**INDIVIDUAL PROPERTY/DISTRICT**
**MARYLAND HISTORICAL TRUST**
**INTERNAL NR-ELIGIBILITY REVIEW FORM**

Property/District Name: Fort Detrick, Frederick County Survey Number: F:3-161

Project: ICRMP (Final) Agency: Army

Site visit by MHT Staff: ___ no _X_ yes Name Anne E. Bruder Date 10/13/1999

Eligibility recommended _X_ Eligibility **not** recommended ____

Criteria: _X_A ___B _X_C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G
___None

Justification for decision: (Use continuation sheet if necessary and attach map)

Fort Detrick, Frederick County, Maryland was established in 1943 as a biological warfare research and development installation during World War II. It is a 1200 acre facility located northwest of Frederick. There are two campuses, Area "A" is the main base, and Area "B,' is west of the main grounds (see map). The research and development mission changed in 1969 following the outlawing of research on offensive biological weapons. The present ICRMP study examines all buildings constructed between 1946 and 1959 to determine if they have significance under Criterion A (events) for their association with the Cold War as architectural examples. The Army and the Trust agreed about the eligibility determinations for these resources, and attached is a list of all buildings included in the survey which show individual status. Building descriptions are contained in the ICRMP beginning at page 20.

Based on the information provided, it does not appear that there is an intact historic district on the base. The buildings which are eligible include the Boiler Plant, Steam Sterilization Plant, Medical Research Lab, R&D Greenhouse, Green House, Laboratory, Incinerator, and Administration Building. These buildings are spread across Area 'A' and there is modern infill around the buildings which prevents them from being considered together. Therefore, the historic property is more appropriately considered under the NR's Multiple Property Submission format.
Documentation on the property/district is presented in: Review & Compliance Files and Integrated Cultural Resources Management Plan (2 vols.)

Prepared by: Mark Baker, U.S. Army Corps of Engineers

Anne Bruder — 21 March 2000
Reviewer, Office of Preservation Services — Date

NR program concurrence: X yes ___ no ___ not applicable

R Kurtz — 4/27/00
Reviewer, NR program — Date

gmf

Survey No. F-3-161

**MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT**

**I. Geographic Region:**

| | |
|---|---|
| ____ Eastern Shore | (all Eastern Shore counties, and Cecil) |
| ____ Western Shore | (Anne Arundel, Calvert, Charles, Prince George's and St. Mary's) |
| _X_ Piedmont | (Baltimore City, Baltimore, Carroll, Frederick, Harford, Howard, Montgomery) |
| ____ Western Maryland | (Allegany, Garrett and Washington) |

**II. Chronological/Developmental Periods:**

| | |
|---|---|
| ____ Paleo-Indian | 10000-7500 B.C. |
| ____ Early Archaic | 7500-6000 B.C. |
| ____ Middle Archaic | 6000-4000 B.C. |
| ____ Late Archaic | 4000-2000 B.C. |
| ____ Early Woodland | 2000-500 B.C. |
| ____ Middle Woodland | 500 B.C. - A.D. 900 |
| ____ Late Woodland/Archaic | A.D. 900-1600 |
| ____ Contact and Settlement | A.D. 1570-1750 |
| ____ Rural Agrarian Intensification | A.D. 1680-1815 |
| ____ Agricultural-Industrial Transition | A.D. 1815-1870 |
| ____ Industrial/Urban Dominance | A.D. 1870-1930 |
| _X_ Modern Period | A.D. 1930-Present |
| ____ Unknown Period ( ___ prehistoric ___ historic) | |

**III. Prehistoric Period Themes:**

____ Subsistence
____ Settlement
____ Political
____ Demographic
____ Religion
____ Technology
____ Environmental Adaptation

**IV. Historic Period Themes:**

____ Agriculture
_X_ Architecture, Landscape Architecture, and Community Planning
____ Economic (Commercial and Industrial)
____ Government/Law
_X_ Military
____ Religion
____ Social/Educational/Cultural
____ Transportation

**V. Resource Type:**

Category: Military base
Historic Environment: Rural
Historic Function(s) and Use(s): Research & development of hazardous materials.
Known Design Source: U.S. Army

**Table 4**
Buildings Evaluated - Constructed from 1946-1960

| Photo? | Bldg No. | Date | Original Use | Current Use | Plan/Type | NR Elig? |
|---|---|---|---|---|---|---|
| X | 190 | 1952 | Oil Heat Plant | Boiler Plant | 27-06-10 | Yes |
| | 192 | 1954 | Power sub-station | Power sub-station | | No |
| X | T-242 | 1952 | Storage Shed | Storage Shed | | No |
| X | 281 | 1946 | Power sub-station | Power sub-station | | No |
| X | 298 | 1946 | Flag Pole | Flag Pole | | No |
| X | 326 | 1953 | Storage Shed | Storage Shed | | No |
| X | 374 | 1952 | Laboratory | Lab/Green House | | No |
| X | 375 | 1953 | Steam Sterilization Plant | Steam Sterilization Plant | F 93-1-2500 | Yes |
| X | 384 | 1976 | Tank Farm* | Tank Farm | | No |
| X | 385 | 1957 | Transformer Bank | Transformer Bank | | No |
| X | 386 | 1989 | Sentry Station* | Sentry Station | | No |
| X | 543 | 1959 | Power sub-station | Power Sub-station | | No |
| X | 568 | 1952 | Munitions Test Building | Administrative | 37-06-03 | No |
| X | 730 | 1957 | Power sub-station | Power sub-station | | No |
| | 731 | 1988 | Sentry Station* | Sentry Station | | No |
| X | S-800 | 1951 | General Storage | Transient Housing | Temporary | No |
| X | S-801 | 1951 | General Storage | Transient Housing | Temporary | No |
| X | S-802 | 1951 | General Storage | Administrative/Housing | Temporary | No |
| | S-818 | 1951 | General Storage | Administrative | Temporary | No |
| X | 905 | 1949 | Transit Shed | General Purpose Storage | | No |
| X | 937 | 1949 | Outdoor Storage | Outdoor Storage | PE 107-5-49 | No |
| X | 938 | 1950 | GP Storage | Magazine | | No |
| X | 939 | 1950 | GP Storage | Magazine | | No |
| X | 941 | 1950 | GP Storage | GP Storage | PE 35-5-52 | No |
| X | T-942 | 1951 | GP Storage | GP Storage | | No |
| | 944 | 1954 | Power sub-station | Power sub-station | | No |



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**Table 4**
Buildings Evaluated - Constructed from 1946-1960

| Photo? | Bldg No. | Date | Original Use | Current Use | Plan/Type | NR Elig? |
|---|---|---|---|---|---|---|
| | 1012 | 1950 | Family Housing | Family Housing | 21-01-70 | No |
| X | 1013 | 1950 | Family Housing | Family Housing | 21-01-70 | No |
| X | 1014 | 1950 | Family Housing | Family Housing | 21-01-70 | No |
| X | 1015 | 1950 | Family Housing | Family Housing | 21-01-70 | No |
| X | 1016 | 1951 | Family Housing | Family Housing | 25-01-105 | No |
| | 1017 | 1951 | Family Housing | Family Housing | 25-01-105 | No |
| X | 1054 | 1954 | PE Maintenance Shop | Administrative | | No |
| X | 1056 | 1958 | Storage Shed | Laboratory | | No |
| X | 1057 | 1959 | Water Tower | Water Tower | | No |
| X | 1129 | 1954 | Water Holding Tank | Water Holding Tank | | No |
| X | 1215 | 1951 | Small Arms Magazine | Small Arms Magazine | SK-367 | No |
| X | 1221 | 1952 | Munitions Loading Building | Storage Building | 3706-01 | No |
| X | 1225 | 1953 | Well Pump Station | Well Pump Station | | No |
| X | 1235 | 1957 | Unknown* | Sporting Club | | No |
| X | 1240-43 | 1958 | USAR Center | USAR Center | | No |
| X | 1301 | 1956 | Medical Research Lab | Research Lab | 35-06-46 | Yes |
| X | 1302 | 1956 | R & D Greenhouse | Research | 35-06-47 | Yes |
| X | 1303-06 | 1956 | Green House | Green House | 36-39-05 | Yes |
| | T-1312 | 1957 | Equipment Housing* | Equipment Housing | | No |
| X | 1316 | 1957 | GP Storage | GP Storage | | No |
| X | 1400 | 1953 | Residence | Residence | PE 65-12-32 | No |
| X | 1404 | 1957 | Garage | Garage | | No |
| X | 1409 | 1955 | Water Tower | Water Tower | | No |
| X | 1412 | 1958 | Laboratory | Laboratory | | Yes |
| X | 1414 | 1958 | Incinerator | Storage | | Yes |
| X | 1415 | 1959 | Administration | Administration | | Yes |
| X | 1674 | 1959 | Barracks | Barracks | 21-01-69 | No |



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**Table 4**
Buildings Evaluated - Constructed from 1946-1960

| Photo? | Bldg No. | Date | Original Use | Current Use | Plan/Type | NR Elig? |
|---|---|---|---|---|---|---|
| X | 1675 | 1958 | Gen. Purpose Storage | Gen. Purpose Storage | | No |
| | 1736 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1737 | | Storage | Storage | 25-02-26 | No |
| | 1738 | | Storage | Storage | 25-02-26 | No |
| | 1739 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1740 | | Storage | Storage | 25-02-26 | No |
| | 1741 | | Storage | Storage | 25-02-26 | No |
| | 1742 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1743 | | Storage | Storage | 25-02-26 | No |
| | 1744 | | Storage | Storage | 25-02-26 | No |
| | 1745 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1746 | | Storage | Storage | 25-02-26 | No |
| | 1747 | | Storage | Storage | 25-02-26 | No |
| | 1748 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1749 | | Storage | Storage | 25-06-26 | No |
| | 1750 | | Storage | Storage | 25-02-26 | No |
| | 1751 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1752 | | Storage | Storage | 25-02-26 | No |
| | 1753 | | Storage | Storage | 25-02-26 | No |
| | 1754 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1755 | | Storage | Storage | 25-02-26 | No |
| | 1756 | | Storage | Storage | 25-02-26 | No |
| | 1757 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1758 | | Storage | Storage | 25-02-26 | No |
| | 1759 | | Storage | Storage | 25-02-26 | No |
| | 1760 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1761 | | Storage | Storage | 25-02-26 | No |



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**Table 4**
Buildings Evaluated - Constructed from 1946-1960

| Photo? | Bldg No. | Date | Original Use | Current Use | Plan/Type | NR Elig? |
|---|---|---|---|---|---|---|
| | 1762 | | Storage | Storage | 25-02-26 | No |
| | 1763 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1764 | | Storage | Storage | 25-02-26 | No |
| | 1765 | | Storage | Storage | 25-02-26 | No |
| | 1766 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1767 | | Storage | Storage | 25-02-26 | No |
| | 1768 | | Storage | Storage | 25-02-26 | No |
| | 1769 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| X | S-1801 | 1958 | Bus Shelter | Bus Shelter | D-93-1-5830 | No |
| X | 1803 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1804 | | Storage | Storage | 25-02-26 | No |
| | 1805 | | Storage | Storage | 25-02-26 | No |
| | 1806 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1807 | | Storage | Storage | 25-02-26 | No |
| | 1808 | | Storage | Storage | 25-02-26 | No |
| | 1809 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1810 | | Storage | Storage | 25-02-26 | No |
| | 1811 | | Storage | Storage | 25-02-26 | No |
| | 1812 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1813 | | Storage | Storage | 25-02-26 | No |
| | 1814 | | Storage | Storage | 25-02-26 | No |
| | 1815 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1816 | | Storage | Storage | 25-02-26 | No |
| | 1817 | | Storage | Storage | 25-02-26 | No |
| | 1818 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1819 | | Storage | Storage | 25-02-26 | No |
| | 1820 | | Storage | Storage | 25-02-26 | No |



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**Table 4**
Buildings Evaluated - Constructed from 1946-1960

| Photo? | Bldg No. | Date | Original Use | Current Use | Plan/Type | NR Elig? |
|---|---|---|---|---|---|---|
| | 1821 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1822 | | Storage | Storage | 25-02-26 | No |
| | 1823 | | Storage | Storage | 25-02-26 | No |
| X | 1824 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1825 | | Storage | Storage | 25-02-26 | No |
| X | 1826 | | Storage | Storage | 25-02-26 | No |
| | 1830 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1831 | | Storage | Storage | 25-02-26 | No |
| | 1832 | | Storage | Storage | 25-02-26 | No |
| | 1833 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1834 | | Storage | Storage | 25-02-26 | No |
| | 1835 | | Storage | Storage | 25-02-26 | No |
| | 1836 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1837 | | Storage | Storage | 25-02-26 | No |
| | 1838 | | Storage | Storage | 25-02-26 | No |
| | 1839 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1840 | | Storage | Storage | 25-02-26 | No |
| | 1841 | | Storage | Storage | 25-02-26 | No |
| | 1842 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1843 | | Storage | Storage | 25-02-26 | No |
| | 1844 | | Storage | Storage | 25-02-26 | No |
| | 1845 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1846 | | Storage | Storage | 25-02-26 | No |
| | 1847 | | Storage | Storage | 25-02-26 | No |
| | 1848 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1849 | | Storage | Storage | 25-02-26 | No |
| | 1850 | | Storage | Storage | 25-02-26 | No |



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**Table 4**
Buildings Evaluated - Constructed from 1946-1960

| Photo? | Bldg No. | Date | Original Use | Current Use | Plan/Type | NR Elig? |
|---|---|---|---|---|---|---|
| | 1851 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1852 | | Storage | Storage | 25-02-26 | No |
| | 1853 | | Storage | Storage | 25-02-26 | No |
| | 1854 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1855 | | Storage | Storage | 25-02-26 | No |
| | 1856 | | Storage | Storage | 25-02-26 | No |
| | 1857 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1858 | | Storage | Storage | 25-02-26 | No |
| | 1859 | | Storage | Storage | 25-02-26 | No |
| | 1860 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1861 | | Storage | Storage | 25-02-26 | No |
| | 1862 | | Storage | Storage | 25-02-26 | No |
| | 1863 | 1958 | Family Housing | Family Housing | Capehart Housing | No |
| | 1864 | | Storage | Storage | 25-02-26 | No |

* Denotes Buildings that are more modern than indicated on the Real Property Inventory database.



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**FIGURE 1: SITE LOCATION, FORT DETRICK, MARYLAND**

USGS 7.5 Minute Quad Sheet
Frederick, Maryland
1980

F-3-161

DANGER
HIGH VOLTAGE

1. F-3-161
2. BUILDING 190, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER, 1998
6. USACE, BALTIMORE DISTRICT
7. NORTHWEST AND SOUTHWEST ELEVATIONS
8. 1 OF 60

1. F-3-161
2. BUILDING T-242, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
8. 2 OF 70 7. FRONT ELEVATION

281
CHEVROLET
CHEVROLET

1. F-3-161

2. # 281, FORT DETRICK, TRANSFORMER BANK

3. FREDERICK COUNTY, MARYLAND

4. U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT

5. OCTOBER 1998

6. USACE, BALTIMORE DISTRICT

7. VIEW SOUTHEAST, POWER SUBSTATION BEHIND BUILDING 201

8. 3 OF 60

1. F-3-161
2. #298, FORT DETRICK - FLAG POLE
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO SOUTHWEST IN FRONT OF BUILDING 243
8. 4 OF 60

1. F-3-161
2. BUILDING 326, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. SOUTH AND EAST ELEVATIONS
8. 5 OF 60

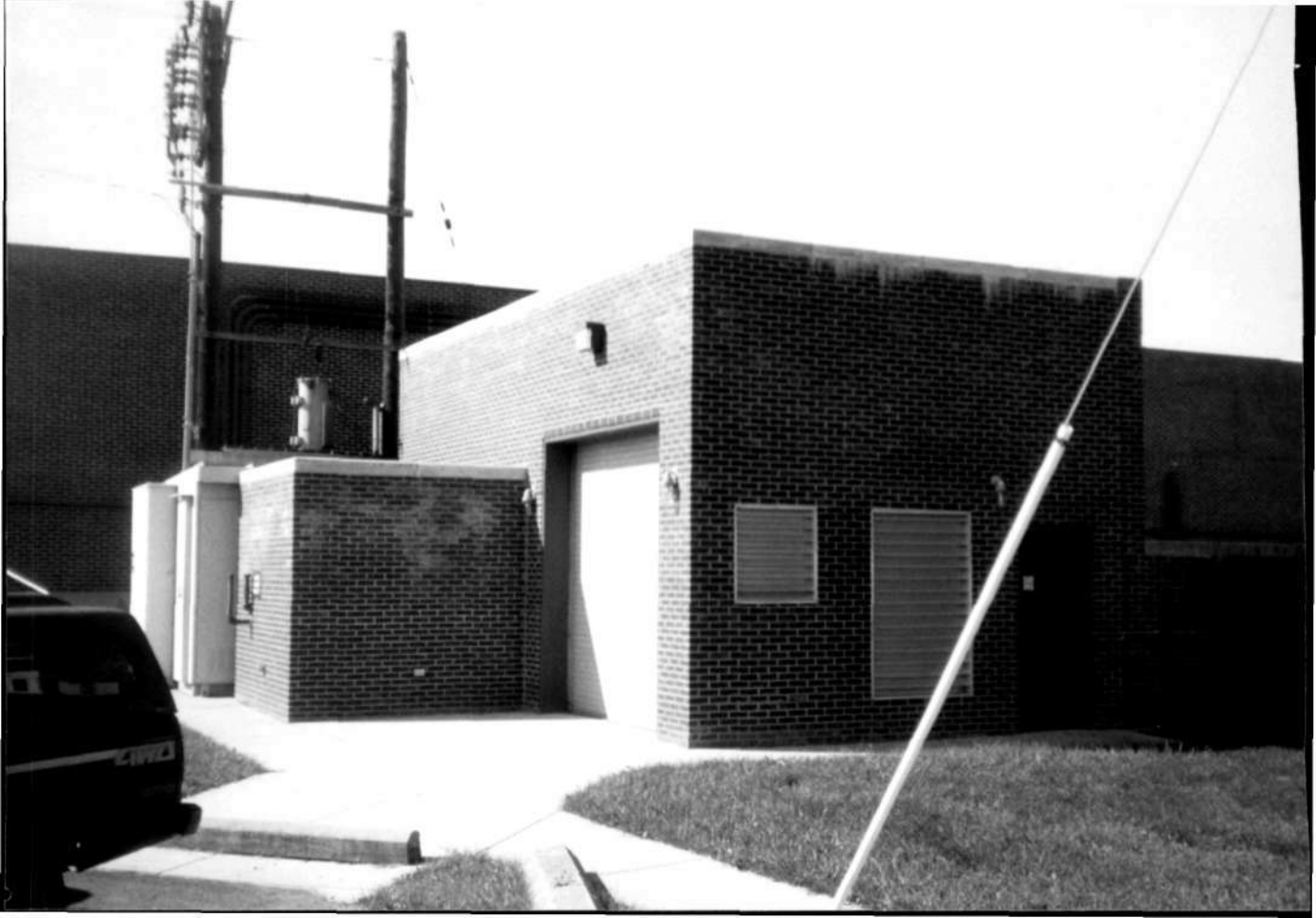
90

1. F-3-161
2. BUILDING 374, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO EAST ALONG NORTH ELEVATION
8. 6 OF 60

1. F-3-161
2. BUILDING 374, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO EAST ALONG SOUTH ELEVATION
8. 7 OF 60

1. F-3-161
2. BUILDING 375, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO EAST ALONG SOUTH ELEVATION
8. 8 OF 60

1. F-3-161
2. BUILDING 37, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO SOUTHEAST
8. 9 OF 60


4WD

1. F-3-161
2. STRUCTURE 385/BUILDING 375, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO NORTHWEST, REAR ELEVATION
8. 10 OF 60

CLOSED

1. F-3-161
2. STRUCTURE 384, TANK FARM, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO EAST
8. 11 OF 60

1. F-3-161
2. BUILDING 386, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO WEST
8. 12 OF 60

1. F-3-161
2. STRUCTURE 543, TRANSFORMER BANK, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO EAST
8. 13 OF 60

1. F-3-161
2. BUILDING 568, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. USARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW NORTH, SOUTH AND EAST ELEVATIONS
8. 14 OF 60

1. F-3-161
2. BUILDING 568, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. NORTH ELEVATION
8. 15 OF 60

1. F-3-161
2. STRUCTURE 730 TRANSFORMER, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW NORTH
8. 16 OF 60

GUEST HOUSE
BUILDINGS 800,
801 & 802

1. F-3-161
2. BUILDING 800, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW WEST
8. 17 OF 60

SPEED
LIMIT
15

1. F-3-161
2. BUILDINGS 800, 801, 802, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO NORTH
8. 18 OF 60

1. F-3-161
2. BUILDING 905, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. SOUTH AND EAST ELEVATIONS
8. 19 OF 60

1. F-3-161
2. BUILDING T-942, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1997
6. USACE, BALTIMORE DISTRICT
7. VIEW TO WEST
8. 30 OF 60

1. F-3-161
2. BUILDING 938, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5 OCTOBER 1995
6. USACE, BALTIMORE DISTRICT
7. VIEW TO NORTH
8. 21 OF 60

1. F-3-161
2. BUILDING 934, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW WEST
8. 22 OF 60

1. F-3-161
2. BUILDING 941, FORT DETRICK (ALSO BUILDINGS 937/938)
3. FREDERICK COUNTY, MARYLAND
4. U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1994
6. USACE, BALTIMORE DISTRICT
7. VIEW NORTH
8. 23 OF 60

1. F-3-161
2. BUILDING 1015, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW NORTH ALONG FRONT ELEVATION
8. 24 OF 60

1. F-3-161
2. BUILDING 1013, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. REAR ELEVATION
8. 35 OF 60

1. F-3-161
2. BUILDINGS 1013, 1014, 1015, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO WEST ALONG REAR ELEVATIONS
8. 16 OF 60

1. F-3-161
2. BUILDING 1016, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. USARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO WEST ALONG FRONT ELEVATION
8. 17 OF 60

1. F-3-161
2. BUILDING 1016, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. USARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW NORTH, REAR ELEVATION
8. 38 OF 60

1. F-3-161
2. BUILDING 1054, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO NORTHWEST
8. 29 OF 60

1. F-3-161
2. BUILDING 1054, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. EAST ELEVATION, WINDOW DETAIL
8. 30 OF 60

1. F-3-161
2. BUILDING 1056, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. USARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO NORTHWEST
8. 31 OF 60

1. F-3-161
2. STRUCTURE 1054, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW NORTH
8. 32 OF 60

1. F-3-161
2. STRUCTURE 1129, FORT DETRICK, CLEAR WELL WATER TREATMENT PLANT
3. FREDERICK COUNTY, MARYLAND
4. U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO NORTHWEST
8. 33 OF 60

1. F-3-161
2. BUILDING 1215, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO SOUTHWEST
8. 34 OF 60

CHEVROLET

1. F-3-161
2. BUILDING 1221, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW FACING SOUTHEAST
8. 35 OF 60

1. F-3-161
2. BUILDING 1225, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW FACING NORTH
8. 36 OF 60

1235

1. F-3-161
2. BUILDING 1235, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. FRONT & ELEVATION
8. 37 OF 60

1. F-3-161
2. BUILDING 1240, US ARMY RESERVE CENTER,
FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW NORTH ALONG FRONT ELEVATION
8. 38 OF 60

Marines

1. F-3-161
2. BUILDINGS 1240 & 1241, US ARMY RESERVE CENTER, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. FRONT ELEVATION, VIEW TO SOUTHWEST
8. 39 OF 60

1. F-3-161
2. BUILDING 1261, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW LOOKING WEST ALONG FRONT ELEVATION
8. 40 OF 60

1. F-3-161
2. BUILDINGS 1301 + 1302, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW LOOKING WEST ALONG REAR ELEVATION OF 1301, 1302 IS WING THAT EXTENDS FROM REAR OF 1301
8. 41 OF 60

1. F-3-161
2. BUILDINGS 1303-06, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. USARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO NORTHWEST
8. 42 OF 60

1. F-3-161
2. BUILDING 1316, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO SOUTH
8. 43 OF 60

1. F-3-161
2. STRUCTURE 1409, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO NORTH
8. 44 OF 60

1. F-3-161
2. BUILDING 1400, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO NORTHEAST
8. 45 OF 60

1. F-3-161
2. BUILDING 1464, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO NORTHWEST
8. 46 OF 60

1. F-3-161
2. BUILDING 1412, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO NORTHWEST, FRONT ELEVATION
8. 47 OF 60

1. F-3-161
2. BUILDING 1412, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO SOUTHEAST, REAR ELEVATION
8. 48 OF 60

1. F-3-161
2. STRUCTURE 1413, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE MARYLAND
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO SOUTHEAST
8. 19 OF 60

1. F-3-161
2. BUILDING 1414, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. USARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO NORTHWEST
8. 50 OF 60

1. F-3-161
2. BUILDING 1415, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW SOUTH
8. 51 OF 60

1. F-3-161
2. BUILDING 1674, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. EAST ELEVATION
8. 52 OF 60

1. F-3-161
2. BUILDING 1674, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. WEST ELEVATION
8. 53 OF 60

1. F-3-161
2. BUILDING 1675, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. EAST + SOUTH ELEVATIONS
8. 54 OF 60

1. F-3-161
2. STRUCTURE 3-1861, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. VIEW TO NORTH, SCHOOL BUS SHELTER
8. 55 OF 60

1. F-3-161
2. BUILDING 1824, FORT DETRICK, FAMILY HOUSING AREA
3. FREDERICK COUNTY, MARYLAND
4. U S ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. FRONT ELEVATION
8. 56 OF 60

1. F-3-161
2. BUILDING 1803, FORT DETRICK, FAMILY HOUSING AREA
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5 OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. REAR ELEVATION
8. 57 OF 60

1. F-3-161
2. BUILDING 1836, FORT DETRICK, FAMILY HOUSING AREA
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. EXTERNAL STORAGE UNIT
8. 58 OF 60

1. F-3-161
2. 1800 AREA, FAMILY HOUSING AREA, FORT DETRICK
3. FREDERICK COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE BALTIMORE DISTRICT
7. VIEW LOOKING EAST FROM KING AVENUE
8. 59 OF 60

1. F-3-161
2. KING AVENUE, FAMILY HOUSING AREA, FORT DETRICK
3. FREDERICK, COUNTY, MARYLAND
4. US ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5. OCTOBER 1998
6. USACE, BALTIMORE DISTRICT
7. STREETSCAPE [illegible]
8. [illegible]

# MARYLAND HISTORICAL TRUST
# DETERMINATION OF ELIGIBILITY FORM

**NR Eligible: yes ___**
**no ___**

Property Name: Buildings 1412, 1414, & 1415 Inventory Number: F-3-161

Address: Fort Detrick City: Frederick Zip Code: 21702

County: Frederick USGS Topographic Map: Frederick

Owner: U.S. Army Is the property being evaluated a district? ____yes

Tax Parcel Number: NA Tax Map Number: NA Tax Account ID Number: NA

Project: Fort Detrick ICRMP Agency: U.S. Army

Site visit by MHT Staff: XX no ___yes Name: _____ Date: _____

Is the property located within a historic district? ____yes XX no

*If the property is within a district* District Inventory Number: _____

NR-listed district ____yes Eligible district ____yes District Name: _____

Preparer's Recommendation: Contributing resource ___yes ___no Non-contributing but eligible in another context ____

*If the property is not within a district (or the property is a district)*

Preparer's Recommendation: Eligible ____yes XX no

Criteria: ___A ___B ___C ___D Considerations: ____A ___B ___C ___D ___E ___F ___G ___None

Documentation on the property/district is presented in:

Description of Property and Eligibility Determination: *(Use continuation sheet if necessary and attach map and photo)*

**Description Summary**

Buildings 1412, 1414, and 1415 comprise a laboratory complex constructed ca. 1958, and located in the northeastern portion of Area "A" at Fort Detrick, Frederick County, Maryland. The location of the complex originally was dictated by prevailing winds and the necessity for a site "down-wind" from the housing and support buildings of Fort Detrick. The buildings in the laboratory complex are functional in materials, massing, and proportion with little ornamentation. Buildings 1412 and 1414 are constructed with poured concrete posts, pre-cast bond beams, and concrete-masonry-unit infill. Windows of these two buildings are multi-light, metal-sash with awning sections. Wire-glass, half-light metal doors predominate in all three buildings. Building 1412 is sited adjacent to a brick chimney approximately 120 feet in height. Building 1415 is running-bond brick veneer over concrete block. All three buildings terminate in concrete-panel, flat roofs with built-up bituminous coverings.

**MARYLAND HISTORICAL TRUST REVIEW**

**Eligibility recommended** X **Eligibility not recommended** _____

**Criteria:** X **A** ___**B** ___**C** ___**D** **Considerations:** ___**A** ___**B** ___**C** ___**D** ___**E** ___**F** ___**G** ___**None**

**Comments:** Despite removal of functional equipment, buildings contribute to larger complex, reflecting association with Cold War era bioweapons development.

Andrew Lewis 3/13/08

**Reviewer, Office of Preservation Services** **Date**

Beth Cole 2/21/06

**Reviewer, NR Program** **Date**

200600497

**General Description**

Building 1412 is a laboratory structure constructed with a concrete structural system and concrete masonry units. Orientation of the building is to the southeast. The core of the structure is three stories in height and measures approximately 103 by 158 feet with a 54 by 59 foot extension on the southeast and a 21 by 23 foot offset on the southwest wall. The principal mass of the building is windowless with structural concrete pillars providing the only interruption to the masonry unit walls. Fenestration is limited to the two-story wing that extends from the southeast elevation. The principal entrance is located in the southeast elevation of the wing. The southeast wing contains, multi-pane windows with metal frames and sash on the first floor of the southeast wall, and the upper floor of the southwest and northeast elevations. A double-leaf, full-light metal door is near the center of the southeast elevation. The entrance is approached by a flight of concrete steps and sheltered by a shed-roofed awning supported by concrete-masonry-unit wig walls. A penthouse rises above the flat roof of the two-story section at the southwest corner. The location corresponds with an interior stairway, which terminates with a door opening onto the roof.

The three story section of the laboratory building is windowless. Primary access to the building is through the two-story wing of the southeast elevation, but additional pedestrian access is provided by doors in the southeast and northeast elevations. The upper floor of all four elevations of the laboratory contains louvered ventilators. The first floor of the southwest elevation is pierced by three ventilators at grade. The vents are contained within concrete-block projections creating shafts for intake air to the basement level. A concrete-block elevator tower was added to this elevation in the 1980s, blocking a fourth at-grade ventilator. The first floor of the elevator tower has a loading dock and freight entrance. A metal fire escape with landings and doors on each level is attached to the northeast wall.

The flat roof of the structure is penetrated by numerous ventilation and exhaust stacks. Ongoing renovations have modified the ventilation and air handling systems of the building with exterior ductwork. The ducting interconnects the laboratory spaces with the air handling and filtering systems located on the roof and to the rear of the building.

The interior of the building contains numerous laboratories, offices, and support areas. Mechanical equipment in the lowest level supplies heated and chilled water to the ventilation system, collects effluent from laboratories, sterilizes waste water, and distributes compressed gasses to the laboratories. The upper two levels of the building contain the laboratories and offices. The plan of the building is not regular with single-loaded, double-loaded, intersecting, and dead-end corridors. Laboratories and offices open irregularly off the corridors. Many lab areas are secure with double airlocks and ultraviolet sterilization systems. The building contains two, interior passenger elevators, and a freight elevator contained in an exterior tower located on the southwest elevation. The elevator tower provides access to

animal rooms on the first and second levels. The third story contains mechanical equipment related to the heating and ventilation systems. Due to the nature of the research conducted in Building 1412, many areas are restricted.

Associated with the laboratory are two ancillary buildings. The first, Building 1414, is a 25-foot by 46-foot building constructed originally as a support structure to an exhaust air incinerator. The one story, concrete masonry unit building is accented by a brick stack approximately 120 feet in height. Three, double-leaf metal doors provide access to the building on the northeast elevation, which is also pierced by three windows having multiple lights and metal frames and sash. The building currently houses emergency generators and the associated switch gear.

The second support structure for Building 1412 is a square, one story brick building originally used as a sentry station (Building 1415). Topped by a slightly-pitched, shed roof, the building is pierced by a replacement, metal-framed window and door on the northeast elevation. The northwest elevation originally held the openings to the building evidenced by considerable brick infill. Building 1415 does not appear on the original site plan for the laboratory complex and was constructed a year after Buildings 1412 and 1414.

**Integrity of Historic Resources**

The laboratory complex does not retain integrity of design, association, feeling, materials, or workmanship. Building 1412 originally was constructed to house two, two-story tall cloud chambers. Cloud chambers serve many purposes in modern scientific research including atmospheric investigations and the study of crop diseases (Defence Research and Development 2005). The cloud chambers at Fort Detrick were used to test the effectiveness of biological agents through aerosol dispersion. Testing undertaken in Building 1412 sought to determine the optimum aerosol concentration of particular agents for effectiveness offensively and to develop defensive measures. The cloud chambers were independent "rooms" within the shell of Building 1412. Construction included a structural steel frame lined with welded, stainless-steel sheathing. The two cloud chambers were vertically and horizontally divided with baffle plates that evenly controlled the dispersion of the aerosol throughout the rooms. A perimeter space surrounded each cloud chamber provided access to the testing room, observation areas, and glove panels. A monorail surrounded each chamber at the top of the second level perimeter space. A scaffold was suspended from the monorail so that all exterior surfaces of the cloud chamber were easily accessible. Access to the chambers was through multiple airlocks. The remaining spaces of the three-story portion of the building contained animal holding and evaluation labs; bacteriology, mycology, virology, and toxicology labs; physics labs; and rooms referenced only as "Special Projects" laboratories. The two-story section of the building contained offices and conference rooms. Only the office space was considered "clean" while the balance of the building was contaminated.

The end of biological weapons testing at Fort Detrick in 1969 prompted significant changes to Building 1412. The cloud chambers were removed and the southwestern portion of the building converted into additional animal rooms during the early 1980s. An exterior tower was appended to the southwest wall, and a loading dock and elevator added to move animals between the levels of the building. First floor biology labs were also removed and the space converted to cage washing and storage areas.

Changes also took place to Building 1414 with the elimination of biological weapons testing in Building 1412. Building 1414 originally housed the mechanical equipment for the exhaust air system of the laboratory. All air from contaminated areas was conveyed to Building 1414 through 24-inch ductwork. The exhaust air was then passed through 18-inch pipe to the exhaust air incinerator. The incinerator stood on an outdoor pad with only the burner portion of the device projecting into the west wall of Building 1414. The oil-fired burners of the incinerator produced temperatures of about 3,000 degrees Fahrenheit in the refractory lined mixing chamber. Exhaust gases then passed through a checker tower where conditions were closely monitored. The checker tower contained numerous thermocouples and test connections where temperature and emissions quality were recorded. A blower on the top of the checker tower moved the sterilized exhaust to the brick chimney. Modifications to the building include the enclosure of the incinerator, the removal of all ductwork connecting Buildings 1412 and 1414, the removal of air-handling machinery, and the removal of the burner system.

**Historic Context**

The Cold War era (1946-1989) generally is defined as the period between 1946, when the Soviet Union (U.S.S.R) moved to retain territory it had liberated from Nazi Germany during World War II, and 1989, when the Berlin Wall fell. In Europe, the period was marked by a tense, hostile standoff between the Warsaw Pact countries, led by the USSR, and the North Atlantic Treaty Organization (NATO) allies led by the U.S. In Asia, the confrontational attitude erupted into "hot" wars, at times waged through surrogates, chief of which were the Korean and Vietnam conflicts. The principal role of the U.S. Army during this time was to support U.S. policies of peace through strength by maintaining ground force readiness as an alternative to strategic nuclear weapons for deterring Communist expansion (U.S. Army Environmental Center (USAEC) 1997).

The demands of the Cold War era prompted major organizational changes in the armed forces of the United States and were accompanied by competition for limited military appropriations among the services. The era also was marked by significant changes in U.S. Army operations. Instead of relying on a small standing army and mobilizing troops as needed, Army personnel were now ready to enter combat on short notice. This meant that a large, trained

standing army was maintained in constant readiness. Troops were stationed for the first time in friendly foreign nations under an allied command structure. Within the U.S., the Army maintained an active force that was prepared to deploy quickly into combat zones (USAEC 1997).

The newly defined requirements of the Cold War ushered in a new era in Frederick County after World War II. The expansion of Fort Detrick's physical plant and its mission provided new jobs, and many persons involved with the facility remained in Frederick, thereby stimulating the county's economy (Whitmore and Cannon 1981:101). During the Cold War, Fort Detrick became a permanent installation involved in peacetime biological research and development, the installation was active in the areas of basic research, material development and testing, education, and medical activities.

Chemical and Bioweapon Development 1946-1968.

As Cold War hostilities intensified, interest in the development of chemical and biological agents increased and research areas at Fort Detrick expanded. In 1946, the Army bought additional property west of Rosemont Avenue and increased the size of Area 'A' enabling expansion of biological laboratory research and development facilities (Fort Detrick Archival Collection (FDAC) Detrick Plat 1951; FDAC *Fort Detrick Paper Files on the Cold War* 1950). During this time, the military installation focused on developing biological weapons. To support the increased research effort, additional safety protocols were in place by 1946 (FDAC *Fort Detrick Paper Files on the Cold War*; U.S. Department of Defense (DoD) 1977a:1-4).

Beginning in 1949, a series of vulnerability trials designed to understand the effect of biological warfare attacks on the military were conducted at the biological and chemical laboratories at Fort Detrick (DoD Exhibit D, Charles Phillips Affidavit 12/17/1979). With the beginning of the Korean War in June of 1950, the intelligence community increasingly became concerned with the defense of coastal population centers against biological warfare; increased emphasis was placed on field testing biological agents (DoD 1977d). Simulants such as *Bacillius globigii* and *Serratia marcescens* (SM), considered relatively harmless to humans at the time, were tested at Fort Detrick and later used by the Naval Biological Laboratories in San Francisco to study the dispersion of airborne pathogens around coastal population centers (DoD 1979). Later review of the SM data revealed that this substance attacked the respiratory and urinary tracts in humans (Yu 1979:887-888).

Fort Detrick continued to expand as a result of the heightened threat of biological warfare. In 1951, the installation annexed two additional parcels northeast and west of the main campus totaling 698 acres (398 acres in Area 'A' and 300 acres in Area 'B') (FDAC *Fort Detrick Paper Files on the Cold War* 1951). The increase in installation

size was accompanied by a building boom; between 1946 and 1960, 148 new structures, ranging from biological laboratories to residential and support buildings, were constructed at the installation.

On February 1, 1952 Fort Detrick was declared a permanent Army installation. Although its primary mission continued to concentrate on research and development of biological warfare agents, the installation also conducted research into weapons and defense measures to counter biological warfare attacks (Baker 2000:12). According to the Department of the Army (DoA), research into the production of bioweapons doubled in 1952 (DoD 1977a). In 1953 Fort Detrick spent $10 million dollars on expanding its biological laboratories and pilot plant facilities (DoD 1977a).

During the early 1950s, researchers at Fort Detrick developed and tested biologically lethal agents, such as Tularemia and Anthrax. At that time, small quantities of the latter agent were considered safe and testing continued over an 18-month period (FDAC *Fort Detrick Paper Files on the Cold War* 1974: K-4-1). Successful experimentation with such biological agents helped to establish Fort Detrick's reputation as a scientific laboratory. On September 7, 1954, the Office of the Director of Experimental Medicine (ODEM) was established at Camp Detrick to advise the Department of Defense on projects concerning biological weapons (FDAC *Fort Detrick Paper Files on the Cold War* 1990). Fort Detrick subsequently was reclassified as a Class III installation in 1955, and by the following year, was upgraded to a Class II installation. In 1956, the installation's permanent status was recognized when the name was changed to Fort Detrick.

The Biological Laboratory Program at Fort Detrick peaked between 1959 and 1968, when the weapons program expanded to include biological agent research (DoD 1960). By 1960, the mission of the U.S. Army Chemical Corps Biological Laboratories was to conduct chemical research and develop offensive and defensive biological warfare systems and agents (DoD 1960). Open-air testing that had begun in 1950 continued in a number of cities through the 1960s (DoD 1977c) and several vaccines were tested between 1959 and 1974 (DoD 1977a). Basic and applied research in this area included: specialized laboratory work in physical and mathematical sciences, as well as medical research into infectious diseases related to biological weapons, protective measures against biological weapons, development of biological weapons processes, research on biological and chemical anticrop agents, production of laboratory animals, and evaluation of genetic mutations (DoD 1960).

In 1960 Fort Detrick was re-designated as the U.S. Army Chemical Corps, Biological Laboratories, and by March 1963, the U.S. Army Biological Laboratories were reorganized. Its research focus included medical bacteriology, virus and rickets, physical science, aeroriology, and entomology; crop research was undertaken under the Division

of Biological Research (FDAC *Fort Detrick Paper Files on the Cold War* 1963). The Post Commander supervised the divisions of biological research, development, engineering services, materiel, medical research, and technical services.

The Decline of the Biological Laboratory Program at Fort Detrick (1969-1989).

The year 1969 marked another significant turning point in the mission and programs at Fort Detrick as the United States banned the development of bioweapons and biotoxins. This ban mandated that work cease in biological laboratories like Fort Detrick (DoD 1977a: K-4-1; 6-2; and 7-1). The number of vaccines developed at the facility decreased after 1970. Work on crop production and on the infectious diseases affecting crops was halted during the mid-1970s, when the USDA assumed these functions (Baker 2000:13).

Program and mission changes impacted significantly the built environment at Fort Detrick. A percentage of the buildings were reclassified and evacuated beginning in 1971 and chemical disposal undertaken (FDAC 1971; DoD 1977a: L-11). Buildings were categorized into one of five classifications. Category 1 buildings were identified as National Cancer Institute (NCI) buildings; Category 2 buildings were placed "on hold" for the Department of Defense or the NCI. Category 3 buildings were closed and mothballed, while Category 4 buildings were transferred within the organization or torn down. Category 5 buildings were identified as having potential residual hazardous materials and were slated for removal from the DoD inventory (FDAC 1971).

Under a new presidential directive in 1976, Fort Detrick's mission once again was redirected towards new programs and missions. Army offices were relocated, and the focus of research changed from defense to medical research. The change was prompted by the Senate subcommittee investigations of Fort Detrick's development and the use of specific chemicals, which had been tested using aerosols in San Francisco and Alabama (Yu 1979:887-889; FDAC House Subcommittee Report #94-1222 1976). One immediate result was that buildings that once had housed these chemicals were tested for potential re-use based on levels of contamination (DoD 1977a; FDAC *Fort Detrick Paper Files on the Cold War* 1977:7-1 through 7-10).

The Presidential directive lead to reorganization of the installation. Fort Detrick was formally transferred (realigned) from the Army Materiel Command to the Office of the Army Surgeon (DoD 1977a: 7-3); activities at the installation were consolidated and the status and use of the buildings at Fort Detrick again were reassessed. The consolidation affected both the uses of specific buildings on the Fort Detrick Campus and local employment. Twenty-two thousand jobs were cut by April 2, 1976. The National Cancer Institute (NCI) had operated since 1972

as part of the National Institutes of Health (NIH) for the purposes of research, disease diagnosis, and prevention (DoD 1977b). The National Cancer Institute moved to Fort Detrick in 1973. The U.S. Army Garrison currently oversees 1,143 acres of the installation with the National Cancer Institute Frederick controlling the remaining 69 acres. In addition, Area 'B' was closed off because it contained contaminants.

The Biological Weapons and Anti-terrorism Act of 1989 affected programs at the Fort Detrick facility. This law prohibited the development, production, and stockpiling of bacteriological (biological) and toxic weapons by prohibiting certain conduct related to biological weapons (FDAC *Fort Detrick Paper Files on the Cold War*). Subsequently, during the Post-Cold war period, many of the buildings at Fort Detrick were used for agricultural, medical and communications purposes. The USDA's agricultural programs occupied the greenhouses and laboratories of the 1300 area for its foreign disease-weed science research that targeted foreign plant pathogens and development of disease resistant strains. The role of the NCI at Frederick was broadened to include conducting research to find cures for cancer, Acquired-Immune Deficiency Syndrome (AIDS), and related diseases. The U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) conducted biological defense research to develop strategies, products and training on biological agents and naturally occurring infectious diseases of military importance.

**Analysis**

Research at Fort Detrick followed two parallel programs. The first focused on biological weapons as an offensive tool; the second dealt with defensive methods, such as vaccines or anti-toxins, to respond to biological attack. Research into the offensive use of biological weapons included the development of new or more virulent strains of biological agent and the design of prototypical production facilities to manufacture the agent in sufficient quantities and purity for practical use. Associated research addressed the most efficient way to deliver biological weapons. The effectiveness of any biological agent relies on dispersing the toxin and controlling its movement. Aerosol test chambers or "cloud chambers" were used to examine methods of transforming liquid or solid cultures into dispersed vapors. Experimentation into various munitions and aerial applications required carefully controlled atmospheric testing and the production of simulants—non-lethal compounds possessing similar chemical and absorptive characteristics as the weapons-grade agent. This research proved the viability of rapid, and covert, release of airborne pathogens in densely populated areas. These findings prompted military and civilian health organizations to increase efforts to develop antitoxins and other defensive measures for the agents studied at Fort Detrick.

The *Thematic Study and Guidelines: Identification and Evaluation of U.S. Army Cold War Era Military-Industrial Historic Properties* identified significant themes related to Army military-industrial history during the Cold War

(USAEC 1997). Of these, Fort Detrick holds associations with: basic research (laboratories); materiel development and testing (research, development, engineering centers and proving grounds); and Army medical activities. The laboratory complex containing buildings 1412, 1414, and 1415 is relevant to the theme of materiel development and testing.

Assessing the National Register eligibility of Fort Detrick, Cold War era resources represents a multi-stepped process. The National Register generally defines resources eligible for listing as being 50 years of age or older. The laboratory complex containing Buildings 1412, 1414, and 1415 fails to meet this threshold level. Exceptions to the age requirement can be made when buildings nearing 50-years old contribute to a historic district. Under this exception, the building must still contribute to the significance of the National Register District and retain integrity to the period of significance. The Fort Detrick ICRMP did not identify any listed or eligible National Register Districts (Baker 2000). The National Register provides guidance on assessing individual resources of exceptional importance to the 50-year rule under Criteria Consideration G. Guidance provided by the *Thematic Study and Guidelines: Identification and Evaluation of U.S. Army Cold War Era Military-Industrial Historic Properties* refines the application of the criteria of exceptional importance to those properties that relate directly to the Cold War Era Military-Industrial Context (USAEC 1997).

The U.S. Army guidance identifies associations in four areas or sub themes within Cold War Military history. Properties that relate directly to the Cold War Military-Industrial context are "defined as those that meet any or all of the following qualifications:

1. They were specifically constructed or used prior to 1989 to
   -Meet the perceived Soviet/communist military threat;
   -Project a force designed to influence Soviet policy; and
   -Affect global opinion of the relationship between the superpowers.
2. Through their architectural or engineering design, they clearly reflect one of the Cold War themes.
3. They are directly related to the United States/Soviet relationship through association with a milestone event of the period.
4. They are directly related to a United States/Soviet relationship through association with the life of a person during the Cold War period (USAEC 1997:89)."

In addition to meeting the qualifications of the Cold War Military-Industrial context, a resource must also satisfy National Register criteria and applicable Criteria Considerations. The laboratory complex containing buildings 1412, 1414, and 1415 was evaluated against National Register of Historic Places criteria for significance and integrity for the period ca. 1958 to 1969; the construction date of the laboratory and incinerator to the cessation of biological weapons research at Fort Detrick.

The most complex issue surrounding the laboratory complex is the integrity of the resource. Modifications to Building 1412 have taken place continually since the end of biological weapons testing in 1969. Decontamination of the building required the removal of all research-related equipment. This included the cloud chambers and structural supports, the ducting used originally to convey exhaust to Building 1414, the animal holding areas, the small laboratories that supported aerosol research such as necrology and microbiology, and all other hardware within the contaminated areas. Had Building 1412 retained this research equipment, the building clearly would be eligible for the National Register under the Cold War Era context; however, integrity "does demand enough physical presence to retain a 'preservable entity' that communicates relevant significance" (Advisory Council on Historic Preservation 1991:29). The loss of all equipment associated with biological weapons research raises questions about the integrity of these resources.

The property was evaluated under Criterion A for its association with events that have made a significant contribution to the broad patterns of our history. As designed and constructed originally, the cloud chambers and associated laboratory complex would achieve significance under Criterion A, and the Cold War Military-Industrial context under Qualification 3 within the theme of materiel development; however, the resource must also hold integrity to the significant theme. Although the shells of the buildings reflect the design conceived during the 1950s, the interiors were radically altered during the 1980s and continue to experience alteration as the research at Fort Detrick evolves. The research conducted at Fort Detrick was designed to support an industrial process and utilized equipment and hardware associated with the production of biological cultures and both offensive and defensive actions associated with biological weapons. The buildings that housed the equipment used in development and testing served as a shell within which research took place. The design, spatial relationships, and equipment within the buildings were critical to the process and thus its significance and integrity. The biological weapons research buildings at Fort Detrick possessed unique plans, configuration and type of laboratory equipment, safety rooms, and sophisticated ventilations systems. The interior design and the equipment found in these functional laboratory buildings is critical to understanding how the building was used, and thus assumes importance in assessing resource integrity. Buildings 1412 and 1414 were industrial buildings designed and constructed to house dual cloud chambers, and to sterilize exhaust air from the laboratory spaces. The industrial engineering of the cloud chambers dictated all aspects of the design of the buildings. The form, scale, massing, and materials of the buildings were intrinsically linked to the cloud chambers and the equipment associated with aerosol testing of biological agents. The removal of the cloud chambers and associated equipment from the laboratory complex isolates the surviving building shells from the biological weapons mission of Fort Detrick. The contextual link between the resource and the Fort Detrick

mission is irretrievably broken. Building 1415 was not included in the original design concept for the laboratory complex. Fort Detrick records indicate that the sentry station was constructed a year after the completion of the primary buildings. Buildings 1412, 1414, and 1415 do not retain the integrity of materials, workmanship, feeling, association, and design to merit further consideration for eligibility to the National Register of Historic Places under Criterion A, or to meet Criteria Consideration G as resources of exceptional importance with the Cold War Era context.

The resources were evaluated under Criterion B for association with individuals linking the research at the laboratory with the United States/Soviet relationship during the Cold War period. Archival research has yielded no specific information about the activities or impact of a person and Cold War relationships, and no scholarly judgement can be made about historic importance. Buildings 1412, 1414, and 1415 do not possess association with individuals significant in local, state, or national history to merit further consideration for eligibility to the National Register of Historic Places under Criterion B.

In order to merit further consideration for eligibility to the National Register of Historic Places under Criterion C, a property must achieve significance within a historic context and retain integrity. The method of construction of all three buildings is typical of industrial buildings of the second half of the twentieth century. Concrete structural systems combined with concrete-masonry-unit walls first appeared in the early decades of the twentieth century, and gained widespread popularity in the years after World War II due to the speed of construction, low cost, durability, and reduced fire hazard. Inexpensive interior lighting and improvements in ventilation systems allowed for reduced areas of glazing. While offices and public spaces retained windows, factories and warehouses became windowless as managers sought to enhance building security, and reduce the maintenance costs associated with painting sashes and repairing glazing. The incinerator building is typical of boiler houses and other buildings containing heat-generating equipment. Building 1415, the sentry station, reflects common design and location characteristics of industrial gate houses. Buildings 1412, 1414, and 1415 do not possess significant physical design or construction and do not merit further consideration for eligibility to the National Register of Historic Places under Criterion C.

**Major Bibliographical References**

Advisory Council on Historic Preservation
1991 *Balancing Historic Preservation Needs with the Operation of Highly Technical or Scientific Facilities.* Advisory Council on Historic Preservation, Washington, DC.

Baker, Mark
2000 *Integrated Cultural Resource Management Plan Fort Detrick, Maryland,* Volumes 1 and 2. Prepared by the U.S. Army Corps of Engineers, Baltimore District, Planning Division, Baltimore, Maryland. Report prepared for the Directorate of Prevention, Protection and Community Activities, Fort Detrick, Frederick, Maryland.

Defence Research and Development
2005 Accessed at http://www.dres.dnd.ca/facilities/CB/DFS99001/index_e.html. 17 November.

Fort Detrick Archival Collection
1946-1990 *Fort Detrick Paper Files on the Cold War.* Fort Detrick Archival Collection, Fort Detrick Military Base, Frederick, Maryland.

1951 Detrick Plat. Land Records. Fort Detrick Archival Collection, Fort Detrick Military Base, Frederick, Maryland.

1955 Construction drawings for Buildings 1412 and 1414. Department of Public Works, Fort Detrick Military Base, Frederick, Maryland.

1980 Construction drawings for modifications to Building 1412. Department of Public Works, Fort Detrick Military Base, Frederick, Maryland.

1971 Fort Detrick Memorandum on building closure, October 22, 1971. Fort Detrick Archival Collection, Box 470, Fort Detrick Military Base, Frederick, Maryland.

1976 House Subcommittee Report #94-1222. Fort Detrick Archival Collection, Fort Detrick Military Base, Frederick, Maryland.

U.S. Army Environmental Center
1997 *Thematic Study and Guidelines: Identification and Evaluation of U.S. Army Cold War Era Military-Industrial Historic Properties.* U.S. Army Environmental Center, Aberdeen Proving Ground, Maryland.

U.S. Department of Defense
1960 *U.S. Army Biological Laboratory Organization Manual.* U.S. Department of Defense, Washington D.C.

1977a *U.S. Army Activity in the U.S. Biological Warfare Programs*, Volume I. U.S. Department of the Army, Washington.

1977b *Information for Members of Congress: U.S. Army Activities in the U.S. Biological Warfare (BW) Program.* U.S. Department of the Army, Office of the Secretary of the Army, Washington.

1977c *Biological Testing Involving Human Subjects by the Department of Defense 1977.* Prepared for U.S. Senate Subcommittee on Health and Scientific Research of the Committee of Human Resources, Washington.

1977 *Exhibit E: Affidavit of William M. Creasy, Civil No. C-78-1713-SC.* Hearings (May 23, 1977), Senate Subcommittee on Health and Scientific Research, Washington.

1979 *Exhibit D: Affidavit of Charles R. Phillips, Civil No. C-78-1713-SC.* Archives, Frederick County Court, Frederick.

Whitmore, Nancy F., and Timothy L. Cannon
1981 *Frederick: A Pictorial History.* Donning Company, Norfolk.

Yu, Victor L.
1977 Special Articles: Serratia Marcescens Historical Perspective and Clinical Review. The Division of Infectious Diseases, Department of Medicine, University of Pittsburgh School of Medicine and Veterans Administration Medical Center, Pittsburgh.

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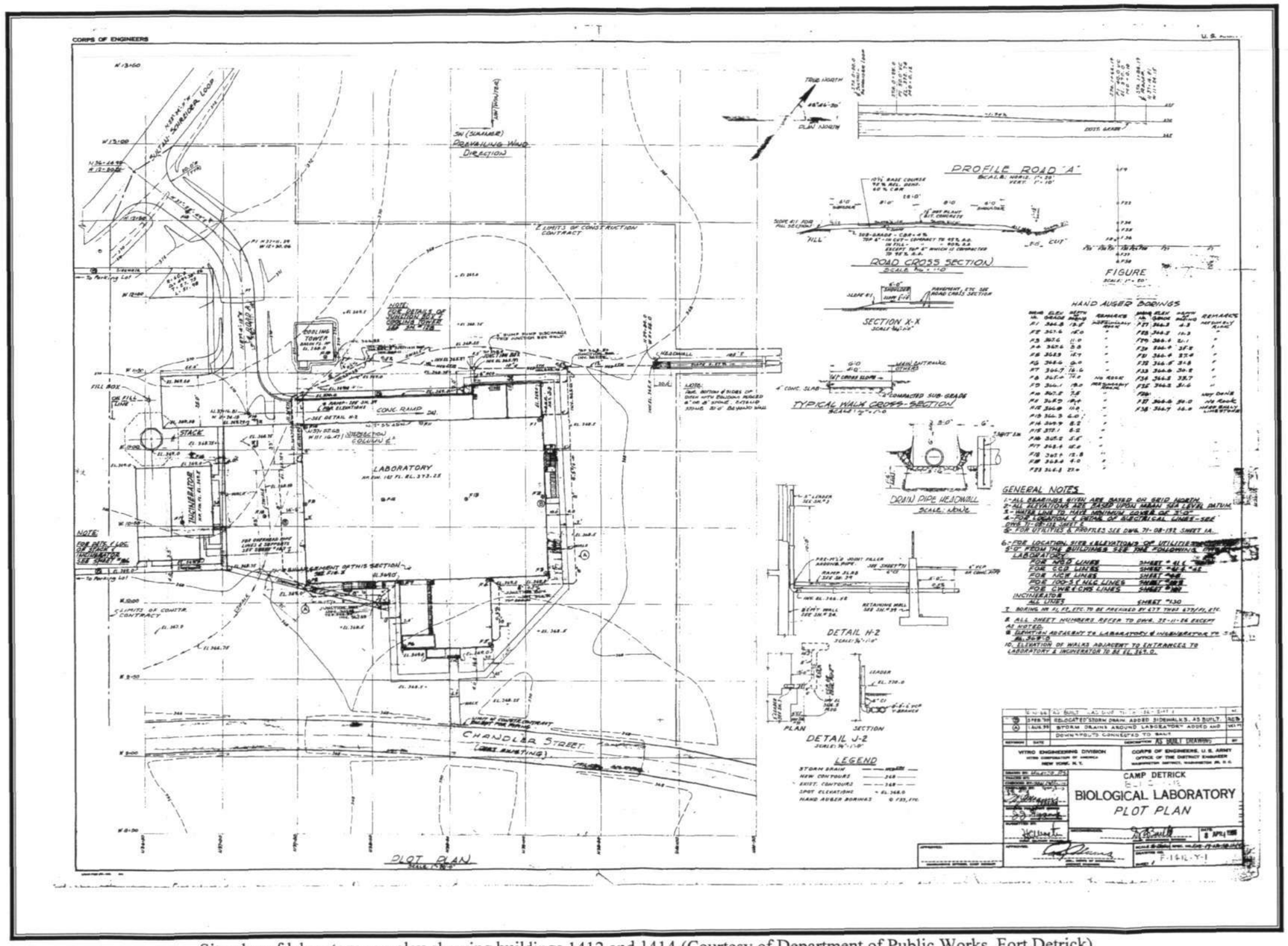
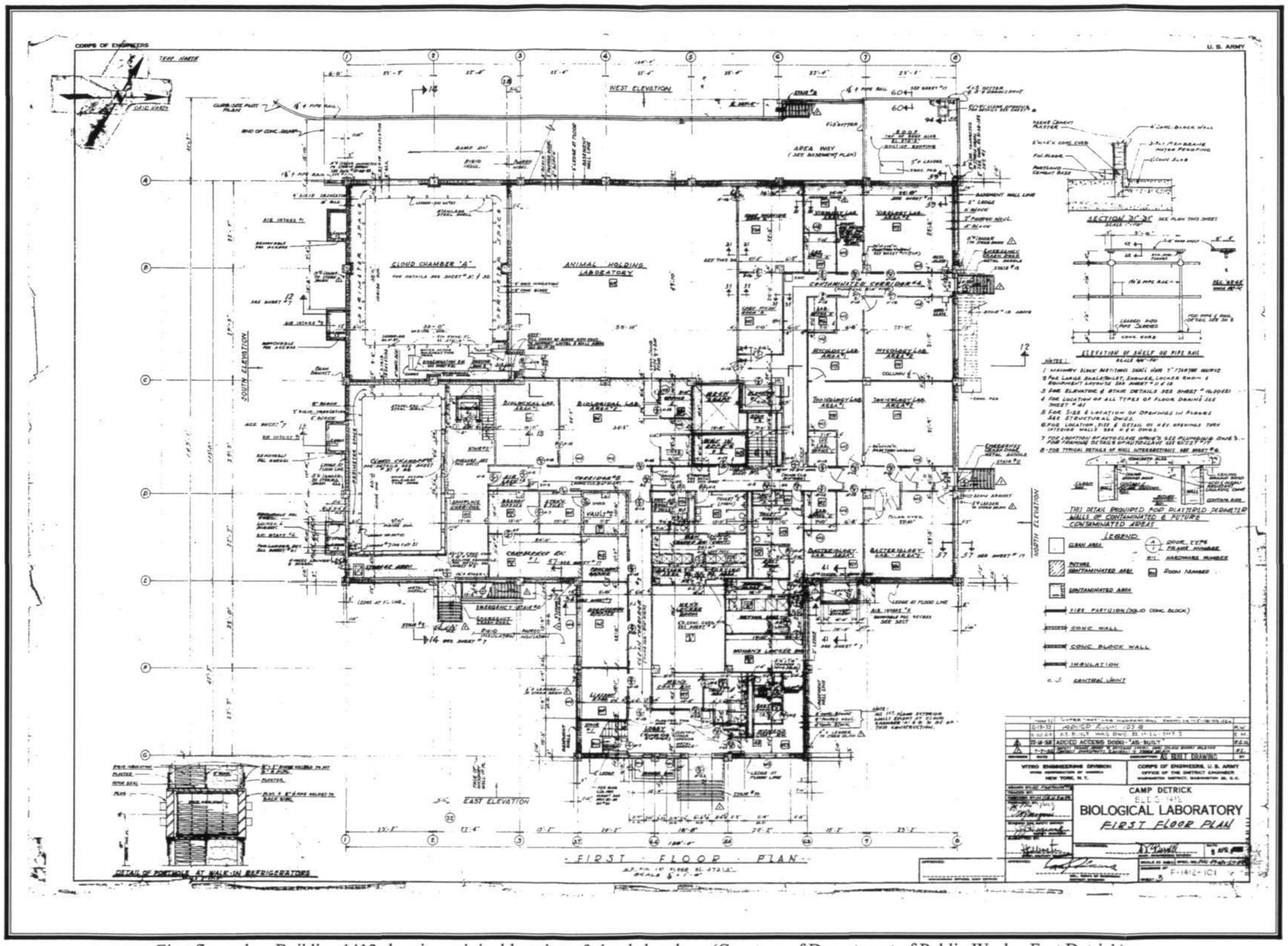


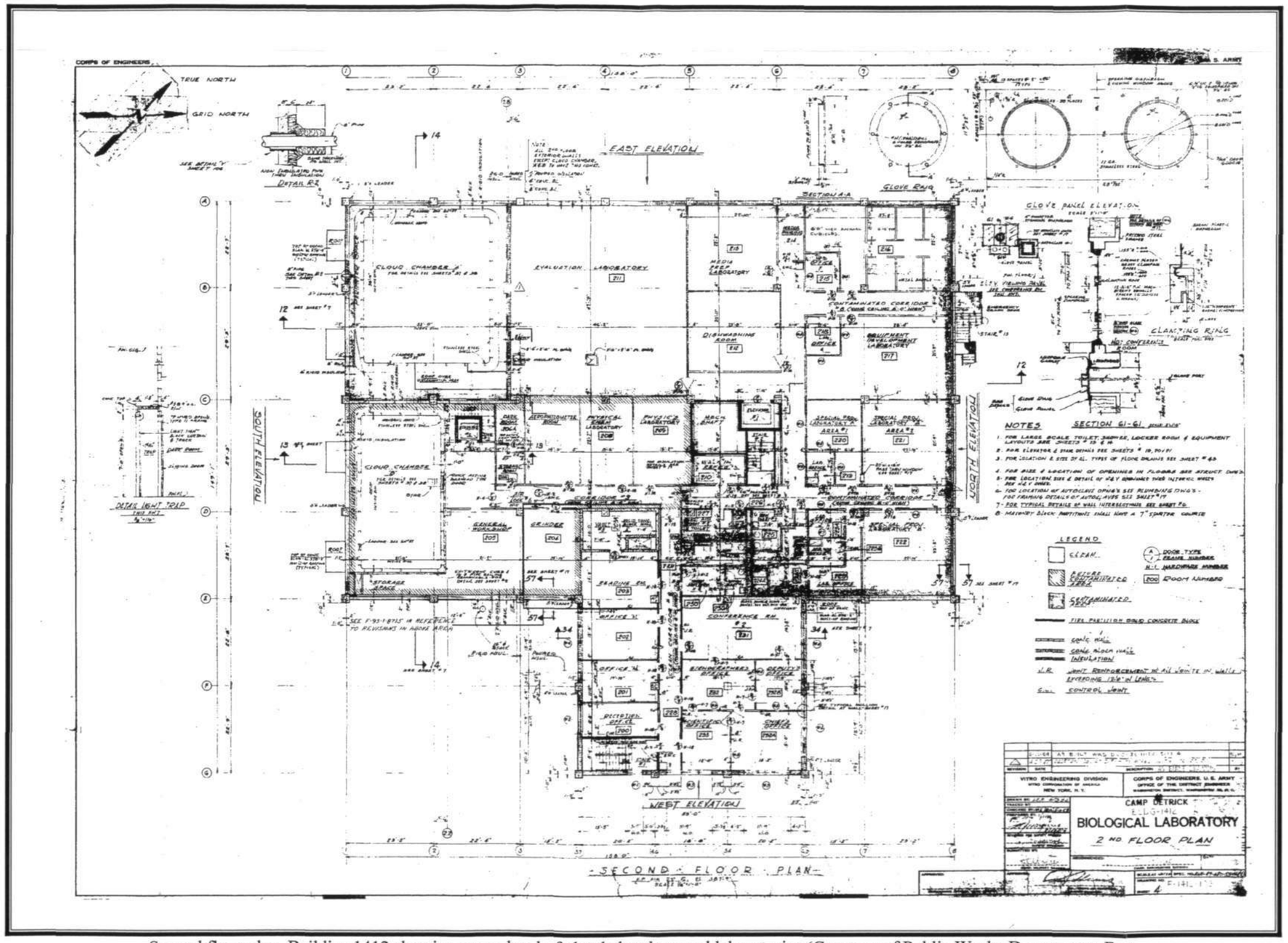

Site plan of laboratory complex showing buildings 1412 and 1414 (Courtesy of Department of Public Works, Fort Detrick)

F-3-161



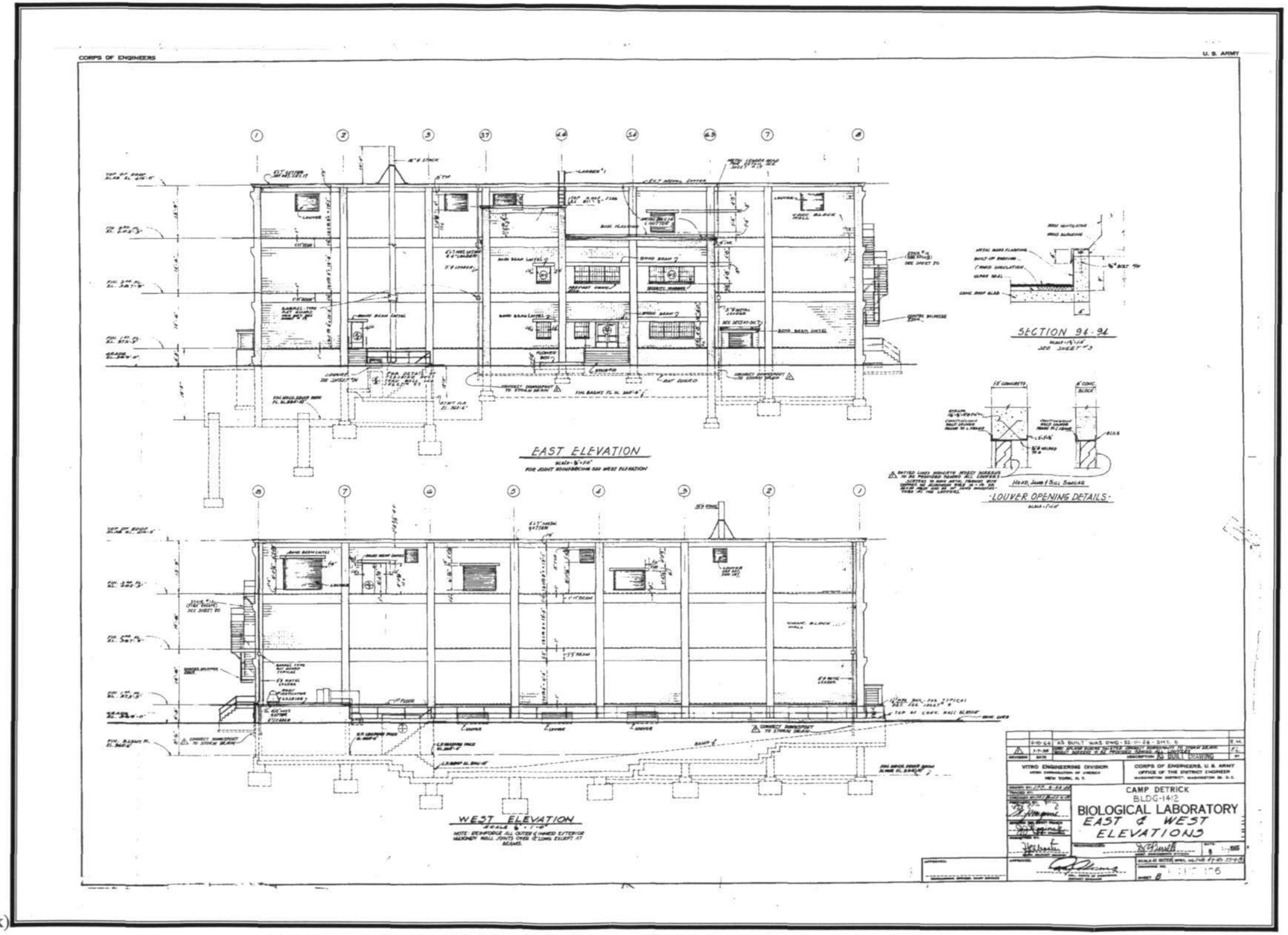

First floor plan, Building 1412 showing original location of cloud chambers (Courtesy of Department of Public Works, Fort Detrick)

F-3-161




Second floor plan, Building 1412 showing upper level of cloud chambers and laboratories (Courtesy of Public Works Department, Fort

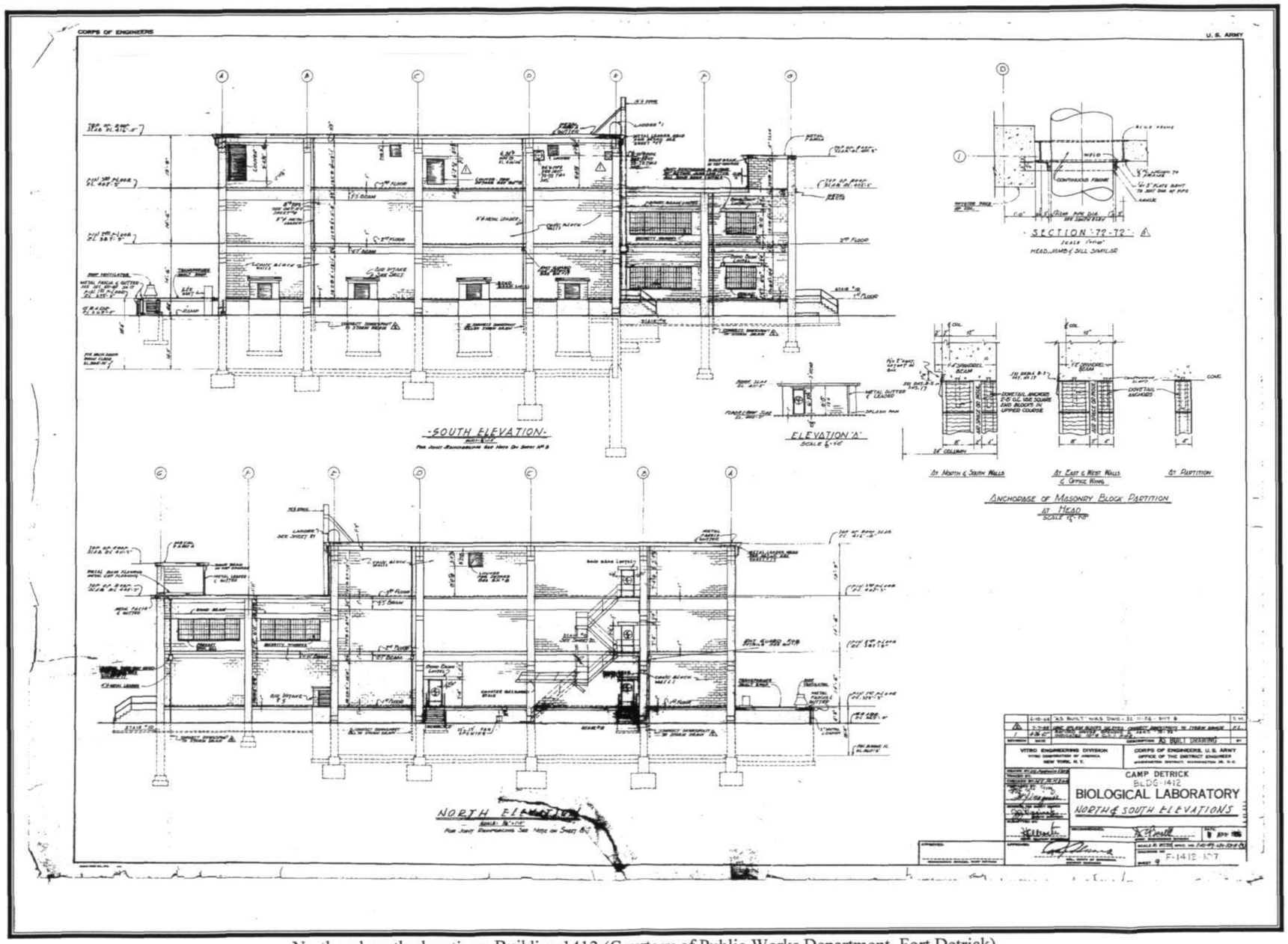
F-3-161




Detrick)

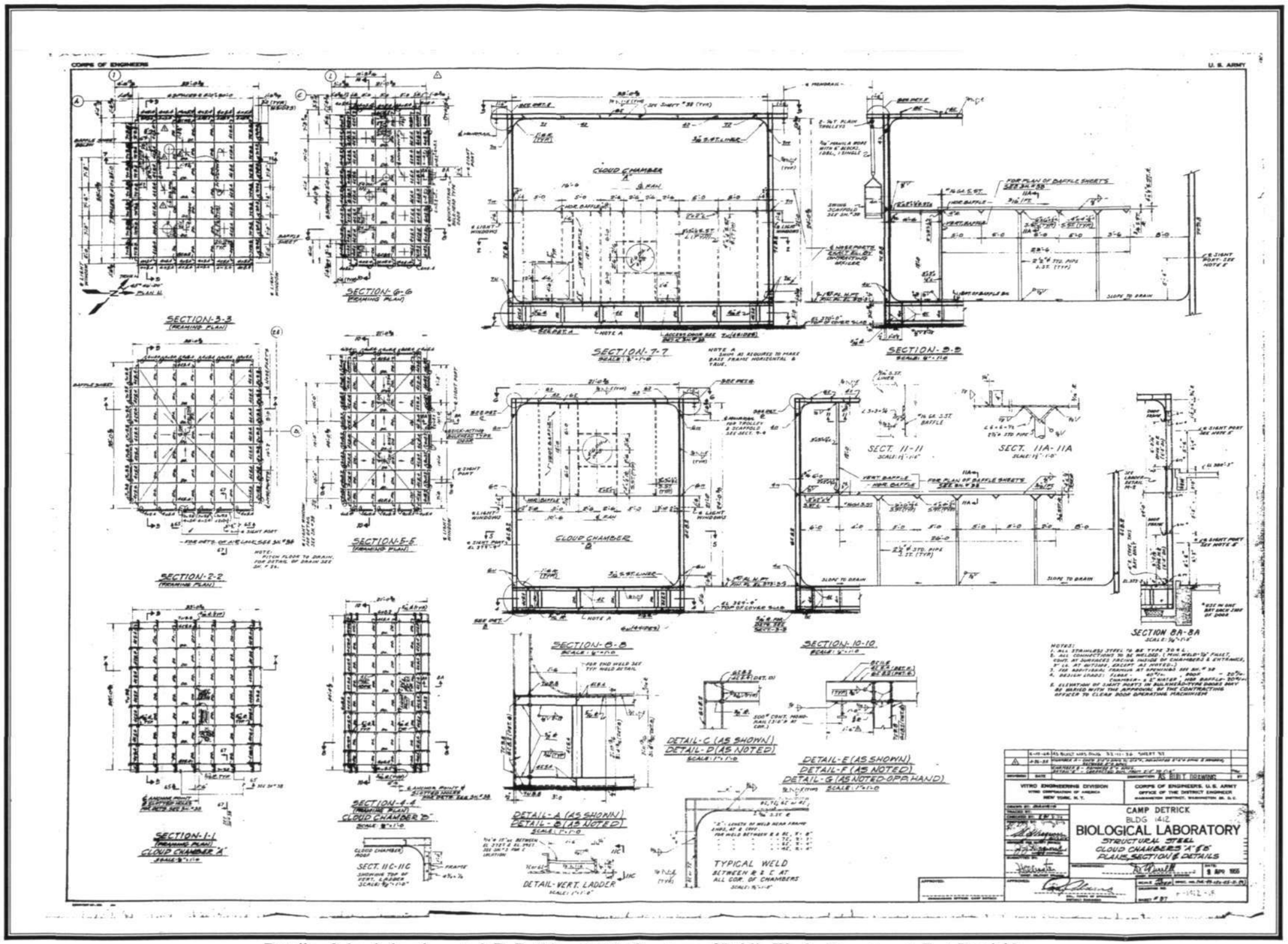
East and west elevations, Building 1412 (Courtesy of Public Works Department, Fort Detrick)

F-3-161



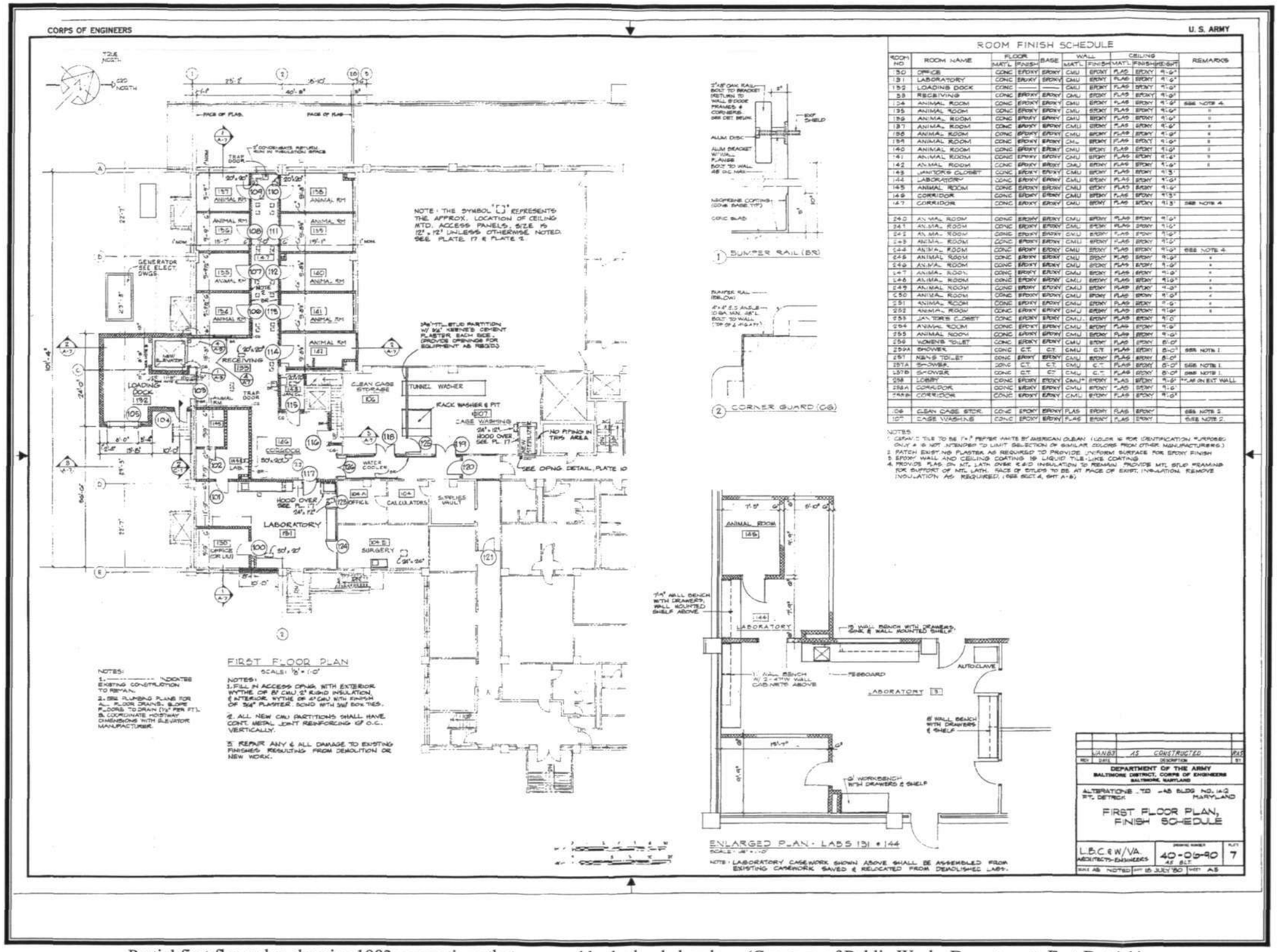

North and south elevations, Building 1412 (Courtesy of Public Works Department, Fort Detrick)

F-3-161




Details of cloud chambers A & B, Building 1412 (Courtesy of Public Works Department, Fort Detrick)

F-3-161



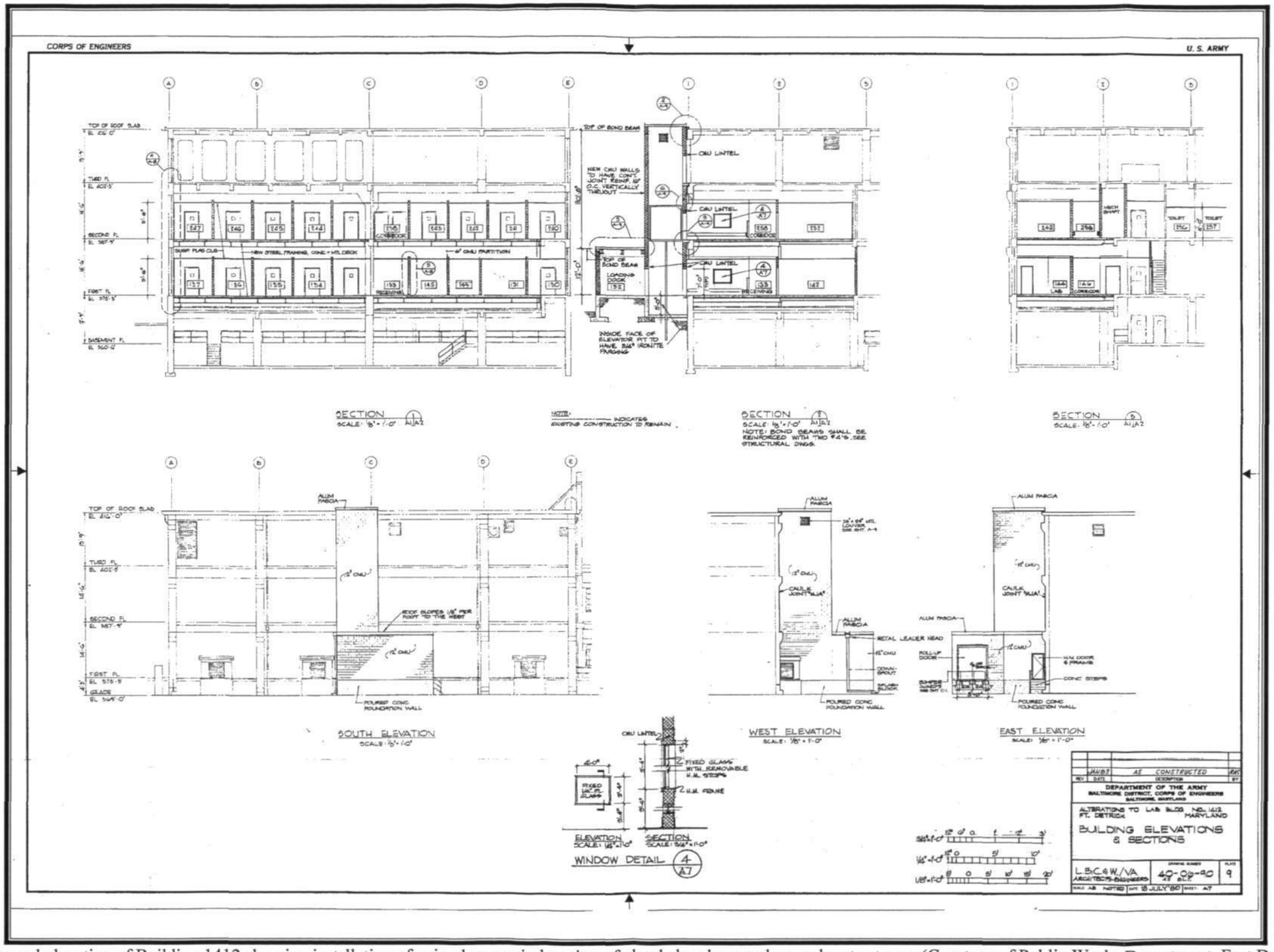

ROOM FINISH SCHEDULE

| ROOM NO. | ROOM NAME | FLOOR MAT'L | FLOOR FINISH | BASE | WALL MAT'L | WALL FINISH | CEILING MAT'L | CEILING FINISH | HEIGHT | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| 130 | OFFICE | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | |
| 131 | LABORATORY | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | |
| 192 | LOADING DOCK | CONC | —— | —— | CMU | EPOXY | PLAS | EPOXY | 9'-0" | |
| 193 | RECEIVING | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | |
| 134 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | SEE NOTE 4. |
| 135 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | " |
| 136 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | " |
| 137 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | " |
| 138 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | " |
| 139 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | " |
| 140 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | " |
| 141 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | " |
| 142 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | " |
| 143 | JANITOR'S CLOSET | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | |
| 144 | LABORATORY | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | |
| 145 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | |
| 146 | CORRIDOR | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | |
| 147 | CORRIDOR | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | SEE NOTE 4 |
| 240 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | |
| 241 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | |
| 242 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | |
| 243 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | |
| 244 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | SEE NOTE 4. |
| 245 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | " |
| 246 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | " |
| 247 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | " |
| 248 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | " |
| 249 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | " |
| 250 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | " |
| 251 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | " |
| 252 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | " |
| 253 | JANITOR'S CLOSET | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0 | |
| 254 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | |
| 255 | ANIMAL ROOM | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | |
| 256 | WOMEN'S TOILET | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 8'-0" | |
| 256A | SHOWER | CONC | C.T. | C.T. | CMU | C.T. | PLAS | EPOXY | 8'-0" | SEE NOTE 1. |
| 257 | MEN'S TOILET | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 8'-0" | |
| 257A | SHOWER | CONC | C.T. | C.T. | CMU | C.T. | PLAS | EPOXY | 8'-0" | SEE NOTE 1. |
| 257B | SHOWER | CONC | C.T. | C.T. | CMU | C.T. | PLAS | EPOXY | 8'-0" | SEE NOTE 1. |
| 258 | LOBBY | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | TO JAM ON EXT. WALL |
| 258A | CORRIDOR | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0 | |
| 258B | CORRIDOR | CONC | EPOXY | EPOXY | CMU | EPOXY | PLAS | EPOXY | 9'-0" | |
| 106 | CLEAN CASE STOR. | CONC | EPOXY | EPOXY | PLAS | EPOXY | PLAS | EPOXY | | SEE NOTE 2 |
| 107 | CASE WASHING | CONC | EPOXY | EPOXY | PLAS | EPOXY | PLAS | EPOXY | | SEE NOTE 2 |

NOTES:
1. CERAMIC TILE TO BE 1"x1" PRESS-ANITE BY AMERICAN OLEAN. (COLOR IS FOR IDENTIFICATION PURPOSES ONLY & IS NOT INTENDED TO LIMIT SELECTION OF SIMILAR COLORS FROM OTHER MANUFACTURERS.)
2. PATCH EXISTING PLASTER AS REQUIRED TO PROVIDE UNIFORM SURFACE FOR EPOXY FINISH
3. EPOXY WALL AND CEILING COATING IS LIQUID TILE-LIKE COATING
4. PROVIDE PLAS. ON MTL LATH OVER RIGID INSULATION TO REMAIN. PROVIDE MTL STUD FRAMING FOR SUPPORT OF MTL LATH. FACE OF STUDS TO BE AT FACE OF EXIST. INSULATION. REMOVE INSULATION AS REQUIRED. (SEE SECT A, SHT A-8)

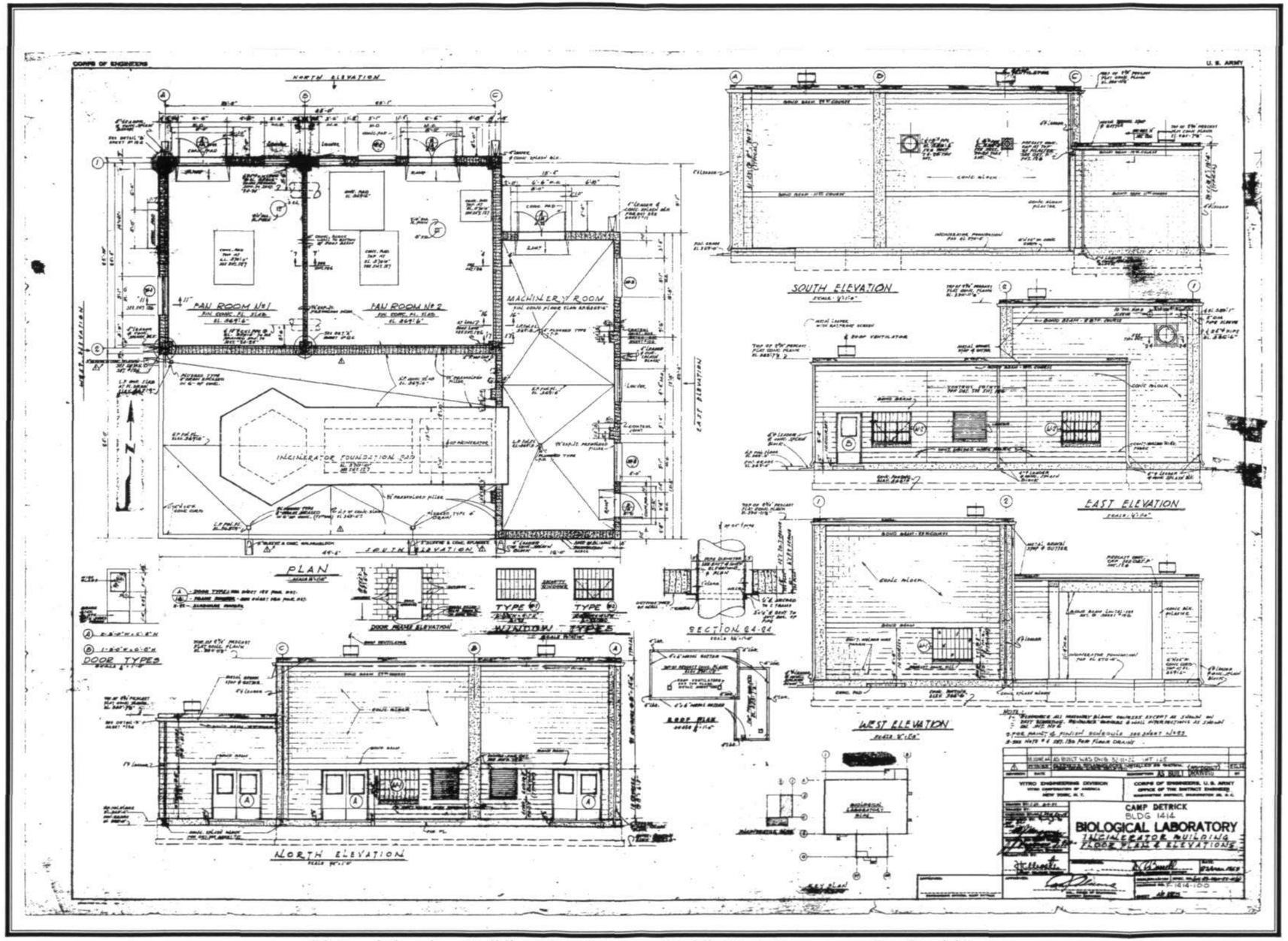
Partial first floor plan showing 1983 renovations that removed both cloud chambers (Courtesy of Public Works Department, Fort Detrick)

F-3-161



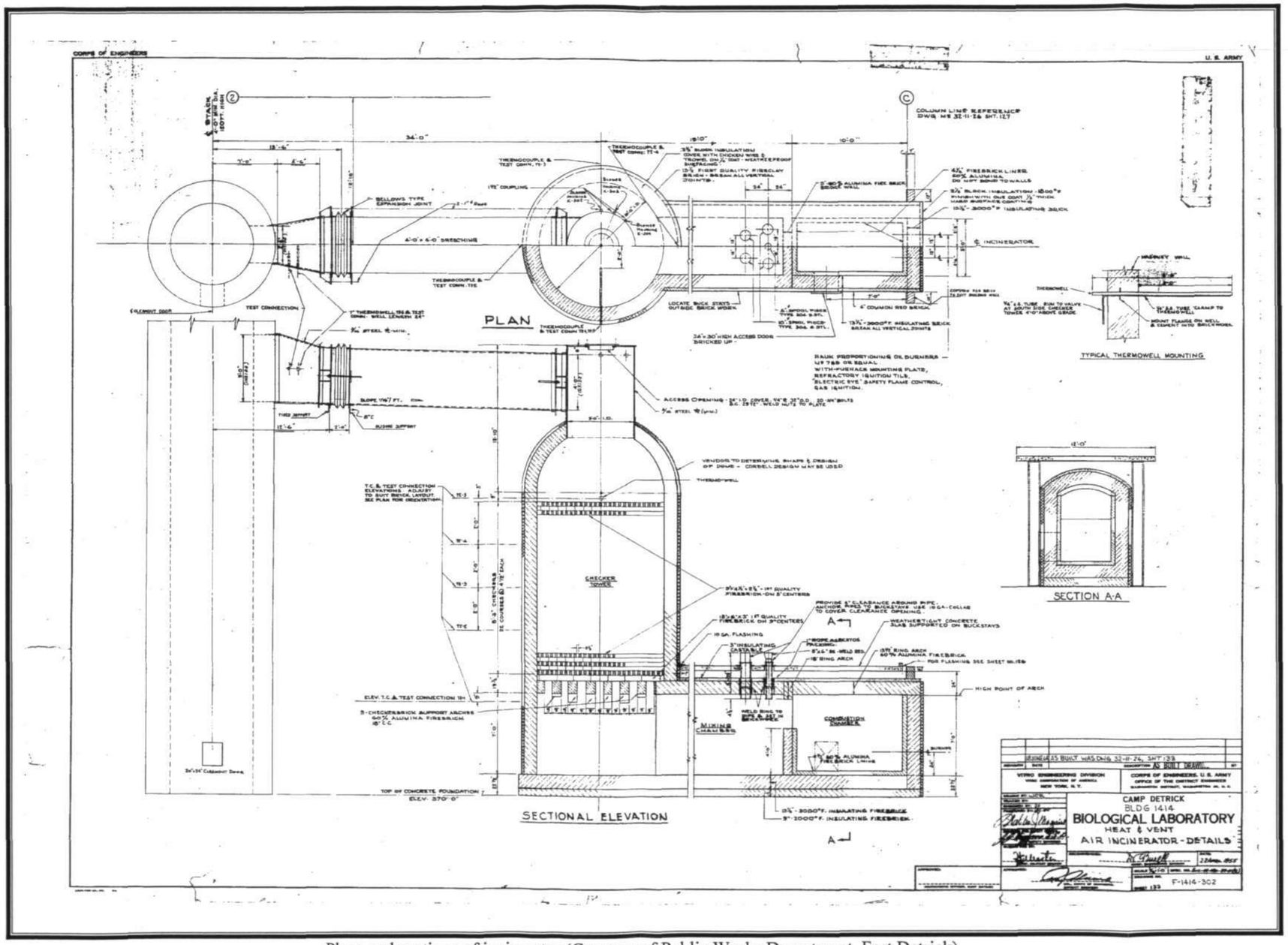

Section and elevation of Building 1412 showing installation of animal rooms in location of cloud chambers and new elevator tower (Courtesy of Public Works Department, Fort Detrick)

F-3-161

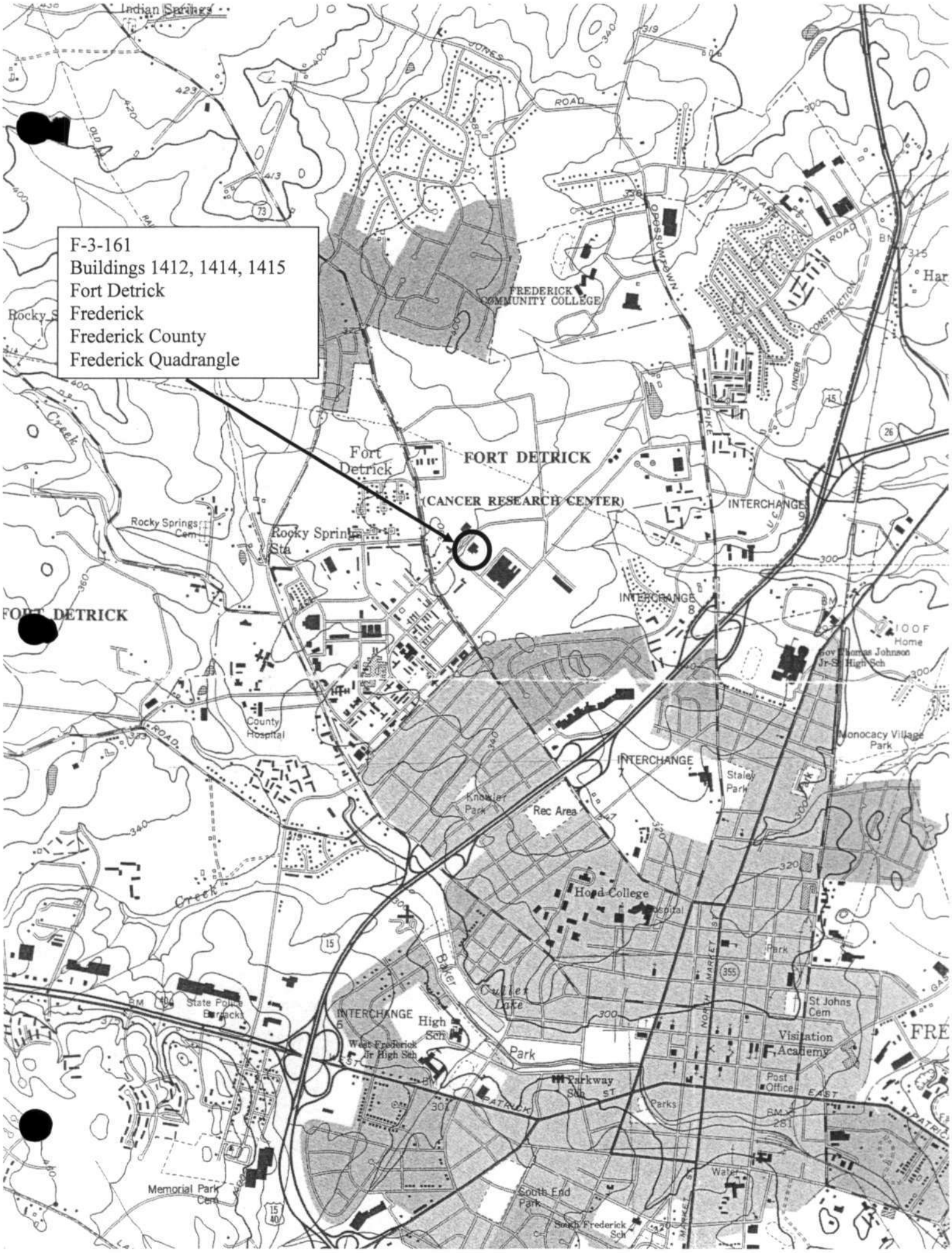



Plans and elevations, Building 1414 (Courtesy of Public Works Department, Fort Detrick)

F-3-161




Plans and sections of incinerator (Courtesy of Public Works Department, Fort Detrick)


F-3-161
Buildings 1412, 1414, 1415
Fort Detrick
Frederick
Frederick County
Frederick Quadrangle
Indian Springs
FREDERICK COMMUNITY COLLEGE
FORT DETRICK
(CANCER RESEARCH CENTER)
Fort Detrick
Rocky Springs Cem
Rocky Springs Sta
FORT DETRICK
INTERCHANGE 9
INTERCHANGE 8
INTERCHANGE 7
INTERCHANGE 6
County Hospital
Knowler Park
Rec Area
Staley Park
Monocacy Village Park
Hood College
Hospital
Culler Lake
Baker Park
High Sch
West Frederick Jr High Sch
State Police Barracks
Parkway Sch
Parks
Post Office
St Johns Cem
Visitation Academy
Memorial Park Cem
South End Park
South Frederick Sch
Gov Thomas Johnson Jr-Sr High Sch
IOOF Home
Creek
Water

MIHP # F-3-161

BUILDING 1412

FORT DETRICK

FREDERICK COUNTY, MD

12 DECEMBER 2005

MD SHPO

Southeast Elevation, Looking northwest

R.C. Goodwin / Dean A. Doerfeld

1 of 10

MIHP # F-3-161

BUILDING 1412

FORT DETRICK

FREDERICK, COUNTY, MD

R.L. Goodwin / Dean A. Doerfeld

12 December 2005

MD SHPO

Southeast Elevation, Looking West

2 of 10

MIHP # F-3-161

BUILDING 1412

FORT DETRICK

FREDERICK COUNTY, MD

R.C. Goodwin / Dean A. Doerfeld

12 December 2005

MD SHPO

Detail of entry on Southeast Elevation

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MIHP # F-3-161

BUILDING 1412

FORT DETRICK

FREDERICK COUNTY, MD

R.C. Goodwin / Dean A. Doerfeld

12 December 2005

MD SHPO

Southwest wall of Office Block

4 of 10

CHEVROLET

MIHP # F-3-161

BUILDING 1412

FORT DETRICK

FREDERICK COUNTY, MD

R.C. Goodwin / Dean A. Doerfeld

12 December 2005

MD SHPO

Northwest Elevation, looking East

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CHILLED WATER
YORK

MIHP #F-3-161

BUILDING 1412

FORT DETRICK

FREDERICK, COUNTY, MD

R.L. Goodwin / Dean A. Deerfield

12 December 2005

MD SHPO

Interior of first level

6 of 10

MHP #F-3-161

BUILDING 1414

FORT DETRICK

FREDERICK COUNTY, MD

R.L. Goodwin/Dean A. Doerfeld

12 December 2005

MD SHPO

Northeast Elevation, Looking South

7 of 10

MIHP # F-8-761

BUILDING 1414

FORT DETRICK

FREDERICK COUNTY, MD

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12 December 2005

MD SHPO

Chimney looking Southeast

8 of 10

MIHP #F-3-167
BUILDING 1414
FORT DETRICK
FREDERICK COUNTY, MD
R.L. Goodwin / Dean A. Doerfeld
12 December 2005
MD SHPO
Interior
9 of 10

RESERVED
IAM
UNION
PARKING
ONLY
1415
1415

MIHP # F-3-161

BUILDING 1415

FORT DETRICK

FREDERICK COUNTY, MD

R.C. Goodwin / Dean A. Doerfeld

12 December 2005

MD SHPO

Northwest Elevation, Looking South

10 of 10