DOOR NUDGING	G	(FRT.) SEQUENCE OPERATION	G	SEQUENCE TIMING & ALARM	N/A
12 OPERATING PANEL (S)	G	ANNUNCIATOR	N/A	PANEL-TELEPHONE OR INTERCOM	G	PANEL H.ACCESS SWITCH	N/A
13 CAR POSITION INDICATOR	G	CAR LIGHTING	G	EMERGENCY LIGHT	G	CLEANLINESS	G
CAR *(Exterior)*							
14 CAR TOP OPERATOR	G	CAR TOP LIGHT & RECEPTACLE	G	CAR SHEAVE & GUARD	G	EMERGENCY LIGHT BATTERIES	G
15 ROPE HITCH	N/A	GOVERNOR RELEASE CARRIAGE	N/A	LEVELING DEVICES	G	TOP LIGHT SWITCHES	G
16 SELECTOR DRIVE	G	CAR & CWT O.H. CLEARANCE	N/A	O.H. DEFLECTION SHEAVES	G	SHEAVES GUARD & FAN	N/A
17 CAR GUIDES	G	CWT GUIDES	N/A	CWT SHEAVE	N/A	RAIL FASTENINGS	G
18 CAR DOOR/GATE OPERATION	G	DOOR CLUTCH *(vanes)*	G	CAR GATE/DOOR HANGERS	G	DOOR CONTACT	G
19 HOISTWAY DOOR OPERATOR CLOSE	G	H. DOOR LATCH ROLLERS	G	HOISTWAY DOOR HANGERS	G	INTERLOCKS	G
20 DUST COVERS & SHEAR PLATES	G	TOE GUARD APRON	G	CAR BOTTOM LIGHT	G	JUNCTION BOX & WIRING	N/A
21 PLATFORM SLING & SUPPORTS	G	CAR & CWT COMPRESSOR HITCH	N/A	CAR-BOTTOM CLEARANCE	G	CLEANLINESS	G
PIT							
22 EMERGENCY STOP SWITCH	G	PIT LADDER *(over 40')*	G	PIT LIGHT	G	BOTTOM LIMIT SWITCHES	G
23 CWT. TO BUFFER CLEARANCE	N/A	CWT. GUARD	N/A	COMPENSATION GUARD SWITCH	N/A	GOVERNOR CABLE TENSION	N/A
24 PIT DOOR LOCK	N/A	ADJ. SHAFT PROTECTION	N/A	HOISTWAY LIGHTING	G	CLEANLINESS	G
MACHINE ROOM							
25 MAIN SWITCH	G	VENTILATION	G	GOVERNOR	N/A	BRAKE SHOE PINS	N/A
26 MACHINE	G	MACHINE BEARNINGS	G	WORM & GEAR	N/A	THRUST	N/A
27 MOTOR BEARINGS	G	MOTOR COMMUTATOR BRUSHES	N/A	MOTOR WINDINGS	N/A	DRIVE SHEAVE GROOVES	N/A
28 M.G. SET BEARINGS	N/A	M.G. COMMUTATOR BRUSHES	N/A	M.G. SET WINDINGS	N/A	TRAVEL NUT.SLACK CABLE SWITCH	N/A
29 EXCITER BEARINGS	N/A	EXCITER COMMUTATOR, BRUSHES	N/A	EXCITER WINDINGS	N/A	ROTARY CONVERTER	N/A
30 CONTROLLER & PARTS	G	M.G. STARTER & PARTS	N/A	RELAY PANEL & PARTS	G	SELECTION PANEL & PARTS	G

CABLES	MATERIAL	NO.	SIZE	CONSTRUCTION	INST. DATE	REMARKS
31 HOIST	N/A			8x19	2003	
32 CAR/CWT.	N/A					
33 DRUM/CWT.	N/A					
34 GOVERNOR	N/A					
35 COMPENSATION	N/A					
36 SELECTOR	VANE					Solid State with door zone magnets on tape. (Good)
37 SAFETY TAIL ROPE	N/A					
38 TRAVELING CABLE (S)						

SAFETY (5 year & Annual Insp. Only) (A)	Cond.	(B)	Cond.	(C)	Cond.	(D)	Cond.
39 GOVERNOR TYPE	N/A	GOVERNOR PLATE TRIP SPEED (F.P.M.)	N/A	P.O.T. SWITCH SET (F.P.M.)	N/A	GOVERNOR SPEED	N/A
40 GOVERNOR JAW MATERIAL	N/A	GOVERNOR SEALED	N/A	SAFETY TYPE "B"	N/A	SAFETY PLATE SPEED	N/A
41 SAFETY SWITCH	N/A	JAW CLEARANCE (left/right in.)	N/A	TEST WITH (LB	N/A	TEST AT 125 %	N/A
42 RAIL MARK AVERAGE (IN)	N/A	CAR LEVEL PER FEET (in) LESS THAN ¼ INCH	N/A	SAFETY ROPE PULL OUT (LBS)	N/A	TURNS ON DRUM	N/A
43 SAFETY TAGGED	N/A	CAR BUFFER TYPE SPRING	G	COUNTERWEIGHT BUFFER TYPE SPRING	N/A	BUFFER PLATE LOAD	N/A
44 BUFFER PLATE SPEED (F.P.M.)		BUFFER RUN-IN TEST (F.P.M.)	N/A	90 SECOND BUFFER RETURN	N/A	BUFFER TAGGED	N/A
HYDRAULIC ANNUAL TESTS	Cond.		Cond.		Cond.		Cond.
45 TEST LOAD (LB)	-----	15 MIN. STATIC TEST-CREEP (in)	-----	RELIEF VALVE SET (LB) (720 psi)	G	RELIEF VALVE- TAGGED & SEALED (775 psi)	G
46 EMERGENCY TOP TERMINAL SPEED LIMITING DEVICE	-----	STATIC TEST PRESSURE (375 psi)	G	EMPTY CAR RUNNING UP PRESSURE TEST (430 psi)	G	CONTROL SWITCHES SEPARATE & INDEPENDENT	N/A
FIRE & EMERGENCY CONTROLS	Cond.		Cond.		Cond.		Cond.
47 MASTER SWITCH (floor)	R	ALTERNATE (floor) No test performed		ALL CARS RETURN NON-STOP TO SELECTED FLOOR	G	CARS PARKED – DOORS OPEN - LIGHTS ON	G
48 CAR EMERGENCY SWITCH	G	CAR RESPONSE CAR CALLS ONLY	G	CONSTANT PRESSURE DOOR OPENING	G	REOPENING DEVICES DEACTIVATED	G

49 AUTOMATIC DETECTION

RALE OF RISE [ ] FIXED TEMPERATURE [X] IONIZATION [ ] PHOTO CELL [ ] PASSENGER NOTIFICATION [X] INTERCOM [ ] SIGN [ ]

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"F" - Serviceable but worn or obsolete.
"R" - Recommend repair or replacement (Explain each item in brief with corrective action under RECOMMENDATIONS)
"N" - Items not applicable.

RECOMMENDATIONS

Submersible Pump unit Job no# 03-39080
Door Torque = 23 lb
Deficiencies: Screw missing in door gib at 2nd landing.
Fire Service jewel missing on main return landing fire service panel. ASME AS17.1 rule 2.27.3.1.6

****** Test smoke detectors when convenient and observe elevator response. ********

ELEVATOR SERVICED BY Maryland Elevator Company	**TYPE OF SERVICE** Full Service Maintenance	
ELEVATOR INSPECTED BY VERNON J. IRVING QEI – 1571	**OFFICE** Admiral Elevator Company, Inc.	**PHONE NUMBER** (410) 732-1102
CONTACT Hernan Santos, or Jamshid Malakouti	**PHONE NUMBER** (703) 288-5060	

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REGION	SEMI-ANNUAL		ANNUAL & NO-LOAD TESTS	X	FULL-LOAD TESTS ANNUAL & 5-YEAR			INSPECTION DATE
								06/23/05
BUIDING	STREET ADDRESS				CITY		STATE and ZIP CODE	
Treasury Building	1500 Pennsylvania Avenue N.W.				Washington		DC 20220	

GENERAL

1 NUMBER OF UNITS IN BUILDING:	Passenger	X	Freight		Escalator		Dumbwaiter		Other	
10										

2 **THIS ELEVATOR:**				
Owner's Number **8**	Type (Pass., Frt., etc.) **PASSENGER**	Manufacturer **MCE**	Manufacturer Number	Capacity (lb) **3500**
3a Contract Speed **100 fpm**	b. Type of Machine (Geared, Traction, Drum, etc) **Roped Hydraulic (Twin Post)**		c. No. Floors **5**	d. No. Openings **5**
4a Type of Control **HMC 1000 Microprocessor**	b. Type of Operation (C.S., P.B., Single Col. Sel) **AUTOMATIC PUSH BUTTON**		c. Roping	d. Year Built **2003**

LANDINGS (A)	Cond.	(B)	Cond.	(C)	Cond.	(D)	Cond.
5 ENTRANCES	G	ACCESS CONTROL SWITCHES	N/A	HOISTWAY DOORS	G	EMERGENCY ACCESS KEYWAYS	G
6 THRESHOLD	G	HOISTWAY DOOR GUIDES	G	PARKING DEVICE	N/A	FRT.DOOR SAFETY ASTRAGALS	G
7 SUPERVISORY (Station) PANEL	N/A	PANEL-TELEPHONE OR INTERCOM	G	HALL POSITION INDICATOR	G	HALL LANTERNS & BUTTOMS	G
CAR *(Interior)*							
8 THRESHOLD	G	FLOOR COVERING	?	SAFETY WRENCH PLATE	G	CAR VENTILATION	G
9 WAINSCOT *(Interior Panels)*	G	BY-PASS BUTTOM	N/A	EMERGENCY EXIT (S) HINGED	G	EMERGENCY EXIT (S) CONTACTED	G
10 CAR DOOR (S) & GATE (S)	G	CAR DOOR GUIDES	G	SAFETY EDGE *(Car Gate/Door)*	N/A	DOOR DETECTOR *(Photo)*	G
11 CAR DOOR/GATE OPERATION	G	DOOR NUDGING	G	(FRT.) SEQUENCE OPERATION	G	SEQUENCE TIMING & ALARM	N/A
12 OPERATING PANEL (S)	G	ANNUNCIATOR	N/A	PANEL-TELEPHONE OR INTERCOM	G	PANEL H.ACCESS SWITCH	N/A
13 CAR POSITION INDICATOR	G	CAR LIGHTING	G	EMERGENCY LIGHT	G	CLEANLINESS	G
CAR *(Exterior)*							
14 CAR TOP OPERATOR	G	CAR TOP LIGHT & RECEPTACLE	G	CAR SHEAVE & GUARD	G	EMERGENCY LIGHT BATTERIES	G
15 ROPE HITCH	N/A	GOVERNOR RELEASE CARRIAGE	N/A	LEVELING DEVICES	G	TOP LIGHT SWITCHES	G
16 SELECTOR DRIVE	G	CAR & CWT O.H. CLEARANCE	N/A	O.H. DEFLECTION SHEAVES	G	SHEAVES GUARD & FAN	N/A
17 CAR GUIDES	G	CWT GUIDES	N/A	CWT SHEAVE	N/A	RAIL FASTENINGS	G
18 CAR DOOR/GATE OPERATION	G	DOOR CLUTCH *(vanes)*	G	CAR GATE/DOOR HANGERS	G	DOOR CONTACT	G
19 HOISTWAY DOOR OPERATOR CLOSE	G	H. DOOR LATCH ROLLERS	G	HOISTWAY DOOR HANGERS	G	INTERLOCKS	G
20 DUST COVERS & SHEAR PLATES	G	TOE GUARD APRON	G	CAR BOTTOM LIGHT	G	JUNCTION BOX & WIRING	N/A
21 PLATFORM SLING & SUPPORTS	G	CAR & CWT COMPRESSOR HITCH	N/A	CAR-BOTTOM CLEARANCE	G	CLEANLINESS	G
PIT							
22 EMERGENCY STOP SWITCH	G	PIT LADDER *(over 40')*	G	PIT LIGHT	G	BOTTOM LIMIT SWITCHES	G
23 CWT. TO BUFFER CLEARANCE	N/A	CWT. GUARD	N/A	COMPENSATION GUARD SWITCH	N/A	GOVERNOR CABLE TENSION	N/A
24 PIT DOOR LOCK	N/A	ADJ. SHAFT PROTECTION	N/A	HOISTWAY LIGHTING	G	CLEANLINESS	G
MACHINE ROOM							
25 MAIN SWITCH	G	VENTILATION	G	GOVERNOR	N/A	BRAKE SHOE PINS	N/A
26 MACHINE	G	MACHINE BEARNINGS	G	WORM & GEAR	N/A	THRUST	N/A
27 MOTOR BEARINGS	G	MOTOR COMMUTATOR BRUSHES	N/A	MOTOR WINDINGS	N/A	DRIVE SHEAVE GROOVES	N/A
28 M.G. SET BEARINGS	N/A	M.G. COMMUTATOR BRUSHES	N/A	M.G. SET WINDINGS	N/A	TRAVEL NUT.SLACK CABLE SWITCH	N/A
29 EXCITER BEARINGS	N/A	EXCITER COMMUTATOR, BRUSHES	N/A	EXCITER WINDINGS	N/A	ROTARY CONVERTER	N/A
30 CONTROLLER & PARTS	G	M.G. STARTER & PARTS	N/A	RELAY PANEL & PARTS	G	SELECTION PANEL & PARTS	G

CABLES	MATERIAL	NO.	SIZE	CONSTRUCTION	INST. DATE	REMARKS
31 HOIST	N/A			8x19	2003	
32 CAR/CWT.	N/A					
33 DRUM/CWT.	N/A					
34 GOVERNOR	N/A					
35 COMPENSATION	N/A					
36 SELECTOR	VANE					Solid State with door zone magnets on tape. (Good)
37 SAFETY TAIL ROPE	N/A					
38 TRAVELING CABLE (S)						

SAFETY (5 year & Annual Insp. Only) (A)	Cond.	(B)	Cond.	(C)	Cond.	(D)	Cond.
39 GOVERNOR TYPE	N/A	GOVERNOR PLATE TRIP SPEED (F.P.M.)	N/A	P.O.T. SWITCH SET (F.P.M.)	N/A	GOVERNOR SPEED	N/A
40 GOVERNOR JAW MATERIAL	N/A	GOVERNOR SEALED	N/A	SAFETY TYPE "B"	N/A	SAFETY PLATE SPEED	N/A
41 SAFETY SWITCH	N/A	JAW CLEARANCE (left/right in.)	N/A	TEST WITH (LB	N/A	TEST AT 125 %	N/A
42 RAIL MARK AVERAGE (IN)	N/A	CAR LEVEL PER FEET (in) LESS THAN ¼ INCH	N/A	SAFETY ROPE PULL OUT (LBS)	N/A	TURNS ON DRUM	N/A
43 SAFETY TAGGED	N/A	CAR BUFFER TYPE SPRING	G	COUNTERWEIGHT BUFFER TYPE SPRING	N/A	BUFFER PLATE LOAD	N/A
44 BUFFER PLATE SPEED (F.P.M.)		BUFFER RUN-IN TEST (F.P.M.)	N/A	90 SECOND BUFFER RETURN	N/A	BUFFER TAGGED	N/A
HYDRAULIC ANNUAL TESTS	Cond.		Cond.		Cond.		Cond.
45 TEST LOAD (LB)	-----	15 MIN. STATIC TEST-CREEP (in)	-----	RELIEF VALVE SET (LB) (695 psi)	G	RELIEF VALVE- TAGGED & SEALED (775 psi)	G
46 EMERGENCY TOP TERMINAL SPEED LIMITING DEVICE	-----	STATIC TEST PRESSURE (380 psi)	G	EMPTY CAR RUNNING UP PRESSURE TEST (410 psi)	G	CONTROL SWITCHES SEPARATE & INDEPENDENT	N/A
FIRE & EMERGENCY CONTROLS	Cond.		Cond.		Cond.		Cond.
47 MASTER SWITCH (floor)	R	ALTERNATE (floor) No test performed		ALL CARS RETURN NON-STOP TO SELECTED FLOOR	G	CARS PARKED – DOORS OPEN - LIGHTS ON	G
48 CAR EMERGENCY SWITCH	G	CAR RESPONSE CAR CALLS ONLY	G	CONSTANT PRESSURE DOOR OPENING	G	REOPENING DEVICES DEACTIVATED	G

49 AUTOMATIC DETECTION

RALE OF RISE [ ] FIXED TEMPERATURE [X] IONIZATION [ ] PHOTO CELL [ ] PASSENGER NOTIFICATION [X] INTERCOM [ ] SIGN [ ]

INSTRUCTIONS (all spaces must be filled in)
Refer – A17.1 Code – All terms, definitions, and questions.
Indicate in the condition (Cond.) columns one of the following:
"G" - New or in good serviceable condition.
"F" - Serviceable but worn or obsolete.
"R" - Recommend repair or replacement (Explain each item in brief with corrective action under RECOMMENDATIONS)
"N" - Items not applicable.

RECOMMENDATIONS
Submersible Pump unit Job no# 03-39080
Door Torque = 26 lb
Deficiencies: Screw missing in two door gibs at 3rd landing.
Fire Service jewel missing on main return landing fire service panel. ASME AS17.1 rule 2.27.3.1.6
Elevator floor was covered. Unable to check car flooring.
****** Test smoke detectors when convenient and observe elevator response. ********

ELEVATOR SERVICED BY Maryland Elevator Company	**TYPE OF SERVICE** Full Service Maintenance	
ELEVATOR INSPECTED BY VERNON J. IRVING QEI – 1571	**OFFICE** Admiral Elevator Company, Inc.	**PHONE NUMBER** (410) 732-1102
CONTACT Hernan Santos, or Jamshid Malakouti	**PHONE NUMBER** (703) 288-5060	

ELEVATOR INSPECTION REPORT

REGION	SEMI-ANNUAL		ANNUAL & NO-LOAD TESTS	X	FULL-LOAD TESTS ANNUAL & 5-YEAR			INSPECTION DATE
03								06/23/05
BUIDING	STREET ADDRESS				CITY		STATE and ZIP CODE	
Treasury Building	1500 Pennsylvania Avenue N.W.				Washington		DC 20220	

GENERAL

1 NUMBER OF UNITS IN BUILDING:	Passenger	X	Freight		Escalator		Dumbwaiter		Other	
10										

2 **THIS ELEVATOR:**				
Owner's Number **10**	Type (Pass., Frt., etc.) **Passenger**	Manufacturer **MCE**	Manufacturer Number	Capacity (lb) **3000**
3a Contract Speed **300 fpm**	b. Type of Machine (Geared, Traction, Drum, etc) **Geared Basement Traction**		c. No. Floors **6**	d. No. Openings **6**
4a Type of Control **SCR Type Black Box**	b. Type of Operation (C.S., P.B., Single Col. Sel) **AUTOMATIC PUSH BUTTON**		c. Roping **1:1**	d. Year Built **2004**

LANDINGS (A)	Cond.	(B)	Cond.	(C)	Cond.	(D)	Cond.
5 ENTRANCES	G	ACCESS CONTROL SWITCHES	N/A	HOISTWAY DOORS	G	EMERGENCY ACCESS KEYWAYS	G
6 THRESHOLD	G	HOISTWAY DOOR GUIDES	G	PARKING DEVICE	N/A	FRT.DOOR SAFETY ASTRAGALS	G
7 SUPERVISORY (Station) PANEL	N/A	PANEL-TELEPHONE OR INTERCOM	G	HALL POSITION INDICATOR	G	HALL LANTERNS & BUTTOMS	G
CAR *(Interior)*							
8 THRESHOLD	G	FLOOR COVERING	G	SAFETY WRENCH PLATE	G	CAR VENTILATION	G
9 WAINSCOT *(Interior Panels)*	G	BY-PASS BUTTOM	N/A	EMERGENCY EXIT (S) HINGED	G	EMERGENCY EXIT (S) CONTACTED	G
10 CAR DOOR (S) & GATE (S)	G	CAR DOOR GUIDES	G	SAFETY EDGE *(Car Gate/Door)*	N/A	DOOR DETECTOR *(Photo)*	G
11 CAR DOOR/GATE OPERATION	G	DOOR NUDGING	G	(FRT.) SEQUENCE OPERATION	G	SEQUENCE TIMING & ALARM	N/A
12 OPERATING PANEL (S)	G	ANNUNCIATOR	N/A	PANEL-TELEPHONE OR INTERCOM	G	PANEL H.ACCESS SWITCH	N/A
13 CAR POSITION INDICATOR	G	CAR LIGHTING	G	EMERGENCY LIGHT	G	CLEANLINESS	G
CAR *(Exterior)*							
14 CAR TOP OPERATOR	G	CAR TOP LIGHT & RECEPTACLE	G	CAR SHEAVE & GUARD	G	EMERGENCY LIGHT BATTERIES	G
15 ROPE HITCH	G	GOVERNOR RELEASE CARRIAGE	G	LEVELING DEVICES	G	TOP LIGHT SWITCHES	G
16 SELECTOR DRIVE	G	CAR & CWT O.H. CLEARANCE	G	O.H. DEFLECTION SHEAVES	G	SHEAVES GUARD & FAN	G
17 CAR GUIDES	G	CWT GUIDES	G	CWT SHEAVE	G	RAIL FASTENINGS	G
18 CAR DOOR/GATE OPERATION	G	DOOR CLUTCH *(vanes)*	G	CAR GATE/DOOR HANGERS	G	DOOR CONTACT	G
19 HOISTWAY DOOR OPERATOR CLOSE	G	H. DOOR LATCH ROLLERS	G	HOISTWAY DOOR HANGERS	G	INTERLOCKS	G
20 DUST COVERS & SHEAR PLATES	G	TOE GUARD APRON	G	CAR BOTTOM LIGHT	G	JUNCTION BOX & WIRING	G
21 PLATFORM SLING & SUPPORTS	G	CAR & CWT COMPRESSOR HITCH	G	CAR-BOTTOM CLEARANCE	G	CLEANLINESS	R
PIT							
22 EMERGENCY STOP SWITCH	G	PIT LADDER *(over 40')*	G	PIT LIGHT	G	BOTTOM LIMIT SWITCHES	G
23 CWT. TO BUFFER CLEARANCE	G	CWT. GUARD	G	COMPENSATION GUARD SWITCH	N/A	GOVERNOR CABLE TENSION	G
24 PIT DOOR LOCK	G	ADJ. SHAFT PROTECTION	G	HOISTWAY LIGHTING	G	CLEANLINESS	R
MACHINE ROOM							
25 MAIN SWITCH	G	VENTILATION	G	GOVERNOR	G	BRAKE SHOE PINS	G
26 MACHINE	G	MACHINE BEARNINGS	G	WORM & GEAR	G	THRUST	G
27 MOTOR BEARINGS	G	MOTOR COMMUTATOR BRUSHES	G	MOTOR WINDINGS	G	DRIVE SHEAVE GROOVES	G
28 M.G. SET BEARINGS	G	M.G. COMMUTATOR BRUSHES	G	M.G. SET WINDINGS	G	TRAVEL NUT.SLACK CABLE SWITCH	G
29 EXCITER BEARINGS	N/A	EXCITER COMMUTATOR, BRUSHES	N/A	EXCITER WINDINGS	N/A	ROTARY CONVERTER	N/A
30 CONTROLLER & PARTS	G	M.G. STARTER & PARTS	G	RELAY PANEL & PARTS	G	SELECTION PANEL & PARTS	G

CABLES	MATERIAL	NO.	SIZE	CONSTRUCTION	INST. DATE	REMARKS
31 HOIST	IRON	6	1/2	8x19 TS	2001	Good
32 CAR/CWT.						
33 DRUM/CWT.						
34 GOVERNOR	16 in	1	1/2	8x19 8/21 TS	2001	Good
35 COMPENSATION	N/A					
36 SELECTOR	VANE					
37 SAFETY TAIL ROPE						
38 TRAVELING CABLE (S)						

SAFETY (5 year & Annual Insp. Only) (A)	Cond.	(B)	Cond.	(C)	Cond.	(D)	Cond.
39 GOVERNOR TYPE 16 INCH HW TYPE	G	GOVERNOR PLATE TRIP SPEED (395fpm)	G	P.O.T. SWITCH SET (F.P.M.) (345 fpm)	G	GOVERNOR SPEED	G
40 GOVERNOR JAW MATERIAL	G	GOVERNOR SEALED	G	SAFETY TYPE "B"	G	SAFETY PLATE SPEED	G
41 SAFETY SWITCH	G	JAW CLEARANCE (left/right in.) LEFT ½ inch clearance	G	TEST WITH (LB)	N/A	TEST AT 125 %	N/A
42 RAIL MARK AVERAGE (IN)	N/A	CAR LEVEL PER FEET (in) LESS THAN ¼ INCH	G	SAFETY ROPE PULL OUT (LBS) 400 lb	N/A	TURNS ON DRUM	N/A
43 SAFETY TAGGED	G	CAR BUFFER TYPE OIL	G	COUNTERWEIGHT BUFFER TYPE OIL	G	BUFFER PLATE LOAD	G
44 BUFFER PLATE SPEED (F.P.M.)		BUFFER RUN-IN TEST (F.P.M.)	N/A	90 SECOND BUFFER RETURN	N/A	BUFFER TAGGED	G
HYDRAULIC ANNUAL TESTS	Cond.		Cond.		Cond.		Cond.
45 TEST LOAD (LB)	N/A	15 MIN. STATIC TEST-CREEP (in)	N/A	RELIEF VALVE SET (LB)	N/A	RELIEF VALVE- TAGGED & SEALED	N/A
46 EMERGENCY TOP TERMINAL SPEED LIMITING DEVICE	N/A	STATIC TEST PRESSURE	N/A	EMPTY CAR RUNNING UP PRESSURE TEST	N/A	CONTROL SWITCHES SEPARATE & INDEPENDENT	N/A
FIRE & EMERGENCY CONTROLS	Cond.		Cond.		Cond.		Cond.
47 MASTER SWITCH (floor)	R	ALTERNATE (floor) No test performed		ALL CARS RETURN NON-STOP TO SELECTED FLOOR	G	CARS PARKED – DOORS OPEN - LIGHTS ON	G
48 CAR EMERGENCY SWITCH	G	CAR RESPONSE CAR CALLS ONLY	G	CONSTANT PRESSURE DOOR OPENING	G	REOPENING DEVICES DEACTIVATED	G

49 AUTOMATIC DETECTION

INTERCOM ☐

RALE OF RISE ☐ FIXED TEMPERATURE ☒ IONIZATION ☐ PHOTO CELL ☐ PASSENGER NOTIFICATION ☒ SIGN ☐

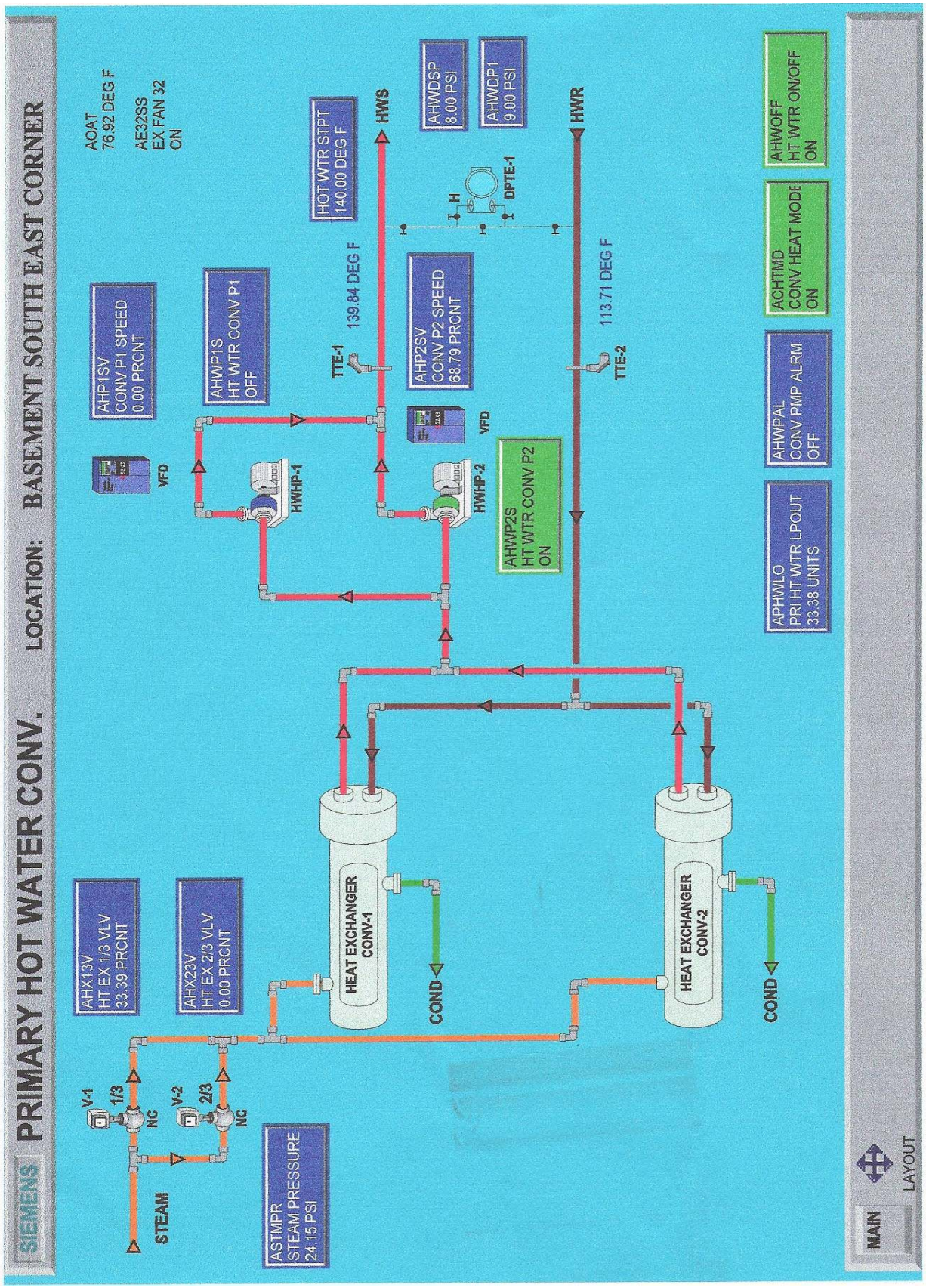
INSTRUCTIONS (all spaces must be filled in)
Refer – A17.1 Code – All terms, definitions, and questions.
Indicate in the condition (Cond.) columns one of the following:
"G" - New or in good serviceable condition.
"F" - Serviceable but worn or obsolete.
"R" - Recommend repair or replacement (Explain each item in brief with corrective action under RECOMMENDATIONS)
"N" - Items not applicable.

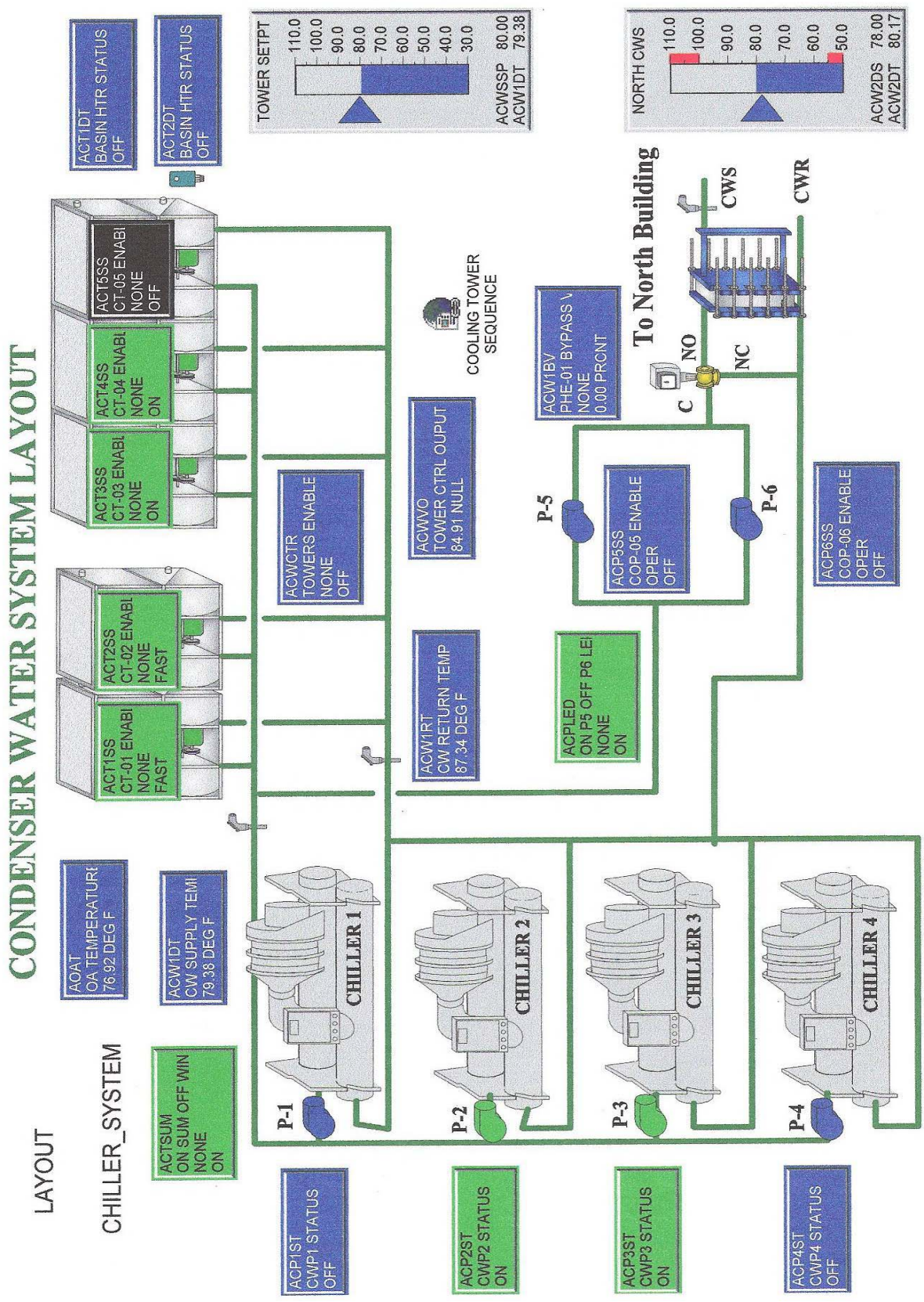
RECOMMENDATIONS
Door torque is 23 flb
Deficiencies: Pit stop switch is mounted on pit ladder. Relocate in accordance to the rule. ASME A17.1 rule 5.6.1.8(a) It should be mounted on the wall and not on a run of a ladder step.
Machine room is under renovation and is dirty.
Fire service jewel is missing on main return landing panel. ASME A17.1 rule 2.27.3.1.6
Install missing outlet cover on box located next to door in machine room.
****** Test smoke detectors when convenient and monitor response of elevators********
****** Test emergency power transfer operation on elevators **********

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CONTACT Hernan Santos or Jamshid Malakouti	**PHONE NUMBER** (703) 288-5060

Mechanical Schematic Diagrams

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SIEMENS
PRIMARY HOT WATER CONV.
LOCATION: BASEMENT SOUTH EAST CORNER
AOAT
76.92 DEG F
AE32SS
EX FAN 32
ON
AHP1SV
CONV P1 SPEED
0.00 PRCNT
VFD
AHWP1S
HT WTR CONV P1
OFF
HWHP-1
TTE-1
139.84 DEG F
HOT WTR STPT
140.00 DEG F
HWS
AHWDSP
8.00 PSI
AHWDP1
9.00 PSI
DPTE-1
HI
AHP2SV
CONV P2 SPEED
68.79 PRCNT
VFD
HWHP-2
AHWP2S
HT WTR CONV P2
ON
HWR
113.71 DEG F
TTE-2
AHWOFF
HT WTR ON/OFF
ON
ACHTMD
CONV HEAT MODE
ON
AHWPAL
CONV PMP ALRM
OFF
APHWLO
PRI HT WTR LPOUT
33.38 UNITS
AHX13V
HT EX 1/3 VLV
33.39 PRCNT
AHX23V
HT EX 2/3 VLV
0.00 PRCNT
HEAT EXCHANGER
CONV-1
COND
HEAT EXCHANGER
CONV-2
COND
V-1
1/3
NC
V-2
2/3
NC
STEAM
ASTMPR
STEAM PRESSURE
24.15 PSI
MAIN
LAYOUT


CONDENSER WATER SYSTEM LAYOUT
LAYOUT
CHILLER_SYSTEM
ACT1DT BASIN HTR STATUS OFF
ACT2DT BASIN HTR STATUS OFF
TOWER SETPT
110.0
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
ACWSSP 80.00
ACW1DT 79.38
NORTH CWS
110.0
100.0
90.0
80.0
70.0
60.0
50.0
ACW2DS 78.00
ACW2DT 80.17
ACT5SS CT-05 ENABL NONE OFF
ACT4SS CT-04 ENABL NONE ON
ACT3SS CT-03 ENABL NONE ON
ACT2SS CT-02 ENABL NONE FAST
ACT1SS CT-01 ENABL NONE FAST
COOLING TOWER SEQUENCE
ACWCTR TOWERS ENABLE NONE OFF
ACWVO TOWER CTRL OUPUT 84.91 NULL
ACW1BV PHE-01 BYPASS V NONE 0.00 PRCNT
To North Building
C
NO
NC
CWS
CWR
P-5
P-6
ACP5SS COP-05 ENABLE OPER OFF
ACP6SS COP-06 ENABLE OPER OFF
ACW1RT CW RETURN TEMP 87.34 DEG F
ACPLED ON P5 OFF P6 LEI NONE ON
AOAT OA TEMPERATURE 76.92 DEG F
ACW1DT CW SUPPLY TEMI 79.38 DEG F
ACTSUM ON SUM OFF WIN NONE ON
CHILLER 1
CHILLER 2
CHILLER 3
CHILLER 4
P-1
P-2
P-3
P-4
ACP1ST CWP1 STATUS OFF
ACP2ST CWP2 STATUS ON
ACP3ST CWP3 STATUS ON
ACP4ST CWP4 STATUS OFF

SECTION III

Office of Management
Matrix of Findings, Corrective Actions, and Target Dates

Rec. Index	Area of Review	Finding/Recommendations	Code/ Standard Reference	Background	Corrective Action/Explanation	Deficient	Compliant	Recom-medations	HPA	Mainten-ance Work	Planned Phase IV TBARR	Additional TBARR Action	No Action Required	Concur with CMDR	Target Completion Date
Category: Accessibility						7	0	5	2	3	0	2	0		
a	Offices Door thresholds	Many doors contained a metal threshold exceeding 1/2" maximum allowed - *No corrective action recommended*		This condition does exist in the Main Treasury Treasury Building (MTB).	This condition is a result of the modernization of the office spaces. Modifications to overcome this short coming would significantly alter the appearance of the building. Care will taken during occupancy planning to ensure that this characteristic does not impede the intended occupant's.	1			1					Y	N/A
a	Offices Door clearances	The recess on corridor doors does not conform to 2'-0 minimum maneuvering clearances on the pull side of the doors - *No corrective action recommended*	ADAAG 4.13.6	This condition does exist in a small percentage of the doors in the Main Treasury Building (MTB).	This is an inherent condition of the buildings' original design. Modifications to overcome this short coming would significantly alter the appearance of the building. Care will be taken during occupancy planning to ensure that this characteristic does not impede the intended occupant's.	1			1					Y	N/A
b	Drinking Fountains	Fountain configuration creates a protruding object hazard on floors one-four. *Recommendation: Add extension to bottom of water fountain to bring within 27 inches of the floor*	ADAAG 4.1.1	This condition does exist in the MTB.	A cane strike (extension) will be added to the bottom of the fountain to satisfy the floor clearance for objects protruding into the corridor.	1		1				1		Y	Oct-05
c	Signage Offices Suites	Lettering size, the lack of raised letters & lack of Braille are not in conformance. *Recommendation: Install appropriate room signage*	ADAAG 4.30	This condition does exist in the MTB. Signage for the MTB was not in the original scope of the TBARR project	DO is currently reviewing options for a complete signage plan to be implemented following completion of Phase IV construction.	1		1		1				Y	Jul-06
d	Signage Toilet Rooms	Lack of raised letters, lack of Braille, placement and font are not in conformance. *Recommendation: Install appropriate room signage.*	ADAAG 4.30	This condition does exist in the MTB. Signage for the MTB was not in the original scope of the TBARR project	DO is currently reviewing options for a complete signage plan to be implemented following completion of Phase IV construction.	1		1		1				Y	Jul-06
e	Ramps Handrails	Ramp does not have handrails on any side wall surface as required. *Recommendation: Install handrails*	ADAAG 4.85	This condition exists in MTB in (1) location.	Handrails will be installed	1		1				1		Y	Aug-05
e	Ramps Lock box	Box on the north wall mounted at wrong height, creates a protruding object hazard. *Recommendation: Add extension to bottom of key box to bring within 27 inch of floor or relocate.*	ADAAG 4.4	This condition exists in MTB in (1) location.	Lock box will be relocated or adjusted to satisfy height restrictions for objects protruding into the corridor	1		1		1				Y	Oct-05

Rec. Index	Area of Review	Finding/Recommendations	Code/ Standard Reference	Background	Corrective Action/Explanation	Deficient	Compliant	Recom-medations	HPA	Mainten-ance Work	Planned Phase IV TBARR	Additional TBARR Action	No Action Required	Concur with CMDR	Target Completion Date
Category: Life Safety															
	Means of Egress					11	3	7	5	5	1	0	3		
a	Corridors & Horizontal Exits	The area of refuge encompassing the east wing and central corridor does not have its own exit. *Recommendation: Modify designation of areas of refuge.*	BOCA 1019.4		The intended life safety approach divided the building into two, not three horizontal fire refuge zones. Zone 1 of the Mills' Wings (east and center corridors and zone 2 of the Non-Mills' wings (north, south and west corridors). Each zone is served by one dedicated new egress stair as well as three horizontal exits. We concur with CMDR assessment regarding not using the third area of refuge as a horizontal exit.		1	1					1	Y	N/A
b	Corridors & Horizontal Exits 1st floor risers	Handrails jog around pilasters and are not continuous an uninterrupted. *No corrective action recommended.*	BOCA 1022.2	This condition does not exist	Handrails installed are continuous and uninterrupted		1						1	N	N/A
c	Exit Stairs	Doors propped open at the level of exit discharge in Stair #2. *Recommendation: Install magnetic hold open devices into fire alarm systems. Educate occupants to hazards created by propping doors open*		This condition does exist in the MTB.	Magnetic hold open devices will be installed and tied into the fire alarm system. Occupants will be educated to hazards presented by this practice. This area of concern and has been forwarded to the appropriate operations/service providers for correction.	1		1		1				Y	Aug-05
d	Exit Stairs	Stair #2 storage of furniture and equipment. *Recommendation: Remove furniture and equipment*		This condition does exist in the MTB.	This area of concern and has been forwarded to the appropriate operations/service providers for correction.	1		1		1				Y	Aug-05
e	Monumental Stairs Handrails and treads	Handrails are not mounted at proper height on the inside curve of the stair. *No corrective action recommended.*	BOCA 1017.7	This condition does exist in the MTB.	This is an inherent condition of the buildings' original design. Modifications to overcome this short coming would significantly alter the appearance of the building.	1			1					Y	N/A
f	Risers in Stair B and C on 1st floor	Several risers (steps) show wear and create an uneven surface. *Recommendation: Install signage to alert occupants*	BOCA 1014.6.2	This condition does exist in the MTB.	Signage will be posted to advise occupants of worn tread.	1		1		1				Y	Aug-05
g	Risers in Stair B 4th floor landing	Riser (steps) show wear and create an uneven surface. *No corrective action recommended.*	BOCA 1014.6.2	This condition does exist in the MTB.	This is an inherent condition of the buildings' original design. Modifications to overcome this short coming would significantly alter the appearance of the building.	1			1					Y	N/A
h	Monumental Stairs Fire Doors	Fire doors propped open, compromising fire and smoke ratings. *Recommendation: Install magnetic hold open devices to ensure release during fire alarm.*		This condition does exist in the MTB.	This is an inherent condition of the buildings' original design. Modifications to overcome this short coming would significantly alter the appearance of the building.	1		1		1				Y	Aug-05
i	Cash Room Door Hardware & Width	Doors do not have exit, panic or accessibility hardware. Individual door width too narrow. *Recommendation: Doors should remain open while room is in use*	BOCA 108.1	This condition does exist in the MTB.	This is an inherent condition of the buildings' original design. Modifications to overcome this short coming would significantly alter the appearance of the building. These doors do not lock. Event staff will be advised that when feasible doors should be left open.	1		1	1					Y	N/A
i	Cash Room Remote Exits/Occupancy	Exits are not remotely located. No maximum occupancy sign observed. *No corrective action recommended.*	BOCA 1017.2	This condition does exist in the MTB.	This is an inherent condition of the buildings' original design. Modifications to overcome this short coming would significantly alter the appearance of the building. The existing conditions provide for exit from the Cash Room through another space. Appropriate signage will be added to indicate exit path. Maximum occupancy signage is provided.	1			1					N	N/A
i	Cash Room Balcony Railing	Guard rails on balcony do not meet minimum requirement of 42 inches. *No corrective action recommended*	BOCA 1021.2	This condition does exist in the MTB.	This is an inherent condition of the buildings' original design. Modifications to overcome this short coming would significantly alter the appearance of the building. This space is restricted access.	1			1					Y	N/A

Rec. Index	Area of Review	Finding/Recommendations	Code/ Standard Reference	Background	Corrective Action/Explanation	Deficient	Compliant	Recom-medations	HPA	Mainten-ance Work	Planned Phase IV TBARR	Additional TBARR Action	No Action Required	Concur with CMDR	Target Completion Date
Fire Ratings															
a	Fireproofing material	Steel beam in electric vault is partially missing fireproofing material. *Recommendation: Provide replacement fireproofing*		This condition does exist in the MTB.	Fireproofing will be replaced	1		1			1			Y	Aug-05
Floor Surfaces															
a	Floor Surfaces	Floor finish has irregularities greater than 1/2 inch in rise and depression. *Recommendation: Apply leveling compound or grind stone to a smooth finish when vinyl tile is replaced in the future.*		This condition does exist in the MTB.	This is an inherent condition of the buildings' original design. Grinding the stone significantly alter the stone, causing irreversible damage. A leveling compound will be reviewed for use with stone and as appropriate be applied when tile is replaced in the future.	1				1				Y	N/A
Access Door															
a	Access Door	Secondary pair of metal doors to steam room has insufficient head room for use by building occupants. *No corrective action recommended.*		This condition does exist in the MTB.	Doors are considered as equipment access doors. A additional pair of 84 inch high doors exists from an adjacent corridor.		1						1	Y	N/A
Category: Structural															
Exterior						2	3	5	0	2	1	0	2		
a	Exterior	Appearance of deterioration on exterior. *Recommendation: Conduct a detailed survey to identify areas for repair or restoration*			Survey completed prior to beginning of project. DO will review opportunities for a additional surveys as funding is available.		1	1		1				Y	Funding Dependent
Interior															
a	BOCA Code -VS-IBC	Conflicting codes. *Recommendation: Confirm BOCA was appropriate code at time of renovation*			ICC codes were adopted by the District of Columbia in January 2004.		1	1					1	Y	N/A
b	Galvanic Corrosion	No spacer between aluminum and steal framing. Recommend: Confirm project documents require separation.		This condition does exist in the MTB.	The project documents do require separation of dissimilar metals. Detail 05/A5.95 specifically indicates "bituminous coating to separate dissimilar metals" to be provided between the aluminum and the steel.	1		1					1	Y	Complete
c	Executive Order 12941	Lack of seismic survey. *Recommendation: Confirm survey has been or is planned.*			This was not a requirement of the current scope of work. A follow up with agencies responsible for surveys will be completed.	1		1		1				Y	Funding Dependent
d	New Stair & Elevator	A small portion of the beam appears unsupported. *Recommendation: Provide additional support to beam.*		Intermediate condition	This is an open construction area. Deficiency will be remedied upon completion of work in this area.		1	1			1			Y	Mar-06
Category: Environmental															
						0	2	2	0	1	1	0	0		
	Asbestos Containing Material (ACM)	***Program area was found compliant-Conduct third party inspection at completion of project***			The DO Environmental Safety and Health Office currently monitors in door air quality, independent of the TBARR program and will conduct third part inspection at completion.		1	1		1				Y	Jul-06
	Lead-Based Paint (LBP)	Appearance of lead based paint. *Recommendation: Confirm presence of lead-based paint and abatement appropriately*		This condition does exist in the MTB.	Per the original scope, all existing paint is assumed to be lead-based. Abatement procedures will remain in place through completion of project.		1	1			1			Y	Mar-06

Rec. Index	Area of Review	Finding/Recommendations	Code/ Standard Reference	Background	Corrective Action/Explanation	Deficient	Compliant	Recom-medations	HPA	Mainten-ance Work	Planned Phase IV TBARR	Additional TBARR Action	No Action Required	Concur with CMDR	Target Completion Date
Category: Vertical Conveyance															
	Elevators	***Program area was found compliant. Maintenance items identified for correction:***				6	3	9	0	6	3	0	0		
Elevator #6		Emergency power transfer. *Recommendation: Test emergency power transfer operation*			Per the original testing criteria this test will be completed when all the elevators are complete and the emergency power control system overlay is connected to all elevators		1	1			1			Y	Mar-06
Elevator #7		Missing screw at door gib at 2nd landing. *Recommendation: Installation of screw*		This condition does exist in the MTB.	This area of concern and has been forwarded to the appropriate operations/service providers for correction.	1		1		1				Y	Aug-05
Elevator #8		Missing screw at door gib at 3rd landing. *Recommendation: Installation of screw*		This condition does exist in the MTB.	This area of concern and has been forwarded to the appropriate operations/service providers for correction.	1		1		1				Y	Aug-05
2		Car flooring inspection incomplete *Recommendation: Inspection upon completion*			Inspection to be completed when protection is removed.	N/A		N/A						Y	Mar-06
Elevator #10		Pit stop switch is mounted on ladder *Recommendation: Relocate switch*		This condition does exist in the MTB.	Switch will be relocated	1		1		1				Y	Aug-05
2		Outlet cover missing on box in machine room. *Recommendation: Install outlet cover.*		This condition does exist in the MTB.	Outlet cover will be installed	1		1		1				Y	Aug-05
3		Emergency power transfer. *Recommendation: Test emergency power transfer operation*			Per the original testing criteria this test will be completed when all the elevators are complete and the emergency power control system overlay is connected to all elevators		1	1			1			Y	Mar-06
General Elevators		Smoke detectors: *Recommendation: Test smoke detectors and observe elevator response*			Per the original testing criteria this test will be completed when all the elevators are complete and the emergency power control system overlay is connected to all elevators		1	1			1			Y	Mar-06
2		Lack of fire service jewels. *Recommendation: Install fire service jewels on main return landing - all elevators*			Fire services jewels were not required at the time of construction. Jewels will be installed.	1		1		1				Y	Aug-05
3		Elevator pits are dirty. *Recommendation: Clean elevator pits*			Elevator pits will be cleaned	1		1		1				Y	Mar-06

Rec. Index	Area of Review	Finding/Recommendations	Code/ Standard Reference	Background	Corrective Action/Explanation	Deficient	Compliant	Recom-medations	HPA	Mainten-ance Work	Planned Phase IV TBARR	Additional TBARR Action	No Action Required	Concur with CMDR	Target Completion Date
Category: Mechanical & Plumbing															
Mechanical		*Program area was found compliant. Items identified that may impact operating efficiency:*				3	8	11	0	5	5	0	1		
a	Pumps	Mixture of variable speed and constant speed pumps. *Recommendation: Install all variable speed pumps*			DO will review opportunities to replace with variable speed as funding are made available.		1	1		1				Y	Funding Dependent
b	Safety Valve	Three inch safety valve on low pressure steam reducing station introduces additional heat into the chiller room. *Recommendation: Relocate relief valve.*		Intermediate condition	Relief valve installed by GSA to service White House. Relocation of safety valve is an option action item for GSA. DO will follow up with GSA to ensure completion/correction.		1	1		1				Y	Sep-05
c	Economizer	No economizer loop on the condensate water loop at the cooling towers. *Recommendation: Install economizer.*		Intermediate condition	Economizer planned for installation at the completion of Phase IV		1	1			1			Y	Mar-06
d	Ventilation	Lack of ventilation and exhaust air system at the high pressure steam reducing station in the southeast wing. *Recommendation: Addition of ventilation system.*		Intermediate condition	The steam room has an exhaust system. However the make-up air system is not yet complete. As a result the exhausts are pulling in outside air.		1	1			1			Y	Mar-06
e	Ventilation	Lack of ventilation and exhaust air system capacity in the basement to reduce humidity. *Recommendation: Increase ventilation air and exhaust capacity in basement.*		Intermediate condition	Exhaust system will be operational when make up air system is completed. Humidity level are expected to decrease when exhaust system in operational.		1	1			1			Y	Mar-06
f	Operating Hours	Operating hours of buildings mechanical system are too long. *Recommendation: Modify hours for 6:00a.m. to 6:00 p.m.*			Hours recommended are not the same as the occupant schedule. This area of concern has been forwarded to the appropriate operations/service providers for consideration.		1	1		1				N	N/A
g	Air Handlers	Air handling systems could be more efficient. *Recommendation: Modify system to avoid reheating air to 70 F.*			Concur with CMDR that this could remedy the situation. However, the solution is cost prohibitive. The condition is a result of incomplete building. Humidity levels expected within range once building is closed and systems are working together, as designed.		1	1			1			N	Mar-06
h	Traps	Condensate trap for re-heat coil creates a double trap for re-heat coil. *Recommendation: Eliminate double trap.*		This condition does exist in the MTB.	Improper installation forward to contractor for correction	1		1			1			Y	Aug-05
i	Ventilation	Lack of ventilation in storage closets 5011,& 5015 .*Recommendation: Addition of exhaust air system in these areas* .		Intermediate condition	Closets are in use temporarily. Upon completion of phase IV these will be not be used for storage of janitorial equipment.	1		1		1				Y	Jul-06
j	Ventilation	Lack of ventilation in storage closet 5059. *Recommendation: Addition of exhaust air system in these areas* .		Intermediate condition	Closets are in use temporarily. Upon completion of phase IV these will be not be used for storage of janitorial equipment.	1		1		1				Y	Jul-06
Plumbing															
a	Hose Bibs	Restrooms do not have hose bibs for janitorial staff. *Recommendation: Install hose bibs.*		This condition does exist in the MTB.	Janitor's closest have been provided on each floor for use by the janitorial staff. The restrooms are not intended to aid the janitorial staff.		1	1					1	N	N/A

Rec. Index	Area of Review	Finding/Recommendations	Code/ Standard Reference	Background	Corrective Action/Explanation	Deficient	Compliant	Recom-medations	HPA	Mainten-ance Work	Planned Phase IV TBARR	Additional TBARR Action	No Action Required	Concur with CMDR	Target Completion Date
Category: Fire Protection															
						1	1	2	0	1	0	0	1		
a	Stairwell Smoke	Stairwells over 75 feet require smoke evacuation. *Recommendation: Stairwells need to be pressurized*	IBC 2000 Section 1005.3.2.5	Cross Reference to BOCA 1996 Section 1015 Smoke proof Enclosures	MTB was renovated using the BOCA 1996 guidelines. Section 1015.2 requires a smoke proof enclosure when serving occupants of a floor level located more that 75 feet above the exit discharge. While the overall elevation of the MTB is in excess of 78 feet the floor level on the fifth floor is not.		1	1					1	N	N/A
b	Fire Pump Room	Clutter in basement fire pump room. *Recommend: Removal of items from pump room.*			This area of concern and has been forwarded to the appropriate operations/service providers for correction.	1		1		1				Y	Aug-05
Category: Electrical															
		Program area was found compliant. Items identified that may impact operating efficiency:				3	11	14	0	4	8	0	2		
a	Exit Signs	Placement of chain hung exit signs. *Recommendation: Relocate exits signs to areas near emergency light fixtures.*		This condition does exist in the MTB.	The exit signs have been positioned to avoid damage to decorative ceiling cornices. Exit signs are located near emergency fixtures.		1	1					1	N	N/A
b	Curbs	Curb required around bus duct riser. *Recommendation: Install curb as indicated on drawing E-01 note 5*		This condition does not exist in the MTB.	Curbs have been installed. Visual inspection may have been hindered by the raised floor and fire proofing.		1	1					1	N	N/A
c	Circuit Information	Lack of circuit information on floor outlets. *Recommendation: Provide circuit information*		This condition does exist in the MTB.	Condition identified in spaces renovated by government personnel after spaces tested and accepted. This area of concern and has been forwarded to the appropriate operations/service providers for correction.	1		1		1				Y	Sep-05
d	Fire Stopping	Lack of fire stopping at electric closet NE-1. *Recommendation: Provide fire stopping*		Intermediate condition	installation of fireproofing on punch list	1		1			1			Y	Aug-05
e	Temp Cable	MC cable installed should be EMT. *Recommendation: Install MC cables to replace EMT.*		This condition does exist in the MTB.	Condition identified in spaces renovated by government personnel after spaces tested and accepted. This area of concern and has been forwarded to the appropriate operations/service providers for correction.	1		1		1				Y	Sep-05
f	Temp Cable	Temporary SWBD cable. *Recommendation: Install conduit to replace cables.*		Intermediate condition	Area under construction and temporary for purposes of construction		1	1			1			Y	Apr-06
g	Switchboard	Temporary plywood on back of switch board in South switch gear. *Recommendation: Remove plywood*		Intermediate condition	Area under construction and temporary for purposes of construction		1	1			1			Y	Apr-06
h	Cable	Various cables in basement hanging too low. *Recommendation: Raise or remove cables.*		Intermediate condition	Area under construction and temporary for purposes of construction		1	1			1			Y	Apr-06
i	Wire Trough Cover	Lack of cover on wire trough at MP2 and PP-B2. *Recommendation: Install cover.*		This condition does exist in the MTB.	Contractor directed to re-install covers		1	1			1			Y	Apr-06
j	Spray Shield	Lack of spray shields over electrical equipment and bus ducts in electric vaults. *Recommendation: Install spray shields.*		This condition does exist in the MTB.	Current configuration is NEC compliant. TBARR agrees that the shield will provided added protection and will consider for new budget year.		1	1		1				Y	Funding Dependent
k	Bus Duct	Bus duct in basement near elevator #2 too low. *Recommendation: Raise bus duct.*		This condition does exist in the MTB.	TBARR had previously identified this to responsible contractor. The bus duct has been raised.		1	1			1			Y	Completed
l	Water on Floor	Condensation of water on floor in vault B-302 under battery rack. *No corrective action recommended.*		This condition does exist in the MTB.	Vault B-302 does not have battery racks and findings noted could not be located in Vault B-302. However, a water leak in the North Vault B-94 is currently on the Department's list of unfunded requirements.		1	1			1			Y	Funding Dependent
m	Air Handlers	Air handling unit blocking exit from vault B-302. *Recommendation: Relocate air handling unit.*	NEC-110-26 c	Intermediate condition	Construction work is incomplete in this area. A means of egress will be cut thru the west wall of the space to provide a 2nd unobstructed means of egress as required.		1	1			1			Y	Apr-06
	Insulation Mats	Lack of insulation mats covering 15KV equipment. *Recommendation: Provide insulation mats.*	NEC-110-27	This condition does exist in the MTB.	Current configuration is NEC compliant. TBARR agrees that the shield will provided added protection and will consider for new budget year.		1	1		1				Y	Funding Dependent

Rec. Index	Area of Review	Finding/Recommendations	Code/ Standard Reference	Background	Corrective Action/Explanation	Deficient	Compliant	Recom-medations	HPA	Mainten-ance Work	Planned Phase IV TBARR	Additional TBARR Action	No Action Required	Concur with CMDR	Target Completion Date
Category: Fire Alarm															
						1	2	3	0	0	1	1	1		
a	Voice Announcement	Lack of voice evacuation system. *Recommendation: Provide voice evacuation capability.*			Fire alarm system has recorded voice broadcast capabilities. The broadcast feature will not be activated until Phase IV is completed.		1	1			1			N	Apr-06
b	Smoke Control	Lack of smoke control in new stairwells. *Recommendation: Install smoke control system in new stairwells.*			MTB was renovated use the BOCA 1996 guidelines. Section 1015.2 requires a smoke proof enclosure when serving occupants of a floor level located more than 75 feet above the exit discharge. While the overall elevation of the MTB is in excess of 78 feet the floor level on the fifth floor does not exceed the 75 foot limitation.		1	1					1	N	none
c	Smoke Hatch	Lack of smoke hatch on roof at existing ornamental stairs. *Recommendation: Install smoke hatch*			This was not in the original scope of work. Modern Code ICC 2000, may permit a less intrusive solution. The ICC 2000 will be reviewed and appropriate modifications made.	1		1				1		Y	Apr-06
Category: Telecommunications															
		Program area was found compliant.													
Category: Security															
		Program area was found compliant.													
					Subtotals	34	33	58	7	27	20	3	10		

As shown in the Matrix, management did not concur with 10 of CDMR's recommendations. Following is a summary of management's reasons for the non-concurrence and our assessment:

- Life Safety, Recommendation b (Page 2) CMDR observed that the handrails at the first floor corridor stairs are not continuous (see picture A03 of condition in Section II, page 48), and recommended that the handrails be reconstructed as continuous along the furthest projection of each structural pilaster, and then return to the corridor wall at the top and bottom of the stair runs. Management disagreed that this condition was a deficiency. Because of the potential hazard to handicapped individuals, we believe management should implement CMDR's recommendation.

- Cash Room, Recommendation i (Page 2) CMDR reported that the 3 doors for the Cash Room were not remotely located from each and opened into the room (i.e., the doors would not swing in the direction of travel from the Cash Room in case of an evacuation). Management responded that this is an inherent condition of the building's original design and that other exits from the Cash Room exist. However, management stated that appropriate signage will be added to indicate the exit path from the Cash Room. We believe this action will address the deficiency.

- Mechanical, Recommendation f (Page 5) CMDR recommended shutting down the outside air supply units in the building between 6 PM and 6 AM, which would result in significant energy savings, prolonged life expectancy of the equipment, and less frequent maintenance. Management responded that the proposed shutdown period was not the same as the building occupants' schedules. However, management has forwarded this area of concern to the appropriate operations/service providers for consideration. We believe this action addresses the intent of the recommendation.

- Mechanical, Recommendation g (Page 5) CMDR recommended dedicating a high efficiency chiller to serve the outside air handling units, which would remove most of the moisture from

the air, eliminating a need to heat the outside air supply to 70 degrees. Management considered this recommendation to be cost prohibited and unnecessary once the building is closed and systems are working together, as designed. Management should ensure this is the case once the renovation work is completed.

- Plumbing, Recommendation a (Page 5) CMDR recommended installing hose bibs in all restrooms to facilitate cleaning in these areas. Management commented that janitors' closets have been provided on each floor and that the restrooms are not intended to aid the janitorial staff. We accept management's response that no action is necessary on this recommendation.

- Fire Protection, Recommendation a (Page 6) and Fire Alarm, Recommendation b (Page 7) CMDR recommended in its report that emergency exit stairwells Nos. 1 and 2 on the 5th floor be pressurized in accordance with code requirements since the Main Treasury building was over 75 feet in height. Management responded that while the overall elevation of the building is in excess of 78 feet, the floor level on the 5th floor is not. We confirmed with CMDR that management's interpretation of the code was correct. Accordingly, we agree with management that no action is required on these recommendations.

- Electrical, Recommendation a (Page 6) CMDR recommended relocating chain hung, self-illuminated exit signs to areas near emergency light fixtures to comply with the construction documents. Management responded that exit signs have been positioned to avoid damage to decorative ceiling cornices. Exit signs are located near emergency fixtures. We accept management's response that no further action is required for this recommendation.

- Electrical, Recommendation b (Page 6) CMDR recommended installing a 3" curb as indicated in Electrical Drawing E-01, note 5, to prevent any flood water from entering the bus duct riser penetration. Management responded that the curbs had been installed, commenting that the visual inspection by CMDR may have been hindered by the raised floor and fireproofing.

CMDR confirmed to us that its visual inspection was not impaired and the 3" curb was not installed in the electrical area as stated in its report. Accordingly, we believe that this recommendation is still valid.

- Fire Alarm, Recommendation a (Page 7) CMDR recommended adding a fire alarm voice evacuation system (fire alarm system speakers). Management stated that the fire alarm had recorded voice broadcast capabilities and the broadcast feature would be activated once Phase 4 is completed. If that is the case, it is unclear why Treasury is waiting until Phase 4 is completed to activate this safety feature. We believe management should consider activating the feature sooner.