

FINAL REPORT

JUNE 9, 2004

**DATA RECOVERY AT THE
WEST FAMILY CEMETERY (44AX183),
BLOCK 2, HOFFMAN PROPERTIES,
ALEXANDRIA, VIRGINIA**

Appendices

PREPARED FOR:

**HOFFMAN MANAGEMENT, INC.
2461 EISENHOWER AVENUE
ALEXANDRIA, VA 22331**

**R. CHRISTOPHER GOODWIN & ASSOCIATES, INC.
241 EAST FOURTH STREET, SUITE 100 • FREDERICK, MD 21701**

APPENDIX A

BURIAL PERMIT APPLICATION



COMMONWEALTH of VIRGINIA

Department of Historic Resources

2801 Kensington Avenue, Richmond, Virginia 23221

James S. Gilmore, III
Governor

John Paul Woodley, Jr.
Secretary of Natural Resources

H. Alexander Wise, Jr.
Director

Tel: (804) 367-2323
Fax: (804) 367-2391
TDD: (804) 367-2386

April 19, 2000

Hubert N. Hoffman, Jr., President
Hoffman Buildings Limited Partnership
2461 Eisenhower Avenue
Alexandria, Virginia 22331

Re: Application for the Archeological Removal of Human Burials
200 Stovall Street
City of Alexandria, Virginia
DHR File No. 2000-0093-F

Dear Mr. Hoffman:

In accordance with Section 10.1-2305 of the *Code of Virginia*, final regulations adopted by the Virginia Board of Historic Resources and published in the Virginia Register on July 15, 1991, and following review by the Department, the Department of Historic Resources on this 19th day of April, 2000, hereby grants to Hubert N. Hoffman, Jr., President of Hoffman Buildings Limited Partnership, permission to conduct archaeological investigations involving the removal of human remains and associated artifacts from unmarked human burials at 200 Stovall Street located in the City of Alexandria, Virginia. This permit is to be considered effective as of today's date.

The granting of this permit signifies that:

1. The Department has received from the Permittee and has approved a statement detailing the goals and objectives of the project and the proposed research strategy;
2. The Department has reviewed the vitae of the individuals who will perform the proposed work and has found them qualified to complete the work;
3. The Department has received accurate information as to the location and description of the archeological site for which the field investigation is proposed, including the site number;
4. The Department has received assurances that there are adequate resources to carry out

Petersburg Office
10 Courthouse Avenue
Petersburg, VA 23803
Tel: (804) 863-1620
Fax: (804) 863-1627

Portsmouth Office
612 Court Street, 3rd Floor
Portsmouth, VA 23704
Tel: (757) 396-6707
Fax: (757) 396-6712

Roanoke Office
1030 Penmar Avenue, SE
Roanoke, VA 24013
Tel: (540) 857-7585
Fax: (540) 857-7588

Winchester Office
107 N. Kent Street, Suite 203
Winchester, VA 22601
Tel: (540) 722-3427
Fax: (540) 722-7535

the research design;

5. The Department has received a written statement of the landowner's permission both to conduct such research and to remove human remains on his property and allowing the Director or his designee access to the field investigation site at any reasonable time for the duration of the permit;
6. The Department has received from the Permittee a notice prepared for publication in a newspaper of general circulation in the northern Virginia area, inviting interested parties to express their views on the proposed field investigation to the Director. The Department approves the notice on the condition that it include the possible identification of the burials as members of the Thomas West family, owner of the property in the late 18th Century;
7. The Department has received from the Permittee a statement that the human remains and associated artifacts will be reinterred upon completion of the research;
8. The Department has been provided information as to whether this permit is part of a federal, state or local government undertaking.

This permit is granted subject to the following conditions:

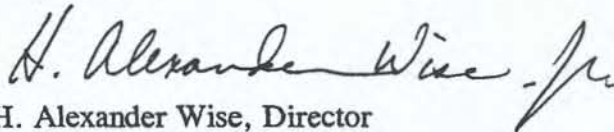
1. The Permittee shall carry out the field investigations in accordance with the approved research statement in Item 1 above, or shall obtain the prior written approval of the Department for any change;
2. The Permittee shall inform the Department in writing of the initiation and completion of field work within two weeks of implementation;
3. The Permittee shall publish or cause to be published the approved public notice in a newspaper of general circulation in northern Virginia concurrently with the initiation of the field investigations. Such notice shall be published once each week for four consecutive weeks. The Permittee shall provide the Department with documentation of the actual publication within 30 days of its publication. Failure to make such publication may result in the denial of future permits;
4. In addition to the public notice, the Permittee shall provide evidence of a reasonable effort to identify and notify the next of kin of the Thomas West family;
5. The Permittee shall provide for storage and maintenance of the remains of the unknown persons in a proper and dignified manner until such time as final disposition has been made;
6. The Permittee shall prepare a technical report of the field investigations and osteological analysis conducted under this permit and submit two copies of it for

review and approval to the Department and one copy to Alexandria Archaeology. All reports shall meet the federal standards entitled *Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines* (48 FR 44716-44742, September 29, 1983) and the Department's *Guidelines for Preparing Identification and Evaluation Reports for Submission Pursuant to Sections 106 and 110, National Historic Preservation Act, Environmental Impact Reports of State Agencies, Virginia Appropriations Act, 1992 Session Amendments* (June 1992). All comments received within 30 days of receipt of the report shall be addressed in the final report. The Permittee shall provide two copies of the final, approved report to the Department prior to April 19, 2002;

7. Within one year of the completion of the field investigations, the Permittee shall prepare a plan for the final disposition of the human remains and submit it to the Department for review and approval prior to implementation. The Permittee shall inform the Department in writing of the final disposition within two weeks of completion;
8. All archeological materials (with the exception of human remains and any items used for appropriate exhibit purposes) resulting from investigations conducted under this permit, including artifacts, field records and photographs, shall be shall be curated at Alexandria Archaeology, 105 N. Union Street, Alexandria, Virginia 22314 in accordance with the Department's *State Curation Standards*.

This permit shall be valid for two years from the date of issuance. This permit is not transferable.

Sincerely,



H. Alexander Wise, Director
Department of Historic Resources

PERMIT APPLICATION FOR ARCHAEOLOGICAL REMOVAL
OF HUMAN BURIALS

PLEASE PRINT OR TYPE ALL ANSWERS:

If a question does not apply to your project, please print N/A (not applicable) in the block or space provided. If additional space is needed, attach extra 8-1/2"x11" sheets of paper. If you have any questions about completing this form, please call/fax Ethel R. Eaton in the Project Review Division at (804) 367-2323; fax (804) 367-2924.

1a. Applicant's name and complete address: Hoffman Buildings Limited Partnership
Dr., Mr., Mrs., Ms. (circle one) Telephone number: (703) 960-4700
2461 Eisenhower Avenue
Alexandria, VA 22331 Telefax number: (703) 960-1754

1b. Property Owner's name and complete address: Hoffman Buildings Limited Partnership
(If different from above) Telephone number: ()
Telefax number: ()
E-mail: _____

2. Please provide the name of the property or archeological site for which removal is proposed, the county or city in which the property/site is located and the state archeological inventory number (if one has been assigned).

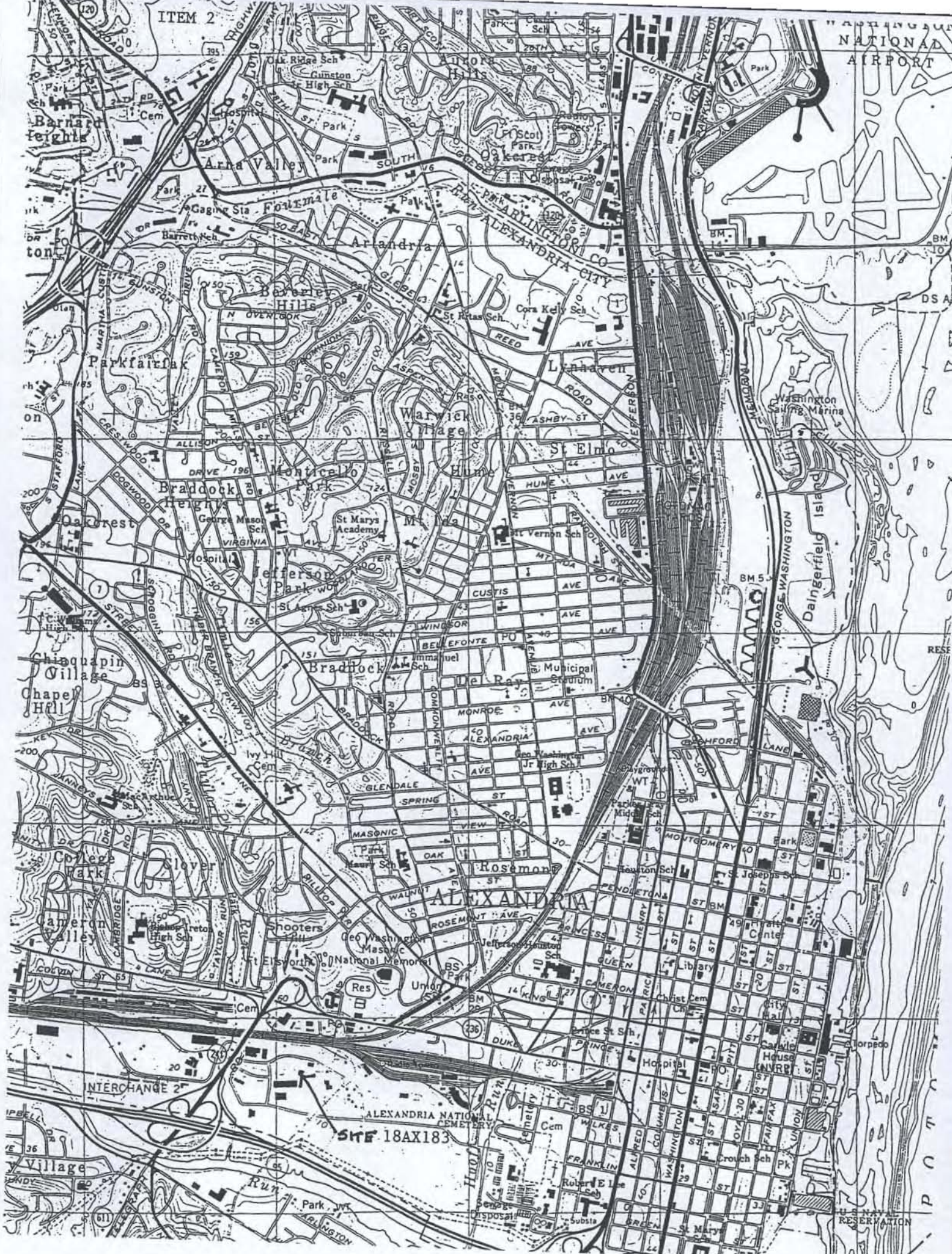
West Family Burial Vault located in Alexandria, Virginia
(State Inventory Number applied for) 44AX183

Please attach a photocopy of the relevant USGS 7.5 series quadrangle sheet showing the property/site(s) location. A supplemental map showing greater detail may also be attached, if available.

3. Please attach a written statement of the landowner's permission both to remove human remains on the property and to allow the duly authorized representatives of the Department of Historic Resources to enter upon the property at reasonable times to inspect and photograph site conditions.

ITEM 2

ALEXANDRIA NATIONAL AIRPORT



ALEXANDRIA NATIONAL CEMETERY

RESERVATION

HOFFMAN BUILDINGS MANAGEMENT CO., INC.

2461 EISENHOWER AVENUE
ALEXANDRIA, VIRGINIA 22331-0100

(703) 960-4700

FAX: (703) 960-1754

March 15, 2000

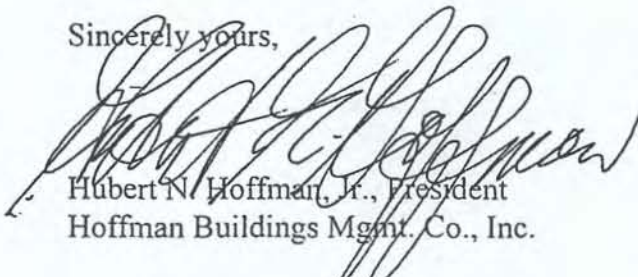
H. Alexander Wise, Jr.
Director
Department of Historic Resources
Commonwealth of Virginia
2801 Kensington Avenue
Richmond, Virginia 23221

Re: Permit Application for Archaeological Removal of Human Burials from that certain 5.23 acre parcel of property located at 200 Stovall Street, Alexandria, Virginia, improved by a 13 story office building known as Hoffman Building II, City of Alexandria Tax Map No. 72.00-03-17, being Parcel No. 501 of Hoffman Town Center (the "Property").

Dear Director Wise:

This letter will serve to attest that the owner of the aforesaid Property has given its permission for R. Christopher Goodwin & Associates, Inc., to conduct an archaeological field investigation on the Property involving the removal of human remains and that the Director of the Commonwealth of Virginia's Department of Historic Resources and/or his duly authorized representative or designee, hereby have a right-of-entry upon the aforesaid Property for access to the field investigation site at any reasonable time, for the duration of the permit granted by the Department, to inspect and photograph site conditions on the Property relating to the proposed archaeological removal of human remains from the Property.

Sincerely yours,

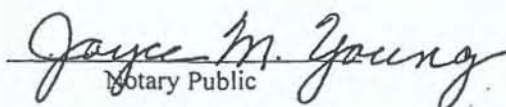


Hubert N. Hoffman, Jr., President
Hoffman Buildings Mgmt. Co., Inc.

I, the undersigned, a notary public in and for State of Virginia, City of the Alexandria, do hereby certify that Hubert N. Hoffman, Jr., whose name as President of the Hoffman Buildings Mgmt. Co., Inc., is signed to the writing above, bearing the date of March 15, 2000, has acknowledged the same before me in the aforesaid jurisdiction as such.

GIVEN under my hand and official seal this 15th day of March, 2000.

My commission expires: 8-31-2000


Notary Public

4. Is this application part of court-ordered removal? YES X NO.

If your answer is "YES", please attach evidence of a reasonable effort to identify and notify next of kin.

5. Are you applying at the direction of a local government, a state agency, or a federal agency? X YES NO (City of Alexandria)

If your answer is "YES", please indicate whether the Department of Historic Resources has previous been contacted. X YES NO

If your answer is "YES", please provide the VDHR File Number (if available). N/A

6. Is the removal a likely consequence of a field investigation where discovery of burials can reasonably be anticipated (but no discovery has yet occurred)? YES XX NO

If your answer is "YES", please describe the factors that suggest the presence of burials:

Presence of human remains verified.

7. Please attach the proposed notice in a newspaper having general circulation in the area of the project.

8. Is a waiver of the public notice, or other requirement requested YES X NO ?

If your answer to the question above is "YES",

a. please describe the specific threats facing the human skeletal remains or associated artifacts, explaining why the emergency situation justifies the requested waiver; and

b. please describe the conservation methods which will be used, especially for skeletal material.

LEGAL NOTICE - ALEXANDRIA JOURNAL

Hoffman Buildings L.P., 2461 Eisenhower Avenue, Alexandria, VA 22331 (the "Applicant") has applied to the Virginia Dept. of Historic Resources in Richmond, VA, for a Permit to excavate human remains from an abandoned, unmarked family graveyard located at 200 Stovall Street, Alexandria, VA, by professional archaeologists who will study, photograph and document all grave features, human remains, and artifacts, concluding with the respectful reinterment of the human remains on a nearby site in Hoffman Town Center by a licensed funeral director. The public is invited to comment on all aspects of this excavation, especially the reinterment of any human remains. Comments should be submitted to the Director of the VA Dept. of Historic Resources, 2801 Kensington Ave., Richmond, VA 23221 and must be received by *(30 days from date upon which Notice first published)*. The public may request additional information and/or a public meeting from the Applicant at its above office address (703-960-4700) Attn: Roger G. Kiper. A complete copy of the Applicant's entire Permit application may be viewed at the office of the Applicant.

9. Have you obtained an archeologist for this project? YES NO
If the answer is "YES", complete the remainder of this question.

- a. Please attach the vita of the archeologist who will actually perform the work in sufficient detail to allow independent verification that the person's qualifications are consistent with the federal standards outlined in 36 CFR §61. (see attached vitae for Suzanne L. Sanders, Kristen Bastis, Christian Davenport)
- b. Please submit the Applicant's and Contractor's Acknowledgement Form with your application.

10. Have you obtained a skeletal biologist for this project? YES NO
If the answer is "YES", complete the remainder of this question.

- a. Please attach the vita of the skeletal biologist prepared in sufficient detail to allow independent verification that the person has at least a Masters degree, the field of specialization, years of laboratory experience in the analysis of human remains and ability to produce a written report of the findings and their interpretation.
- see attached vita for Donna Boyd, Ph.D.

- 11a. Please provide a statement that the treatment of the human skeletal remains and associated artifacts will be respectful. At all times during the course of the proposed field investigation, every aspect of the treatment of any human skeletal remains (e.g. excavation, curation, reburial) and any associated artifacts will be professional, dignified and respectful.

- 11b. Please provide the name and complete address of the institution/facility providing curation during study and prior to final disposition.

Department of Sociology and Anthropology
Radford University, Radford, Virginia 24142 (study/curation)

- 11c. Please list the name and complete address of the institution/facility which will providing curation of original data (with the exception of human skeletal remains and associated artifacts), such as field notes, photographs and other materials

Alexandria Archaeology
105 N. Union Street
Alexandria, Virginia 22314

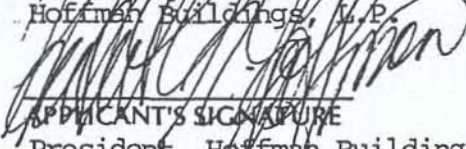
APPLICANT'S AND CONTRACTOR'S ACKNOWLEDGEMENT FORM

I, Hoffman Buildings, L.P., have contracted R.Christopher Goodwin & Associates, Inc.
APPLICANT'S NAME CONTRACTOR'S NAME OR NAME OF FIRM

to perform the work described in the application signed and dated March 28, 2000.
DATE

We will read and abide by all conditions as set forth in the approved permit as required for the actions described in this application. We understand that work conducted under a permit will not be considered complete until all reports and documentation have been submitted and reviewed by the department to meet all conditions specified as part of the approved permit. We further understand that failure to complete the conditions of the permit within the permitted time limit may result in revocation of the permit and constitute grounds for denial of future applications.

Hoffman Buildings, L.P.



March 28, 2000

APPLICANT'S SIGNATURE

DATE

President, Hoffman Buildings Mgmt. Co., Inc.

Christopher R. Polglar Vice President 3/30/00

CONTRACTOR'S SIGNATURE AND TITLE

DATE

(if different from applicant)

REMINDER: BE SURE TO INCLUDE ATTACHMENTS FOR ITEMS 3 AND 6 ABOVE TOGETHER WITH THE BASIC APPLICATION FORM. MAIL THE COMPLETED APPLICATION TO:

Virginia Department of Historic Resources
ATTN: Ethel R. Eaton
2801 Kensington Avenue
Richmond, Virginia 23221

Fax (804)367-2924
E-mail ere@DHR.state.va.us

CHRISTOPHER R. POLGLASE, M.A., ABD
VICE PRESIDENT- ARCHEOLOGICAL SERVICE

Mr. Christopher Polglase received his baccalaureate degree from William and Mary in 1980, his M.A. from SUNY Binghamton in 1985, and he currently is A.B.D. at that institution. At SUNY Binghamton, Mr. Polglase served as a teaching, research, and graduate assistant, where he edited the multi-volume report on excavations at the Utqiagvik site in Barrow, Alaska. Mr. Polglase received considerable cultural resource experience at SUNY Binghamton, where he served as crew chief on Phase I-III projects. Mr. Polglase also served as crew chief for three seasons at Fort Christanna, an early eighteenth century frontier outpost, and as field supervisor for the survey of the proposed Roanoke River Parkway. He also has participated in large projects in Alaska and throughout Italy.

At Goodwin & Associates, Inc., Mr. Polglase has worked on numerous projects in the Middle Atlantic, Southeast, Mid-West and the Caribbean. He has directed data recovery at numerous prehistoric and historic sites in the Middle Atlantic and Phase I-II studies across the Eastern United States. Two of those projects, excavations at the Russett Center and at the Garman Site, received the Excellence in Archeology Awards from the Anne Arundel County Trust for Historic Preservation in 1991 and 1992. His projects also received awards from the Maryland Historical Trust for Education Excellence (1997) and from the Harford County Historic Preservation Commission for the Preservation Project of the Year (1999).

Mr. Polglase's experience at Goodwin & Associates, Inc. has encompassed the range of preservation planning and interpretation studies. He has directed the preparation of multi-disciplinary cultural resource planning studies for the Army Corps of Engineers, NAVFACENCOM, the Department of Energy, and the Maryland Port Administration. These projects have included numerous Cultural Resource Management Plans (ICRMP) for such diverse facilities as the U.S. Naval Academy, Aberdeen Proving Ground, and Fort Belvoir. He has overseen the design of exhibits at several DoD installations, including preparation of panels, exhibit cases, and a touch screen computer kiosk. The development of that kiosk and subsequent projects led to an interest in the digital interpretation of archeological and historical resources, including 3D modeling of archeological sites. Mr. Polglase has directed the preparation of Geographic Information System (GIS) deliverables to DoD and private sector clients in the Middle Atlantic, including: (1) complete historic and natural resource data layers for 11 U.S. Navy installations in Tidewater Virginia; and (2) archeological and historical data for 29 counties in Pennsylvania. Mr. Polglase also oversees artifact curation compliance and conservation studies for Goodwin & Associates, Inc., including NAGPRA research for the U.S. Army Corps of Engineers in 21 states.

His research interests include lithic analysis, long-distance exchange, and the development of holistic preservation planning studies. In addition to numerous technical reports, he has published papers in the *Journal of Archeological Science*, *Preistoria Alpina*, and the *Journal of Middle Atlantic Archaeology*. He has presented professional papers to the Society for American Archeology, the Middle Atlantic Archeological Conference, the Archeological Societies of Maryland and Virginia, the Eastern States Archeological Federation, the Center for Medieval and Early Renaissance Studies, and the Valle dei Cavalieri.

CHRISTOPHER R. POLGLASE, M.A., ABD

VICE PRESIDENT - ARCHEOLOGICAL SERVICES

EDUCATION

Bachelor of Arts Degree in Anthropology and Classical Studies, College of William and Mary, Williamsburg, Virginia, 1980

M.A. in Anthropology, Department of Anthropology, SUNY-Binghamton, 1985

Ph.D. Candidate, Department of Anthropology, SUNY-Binghamton

HONORS

Sigma XI, the Scientific Research Society for "Obsidian Exchange and Social Interaction in Southern Italy during the Neolithic"(1988); Dissertation Fellowship, Department of Anthropology, SUNY-Binghamton (1986); Graduate Assistantship, Department of Anthropology, SUNY-Binghamton. Editing of Utqiagvik Project Final Reports (1985); Teaching Assistantship, Department of Anthropology, SUNY-Binghamton. Anthropology 111 - General Anthropology (1984); Teaching Assistantship, Department of Anthropology, SUNY-Binghamton - not accepted (1983); Research Assistantship, Department of Anthropology/Public Archaeology Facility, SUNY-Binghamton (1982, 1983, 1984. Analysis and writing for Utqiagvik Project.

PROFESSIONAL MEMBERSHIPS

Society for American Archaeology

Archaeological Society of Maryland

Eastern States Archaeological Federation

Middle Atlantic Archaeological Conference

PROFESSIONAL EXPERIENCE

Vice President - Archeological Services, R. Christopher Goodwin & Associates, Inc., Frederick, Maryland, December 1990 to present

Field Archeologist, R. Christopher Goodwin & Associates, Inc., Frederick, Maryland, June 1989 to December 1990

Field Supervisor, WAPORA, Inc., McLean Virginia. April 1989 to June 1989. Archeological Survey of the Proposed Roanoke River Parkway

Field Assistant for the Tompkins/Cortland Community College Archaeological Field School in Lucera, Italy. Excavations of the neolithic site of Ripa Tetta. Instructed 10 students and volunteers, July 1988

Preliminary reconnaissance survey for neolithic sites and examination of obsidian sources in the Oristano/Monte Arci region (Sardinia). With Albert J. Ammerman, June 1988

Laboratory analyses of the obsidian collections at the University of Parma from the Calabria Archaeological Survey, Fall 1987 and Spring 1988

Instructor for Colgate University Foreign Studies Program in Venice. Course: Archaeology in Italy, Fall 1987

Field Assistant at the Gaione site, Parma, Italy. Assisted in directing the excavation of a middle neolithic site, September 1987

Crew Chief for the Public Archaeology Facility, SUNY-Binghamton. Site mitigation at the Jamba Site, Norwich, NY. Report contributions. Project draftsman, April - August 1987

Crew Chief for the Public Archaeology Facility, SUNY-Binghamton. Various highway, sewage, and local development projects, Spring 1986 - Spring 1987

Crew Member for the Public Archeology Facility. Site mitigation at Port Dickinson, New York, September 1985

Field Assistant for the Tompkins/Cortland Community College Archaeological Field School in Lucera, Italy. Excavations of the neolithic site of Ripa Tetta. Instructed 15-20 students and volunteers, July 1985

Research Assistant for the Alaska Projects Office, SUNY-Binghamton. Organized artifacts and documentation from three field seasons for submission to contracting offices. Edited and compiled multi-volume reports from 1982 and 1983 field seasons, Spring 1985

Site monitoring and site survey in Calabria, Italy. With Albert J. Ammerman, August 1984

Teaching Assistant for the Ithaca College Archaeological Field School in Lucera, Italy. Excavations of the neolithic site of Ripa Tetta. Instructed 8-10 students and volunteers, July 1984

Research Assistant for the Utqiagvik Archaeology Project. Cataloged excavated material from the 1983 field season. Analysis and write-up for the 1982 and 1983 excavation reports, September 1983-June 1984

Sitkinak Island Survey. Walk over survey and testing of a Koniag site on Sitkinak Island, AK, August 1983

Crew member for the Utqiagvik Archaeology Project. Excavation of a late prehistoric Inupiat house in Barrow, AK, July - August 1983

Research Assistant for the Utqiagvik Archaeology Project. Processing and computer cataloging of excavated material. Analysis of extramound distribution of tools and waste, September 1982-June 1983

Crew Member/surveyor for the Utqiagvik Archaeology Project. Assisted in development and application of excavation strategy in protohistoric village in Barrow, AK. Responsible for site mapping and survey, June - August 1982

Crew Chief for three seasons for the Fort Christanna Archaeological Project in Brunswick County, VA. Developed, planned, and supervised excavations. Prepared site and area maps. Instructed crew in use of survey equipment. Project Director: Dr. Mary C. Beaudry, Summers 1979-1981

Student in the College of William and Mary's Archaeological Field School. Classroom and field training in all phases of excavation and artifact processing. Director: Dr. Theodore Reinhart, June - July 1979

MANUSCRIPTS, PUBLICATIONS, AND PAPERS PRESENTED

1983 Wealth Distribution in an Appenine Valley: A.D. 1415. A paper presented at the Conference on Medieval Archaeology. The seventeenth annual conference of the Center for Medieval and Early Renaissance Studies, SUNY-Binghamton.

1986a Mound 8 and Mound 7 Extramound Analyses. In *Additional Reports on the 1982 Excavations at the Utqiagvik Village Site, Barrow, AK*, edited by A. Dekin, et al. A report prepared by the Alaska Projects Office of the Public Archaeology Facility, SUNY-Binghamton for the North Slope Borough, Barrow, AK.

- 1986b Excavations of Tent Platform 1. In *Additional Reports on the 1982 Excavations at the Utqiagvik Village Site, Barrow, AK*, edited by A. Dekin, et al. A report prepared by the Alaska Projects Office of the Public Archaeology Facility, SUNY-Binghamton for the North Slope Borough, Barrow, AK.
- 1986c Excavations of the Mound 44 House Kitchen. In *Excavation of a Prehistoric Catastrophe: A Preserved Household from the Utqiagvik Village, Barrow, AK*, edited by A. Dekin, et al. A report prepared by the Alaska Projects Office of the Public Archaeology Facility, SUNY-Binghamton for the North Slope Borough, Barrow, AK.
- 1988a Lithic and lithic concentrations from the 1985 and 1987 excavations at the Jamba site. In: *Norwich Wastewater Treatment Plant: Jamba, SUBi 521; a multistaged approach to impact mitigation at a multicomponent archaeological site*, ed. by J.G. Gibb. A report prepared by the Public Archaeology Facility, SUNY-Binghamton for O'Brien and Gere Engineers.
- 1988b Guest speaker at the annual meeting of the Valle dei Cavalieri, Palanzano (Prov. of Parma), August, 1988.
- 1989a Competing sources, resource availability and utilization at the end of a long-distance obsidian exchange routes. A paper presented at the 54th Annual Meeting of the Society for American Archaeology, Atlanta.
- 1989b *Phase I Archeological Investigation of the Strange/Dorr Properties, Anne Arundel County, Maryland* (with R. Christopher Goodwin, April M. Fehr, Michelle Moran, and Leslie D. McFaden). Submitted to Genstar Stone Products Company.
- 1989c *Phase I Survey of the Proposed Physical Sciences Laboratory Building, College Park, Maryland* (with R. Christopher Goodwin and Michelle Moran). Submitted to U.S. Army Corps of Engineers, Baltimore District.
- 1989d *Intensive Archeological Survey of the Old Frederick Road Bridge Over Hunting Creek, Frederick, Maryland* (with R. Christopher Goodwin and Michelle Moran). Submitted to Frederick County Department of Public Works.
- 1989e *Phase I Archeological Survey of Woodhaven, Section One, Anne Arundel County, Maryland* (with R. Christopher Goodwin and Michelle Moran). Submitted to Wallace Baker & Associates.
- 1989f *Phase I Archeological Survey of the Eagle Passages Subdivision, U.S. 50 at South River, Anne Arundel County, Maryland* (with R. Christopher Goodwin, Leslie D. McFaden, April M. Fehr, and Jim Wojtala). Submitted to D.S. Thaler, Storm & Associates, Inc.
- 1989g *Phase II Archeological Survey Adjacent to the Lewinsville House, Lewinsville Park, Fairfax County, Virginia* (with R. Christopher Goodwin and Michelle T. Moran). Submitted to Fairfax County Park Authority, Division of Historic Preservation.
- 1989h *Phase II Archeological Investigations of the Sebastian Derr House Site (18FR638) Frederick County, Maryland* (with R. Christopher Goodwin). Submitted to MAERK, Ltd.
- 1990a *Phase I Archeological Survey of the Schwerer Property, Anne Arundel County, Maryland* (with Michelle T. Moran). Submitted to Anarex, Inc.
- 1990a Analyses of the obsidian collection from the Gaione site, Parma. *Preistoria Alpina* 25.

- 1990b Neutron activation analysis of obsidian from two sites in Italy. *Journal of Archaeological Science* (with A. J. Ammerman, A. Cesana, and M. Terrani).
- 1990c Recent Archeological Investigations at the Russett Center. A paper presented to the Anne Arundel County Chapter of the Archeological Society of Maryland.
- 1990d *Phase II Archeological Testing of Sites 18CH334, 18CH335, and 18CH336, Charles County Landfill No. 2, Waldorf, Maryland* (with R. Christopher Goodwin, Martha Williams, and Michelle T. Moran). Submitted to Interstate General Company, LP.
- 1990e *Phase I Archeological Testing at the New Castle Disposal Site, Lawrence County, Pennsylvania* (with R. Christopher Goodwin and Michelle T. Moran). Submitted to Blazosky Associates, Inc.
- 1990f Phase I Investigations at the Dorr Site (18AN19), Anne Arundel County. A paper presented at the First Annual Conference on Anne Arundel Archaeology. Annapolis, Maryland.
- 1990g Phase III Archeological Data Recovery at Russett Site 17 (18AN687) and Russett Site 21 (18AN685), Anne Arundel County, Maryland (with Thomas W. Neumann). A paper presented at the First Annual Conference on Anne Arundel Archeology, Annapolis, Maryland.
- 1990h *Archeological and Architectural Reconnaissance of the Suitland Federal Center, Prince Georges County, Maryland* (with April Fehr, Michelle T. Moran, Janet S. Shoemaker, and Kathryn M. Kuranda). Submitted to Ward/Hall Associates, Inc.
- 1990i *Phase III Archeological Data Recovery at Russett Site 17 (18AN687) and Russett Site 21 (18AN685), Anne Arundel County, Maryland* (with Thomas W. Neumann and R. Christopher Goodwin). Submitted to the Russett Center Limited Partnership.
- 1990j *Phase I Archeological Survey of the Proposed Land Proffer from Gettysburg National Military Park to Gettysburg College, Gettysburg, Pennsylvania* (with R. Christopher Goodwin, Peter H. Morrison, Michelle T. Moran, and Martha R. Williams). Submitted to Gettysburg College, Gettysburg, Pennsylvania.
- 1990k *Phase I Intensive Archeological Investigations of the Mountain View Subdivision, Anne Arundel County, Maryland* (with R. Christopher Goodwin, Martha R. Williams, Peter H. Morrison, and Michelle T. Moran). Submitted to Development Facilitators, Inc.
- 1990l *Phase III Archeological Data Recovery at Russett Site 8 (18AN666), Anne Arundel County, Maryland* (with R. Christopher Goodwin and Thomas W. Neumann). Submitted to Russett Center Limited Partnership.
- 1991a *Preliminary Archeological Reconnaissance of the Folly Branch SWM Facility, Prince Georges County, Maryland* (with R. Christopher Goodwin, Martha R. Williams, and Michelle T. Moran). Submitted to Engineering Technologies Associates, Inc.
- 1991b *Historical and Archeological Investigations of the Planned Washington National Airport Surveillance Radar Facility Site, Washington, D.C.* (with R. Christopher Goodwin and Michelle T. Moran). Submitted to Information Systems and Network Corporation.

- 1991c Down the River and Through the Woods: Prehistoric Settlement and Resource Exploitation Strategies Along a Maryland Drainage. A paper presented at the Middle Atlantic Archaeological Conference, Ocean City, Maryland (with Thomas W. Neumann).
- 1991d The Compound Flake Tool Industry of the Mid-Atlantic Region. A paper presented at the Middle Atlantic Archaeological Conference, Ocean City, Maryland (with Thomas W. Neumann).
- 1991e Household Variability in Obsidian Exploitation During the Neolithic in Italy. A paper presented at the 56th Annual Meeting of the Society for American Archaeology, New Orleans, LA.
- 1991f *Phase I Archeological Investigations of the Percon Property - Waverly Development, Howard County, Maryland*, (with R. Christopher Goodwin, Thomas W. Neumann, and Michelle T. Moran). Submitted to GTW Joint Venture.
- 1991g *Archeological Inventory and Testing of the Monocacy - Mount Airy 230 kV Transmission Line, the 230 kV Eaglehead Loop, and the Eaglehead 230 kV Substation, Frederick County, Maryland*, (with R. Christopher Goodwin, Suzanne L. Sanders, Michelle T. Moran, Thomas W. Neumann, with contributions by Pamela Crane). Submitted to Allegheny Power System.
- 1991h *Phase II Archeological Investigations of Site 18CR18, London Square Business Park, Carroll County, Maryland*. Submitted to London Square Partnership.
- 1991i *Phase I Archeological Investigations and Architectural Reconnaissance Survey of the BG&E Utility Corridor from Herald Harbor Road to Maryland Route 3, Anne Arundel County, Maryland* (with R. Christopher Goodwin, William R. Henry, Kathryn M. Kuranda, and Michelle T. Moran). Submitted to Baltimore Gas & Electric Company.
- 1991j *Phase I Archeological Survey of the AES/Warrior Run Cogeneration Facility, Allegany County, Maryland* (with R. Christopher Goodwin, Thomas W. Neumann, and Martha R. Williams). Submitted to AES/Warrior Run, Inc.
- 1991k *Archeological Survey and Architectural Investigation of the Proposed 7-Mile BG&E Dublin Extension Pipeline, Harford County, Maryland* (with Kathryn M. Kuranda, Michelle T. Moran, Mary K. Shipe, and Martha R. Williams). Submitted to Biohabitats.
- 1991l *Archeological and Architectural Reconnaissance of the Proposed Waverly Development, Howard County, Maryland* (with R. Christopher Goodwin, and Kathryn M. Kuranda). Submitted to GTW Joint Venture c/o Land Design & Development, Inc.
- 1991m *Phase II Archeological Investigations of 18PR377, Barnes Farm, Prince George's County, Maryland* (with R. Christopher Goodwin, Suzanne L. Sanders, Ralph Draughon, Jr., Michelle T. Moran, and Cynthia A. Whitley, with contributions by Thomas W. Neumann). Submitted to the U.S. Army Corps of Engineers, Baltimore District.
- 1991n The Early Archaic Component at the Garman Site, 18AN486. A paper presented at the Second Annual Conference on Anne Arundel Archeology, Annapolis, Maryland (with Thomas W. Neumann).
- 1991o Phase III Data Recovery Investigations at Two Multi-Component Early Woodland - Middle Woodland Sites in Central Maryland. A paper presented at the meetings of the Eastern States

- Archeological Federation, Williamsburg, Virginia (with Thomas W. Neumann and R. Christopher Goodwin).
- 1991p Quarry Related Extraction or Extraction Related Quarrying? A paper presented at the meetings of the Eastern States Archeological Federation, Williamsburg, Virginia (with Thomas W. Neumann).
- 1991q *Phase III Archeological Data Recovery of Site 18FR55, Frederick County, Maryland* (with R. Christopher Goodwin and Thomas W. Neumann). Submitted to Frederick County Division of Public Works.
- 1991r *Phase I Archeological Survey of the Riddle Tract, Anne Arundel County, Maryland*, (with R. Christopher Goodwin, Peter H. Morrison, and Michelle T. Moran). Submitted to Reds Dove, Inc.
- 1992a *Phase I Architectural and Archeological Investigations of the Original and Realigned BG&E Perryman to Sharon Gate and James Run Pipeline Corridors, Harford County, Maryland* (with Kathryn M. Kuranda, Michelle T. Moran, Mary K. Shipe, and Martha R. Williams). Submitted to Baltimore Gas & Electric Company.
- 1992b The Compound Tool Industry of the Mid-Atlantic Region. *Journal of Middle Atlantic Archeology* (with Thomas W. Neumann).
- 1992c *Cultural Resource Investigation of Brown's Battery Breaking Site, Berks County, Pennsylvania* (with John J. Mintz, Leo P. Hirrel, Hugh B. McAloon, Thomas W. Davis, and Kathryn M. Kuranda). Prepared under contract to U.S. Army Corps of Engineers.
- 1992d *Phase II/III Archeological Investigations at the Garman Site (18AN486), Woodside Ridge Subdivision, Anne Arundel County, Maryland*. Submitted to Cattail Associates, Inc. and the Anne Arundel County Trust for Preservation, Inc.
- 1992e *Archeological Evaluations of Site 44YO163, Newport News City Park, Virginia* (with Thomas W. Davis, and Leo P. Hirrel). Submitted to Gannett Fleming, Inc.
- 1992f *Phase II Archeological Evaluations of Sites 18CV61 and 18CV62, Calvert County, Maryland* (with Thomas W. Davis, Leo Hirrell, Thomas W. Neumann, Timothy Silva, Kathleen Federline, and Justine Woodard). Submitted to Baltimore Gas and Electric Co.
- 1992g *Archeological Reconnaissance of Stringing Sites and Associated Access Roads for the Proposed Baltimore Gas & Electric Company Waugh Chapel to the Vicinity of High Ridge 500 KV Transmission Line Corridor, Anne Arundel County and Howard County, Maryland* (with Thomas W. Davis). Submitted to Black & Veatch.
- 1992h *Archeological Reconnaissance of Stringing Sites for the Proposed Baltimore Gas & Electric Company Calvert Cliffs Nuclear Power Station to Chalk Point Power Station 500 kV Transmission Line Corridor, Calvert County and Prince George's County, Maryland* (with Thomas W. Davis). Submitted to Black & Veatch.
- 1992i *Phase I Cultural Resource Investigations of the Lake Shore Athletic Complex, Anne Arundel County, Maryland* (with R. Christopher Goodwin, Pamela Crane, and Hugh B. McAloon). Submitted to Anne Arundel County, Maryland.

- 1992j *Cultural Resource Reconnaissance and Sensitivity Study for the C & D Canal Feasibility Study, Chesapeake Bay and Delaware River* (with R. Christopher Goodwin, Kathryn M. Kuranda, Michelle T. Moran, Peter H. Morrison, Katherine E. Grandine, and Thomas W. Neumann). Submitted to the Maryland Port Administration.
- 1992k *Cultural Resource Management Plan for Morgantown Energy Technology Center* (with Michelle T. Moran, Thomas W. Davis, Hugh B. McAloon, and Timothy A. Silva). Submitted to the Department of Energy, Morgantown Energy Technology Center.
- 1992l *Phase II Archival and Archeological Investigations at the Wallace's Mill Site (18AN432), Anne Arundel County, Maryland* (with John J. Mintz, Martha R. Williams, Alice Crampton, S. Justine Woodard, and Kathleen Federline). Submitted to Whitman, Requardt and Associates.
- 1992m Recent Prehistoric Excavations in Maryland. Paper presented to the Archeological Society of Maryland Field School, Frederick, Maryland.
- 1992n The Transformation of Obsidian Exchange in Southern Italy During the Neolithic. A paper presented at the 57th Annual Meeting of the Society for American Archeology, Pittsburgh, Pennsylvania.
- 1992o Archeological Investigations at Gott's Court, City of Annapolis. A paper presented at the Third Annual Anne Arundel Archaeology Conference, Annapolis, Maryland (with Suzanne L. Sanders).
- 1992p *Cultural Resources Management Plan and Maintenance, Rehabilitation, and Repair Guidelines for Fort Detrick, Maryland* (with Deborah K. Cannan, John J. Mintz, William Henry, and Estella K. Bryans-Munson). Submitted to the U.S. Army Corps of Engineers, Baltimore District.
- 1992q *Phase IA Investigations of the Proposed Dalecarlia to Chain Bridge Water Supply Main Project, Washington, D.C., and Montgomery County, Maryland* (with Martha R. Williams and Suzanne L. Sanders). Submitted to Gannett Fleming, Inc.
- 1992r *Phase I Archeological Survey of the Colonial Beach Wastewater Treatment Facility, Westmoreland County, Virginia* (with Thomas W. Neumann, Martha R. Williams, S. Justine Woodard, and Colby A. Child). Submitted to Patton Harris, Rust & Associates, prepared for U.S. Environmental Protection Agency and Virginia State Water Control Board.
- 1992s *Phase II Archeological Evaluations for the Proposed Alpha Ridge Park, Howard County, Maryland* (with Thomas T. Dod and John J. Mintz, with contributions by Thomas W. Neumann). Submitted to J. Christopher Batten, Inc.
- 1992t *Archeological and Architectural Survey of the Potomac Palisades, Arlington County, Virginia* (with Deborah K. Cannan, Martha R. Williams, R. Christopher Goodwin, Pamela Crane, and Thomas W. Neumann). Submitted to Arlington County, Virginia.
- 1993a *Phase I and Phase II Archival, Architectural, and Archeological Investigations for the Local Flood Control Project, Moorefield, Hardy County, West Virginia* (with John J. Mintz, Thomas W. Neumann, Deborah K. Cannan, Michelle T. Moran, Thomas W. Davis, Ralph Draughon, and Kathryn J. Saul). Submitted to the U.S. Army Corps of Engineers, Baltimore District.

- 1993b *Phase I Archeological Survey of the Beards Creek Estates Subdivision, Anne Arundel County, Maryland* (with John J. Mintz, Michelle T. Moran, Colby A. Child, and Thomas W. Davis, with contributions by S. Justine Woodard). Submitted to Mandrin Construction Company, Inc.
- 1993c *Phase I Archeological Survey and Architectural Investigations of the Proposed Delmarva Power & Light Company, Easton-Steele 138 kV Transmission Line, Maryland* (with Michael A. Simons, Geoffrey E. Melhuish, W. Thomas Dod, and Kathryn M. Kuranda). Submitted to Delmarva Power & Light Company.
- 1993d *Archeological Investigations at Sites 31ON533, 31ON534, 31ON535, and 31ON536 Camp Lejeune, Onslow County, North Carolina* (with John J. Mintz, Martha R. Williams, S. Justine Woodard, and Kathleen F. Child). Prepared for the Atlantic Division, Naval Facilities Engineering Command.
- 1993e *Phase I and Phase II Archeological Investigations for the Villages of Lyonsfield Run, Baltimore County, Maryland* (with Jeffrey H. Maymon, Michael A. Simons and Hugh B. McAloon). Submitted to Westinghouse Credit Corporation.
- 1993f *The Exchange of Obsidian at Neolithic Sites in Italy. In Trade and Exchange in Prehistoric Europe*, edited by Chris Scarre and Frances Healey, pp. 101-107. Oxford, Oxbow Books (with Albert J. Ammerman).
- 1993g *Cultural Resources Management Plan and Maintenance, Rehabilitation, and Repair Guidelines for Aberdeen Proving Ground, Maryland* (with Kathryn M. Kuranda, Katherine E. Grandine and Thomas W. Davis). Submitted to the U.S. Army Corps of Engineers, Baltimore District.
- 1993h *Archeological Investigations for the Fiber-Optic Line Project, Carlisle Barracks, Cumberland County, Pennsylvania* (Principal Investigator; Martha R. Williams, John J. Mintz, S. Justine Woodard, William T. Dod, Donald J. Maher, and Suzanne L. Sanders, and with contributions by David B. Landon, and Theresa C. Reimer). Submitted to the U.S. Army Communications Electronic Command.
- 1994a *Phase II Archeological Evaluation of Sites 18PR119 and 18PR435, Sherwood II Development, Prince George's County, Maryland* (Principal Investigator; with Jeffrey H. Maymon and Michael A. Simons). Submitted to South Charles Realty Corporation.
- 1994b *Phase II Archeological Evaluations of Site 18HA176: Maryland Route 161 Bridge Over Deer Creek, Harford County, Maryland* (Principal Investigator; with Thomas W. Davis, Lance K. Trask, William P. Giglio, Hugh B. McAloon, and S. Justine Woodard). Submitted to the Maryland Department of Transportation, State Highway Administration.
- 1994c *Phase II Investigations of Sites 18HO52 and 18HO193 for the Proposed Maryland Route 100 Extension from US 29 to I-95, Howard County, Maryland* (Principal Investigator; with Jeffrey H. Maymon, Michael A. Simons, William P. Giglio and S. Justine Woodard). Submitted to the Maryland Department of Transportation, State Highway Administration.
- 1994d *Phase I Archeological Survey of the Adelphi Manor Water Quality Project, Prince George's County, Maryland* (with Jeffrey H. Maymon, Kathleen M. Child, Katherine E. Grandine. Submitted to the Loiederman Associates, Inc.

- 1994e *Phase I Cultural Resource Investigations for the Phase I Development Area, Chapman's Landing Development Charles County, Maryland* (Principal Investigator; with Timothy A. Silva, Thomas W. Davis, Leo P. Hirrel, Justine Woodard, Jeffrey H. Maymon, and Michael B. Hornum). Submitted to Banyan Management.
- 1994f Phase III Data Recovery of Russett Site 6. Paper presented to Annual Conference on Anne Arundel County Archeology (with Colby A. Child).
- 1994g *Phase I Archeological Investigations of the Daley/Webb/Shotwell Property, Fairfax County, Virginia* (Principal Investigator; Martha R. Williams). Prepared for Toll Brothers of Potomac, Inc.
- 1995a *Phase I Cultural Resources Survey of the Chapman's Landing Phase II/III Development Area Charles County, Maryland* (Principal Investigator; with Thomas W. Davis, Kathryn Saul, Ellen Saint Onge, Leo J. Hirrel, and S. Justine Woodard). Submitted to Banyan Management.
- 1995b *Phase II Cultural Resource Evaluation of Nine Sites Within the Phase I Development Area, Chapman's Landing, Charles County, Maryland* (Principal Investigator; with Michael B. Hornum, Leo P. Hirrel, Brooke V. Best, Elizabeth Edwards, Connie Capozzola, and Lance K. Trask). Submitted to Banyan Management.
- 1995c *Phase III Archeological Data Recovery at the Beehive Site (18HO206), Howard County, Maryland* (Principal Investigator; with Jeffrey H. Maymon, Kathryn J. Saul, Thomas F. Majorov, Kathleen M. Child, and Thomas W. Davis). Prepared for the Maryland Department of Transportation, State Highway Administration, Baltimore, Maryland.
- 1995d *Phase III Archeological Data Recovery at Russett Site 6 (18AN686) and Russett Site 9 (18AN688), Anne Arundel County, Maryland* (Principal Investigator; with April L. Fehr and Colby A. Child). Prepared for Russett Center Limited Partnership.
- 1995e *Phase I Archeological Investigations of the Proposed Jason's Landing Development, Anne Arundel County, Maryland* (Principal Investigator; Martha R. Williams). Prepared for RE Properties.
- 1995f *Phase I Archeological and Architectural Investigations for the Monrovia Wastewater Treatment Plant, Frederick County, Maryland* (Principal Investigator; April L. Fehr, Eliza Burden, and Katherine Grandine). Prepared for Frederick County Department of Public Works.
- 1995g *Inventory and Conservation Needs Assessment for Artifacts from Civil War Wrecks C.S.S. Florida and U.S.S. Cumberland* (Principal Investigator; David S. Robinson). Prepared for the Atlantic Division, Naval Facilities Engineering Command.
- 1995h *Phase I Cultural Resources Investigation of the Riverdale Glen Development Trust, Anne Arundel County, Maryland* (Principal Investigator; Thomas W. Davis, Kathleen M. Child, Geoffrey E. Melhuish, and Henry W. Measells, IV). Prepared for Frankie Wilson & Sons, Inc. and Brenton & Associates.
- 1995i *Phase IA Historical and Archeological Reconnaissance for the Southampton Road Bridge Replacement Project, Harford County, Maryland* (Principal Investigator; Brooke V. Best and Jeffrey H. Maymon). Prepared for Whitney, Bailey, Cox and Magnani.

- 1995j *Supplemental Cultural Resource Investigations to the Cultural Resource Management Plan, Aberdeen Proving Ground: Phase II Archeological Evaluation of Site 18HA122* (Principal Investigator; by Thomas W. Davis and Kathryn J. Saul). Prepared for Atlantic Division, Naval Facilities Engineering Command.
- 1996a *Phase II Archeological Investigations at Five Sites 44FX12, 44FX1305, 44FX1309, 44FX1314, and 44FX1317, U.S. Army Garrison, Fort Belvoir, Fairfax County, Virginia* (Principal Investigator; Michael A. Simons and John G. Clarke). Prepared for Environmental and Natural Resources Division.
- 1996b *Phase I Archeological Survey of the Briggs Chaney Road Realignment, Montgomery County, Maryland* (Principal Investigator; Nora Sheehan, Lori B. O'Donnell, and Jeffrey H. Maymon). Submitted to Hurst-Rosche Engineers, Inc.
- 1996c *Phase IA Archeological and Historic Sites Reconnaissance of the Fischer Property, Charles County, Maryland* (Principal Investigator; Jeffrey H. Maymon and Geoffrey Melhuish). Prepared for the Driggs Corporation.
- 1996d *Phase I Archeological Survey of the Gateway Village Property, Anne Arundel County, Maryland* (Principal Investigator; Ellen Saint Onge and W. Patrick Giglio). Prepared for Donatelli & Klein, Inc.
- 1996e *Phase I Archeological Survey of Mayo Ridge, Anne Arundel County, Maryland* (Principal Investigator; Ellen Saint Onge, Geoffrey Melhuish, and April Fehr). Prepared for Anarex, Inc.
- 1996f *Phase II Archeological Evaluation of Site 44HT46 at NASA Langley Research Center, Hampton, Virginia* (Principal Investigator; Ann B. Markell, Martha Williams, and Kathleen Child). Prepared for National Aeronautics and Space Administration.
- 1996g *Phase III Data Recovery at Site 31ON536 and Phase II Evaluation of the Prehistoric Component at Site 31ON534, Marine Corps Base Camp Lejeune, North Carolina* (Principal Investigator; Thomas W. Davis and Kathleen M. Child). Submitted to Atlantic Division, Naval Facilities Engineering Command.
- 1996h *Cultural Resources Management Investigations for the Main Street Reconstruction Project, Annapolis, Anne Arundel County, Maryland* (Principal Investigator; April L. Fehr, Suzanne Sanders, Martha R. Williams, David Landon, Andrew D. Madsen, Kathleen Child, and Michele Williams). Submitted to City of Annapolis.
- 1996i *Phase I Archeological and Architectural Survey at Naval Radio Transmitter Facility Driver, City of Suffolk, Virginia* (Principal Investigator; Michael B. Hornum, Kathryn J. Saul, and Katherine E. Grandine). Submitted to Atlantic Division, Naval Facilities Engineering Command.
- 1996j *Phase I Archival and Archeological Investigations of the Dorchester Sewer Interceptor, Anne Arundel County, Maryland* (Principal Investigator; Jeffrey H. Maymon and Lori B. O'Donnell). Submitted to Whitman, Requardt and Associates.
- 1996k *Archeological Investigations at 4437 Reservoir Road, N.W., Washington, D.C.* (Principal Investigator; Jeffrey H. Maymon and Donald J. Maher). Submitted to Mr. Mark Palmer.

- 1996l *Phase I Archeological Investigations of Lots 4 and 5 (King Realty, LLC) in the Wedgewood Industrial Park, Frederick County, Maryland* (Principal Investigator; April L. Fehr, Lori B. O'Donnell, and Kathleen M. Child). Submitted to Parker, Cade & Large, Inc.
- 1996m *Phase I Archeological Investigations for the Proposed Virginia Natural Gas, Inc. New Kent/West Point Pipeline Project* (Principal Investigator; Ann B. Markell, Nora Sheehan, and Lex Campbell). Submitted to Virginia Natural Gas, Inc.
- 1997a *Phase I Archeological Investigations for the Barcroft Subdivision, Anne Arundel County, Maryland* (Principal Investigator; April L. Fehr, W. Patrick Giglio, and Nora B. Sheehan). Prepared for Anarex, Inc.
- 1997b *Phase I Archeological Investigations for the Proposed Buckingham's Choice Continuing Care Center, Frederick County, Maryland* (Principal Investigator; Colby A. Child, Jr., April L. Fehr, and Geoffrey E. Melhuish). Prepared for Buckingham's Choice.
- 1997c *Cultural Resources Investigations for Alignment and Environmental Studies, Halfway Boulevard Extended and Newgate Boulevard (PUR-577), Washington County, Maryland* (Principal Investigator; April L. Fehr, Kathryn M. Kuranda, Martha R. Williams, W. Patrick Giglio, and Ellen Saint Onge). Prepared for KCI Technologies.
- 1997d *Phase I Archeological Investigations for the Proposed Fresh and River Water Lines to Building 1776, Indian Head Division, Naval Surface Warfare Center, Charles County, Maryland* (Principal Investigator; Thomas W. Davis, W. Patrick Giglio, and Adam I. Kane). Prepared for Planning Division, Department of Public Works, Indian Head Division.
- 1997e *Phase III Archeological Data Recovery at the Lyonsfield III Site (18BA433), Baltimore County, Maryland* (Principal Investigator; Jeffrey H. Maymon, Michael A. Simons, Donald J. Maher, Thomas F. Majorov, and Kathryn J. McGrath). Prepared for GBC Limited Partnership.
- 1997f *Supplemental Recordation of the Coston Cemetery and Phase II Evaluation of Site 31ON549, Onslow County, North Carolina, ER 93-7865* (Principal Investigator; Thomas W. Davis, Kathleen M. Child, and J. Michael West). Prepared for Atlantic Division, Naval Facilities Engineering Command.
- 1997g *Rock Art Study on DoD Property Located in LANTOPS, EFA Chesapeake, and NORTHDIV Areas of Responsibility* (Principal Investigator; Clement W. Meighan and Martha R. Williams). Prepared for Atlantic Division, Naval Facilities Engineering Command.
- 1997h *Phase I Architectural and Archeological Survey at Cheatham Annex, York County, Virginia* (Principal Investigator; Kathryn J. Saul, Katherine Grandine, Thomas W. Davis, Martha R. Williams, Andrew Madsen, Steven A. Mallory, Michael H. McGrath, Hugh B. McAloon, and David S. Olney). Submitted to Atlantic Division, Naval Facilities Engineering Command.
- 1997i *Archeological Resource Damage Assessment at Sites 44YO682 and 44YO683, Naval Weapons Station Yorktown, York County, Virginia, February 10-13, 1997* (Principal Investigator; Michael B. Hornum, Andrew D. Madsen, and Lex Campbell). Submitted to Atlantic Division, Naval Facilities Engineering Command.

- 1997j *Phase I Archeological Survey of Approximately 583 Acres at Naval Air Station Oceana, Virginia Beach, Virginia* (Principal Investigator; Andrew D. Madsen, Michael B. Hornum, Steven A. Mallory, and W. Patrick Giglio). Submitted to Atlantic Division, Naval Facilities Engineering Command.
- 1997k *Phase II Archeological Evaluations of 24 Sites at Naval Radio Transmitter Facility Driver, City of Suffolk, Virginia* (Principal Investigator; Michael B. Hornum, Andrew D. Madsen, Katherine E. Grandine, and Sonja Ingram). Submitted to Atlantic Division, Naval Facilities Engineering Command.
- 1997l *Phase I Archeological and Archival Investigations of the Proposed Parole Plaza Redevelopment, and Phase II Archeological and Archival Investigations of Site 18AN1026, Parole, Anne Arundel County, Maryland* (Principal Investigator; John L. Seidel and Nora Sheehan). Submitted to Landvisions, Inc.
- 1997m *National Register Evaluation of the Triplett Family Cemetery (44FX739), Lacey's Hill Cemetery (44FX1208), and Woodlawn United Methodist Cemetery (44FX1210), Fort Belvoir, Fairfax County, Virginia* (Principal Investigator; Martha R. Williams and Geoffrey E. Melhuish). Submitted to Paciulli, Simmons & Associates, Ltd.
- 1997n *Supplemental Phase I Archeological Investigations for the Proposed Buckingham's Choice Continuing Care Center, Frederick County, Maryland* (Principal Investigator; April L. Fehr). Submitted to Buckingham's Choice, Inc.
- 1997o *Phase I Archeological Investigations of the Proposed Stonehurst Townhouse Development, Anne Arundel County, Maryland* (Principal Investigator; Nora Sheehan and Katherine Grandine). Submitted to Annapolis Property Consultants.
- 1997p *GIS Data Development for Archeological Sites for U.S. Army Garrison, Fort Belvoir, Fairfax County, Virginia* (Principal Investigator; Augustine J. Fahey). Prepared for Paciulli, Simmons & Associates, Ltd.
- 1997q *Archeological Investigation and Evaluation of the Philip's Meadow Subdivision, Charles County, Maryland* (Principal Investigator; Kathleen Child, Katherine Grandine, and Thomas W. Davis). Prepared for Rainbow Construction Corp. of Waldorf, Inc.
- 1997r *Archeological Overview and Architectural Reconnaissance of the Proposed Coldspring Lane Light Rail Station Parking Facility, Baltimore, Maryland* (Principal Investigator; Katherine E. Grandine and Martha R. Williams). Prepared for Whitman, Requardt and Associates.
- 1997s *Phase II Archeological Investigation at 44FX1898 and Archeological Site Delineation of 44FX1935, U.S. Army Garrison, Fort Belvoir, Fairfax County, Virginia* (Principal Investigator; Michael A. Simons). Prepared for Paciulli, Simmons & Associates, Ltd.
- 1997t *Phase I Archeological Investigations of the Proposed Royal Oaks Subdivision, Frederick County, Maryland* (Principal Investigator; April L. Fehr, Lex Campbell, and Andrew Stout). Prepared for NML Corporation c/o Chevy Chase Bank.

- 1997u *Phase I Archeological Survey of the Proposed Storage Shed Location P-1 Addendum to: Phase I Archeological Investigations for the Proposed Fresh and River Water Lines to Building 1776 Indian Head Division, Naval Surface Warfare Center, Maryland* (Principal Investigator; Adam I. Kane and Thomas W. Davis). Prepared for Department of Public Works, Indian Head Division.
- 1997v *Geographic Information System Case Studies for Master Planning at LANTOPS Virginia Activities* (with Augustine J. Fahey). Prepared for Commander, Atlantic Division,
- 1997w *Phase I Archeological Survey of the Tudor Hall Village Development, St. Mary's County, Maryland* (Principal Investigator; Thomas W. Davis, Kathleen M. Child, W. Patrick Giglio, and Colby A. Child). Prepared for Mark Vogel Companies.
- 1997x *Phase I Archeological Survey at Naval Security Group Activity Northwest, Chesapeake City, Virginia, and Currituck County, North Carolina* (Principal Investigator; Michael B. Hornum, Nora Sheehan, Sonja Ingram, Martha R. Williams, and Geoffrey Melhuish). Prepared for Atlantic Division, Naval Facilities Engineering Command.
- 1997y *Phase I Archeological Survey of the Proposed Edmonston Road Improvements for the Beltsville Office Facility, USDA Beltsville Agricultural Research Center, Prince George's County, Maryland* (Principal Investigator; Michael B. Hornum, Lori O' Thursby, and John Clarke). Prepared for GNM & Associates, Inc.
- 1997z *Phase I Cultural Resource Survey for the Proposed Washington Gas Charles County Loop Line, Prince George's and Charles Counties, Maryland* (Principal Investigator; Jeffrey H. Maymon, Ellen Saint Onge, Andrew Madsen, Brooke Best, and Geoffrey Melhuish). Prepared for Stone & Webster.
- 1997aa *Phase III Archeological Data Recovery at Sites 44CS187 and 44CS188, Naval Security Group Activity Northwest, Chesapeake City, Virginia* (Principal Investigator; Michael B. Hornum, Katherine E. Grandine, Nora B. Sheehan, Andrew D. Madsen, and Michelle Williams). Submitted to Atlantic Division, Naval Facilities Engineering Command.
- 1997ab *Phase I and II Archeological Investigations for the Hospital Drive Extension Study, Anne Arundel County, Maryland* (Principal Investigator; Jeffrey H. Maymon). Prepared for Lukas Associates, Inc.
- 1997ac *Phase I Cultural Resource Investigations of the Proposed Buckeystown Sewer Interceptor and Pump Stations Project (199A-S)* (Principal Investigator; W. Patrick Giglio, Meril Dunn, and Thomas W. Davis). Prepared for Frederick County Department of Public Works.
- 1997ad *Phase I Archeological Survey of Approximately 160 Acres at the Proposed Tanyard Cove Development, Anne Arundel County, Maryland* (Principal Investigator; Michael B. Hornum, Jane Armstrong, and John Clarke). Prepared for CSX Real Property.
- 1997ae *Phase II Archeological Evaluation of Site 18PR542, Washington Gas Charles County Loop Line, Prince George's County, Maryland* (Principal Investigator; Jeffrey H. Maymon and Ellen Saint Onge). Prepared for Stone & Webster.
- 1997af *Phase I Archeological Survey of the Willow Grove Plantation Core Area, Prince George's County, Maryland* (Principal Investigator; Michael B. Hornum, Andrew D. Madsen, Lori O'Donnell, and W. Patrick Giglio). Submitted to Donatelli & Klein, Inc.

- 1997ag *Phase II Archeological Evaluation of Sites 18PR545 and 18PR546 for the Proposed Edmonston Road Improvements, USDA Beltsville Agricultural Research Center, Prince George's County, Maryland* (Principal Investigator; Michael B. Hornum and John Clarke). Prepared for GNM & Associates, Inc.
- 1997ah *Phase I Archeological Investigations at Marine Corps Air Station Cherry Point, North Carolina* (Principal Investigator; Thomas W. Davis, Kathleen M. Child, W. Patrick Giglio, and Martha R. Williams). Submitted to Atlantic Division, Naval Facilities Engineering Command.
- 1997ai *Overview of the Cultural Resources Management Program Naval Surface Warfare Center Indian Head Archeological Resources on Cornwallis Neck* (Principal Investigator; Thomas Davis). Prepared for Engineering Field Activity - Chesapeake.
- 1998a *Phase I Archeological Investigations of the Proposed King's Creek Plantation (Phases 1 and 2), York County, Virginia* (Principal Investigator with Ann B. Markell; by Bradley McDonald and Henry Measells). Submitted to King's Creek Plantation, LLC.
- 1998b *Archeological Survey of 850 Acres Within AFETA Camp Peary, York County, Virginia* (Principal Investigator; Suzanne Sanders, Colby Child, Martha Williams, and Leo Hirrel). Submitted to the Atlantic Division, Naval Facilities Engineering Command.
- 1998c *Archeological and Architectural Investigations for the Proposed Gateway Circle Project, Annapolis, Maryland* (Principal Investigator with Suzanne L. Sanders; Nora Sheehan, Katherine Grandine, and Elaine Kiernan). Prepared for City of Annapolis.
- 1998d *Phase I Survey for Submerged Cultural Resources, Chesapeake Bay Oyster Recovery Project, Chesapeake Bay, Somerset County, Maryland* (Principal Investigator; John L. Seidel and Martha R. Williams). Prepared for Baltimore District, U.S. Army Corps of Engineers.
- 1998e *Phase I Archeological Investigations of the Proposed Laxton Road/Enterprise Drive Connector, City of Lynchburg, Bedford County, and Campbell County, Virginia* (Principal Investigator with Ann B. Markell; Bradley M. McDonald and Henry W. Measells). Prepared for Hurt and Proffitt, Inc.
- 1998f *Phase I Archeological Investigation and Architectural Evaluation of the Cold Spring Lane Light Rail Parking Facility, Baltimore, Maryland* (Principal Investigator; Martha R. Williams, Katherine Grandine, John Clarke, and Elaine Kiernan). Prepared for Maryland Mass Transit Administration and Whitman Requardt and Associates.
- 1998g *Phase I Cultural Resources Survey of Stump Neck Annex and Supplemental Architectural Investigations, Indian Head Naval Surface Warfare Center, Charles County, Maryland* (Principal Investigator; Jeffrey H. Maymon, Elizabeth C. Rupp, Eliza E. Burden, W. Patrick Giglio, and Thomas W. Davis). Prepared for Engineering Field Activity - Chesapeake.
- 1998h *Phase II Archeological Evaluation of Five Sites for the Proposed Tudor Hall Village Development, St. Mary's County, Maryland* (Principal Investigator; Kathleen M. Child, Thomas W. Davis, W. Patrick Giglio, and Christopher Sperling). Prepared for K.A.A.V., LLC.
- 1998i *Historical Archeological Assessment of the Proposed Oxon Cove Prison Site, Washington, D.C.* (Principal Investigator; April L. Fehr). Prepared for Rust Environmental Infrastructure.

- 1998j *Phase I Archeological Survey and Phase II Evaluation of the Brown's Tavern (Site 18PR552), Within the Proposed Gateway Park Development, Prince George's County, Maryland* (Principal Investigator; Nora Sheehan, Martha Williams, Jane Armstrong, and April Fehr). Prepared for Federal Realty Investment Trust.
- 1998k *Interim Report on Archeological Survey of the Proposed Independence Pipeline Corridor through Lawrence, Butler, Armstrong, Clarion, Jefferson, Clearfield, Elk, Forest, McKean, Cameron, Potter, and Clinton Counties, Pennsylvania* (Principal Investigator; Michael B. Hornum, Thomas W. Davis, William Lowthert, Martha Williams, John Zielinski, Kathleen Child, Dan Grose, Greg Katz, Andrew Madsen, and Kathryn McGrath). Prepared for ANR Pipeline Company.
- 1998l *Phase I Underwater Archeological Survey for the Installation of 40 Helical Moorings at the U.S. Naval Station Marina, U.S. Naval Academy, Annapolis, Maryland* (Principal Investigator; David Robinson and April Fehr). Prepared for Michael Baker Jr., Inc.
- 1998m *Supplemental Report on Archeological Survey of the Proposed Independence Pipeline Corridor through Lawrence, Butler, Armstrong, Clarion, Jefferson, Clearfield, Elk, Forest, McKean, Cameron, Potter, and Clinton Counties, Pennsylvania* (Principal Investigator; Michael B. Hornum, Andrew D. Madsen, and William Lowthert). Prepared for ANR Pipeline Company.
- 1998n *Supplemental Report on Archeological Survey of the Proposed Independence Pipeline corridor through Defiance, Henry, Wood, Seneca, Huron, Ashland, Wayne, Stark, Summit, and Columbiana Counties, Ohio* (Principal Investigator; Jeffrey H. Maymon, John P. Zielinski, Patrick O'Neill, Thomas Majorov, Greg Katz, and Brian Stone). Prepared for ANR Pipeline Company.
- 1998o *Phase II Archeological Evaluations of Four Sites at the Eastern Shore Hospital Center, Cambridge, Dorchester County, Maryland* (Principal Investigator; Thomas W. Davis, Brian Stone, Brian Stokes, and Ellen Saint Onge). Prepared for State of Maryland, Department of Health and Mental Hygiene.
- 1998p *Phase II Archeological Evaluation of Site 44CF568 at Defense Supply Center Richmond, Chesterfield County, Virginia* (Principal Investigator with Ann B. Markell; Bradley McDonald and Henry Measells). Prepared for Mill Creek Environmental Consultants, Ltd.
- 1998q *Phase I Archeological Survey of the Proposed Villages at Urbana Planned Urban Development, Frederick County, Maryland* (Principal Investigator; April L. Fehr and Jane Armstrong). Submitted to Monocacy Land Company, L.L.C.
- 1998r *Phase II Archeological Evaluation of Site 18HO12 for the Proposed Rockburn Branch Sewer Line, Rockburn Branch Park, Howard County, Maryland* (Principal Investigator with Michael B. Hornum; John Zielinski and Michael Hornum). Submitted to Howard County Department of Public Works.
- 1998s *Phase I Archeological Investigations of the Proposed Race Road Relocated Water and Sewer Extension, Anne Arundel County, Maryland* (Principal Investigator; John P. Zielinski). Submitted to Anne Arundel County Department of Public Works.

- 1998t *Interim Report on Archeological Evaluation of Ten Sites for the Proposed Independence Pipeline Corridor in Henry, Wood, Ashland, Summit, and Columbiana Counties, Ohio* (Principal Investigator with Jeffrey H. Maymon; Thomas W. Davis, John Zielinski, Kathleen Child, Thomas Majorov, William Lowthert, Kathryn J. McGrath, and Kristen Bastis).
- 1998u *Inventory and Conservation Needs Assessment for Artifacts from the Civil War Shipwreck Kentucky* (Principal Investigator; Andrew D. Madsen, Martha Williams, and Anthony Randolph). Submitted to U.S. Army Corps of Engineers, Vicksburg District.
- 1998v *Phase I Architectural Survey and Archeological Investigations at Naval Communication Detachment Cheltenham, Prince George's County, Maryland* (Principal Investigator with Kathryn M. Kuranda; April Fehr and Katherine Grandine). Submitted to the Baltimore District, U.S. Army Corps of Engineers.
- 1998w *Integrated Cultural Resources Management Plan, US Army Garrison, Fort Belvoir, Virginia* (Principal Investigator with Kathryn M. Kuranda; Brooke Best, W. Patrick Giglio, and Martha Williams). Submitted to Dewberry & Davis on behalf of the Environmental & Natural Resources Division, Fort Belvoir, Virginia.
- 1998x *Phase II Archeological Evaluation of Site 46PD290, Naval Security Group Activity Sugar Grove, Pendleton County, West Virginia* (Principal Investigator; Jeffrey H. Maymon and Ellen Saint Onge). Submitted to Atlantic Division, Naval Facilities Engineering Command.
- 1999a *Phase I Archeological Investigations for the Proposed Arundel Mills Development, Anne Arundel County, Maryland* (Principal Investigator; Nora Sheehan, John Clarke, Justine McKnight, and Elaine Kiernan). Submitted to The Mills Corporation.
- 1999b *Archeological Survey of the Proposed Corsica – Roseville 6' Natural Gas Pipeline, Union Township, Jefferson County, Pennsylvania* (Principal investigator; Kathleen M. Child, Michael Hornum, and Katherine Grandine). Submitted to National Fuel Gas Supply Corporation.
- 1999c *Phase I Archeological Survey for the Proposed Ravenna Runway at Ravenna Army Ammunition Plant, Portage County, Ohio* (Principal Investigator; John Zielinski, Brian Clevon, and Jeffrey Maymon). Submitted to Science & Engineering Associates, Inc.
- 1999d *Phase II Archeological Evaluation of 13 Sites at Naval Security Group Activity Northwest, City of Chesapeake, Virginia, and Currituck County, North Carolina* (Principal Investigator; Nora Sheehan, Sonja Ingram, Steve Mallory, Michael Hornum, Katherine Grandine, and Lori Thursby). Submitted to Atlantic Division, Naval Facilities Engineering Command.
- 1999e *Phase I/II Archeological Investigations at Gunpowder Meeting House and Phase III Archeological Mitigation of Impacts to Site 18HA242, Quiet Lodge, Aberdeen Proving Ground, Harford County, Maryland* (Principal Investigator; Thomas W. Davis, Kristen Bastis, Meril Dunn, and Katherine Grandine). Submitted to Environmental Conservation and Restoration Division, Aberdeen Proving Ground, and Roy F. Weston, Inc.
- 1999f *Phase I Archeological Survey of a Proposed Building Located on Olson Road – Addendum to Phase I Cultural Resources Survey of Stump Neck Annex and Supplemental Architectural Investigations, Indian Head Surface Warfare Center, Charles County, Maryland* (Principal Investigator; Thomas W. Davis, Bradley Burkholder, and William H. Lowthert). Submitted to Indian Head Naval Surface Warfare Center.

- 1999g *Phase I Archeological and Architectural Survey at Naval Weapons Station Yorktown, York County, James City County, and the City of Newport News, Virginia* (Principal Investigator; Nora B. Sheehan, Michael B. Hornum, Katherine Grandine, Martha R. Williams, Brian A. Stone, Steven A. Mallory, Liza Rupp, and Anthony Randolph). Submitted to the Atlantic Division, Naval Facilities Engineering Command.
- 1999h *Phase I and II Investigations for the Proposed Expansion of the Deer Creek Recreation Area, Susquehanna State Park, Harford County, Maryland* (Principal Investigator; William Lowthert, IV, Jeffrey Maymon, and Katherine Grandine). Submitted to Maryland Department of General Services.
- 1999i *Cultural Resource Survey of the Proposed East Defiance Compressor Station Expansion, Defiance County, Ohio* (Independence Pipeline Cultural Resource Report No. 8). (Principal Investigator with Jeffrey H. Maymon; John Zielinski, W. Patrick Giglio, and Colby Child). Submitted to ANR Pipeline Company.
- 1999j *Second Supplemental Report on Archeological Survey of the Proposed Independence Pipeline Corridor through Lawrence, Butler, Armstrong, Clarion, Jefferson, Clearfield, Elk, Forest, Mckean, Cameron, Potter, and Clinton Counties, Pennsylvania* (Principal Investigator with Michael B. Hornum). Submitted to ANR Pipeline Company.
- 1999k *Second Supplemental Report on Archeological Survey of the Proposed Independence Pipeline Corridor through Defiance, Henry, Wood, Seneca, Huron, Ashland, Wayne, Stark, Summit, and Columbiana Counties, Ohio* (Independence Pipeline Cultural Resource Report No. 11) (Principal Investigator with Jeffrey H. Maymon; John Zielinski). Submitted to ANR Pipeline Company.
- 1999l *Archival Overview, Disturbance Assessment, and Archeological Investigations of the Proposed Maryland Museum of African American History and Culture Property, Baltimore County, Maryland* (Principal Investigator; April L. Fehr, Martha Williams, and Kathleen Child). Submitted to Maryland Department of Housing and Community Development.
- 1999m *Phase II Archeological Evaluation of Site 18AN454, Anne Arundel County, Maryland* (Principal Investigator; Ellen Saint Onge, Brian Stone, William Lowthert, and Thomas Davis). Submitted to Colimore-Clarke Associates and Anne Arundel County Department of Public Works.
- 1999n *Phase I Archeological Survey of the Proposed Beech Tree Development, Prince George's County, Maryland* (Principal Investigator; Michael B. Hornum, William Lowthert, IV, and Brian Clevon). Submitted to Ryko Development, Inc.
- 1999o *Phase I Archeological Survey for the Montpelier Ridge Development, Prince George's County, Maryland* (Principal Investigator; Anthony Randolph, Katherine Grandine, Ellen Saint Onge, and Thomas W. Davis). Submitted to Coscan/Adler Limited Partnership.
- 1999p *Phase I/II Archeological Investigations for the Proposed Officer's Club Parking Lot Expansion and Golf Field House Modifications, Naval Air Station, Patuxent River, St. Mary's County, Maryland* (Principal Investigator; Michael B. Hornum, Kathleen Child, and Martha Williams). Submitted to TAMS Consultants, Inc.

- 1999q *Phase I Cultural Resources Survey of Naval Security Group Activity Sugar Grove, Pendleton County, West Virginia* (Principal Investigator; Jeffrey H. Maymon, W. Patrick Giglio, Lori Thursby, Thomas Majorov, and Ellen Saint Onge). Submitted to Atlantic Division, Naval Facilities Engineering Command.
- 1999r *Phase III Archeological Data Recovery of Site 18PR119, Sherwood II Development, Prince George's County, Maryland* (Principal Investigator; Kathryn McGrath, Thomas Majorov, and Thomas Davis). Submitted to South Charles Realty Corporation.
- 1999s *Phase I-III Archeological Investigations for the Chilled Water Line Upgrade (P-165), Including Site 18AP83, U.S. Naval Academy, Annapolis, Maryland* (Principal Investigator with Suzanne Sanders; Nora Sheehan, Martha Williams, and Eleanor Breen). Submitted to Michael Baker, Jr., Inc.
- 1999t *Phase I Remote Sensing Marine Archeological Survey for the DNR Shellfish Dredging Project, Upper Chesapeake Bay, Maryland* (Principal Investigator; Jean B. Pelletier, David W. Trubey, and Martha R. Williams). Submitted to Maryland Department of Natural Services.
- 1999u *Archival Investigations and Disturbance Assessment for the Proposed Addition to the James Senate Office Building, Annapolis, Maryland* (Principal Investigator; Nora Sheehan and Martha Williams). Submitted to Maryland Department of General Services.
- 1999v *Phase IB Cultural Resources Identification of Portions of the Proposed Prince William County Service Authority Western Zone Water Transmission Line, Prince William County, Virginia* (Principal Investigator; Martha Williams). Submitted to Gannett Fleming, Inc.
- 1999w *Cultural Resources Management Investigations for the Site of the Proposed James Senate Office Building Addition, Annapolis, Maryland* (Principal Investigator; Nora Sheehan, Martha Williams, and April Fehr). Submitted to Maryland Department of General Services.
- 1999x *Supplemental Report on Archeological Evaluation along the Proposed Independence Pipeline Corridor through Lawrence, Butler, Armstrong, Clarion, Jefferson, Clearfield, Elk, Forest, McKean, Cameron, Potter, and Clinton Counties, Pennsylvania* (Principal Investigator with Michael B. Hornum; by Michael B. Hornum). Submitted to ANR Pipeline Company.
- 1999y *Phase II Archeological Resources Evaluation of Sites 44YO771 and 44YO772 at King's Creek Plantation, York County, Virginia* (Principal Investigator with Ann B. Markell). Submitted to Kings Creek Plantation, LLC.
- 1999z *Phase I Archeological Survey of Approximately 20 Acres and Phase II Archeological Evaluation of Site 44CS242 at Naval Security Group Activity Northwest, City of Chesapeake, Virginia* (Principal Investigator with Ann B. Markell; Bradley McDonald, Michael Hornum, Katherine Grandine, Sonja Ingram, and Henry Measells). Submitted to Atlantic Division, Naval Facilities Engineering Command.
- 1999aa *Phase I and II Investigations for the Monocacy Boulevard Extension and North Rosenstock Farm, Frederick County, Maryland* (Principal Investigator; by Jeffrey A. Maymon, William Lowther, Katherine Grandine, and Daniel Grose). Submitted to Buckeye Development Construction Company, Inc.

- 1999ab *Phase II Archeological Resources Evaluation of Sites 44YO458 and 44YO608 at FISC Cheatham Annex, Williamsburg, Virginia* (Principal Investigator with Ann B. Markell). Submitted to TAMS Consultants under contract to Atlantic Division, Naval Facilities Engineering Command.
- 1999ac *Third Supplemental Report on Archeological Survey of the Proposed Independence Pipeline Corridor Through Lawrence, Butler, Armstrong, Clarion, Jefferson, Clearfield, Elk, Forest, McKean, Cameron, Potter, and Clinton Counties, Pennsylvania* (Principal Investigator with Michael B. Hornum). Submitted to ANR Pipeline Company.
- 1999ad *Assessment of Archeological Resources in the City of Falls Church, Virginia* (Principal Investigator with Martha R. Williams). Submitted to Virginia Department of Historic Resources.
- 1999ae *Phase I and II Archeological Investigations for the UMBC Research Park and Playfield, Baltimore County, Maryland* (Principal Investigator; with Jeffrey H. Maymon, Katherine Grandine, and Colby Child). Submitted to UMBC Research Park Corporation.
- 1999af *Technical Addendum to the Phase I Archeological Survey of Approximately 200 Acres at the Proposed Beech Tree Development, Prince George's County, Maryland – Phase II Archeological Evaluation of Site 18PR579 (Beechwood Plantation)* (Principal Investigator; by Bill Lowthert, Michael Hornum, and Katherine Grandine). Submitted to Ryko Development, Inc.
- 2000a *Phase I Archeological Investigations of the Bouyers Landing Subdivision, Anne Arundel County, Maryland* (Principal Investigator; Brian Stone and Ellen Saint Onge). Submitted to Anarex, Inc.
- 2000b *Archeological Investigations at the Juvenile Justice Center, Baltimore, Maryland* (Principal Investigator; Martha R. Williams, Nora Sheehan, and Suzanne Sanders). Submitted to Maryland Department of General Services.
- 2000c *Phase I Archeological Survey for the Proposed Valley Ranch Development, Frederick County, Maryland* (Principal Investigator; with Stephanie Mekis, Michael B. Hornum, and Katherine Grandine). Submitted to The Evans Company.
- 2000d *Phase I Remote Sensing Marine Archeological Survey for the Washington Sailing Marina Addendum To: Phase I Remote Sensing Marine Archeological Survey for the Washington Sailing Marina* (Principal Investigator; with Sarah A. Milstead and Jean B. Pelletier). Submitted to Baltimore District, U.S. Army Corps of Engineers.
- 2000e *Phase I Archeological Investigations of the Proposed Daniel's Purchase Subdivision Project, Anne Arundel County, Maryland* (Principal Investigator; with Ellen Saint Onge, Katherine Grandine, Jesse Kulp, and Colby Child, Jr.). Submitted to Anarex, Inc.
- 2000f *Phase I Archeological Survey for the Proposed Parking Lot Off of Strauss Road, NSWC Indian Head, Charles County, Maryland* (Principal Investigator; with Thomas W. Davis, William Lowthert, IV, Brian Stone, and Peter Godwin). Submitted to Indian Head Division, Naval Surface Warfare Center.
- 2000g *Phase II Archeological Evaluation of Sites 36AD208, 36AD210, 36AD216, and 36AD218, Adams County, Pennsylvania* (Principal Investigator; by William Lowthert, IV, Brian A. Stone, Michael B. Hornum, and Martha Williams). Prepared for Adams County Economic Development Corporation.

- 2000h *Interim Report on Cultural Resource Survey for the Proposed Eastchester Marine Pipeline, Suffolk and Bronx Counties, New York* (Principal Investigator with Jeffrey H. Maymon; with Jean B. Pelletier, Richard Vidutis, Martha Williams, Peter Godwin, W. Patrick Giglio, Sarah Milstead, Larkin Post, Brian Stone, Kristen Bastis, and Katherine Grandine). Prepared for ENSR.
- 2000i *Supplemental Analysis of Faunal, Botanical, and Soil Samples from the Towne Neck Site (18AN944) at the U.S. Naval Academy, Annapolis, Maryland* (Principal Investigator; by Ann Markell, Christian Davenport, and Justine W. McKnight). Prepared for Michael Baker, Jr., Inc.
- 2000j *Phase I Archeological Survey for the Proposed Fire Training Academy, Sparrows Point, Baltimore County, Maryland* (Principal Investigator; with Thomas W. Davis, Richard R. Vidutis, and Jennifer L. Tobey). Prepared for Whitney, Bailey, Cox & Magnani, LLP.
- 2000k *Phase II Evaluation of Portions of Site 18CH673, Naval Surface Warfare Center, Indian Head, Charles County, Maryland* (Principal Investigator; by Thomas W. Davis, Colleen Popson, Peter Godwin, and Daniel Grose). Prepared for Public Works Department, NSWC Indian Head.
- 2000l *Intensive Level Reconnaissance at the United States Naval Academy: The Main Campus, NSWC Annapolis Housing, USNA North Severn, and the Naval Academy Dairy Farm, Annapolis and Anne Arundel County, Maryland* (Principal Investigator; by John L. Seidel, Martha R. Williams, and Elizabeth Rupp). Prepared for Engineering Field Activity - Chesapeake.
- 2000m *Integrated Cultural Resource Management Plan, United States Naval Academy, Annapolis, Maryland* (Principal Investigator with Kathryn M. Kuranda; by Lex Campbell, John L. Seidel, and Martha R. Williams). Prepared for Engineering Field Activity - Chesapeake.
- 2000n *Archival Study and Disturbance Assessment for the Philadelphia Avenue Reconstruction Project, Ocean City, Maryland* (Principal Investigator; with Martha R. Williams). Prepared for Whitman Requardt & Associates, LLP.
- 2000o *Technical Addendum to Phase II Archeological Evaluation of Sites 36AD208, 36AD210, 36AD216, and 36AD218, Adams County, Pennsylvania - Phase I Survey of the 3,200 ft (975.6 m) Proposed Off-Site Sewer and Water Line* (Principal Investigator; by Josh Roth, Martha Williams, and Michael B. Hornum). Prepared for Gannett Fleming, Inc.
- 2000p *Phase IB Archeological Testing at the Church Home and Hospital, Baltimore, Maryland* (Principal Investigator; with Suzanne Sanders, Martha Williams, and Laurie Paonessa). Prepared for the Johns Hopkins Hospital.
- 2000q *Technical Addendum to Phase II Archeological Evaluation of Sites 36AD208, 36AD210, 36AD216, and 36AD218, Adams County, Pennsylvania - Phase I Survey of the 14 Acre Drummer Boy Campground Parcel, and Phase II Archeological Evaluation of Sites 36AD213 and 36AD215* (Principal Investigator; by Brian A. Stone, Matthew Gill, William Lowthert, IV, and Michael B. Hornum). Prepared for Adams County Economic Development Corporation.
- 2000r *Phase I Remote Sensing Marine Archeological Survey for the Baltimore Harbor and Anchorage Project; Addendum to: Phase I Remote Sensing Marine Archeological Survey for the Baltimore Harbor and Anchorage Project* (Principal Investigator; by J.B. Pelletier, M.A.). Prepared for Advanced Technology Systems, Inc.

- 2000s *Phase III Archeological Data Recovery at Site 18ST704, Naval Air Station Patuxent River, St. Mary's County, Maryland* (Principal Investigator; by Michael B. Hornum, Andrew D. Madsen, Christian Davenport, John Clarke, Kathleen M. Child, and Martha Williams). Prepared for TAMS Consultants, Inc.
- 2000t *Phase I Archeological Investigations of the Rahll Wetland Mitigation Site, Harford County, Maryland* (Principal Investigator; by Thomas W. Davis, Frank J. Vento, Daniel Grose, Meril Dunn, and John Clarke). Prepared for Maryland Department of Transportation.
- 2000u *Phase I Archeological Survey of Approximately 13 Acres (5.26 ha) for the Proposed Fairwood Development, Prince George's County, Maryland* (Principal Investigator; by Michael B. Hornum). Prepared for Rouse-Fairwood Properties.
- 2000v *Phase I Cultural Resources Survey for the Maryland Mass Transit Police Operations Facility, Baltimore City, Maryland* (Principal Investigator; by Christian Davenport, Nathaniel Patch, and Katherine Grandine). Prepared for Whitman, Requardt & Associates, LLP.
- 2000w *Archival Investigations and Disturbance Assessment for the Proposed Addition to the Lowe House of Delegates Office Building, Annapolis, Maryland* (Principal Investigator; by Ann B. Markell and Martha R. Williams). Prepared for the Maryland Department of General Services.
- 2000x *Phase I Remote Sensing Marine Archeological Survey for the Washington Sailing Marina* (Principal Investigator; by Jean B. Pelletier, Sarah A. Milstead Post, David W. Trubey, Adam I. Kane, and Martha R. Williams). Submitted to U.S. Army Corps of Engineers, Baltimore District.
- 2000y *Phase I Archeological and Architectural Survey for the Proposed Ballenger Creek Pike Realignment, Frederick County, Maryland* (Principal Investigator; by Jennifer Tobey, Nathaniel Patch, Scott Meacham, and Michael B. Hornum). Prepared for Grimm and Parker Architects.
- 2001a *Phase I Archeological Survey of the Proposed Pasadena Manor Subdivision, Anne Arundel County, Maryland* (Principal Investigator; by David Soldo, Nathaniel Patch, and Michael B. Hornum). Prepared for Snyder Development Corporation.
- 2001b *Phase I Archeological Survey for the Proposed Barton Business Park, Allegany County, Maryland* (Principal Investigator; by Kathleen Child, Jeffrey H. Maymon, and Brian Stone). Prepared for Allegany County Department of Community Services.
- 2001c *Archeological Data Recovery of Site 46HY102, Moorefield Local Flood Control Project, Moorefield, Hardy County, West Virginia* (Principal Investigator with Thomas W. Davis; by Colby A. Child, Thomas W. Davis, Thomas F. Majorov, Brian Stone, and Frank S. Vento). Prepared for U.S. Army Corps of Engineers, Baltimore District.
- 2001d *Phase I Archeological Investigations of the Shaw Property, Anne Arundel County, Maryland* (Principal Investigator; by Michael A. Simons and Jennifer A. Brown). Prepared for Snyder Development Corporation.
- 2001e *Phase II Archeological Evaluation of Sites 18AG23, 18AG229, and 18AG234 and Supplementary Archeological Survey for the Proposed Barton Business Park, Allegany County, Maryland* (Principal Investigator; by Colby A. Child, Jr., Kathleen Child, Kristen Bastis, and Jeffrey H. Maymon). Prepared for Allegany County Department of Community Services.

- 2001f *Phase I Cultural Resources Survey for the Proposed Emerson Section 2 Development, Howard County, Maryland* (Principal Investigator; by Michael B. Hornum, Scott Meacham, and Christian Davenport). Prepared for The Howard Research and Development Corporation.
- 2001g *Phase I Remote Sensing Marine Archeological Survey for the Coan River Navigation Improvement Project, Coan River, Northumberland County, Virginia – Addendum* (Principal Investigator; by Jean B. Pelletier and Samuel Turner). Prepared for Advanced Technology Systems, Inc.
- 2001h *Phase I Archeological Investigations for the Enyart Property, Anne Arundel County, Maryland* (Principal Investigator; by Christian Davenport, Michael B. Hornum, and Nathaniel Patch). Prepared for Washington Homes.
- 2001i *Phase I Archeological Investigations of the Proposed Tappahannock – Essex County Airport, Tappahannock, Virginia* VDHR File #92-2761-F (Principal Investigator with Ann Markell; by Ann Markell, Brian Cleven, Christopher Schaney, William H. Lowthert, IV, and Mitzy Schramke). Prepared for Mill Creek Environmental Consultants, Ltd.
- 2001j *Phase I Archeological Survey at the Proposed Carolstown Development, Anne Arundel County, Maryland* (Principal Investigator; by Michael B. Hornum and Nathaniel Patch). Prepared for W.F. Utz Construction c/o Terrain, Inc.
- 2001k *Phase I Remote Sensing Marine Archeological Survey of the Southwest Pass, Ocean Dredge Material Disposal Site, Plaquemines Parish, Louisiana* (with Jean B. Pelletier, Richard Vidutis, Larkin A. Post, Sarah A. Milstead, Roger Saucier, and Douglas Jones). Prepared for the New Orleans District, U.S. Army Corps of Engineers.
- 2001l *Phase I Archeological Survey for the Proposed Tennessee Gas Pipeline Compressor Station, Ellisburg, Potter County, Pennsylvania* (Principal Investigator; by Thomas W. Davis and Daniel Grose). Prepared for Killam Associates New England.
- 2001m *Phase I Archeological Survey for the Proposed Texas Eastern Transmission, LLP, Allegheny – Chambersburg, Pennsylvania Lateral Project, Franklin County, Pennsylvania* (Principal Investigator; by Jesse Kulp, Scott Meacham, and Michael B. Hornum). Prepared for ENSR International.
- 2001n *Phase I Archeological Survey for the Proposed Quantico Creek Railroad Bridge Project, Prince Williams County, Virginia (DHR File Number 1999-2117)* (Principal Investigator; by Peter Godwin, Joshua Roth, Michael Hornum, and Scott Meacham). Prepared for HDR Engineering, Inc.
- 2001o *Supplemental Report on Archeological Evaluation for the Proposed Independence Pipeline Corridor in Henry, Ashland, Stark, and Columbiana Counties, Ohio (Independence Pipeline Cultural Resource Report No. 14)* (Principal Investigator with Jeffrey H. Maymon; by Colby A. Child, Jeffrey H. Maymon, William H. Lowthert IV, David J. Soldo, John Zielinski, Thomas W. Davis, Kristen Bastis, Brian Stone, and Meril Dunn). Prepared for El Paso Corporation.

- 2001p *Fourth Supplemental Report on Archeological Survey of the Proposed Independence Pipeline Corridor Through Defiance, Henry, Wood, Seneca, Huron, Ashland, Wayne, Stark, Summit, and Columbiana Counties, Ohio (Independence Pipeline Cultural Resource Report No. 18)* (Principal Investigator with Jeffrey H. Maymon; by Kathleen M. Child, Jason Kranch, Christina Cushion, Brandi Carrier, William H. Lowthert IV, Brian Stone, Colby Child, Brian Clevon, Brad Burkholder, Jennifer Evans, Matthew Gill, Sean Alexander, Jesse Kulp, Meril Dunn, and Thomas W. Davis). Prepared for El Paso Corporation.
- 2001q *Combined Fourth Supplemental Report on Archeological Survey and Second Supplemental Report on Archeological Evaluation for the Proposed Independence Pipeline Corridor Through Lawrence, Bulter, Armstrong, Clarion, Jefferson, Clearfield, Elk, Forest, Mckean, Cameron, Potter, and Clinton Counties, Pennsylvania (Independence Pipeline Cultural Resource Report No. 19)* (Principal Investigator with Michael B. Hornum; by Michael B. Hornum). Prepared for El Paso Corporation.
- 2001r *Technical Addendum to the Phase I Archeological Survey at the Proposed Beech Tree Development, Prince George's County, Maryland – Phase II Archeological Evaluation of Site 18PR573* (Principal Investigator with Michael B. Hornum; by William Lowthert IV, Brian Stone, and Katherine Grandine). Prepared for Ryko Development, Inc.
- 2001s *Phase I Archeological Survey for the Proposed Duke Energy North America (DENA), LLC Powerplant, German Township, Fayette County, Pennsylvania (Pennsylvania Environmental Report #2001-1219-051-C)* (Principal Investigator; by Jesse Kulp, Peter Holmes, Brian Clevon, Katherine Grandine, Michael Hornum, Kathryn M. Kuranda, and Scott Meacham). Prepared for CH2M Hill.
- 2001t *Supplement to the Phase I Archeological Survey for the Proposed Texas Eastern Transmission, LLP Reliant – Hunterstown, Pennsylvania Lateral Project, Adams County, Pennsylvania* (Principal Investigator; by Jennifer Brown and Michael Hornum). Prepared for ENSR International.
- 2001u *Phase I Archeological Survey for the Proposed Texas Eastern Transmission, LLP Reliant – Hunterstown, Pennsylvania Lateral Project, Adams County, Pennsylvania (Pennsylvania Environmental Report #1999-3106-001-E)* (Principal Investigator; by Michael B. Hornum, Jennifer Brown and Scott Meacham). Prepared for ENSR International.
- 2001v *Phase I and II Cultural Resource Investigations at Fort Howard Medical Center, Fort Howard, Maryland* (Principal Investigator with Ann Markell; by Ann Markell, Martha R. Williams, Joshua S. Roth, and Kathleen Marie Child). Prepared for Condor Technology Solutions, Inc.
- 2001w *Phase I Remote Sensing Marine Archeological Survey for the Coan River Navigation Improvement Project, Coan River, Northumberland County, Virginia Addendum (Contract #DACW31-00-D-0015)* (Principal Investigator; David S. Robinson, Adam Kane, Jean Pelletier, Brian Clevon, and Martha Williams). Prepared for the Baltimore District, U.S. Army Corps of Engineers.

- 2001x *Phase I Archeological Remote Sensing Survey of the Proposed Southern Natural Gas (SNG) Elba Island Turning Basin in the Savannah River, Chatham County Georgia, and including portions of the South Carolina Bankline in Jasper County, South Carolina* (Principal Investigator with R. Christopher Goodwin; by Jean B. Pelletier, Samuel P. Turner, Martha R. Williams, and Frank Vento). Prepared for Southern Natural Gas.
- 2001y *Phase II Archeological Evaluation of Site 36AD214 and 36AD219, Adams County* (Principal Investigator; by Jennifer Tobey, Brian Cleven, Scott Meacham, and Michael Hornum). Prepared for North Ridge Associates c/o Rhodes & Sinon, LLP.
- 2001z *Phase II Underwater Cultural Resources Investigation of the Proposed Dredge Site at Naval Amphibious Base Little Creek, Virginia Beach, Virginia* (Principal Investigator; by Jean B. Pelletier, Sarah A. Milstead Post, Larkin A. Post, and Richard Vidutis). Prepared for TAMS Consultants, Inc.
- 2001aa *Archival Study and Disturbance Assessment for U.S. 50 East of Structure at Sinepuxent Bay Bridge to Philadelphia Avenue and Philadelphia Avenue Reconstruction in Ocean City, Maryland* (Principal Investigator; by Martha Williams). Prepared for Whitman, Requardt and Associates, LLP.
- 2001ab *Phase III Data Recovery at the Monocacy Boulevard Site (18FR750), with Appendix for Results of Archeological Monitoring for the Proposed Riverside Center Soccer Fields, Frederick County, Maryland* (Principal Investigator; by Jeffrey H. Maymon, Kristen Bastis and Colby A. Child, Jr.). Prepared for Buckeye Development Construction Company, Inc.
- 2001ac *Third Supplemental Report on Archeological Survey of the Proposed Independence Pipeline Corridor Through Defiance, Henry, Wood, Seneca, Huron, Ashland, Wayne, Stark, Summit, and Columbiana Counties, Ohio (Independence Pipeline Cultural Resource Report No. 16)* (Principal Investigator with Jeffrey H. Maymon; by Colby A. Child, Jr., Kristen Basten, William Lowthert, IV, Peter Godwin, Joshua Roth, Jesse Kulp, Matthew Thaler, Joshua Weller, Christopher Schaney, Mitzy Schramke, Jason Kranch, and Matthew Gill). Prepared for El Paso Corporation.
- 2001ad *Interim Report on Cultural Resource Survey for the Proposed Eastern Long Island Extension Pipeline, New Haven County, Connecticut and Suffolk County, New York – OPRHP Project No. 01PR3569* (Principal Investigator with Jeffrey H. Maymon; by Jeffrey H. Maymon, Jean B. Pelletier, Samuel P. Turner, Martha Williams, Daniel Grose, Nathaniel Workman, Emmett Brown, Joel Evans). Prepared for ENSR International.
- 2001ae *Supplemental Cultural Resource Survey Report for the Proposed Eastern Long Island Extension Pipeline New Haven County, Connecticut and Suffolk County, New York Docket No. CP01 - ____-____, OPRHP Project No. 01PR3569* (Principal Investigator with Jeffrey H. Maymon; by Jeffrey H. Maymon, Daniel Grose, Martha Williams, and J. Andrew Ross). Prepared for ENSR International.
- 2002a *Phase I Underwater Archeological Survey: Construction of 32 Berth MWR Marina at Mill Creek, U.S. Naval Academy, Anne Arundel County, Maryland* (Principal Investigator; by Jean B. Pelletier, Samuel P. Turner, and Martha R. Williams). Prepared for A. Morton Thomas and Associates, Inc.

- 2002b *Phase I Archeological Survey of the Perryville Connector Corridor, Cecil County, Maryland* (Principal Investigator; by J. Andrew Ross, Kathleen Child, Martha R. Williams, Nathaniel Patch, and Thomas W. Davis). Submitted to Fossett & Brugger Chartered.
- 2002c *Phase I Archeological Investigations of the Proposed Maple Lawn Farms Development, Howard County, Maryland* (Principal Investigator; by Thomas W. Davis, Peter Godwin, and Jennifer Evans). Submitted to Greenebaum and Rose Associates, Inc.
- 2002d *Phase II Archeological Evaluation of Site 18FR785 for the Proposed Duke Energy Facility, Frederick County, Maryland* (Principal Investigator; by Jesse Kulp, Michael B. Hornum, Nathaniel Patch, and Katherine Grandine). Submitted to Environmental Consulting & Technology, Inc.
- 2002e *Visual Reconnaissance for the Proposed Brookfield Compressor Station, Eastchester Phase II Project, Town of Brookfield, Fairfield County, Connecticut* (Letter Report) (Principal Investigator). Submitted to ENSR International.
- 2002f *Phase I Archeological Survey for the Proposed Ballenger Creek Sewer Interceptor, Frederick County, Maryland* (Principal Investigator; by Jennifer A. Brown, Nathaniel Patch, and Michael B. Hornum). Prepared for Grimm and Parker Architects.
- 2002g *Archeological Resource Assessment and Predictive Model, Norfolk Naval Base, Norfolk, Virginia VDHR File No. 93-0994* (Principal Investigator; Ann B. Markell and Katherine Grandine). Submitted to Atlantic Division, Naval Facilities Engineering Command.
- 2002h *Archeological Survey for the Proposed Brookfield Compressor Station, Eastchester Phase II Project, Town of Brookfield, Fairfield County, Connecticut* (Principal Investigator with Jeffrey H. Maymon; by Jeffery H. Maymon, Martha Williams, and J. Andrew Ross). Prepared for ENSR International.
- 2002i *Phase II Archeological Evaluation of Six Sites at Naval Air Station Oceana and Naval Auxiliary Landing Field Fentress, Virginia Beach and Chesapeake, Virginia* (Principal Investigator with Michael B. Hornum; by Michael B. Hornum, Sonja Ingram, Henry W. Measells, Jennifer Brown, and Brad Burkholder). Prepared for Atlantic Division, Naval Facilities Engineering Command.
- 2002j *Phase II Archeological Evaluation of Site 44VB219 at Naval Air Station Oceana, Virginia Beach, Virginia* (Principal Investigator; by Colleen Popson, William Lowthert IV, Michael B. Hornum, and Katherine Grandine). Prepared for Atlantic Division, Naval Facilities Engineering Command.
- 2002k *Cultural Resource Survey and Evaluation for the Four Seasons at Kent Island, Queen Anne's County, Maryland* (Principal Investigator; by Thomas W. Davis, Martha Williams, Jennifer A. Tobey, Christian D. Davenport, Jennifer E. Bourneman, Christopher Schaney, Mitzy Schramke, and Scott Meacham). Prepared for Fossett & Brugger Chartered on behalf of Washington Homes, Inc.
- 2002l *Phase I Archeological Investigations for the Proposed Shrewsbury Square Shopping Center, York County, Pennsylvania* (Principal Investigator; by Drew Ross, Kris West, and Michael B. Hornum). Prepared for Mid-Atlantic Realty Trust.
- 2002m *Technical Addendum to the Phase I Archeological Survey of Approximately 200 Acres at the Proposed Beech Tree Development, Prince George's County, Maryland – Phase III*

- Archeological Data Recovery of Locus A at Site 18PR579 (Beechwood Plantation)* (Principal Investigator with Michael B. Hornum; by William Lowthert IV, David Soldo, and Katherine Grandine). Submitted to Ryko Development, Inc.
- 2002n *Phase I Archeological Survey for Middle River Employment Center Access Study Wetland Mitigation Site 25, Back River Neck Road, Baltimore County, Maryland* (Principal Investigator; by Brian Stone, Emmett Brown, and Thomas W. Davis). Submitted to Maryland State Highway Administration.
- 2002o *Cultural Resource Assessment and Phase I Archeological Testing of Alternative A Potomac Interceptor Sewer Improvements, Arlington County, Virginia (VDHR File No. 2001-0781)* (Principal Investigator; by Martha Williams). Prepared for Camp Dresser & McKee and the National Park Service.
- 2002p *Addendum Report: Phase II Archeological Excavations at Site 18BA494, Fort Howard Medical Center, Fort Howard, Maryland* (Principal Investigator with Ann Markell; by Ann B. Markell, Joshua S. Roth, and Martha R. Williams). Submitted to Condor Technology Solutions, Inc.
- 2002q *Additional Phase I Archeological Survey for the Proposed Duke Energy North America Facility, Frederick County, Maryland* (Principal Investigator; by Michael B. Hornum). Prepared for Environmental Consulting & Technology, Inc.
- 2002r *Phase I Archeological Survey for the Proposed Duke Energy North America Facility on the Offutt Property, Frederick, Maryland* (Principal Investigator; by Brian Stone, Nathaniel Patch, and Michael Hornum). Prepared for Environmental Consulting & Technology, Inc.
- 2002s *Supplemental Phase I Archeological Survey for the Proposed Duke Energy North America Facility, Frederick County, Maryland* (Principal Investigator; by Michael Hornum, J. Andrew Ross, Jesse Kulp, and Brad Burkholder). Prepared for Environmental Consulting & Technology, Inc.
- 2002t *Phase II Archeological Evaluation of the Burgee Springhouse (18FR725) for the Proposed Frederick County Public Schools Urbana Elementary, Frederick County, Maryland* (Principal Investigator with Suzanne L. Sanders; by Daniel Grose, Suzanne Sanders, and Brian Cleven). Prepared for Frederick County Public Schools.
- 2002u *Phase I Archeological Survey for the Virts Property Wetlands Creation Area, St. Mary's County, Maryland* (Principal Investigator; by Michael B. Hornum, Brian A. Stone, and Brian Cleven). Prepared for ENTRIX, Inc.
- 2002v *Phase I Archival and Archeological Investigation of the Proposed Estates at Fairfax Development, Fairfax County, Virginia* (Principal Investigator; by Colby A. Child, Jr. and Martha R. Williams). Prepared for Equity Homes.
- 2002w *Phase II Archeological Evaluation of Site 18ST751, Naval Air Station Patuxent River, St. Mary's County, Maryland* (Principal Investigator; by Kathleen M. Child, Sean Alexander, Michael B. Hornum, and Martha Williams). Prepared for Commander, Atlantic Division.
- 2002x *Phase I Archival and Archeological Investigation of the Proposed Deepwood Farm Subdivision, Fairfax County, Virginia* (Principal Investigator; by Colby A. Child, Jr., M.A., and Martha R. Williams, M.A., M.Ed.). Prepared for Equity Homes.

- 2002y *Archeological and Architectural Reconnaissance Survey of Five Proposed Outlying Landing Fields in Bertie, Craven, Hyde, Perquimans, and Washington Counties, North Carolina and Intensive Phase I Archeological Survey of Approximately 35 Acres at MCAS Cherry Point, Craven County, North Carolina* (Principal Investigator with Thomas W. Davis; by William Lowthert IV, Martha Williams, Kathleen Child, Brad Burkholder, and Peter Godwin). Prepared for Ecology and Environment, Inc.
- 2002z *Phase I Archival and Archeological Investigation of the Proposed Estates at Leewood Development, Fairfax County, Virginia* (Principal Investigator; by Colby A. Child, Jr. and Martha R. Williams). Prepared for Equity Homes.
- 2002aa *Phase I Archeological Survey at the ACL Site, Aberdeen Proving Ground, Harford County, Maryland* (Principal Investigator; by Thomas W. Davis, Matthew Gill, Joshua S. Roth, and Brian A. Stone). Prepared for US Army Medical Research Acquisition Activity.
- 2002ab *Tioga, Hammond, and Cowanesque Lakes Cultural Resources Management Plan* (Principal Investigator; by Michael B. Hornum). Prepared for CH2M Hill on behalf of U.S. Army Corps of Engineers, Baltimore District.
- 2002ac *Phase I Archeological Survey for the Proposed Addition to the Lowe House of Delegates Office Building, Annapolis, Maryland* (Principal Investigator; by Ann. B. Markell, Martha R. Williams, and Kathleen Child). Prepared for Maryland Department of General Services.
- 2002ad *Archival, Archeological, and Geophysical Remote Sensing Investigations at the Montevue Property, Frederick County, Maryland* (Principal Investigator with Kathryn M. Kuranda; by William Lowthert IV, Scott Meacham, Nate Patch, Brian Clevon, Jean B. Pelletier, and Katherine Grandine). Prepared for Frederick County Division of Public Works.
- 2002ae *Supplemental Phase I Archeological Survey for the Proposed Duke Energy North America (DNA), LLC Power Plant, German Township, Fayette County, Pennsylvania* (Principal Investigator; by Michael Hornum and Brian Clevon). Prepared for CH2M Hill.
- 2002af *Reacquisition and Delineation of Nine Cultural Resource Targets and Survey of Realignment for the Eastchester Marine Pipeline, Suffolk and Bronx Counties, New York (Docket No. CP00-232; OPRHP Project No. 99PR3383)* (Principal Investigator with Jeffrey H. Maymon; by Jean B. Pelletier). Prepared for ENSR International.
- 2002ag *Supplemental Cultural Resource Survey of the FERC Shallow Water Route (Modified Route F5.32) for the Proposed Eastchester Marine Pipeline, Suffolk and Bronx Counties, New York (OPHRP Project No. 99PR3383; Docket No. CP00-232)* (Principal Investigator with Jeffrey H. Maymon; by Jean B. Pelletier, Jeffrey H. Maymon, Samuel P. Turner, Martha R. Williams, Kristen Harley Meier, and Colby A. Child). Prepared for ENSR International.
- 2002ah *Technical Addendum to the Supplemental Phase I Archeological Survey for the Proposed Duke Energy Facility, Frederick County, Maryland – Intake and Outfall Options 1 and 4* (Principal Investigator; by Jennifer Brown, Nathaniel Patch, Brian Clevon, and Michael Hornum). Prepared for Environmental Consulting & Technology, Inc.
- 2002ai *Research Design for Cultural Resource Assessment of Six State Parks, State Owned Cultural Resource Assessment Program, Department of Natural Resources Pilot Study* (Principal

- Investigator with Kathryn M. Kuranda; by Katherine E. Grandine, Jeffrey H. Maymon, and Martha Williams). Prepared for Maryland Historical Trust.
- 2002aj *Phase I Archeological Survey for a 1,500 ft Road Right-of-Way and New Gate at Marine Corps Base Quantico, Prince William County, Virginia* (Principal Investigator; by Jesse B. Kulp, Christine Heidenrich, and Michael B. Hornum). Prepared for Ecology and Environment, Inc.
- 2002ak *Phase I Underwater Archeological Survey of the Mill Hill and St. Mary's Power Dredge Oyster Sanctuaries, Chesapeake Bay, Maryland* (Principal Investigator; by K. Harley Meier, Jean B. Pelletier, and Martha R. Williams). Prepared for Andrews, Miller & Associates, Inc.
- 2002al *Anchor Clearance Plan for the Eastchester Marine Pipeline, Suffolk and Bronx Counties, New York (OPRHP Project No. 99PR3383; Docket NO. CP00-232)* (Principal Investigator with Jeffrey H. Maymon; by Samuel P. Turner, Jean B. Pelletier, and Jeffrey M. Maymon). Prepared for ENSR International.
- 2002am *Phase IA Archeological and Historical Reconnaissance of the Wallkill National Wildlife Refuge, Sussex County, New Jersey and Orange County, New York* (Principal Investigator; by Jeffrey H. Maymon, Martha R. Williams, Colby A. Child, Jr., and Brian A. Stone). Prepared for the U.S. Fish and Wildlife Service.
- 2002an *Phase II Archeological Evaluation of Sites 44CS217 and 44CS241 at Naval Security Group Activity Northwest, City of Chesapeake, Virginia* (Principal Investigator; by William Lowthert, IV, Ann B. Markell, Henry Measells, Stacey Jordan, and Lori Ricard). Prepared for Atlantic Division, Naval Facilities Engineering Command.
- 2002ao *Phase I Archeological Survey and Architectural Reconnaissance, and Phase II Archeological Evaluation of Site 36NM4 for the Portland Station Combined Cycle Power Plant Project, Upper Mount Bethel Township, Northampton County, Pennsylvania – ER# 99-3110-095-E & F* (Principal Investigator; by Michael B. Hornum, William Lowthert, IV, Brian Clevon, Richard Vidutis, and Frank Vento). Submitted to ENSR.
- 2002ap *Archeological Feature Verification and Evaluation at Site 18ST87 (St. Inigoes Manor), Naval Air Station Patuxent River Webster Field Annex, St. Mary's County, Maryland* (Principal Investigator; by Michael B. Hornum, William Lowthert, IV, and Martha Williams). Prepared for Southern Maryland Resource Conservation & Development Area.
- 2002aq *Archeological Monitoring and Phase II Archeological Investigations of Block F, United States Patent and Trademark Office (USPTO) Relocation Site, Alexandria, Virginia* (Principal Investigator; by Martha Williams and David J. Soldo). Prepared for Roy F. Weston, Inc.
- 2002ar *Cultural Resource Investigations at St. Martin's Church, Worchester County, Maryland – SHA Project No. WO720B11* (Principal Investigator; by Ann B. Markell, William Lowthert, IV, and Martha R. Williams). Prepared for Maryland State Highway Administration.
- 2002as *Phase I Archeological Survey of the Proposed Sewer Outfall Extension, Barton Business Park, Allegany County, Maryland* (Principal Investigator with Jeffrey H. Maymon; by Kathleen Child and Jesse B. Kulp). Prepared for Allegany County Department of Community Services.

- 2002at *Letter Report and Survey Results Maps of Geophysical Remote Sensing Investigations at the Harriet Tubman House Site, Cayuga County, New York* (Principal Investigator; by William H. Lowthert, IV). Prepared for Dr. Douglas Armstrong at the Department of Anthropology).
- 2002au *Phase I Survey of Underwater Cultural Resources for the Proposed Breakwater at Town Point, Rockhold Creek, Anne Arundel County, Maryland* (Principal Investigator; with Samuel P. Turner and Jean B. Pelletier). Prepared for Andrews, Millers & Associates, Inc.
- 2002av *Phase II Evaluation of Site 18FR685, Wide Pastures, Fort Detrick, Frederick County, Maryland* (Principal Investigator; by Thomas W. Davis, Nathan Workman, J. Andrew Ross, Christine Heidenrich, Kathleen M. Child, Jesse B. Kulp, and Jason C. Kranch). Prepared for USAMRAA.
- 2002aw *Phase I Archeological Survey for the Proposed Road and Water/Sewer Improvements at Lake Linganore, Frederick County, Maryland* (Principal Investigator; by Jesse Kulp, Chris Heidenrich, and Michael Hornum). Prepared for Whitman, Requardt and Associates, LLP.
- 2002ax *Phase I Archeological Survey at the Proposed Marvista Development, Anne Arundel County, Maryland* (Principal Investigator; with Jesse Kulp, Josh Roth, Nathaniel Patch, and Michael Hornum). Prepared for Mandrin Construction Company, Inc.
- 2002ay *Phase I and II Archeological Investigations for the Proposed Shrewsbury Square Shopping Center, York County, Pennsylvania* (Principal Investigator; by J. Andrew Ross, Daniel Grose, Kristopher West, and Michael B. Hornum). Prepared for Mid-Atlantic Realty Trust.
- 2002az *Phase I Archival and Archeological Investigation of Four Wireless Telecommunication Network Facility Sites for Verizon Wireless, Thurmont, Maryland* (Principal Investigator; by Colby A. Child, Jr. Prepared for Verizon Wireless.
- 2002ba *Phase I Archeological Investigations for the Proposed Collington Center North Development, Prince George's County, Maryland* (Principal Investigator; by Jennifer Brown, Peter D. Holmes, Chris Heidenrich, and Michael Hornum). Prepared for Karington LLC, c/o The Michael Companies.
- 2002bb *Archeological Reconnaissance Survey, Archeological Phase I Survey, and Architectural Inventory Survey of Outlying Landing Field C in Washington County, North Carolina and Architectural Inventory Survey of Outlying Landing Field E in Craven County, North Carolina* (Principal Investigator with Thomas W. Davis; by Kathleen Child, William Lowthert IV, Ellen Saint Onge, Brad Burkholder, and Chris Heidenrich). Prepared for Ecology and Environment, Inc.
- 2002bc *Phase I Archeological Survey for the Proposed Allegheny Heights Wind Energy Project, Garrett County, Maryland* (Principal Investigator; by J. Emmett Brown, Chris Heidenrich, Lori Ricard, Kate Gallagher, Michael Hornum, and Christian Davenport). Prepared for Clipper Windpower, Inc.
- 2002bd *Phase II Archeological Evaluation of Site 18PR628 for the Proposed Collington Center North Development Prince George's County, Maryland* (Principal Investigator; by Michael B. Hornum, Josh Roth, Peter Holmes, Daniel Grose, and Chris Heidenrich). Prepared for Karington LLC.

- 2002be *Cultural Resources Survey for the Proposed Bridge Replacement at Keeney Mill Road and Little Falls Creek, Baltimore County, Maryland* (Principal Investigator; by Peter Godwin, Brian Clevon, and Colby A. Child, Jr.). Prepared for Hurst-Rosche Engineers, Inc.
- 2003a *Archeological and Architectural Reconnaissance Survey of One Proposed Outlying Landing Field in Burke County, Georgia* (Principal Investigator with Thomas W. Davis; by William Lowthert IV, Martha Williams, Kathleen Child, Brad Burkholder, and Brian Stone). Prepared for Ecology and Environment, Inc.
- 2003b *Phase I Archeological Survey for the Proposed APG Waterline Project, Aberdeen Proving Ground, Harford County, Maryland* (Principal Investigator; by Thomas W. Davis, Jason Kranch, and William Lowthert IV). Submitted to the US Army Medical Research Acquisition Activity.
- 2003c *Phase II Archeological Evaluation of Sites 18AG8 and 18AG240 for the Proposed Sewer Outfall, Barton Business Park, Allegany County, Maryland* (Principal Investigator with Jeffrey H. Maymon; by Jeffrey H. Maymon and Kathleen M. Child). Prepared for Allegany County Department of Community Services.
- 2003d *Phase II Archeological Evaluations of Sites 44EX153, 44EX242, 44EX246, 44EX248, and 44EX262 at the Proposed Tappahannock/Essex County Regional Airport, Essex County, Virginia* (Principal Investigator with Ann B. Markell; by Kathleen M. Child, Ann B. Markell, Martha R. Williams, William H. Lowthert IV, Peter L. Godwin, and Katherine Gallagher). Prepared for Mill Creek Environmental LTD.
- 2003e *Phase I Cultural Resource Investigations at Fort Howard Medical Center, and Phase II Evaluations of Sites 18BA494 and 18BA495, Fort Howard, Baltimore County, Maryland* (Principal Investigator with Ann Markell; by Ann Markell, Martha R. Williams, Joshua S. Roth, and Kathleen M. Child). Prepared for CACI, Inc.
- 2003f *Data Recovery at the West Family Cemetery (44AX183), Block 2, Hoffman Properties, Alexandria, Virginia* (Principal Investigator; by Martha R. Williams). Prepared for Hoffman Management, Inc.
- 2003g *Phase I Archeological Survey for the Proposed Geotechnical Coring Sites in the C&O Canal Park for the Proposed Duke Energy Facility Option Nos. 1 and 4, Frederick County, Maryland* (Principal Investigator; by Michael B. Hornum). Prepared for Environmental Consulting & Technology, Inc.
- 2003h *Phase I Archeological Survey for the Proposed Queenstown Road Residential Development and Additions to Shaw Commercial Center, Anne Arundel County, Maryland* (Principal Investigator; by Joshua Roth, Chris Heidenrich, and Michael Hornum). Prepared for Snyder Development Corporation.
- 2003i *Historic Assessment and Phase I Remote Sensing Survey of Four Borrow Areas for Venice Beach, Sarasota County, Florida* (Principal Investigator with Jean B. Pelletier; by Jean B. Pelletier, Martha R. Williams, Greg Brooks, and K. Harley Meier). Prepared for the U.S. Army Corps of Engineers, Jacksonville District under subcontract to CDM Federal Programs Corporation.
- 2003j *Archeological Testing at Site 18AN1206 for the Proposed Marvista Development, Anne Arundel County, Maryland* (Principal Investigator; by Michael Hornum, Jesse Kulp, and Martha Williams). Prepared for Mandrin Construction Company, Inc.

- 2003k *Phase I and II Archeological Investigations for the Proposed York Water Company Pumping Station Site, Lower Windsor Township, York County, Pennsylvania* (Principal Investigator; by Michael B. Hornum, Jennifer Evans, and Chris Heidenrich). Prepared for Rummel, Klepper & Kahl.
- 2003l *Archeological Background Study and Phase I Archeological Testing for the Federal Courthouse and Post Office Project Lynchburg, Virginia* (Principal Investigator; by Ann B. Markell, Martha R. Williams, and Kathleen M. Child). Prepared for Keating Partners, LLC.
- 2003m *Phase I Archeological Survey of the Cub Run Parcel, Loudoun County, Virginia* (Principal Investigator; by Colby A. Child, Jr., Peter Godwin, and Christine Heidenrich). Prepared for Corporate Service Group, Inc.
- 2003n *Cultural Resource Investigations at the Proposed Ridgely Business Park, Caroline County, Maryland* (Principal Investigator; by Kathleen Child, William Lowther IV, Christine Heidenrich, and Kirsten Peeler). Prepared for Whitman, Requardt and Associates, LLP.
- 2003o *Archeological Survey of Seven Anchor Locations in the East River for the Eastchester Pipeline, Bronx County, New York* (Principal Investigator with Jeffrey H. Maymon; by Jean B. Pelletier and Samuel Turner). Prepared for ENSR International.
- 2003p *Cultural Resources Survey for the Proposed BP Liberty Project Logan Township, Gloucester County, New Jersey and Newcastle County, Delaware* (Principal Investigator with Jeffrey H. Maymon; by Colby A. Child, K. Harley Meier, Martha Williams, Jeffrey H. Maymon, Daniel Grose and Jean B. Pelletier). Prepared for Environmental Resource Management.
- 2003q *Phase III Archeological Data Recovery Investigations for Site 18WA487, Maryland Route 66 at Mt. Aetna Road, Washington County, Maryland* (Principal Investigator; by William Lowther IV, April L. Fehr, Ann B. Markell, and Martha R. Williams). Prepared for State Highway Administration, Maryland Department of Transportation.
- 2003r *Phase I Archeological Survey for the Proposed Line 1278 Replacement Project, Northampton, Monroe, and Pike Counties, Pennsylvania* (Principal Investigator; by Michael B. Hornum, Josh Roth, Kris West, Daniel Grose, Brad Burkholder, Jennifer Evans, Kate Gallagher, Brian Clevon, and Daniel Wagner). Prepared for Columbia Gas Transmission Corporation.
- 2003s *Phase I Archeological Investigations for the Improvement of Ijamsville Road and Bridge Over Bush Creek, Frederick County, Maryland* (Principal Investigator; by April L. Fehr, Christine Heidenrich, and Peter L. Godwin). Prepared for Brudis & Associates, Inc.
- 2003t *Phase I Archeological Survey of Four Parcels in the Town of Indian Head, Charles County, Maryland* (Principal Investigator; by Colby A. Child, Jr., Peter Godwin, and Christine Heidenrich). Prepared for Natter Development.
- 2003u *Phase I Archeological Survey of Approximately 18 Acres at Camp Murray Air National Guard Base, Pierce County, Washington* (Principal Investigator; by Ann B. Markell, Kathleen M. Child, Jason M. Coffey, and Katherine J. Gallagher). Prepared for Air National Guard Readiness Center.
- 2003v *Phase I Archival Research, Archeological Predictive Model Preparation, and Field Survey Investigations for the Smoky Hill Air National Guard Air-to-Ground Gunnery Range, Saline County, Kansas* (Principal Investigator; by Colby A. Child, Jr., Joshua S. Roth, Christine

- Heidenrich, Thomas W, Davis, Bradley Burkholder, Kathleen M. Child, Jason Coffey, Matt Gill, Jason C. Kranch, William Lowthert IV, and Kristopher West). Prepared for Air National Guard Readiness Center.
- 2003w *Technical Addendum to the Phase I Archeological Survey for the Proposed APG Waterline Project, Aberdeen Proving Ground, Harford County, Maryland* (Principal Investigator; by William Lowthert IV and Jason Kranch). Prepared for USAMRAA.
- 2003x *Phase I Archeological Survey of the Proposed Arundel Preserve Development, Anne Arundel County, Maryland* (Principal Investigator; by Jeffrey H. Maymon and Peter Godwin). Prepared for Somerset Construction Company.
- 2003y *Phase I Archeological Investigations of the Proposed UMAB Health Sciences Research Park, 800-900 West Baltimore Street, Baltimore, Maryland* (Principal Investigator; by Martha R. Williams). Prepared for the University of Maryland, Baltimore).
- 2004a *Archeological Monitoring of the Verizon Wireless Cellular Monopole Site, Great Falls Park, Virginia, George Washington Memorial Parkway* (Principal Investigator; by Martha R. Williams and Brian A. Stone). Prepared for Verizon Wireless Communications.
- 2004b *Phase I Archeological Investigations of Site C, City of Frederick, Frederick County, Maryland* (Principal Investigator; by Kathleen M. Child, William Lowthert IV, and Chris Heidenrich). Prepared for The City of Frederick.
- 2004c *Phase I Survey of Elks Landing and Milne Property Developments, Anne Arundel County, Maryland* (Principal Investigator; by Colby A. Child Jr., Jason C. Kranch, and Chris Heidenrich). Prepared for Snyder Development Corp.
- 2004d *Phase I Archeological Investigations of the Muses Beach U.S. Navy Communications Site, Westmoreland County, Virginia* (Principal Investigator; by Jeffrey H. Maymon and Martha R. Williams). Prepared for Northern Neck Soil & Water Conservation District.
- 2004e *Phase I Archeological Survey for the Proposed Replacement of Approximately 2,150 feet (655.5 m) of Line 1278, Richland and Springfield Townships, Bucks County, Pennsylvania* (Principal Investigator; by Michael B. Hornum). Prepared for Columbia Gas Transmission Corporation.
- 2004f *Phase I Archival and Archeological Investigations, Including Additional Phase I and Phase II Excavations within the Monocacy National Battlefield, for the Proposed New Design Water Main, Frederick County, Maryland* (Principal Investigator; by Colby A. Child, Jr., Bradley K. Burkholder, and Christine Heidenrich). Prepared for Whitman, Requardt and Associates.
- 2004g *Phase I Archeological Survey of the Proposed Chapel Ridge Development, Anne Arundel County, Maryland* (Principal Investigator; by Colby A. Child, Jr., Joshua S. Roth, and Kathryn G. Smith). Prepared for Weston Builders & Developers, Inc.
- 2004h *Archeological Mitigation for the Geothermal HVAC Replacement Project Carlisle Barracks, Carlisle, Pennsylvania* (Principal Investigator; by Ellen C. Saint Onge, Suzanne Sanders, and Martha R. Williams). Prepared for Co-Energy Group LLC.
- 2004i *Technical Addendum to Archeological Testing at Site 18ANI206 for the Proposed Marvista (Osprey Landing) Development, Anne Arundel County, Maryland Archeological Testing of Wharf*

- Structure and Phase I Marine Archeological Remote Sensing Survey of Osprey Landing* (Principal Investigator; by Samuel P. Turner, Jean B. Pelletier, and K. Harley Meier). Prepared for Mandrin Construction Company, Inc.
- 2004j *Cultural Resources Management Plan for the Smoky Hill Air National Guard Air-to-Ground Gunnery Range* (with Thomas D. Davis, Ellen C. Saint Onge, Colby Child, Chris Heidenrich, Joshua Roth, and Jason Kranch). Prepared for Air National Guard Readiness Center.
- 2004k *Phase II Archeological Evaluation of Fifteen Sites for the Proposed Line 1278 Replacement Project, Northampton, Monroe, and Pike Counties, Pennsylvania* (Principal Investigator; by Michael B. Hornum, Joshua Roth, Jesse Kulp, Lori Ricard, Pete Godwin, Daniel Grose, Jason Coffey, and Jennifer Evans). Prepared for Columbia Gas Transmission Corp.
- 2004l *Phase I Cultural Resource Survey for the Poplar Island Expansion Supplemental Environmental Impact Statement (SEIS) Project* (Principal Investigator; by K. Harley Meier, Jean B. Pelletier, and Donald C. Barber). Prepared for EA Engineering, Science and Technology Inc.
- 2004m *Phase I Archeological Survey of the Proposed Sweetwater Crossing Subdivision, Washington County, Maryland* (Co-Principal Investigator with Suzanne L. Sanders; by Suzanne L. Sanders, Daniel Grose, and Chris Heidenrich). Prepared for Ted and Sharon Lapkoff.
- 2004n *Phase I Archeological Investigation of the Proposed Jackson Fields Subdivision Centreville, Fairfax County, Virginia* (Principal Investigator; by Martha Williams). Prepared for J.A. Loveless Companies, L.L.C.

SUZANNE L. SANDERS, M.A.

SENIOR PROJECT MANAGER

Suzanne Sanders, M.A., Senior Project Manager, received her Bachelor of Arts degree from SUNY Binghamton in 1984, and her M.A., in Historical Archaeology from the College of William and Mary in 1988. Ms. Sanders' M.A. thesis focused on vernacular architecture (standing structures), and included an inventory and analysis of over 400 buildings. For four years, while at William and Mary, Ms. Sanders instructed archeological field schools in historical archeology held by the College in the West Indies. In addition to extensive field experience in the Mid-Atlantic, Ms. Sanders has worked in the southeast, including North Carolina, Florida, and Louisiana; and, in West Virginia and Ohio. Her fieldwork also includes extensive experience on both historic and Precolumbian sites in the Bahamas and in the Caribbean. Ms. Sanders has worked on sites ranging in date from the mid-seventeenth through the twentieth century. These have included both urban and rural sites related to domestic, agricultural, industrial, institutional and military activities. These investigations have included the range from Phase I survey and inventory, through Phase II evaluation, and Phase III mitigation. Her experience in cultural resource management includes participation in the preparation of planning documents such as Memoranda of Agreement (MOAs), Programmatic Agreements (PAs), Environmental Assessments, Environmental Impact Assessments, and Historic and Archeological Resources Protection Plans (HARP Plans). Additional participation in planning under Federal Preservation Law has included the preparation of National Register of Historic Places nominations and amendments to nominations for both sites and districts.

Ms. Sanders has supervised or served as project manager for Phase I survey and inventory projects that include extensive, long-term Section 110 inventory on federal properties and military installations. These surveys have included the preparation of planning documents for these facilities. Her involvement in Phase II evaluation of prehistoric, Precolumbian, and historic sites has included extensive domestic, agricultural and plantation, industrial and institutional, and military sites throughout the Mid-Atlantic and in the Bahamas and the Caribbean. Relevant projects encompassed research on eighteenth and nineteenth century domestic and plantation sites in Maryland and Virginia; seventeenth, eighteenth, and nineteenth century plantation and sugar processing sites in the Caribbean; and Precolumbian habitation sites in the Caribbean. Ms. Sanders has managed or supervised many Phase III mitigation projects, including urban domestic and industrial sites in Annapolis and Baltimore, Maryland, and Civil War campsites in Pennsylvania and Virginia, as well as a nineteenth century graveyard in Pennsylvania. At Goodwin & Associates, Inc., Ms. Sanders also has been involved with many comprehensive, multi-phase investigations of urban neighborhoods. In Baltimore, these include working with the Maryland Stadium Authority in connection with the development of Oriole Park at Camden Yards, the Baltimore Convention Center, and the Ravens Stadium. Her work with the City of Annapolis was connected with several phases of downtown development, including the Gott's Court Parking Area and the Main Street Project. She also was involved in the 14th Street Urban renewal efforts in Washington, D.C.

SUZANNE L. SANDERS, M.A.

HISTORIC SITES SPECIALIST / SENIOR PROJECT MANAGER

EDUCATION

B.A. in Anthropology, Department of Anthropology, SUNY-Binghamton, 1984

M.A. in Historical Archeology, Department of Anthropology, College of William of Mary, Williamsburg, Virginia, 1988

Workshop "National Environmental Policy Act", University of Southern Maine, Summer Session Program, 1999

PROFESSIONAL EXPERIENCE

Senior Project Manager, R. Christopher Goodwin & Associates, Inc., Frederick, Maryland, September 1989 - Present

Field and Laboratory Supervisor, William and Mary Field School, St. Eustatius, Dutch West Indies, April 1989 to August 1989

Field and Laboratory Supervisor, William and Mary Field School, St. Eustatius, Dutch West Indies, June 1988 to August 1988

Skilled Excavator, Phase I Survey, Suffolk, Virginia, May 1988

Field and Laboratory Aide, Phase I, II, and III excavations, MAAR Associates, Inc., October 1987 to May 1988

Field and Laboratory Supervisor, William and Mary Field School, St. Eustatius, Dutch West Indies, June 1987 to August 1987

Field Aide, Phase I, II, and III Survey, MAAR Associates, Inc., October 1986 to June 1987

Field and Laboratory Supervisor, William and Mary Field School, St. Eustatius, Dutch West Indies, June 1986 to August 1986

Skilled Excavator, Phase II Excavation on Route 58, Capron, Virginia, May 1986 to June 1986

Skilled Excavator, Phase II Archeological Project, Suffolk, Virginia, February 1986 to May 1986

MANUSCRIPTS, PUBLICATIONS, AND PAPERS PRESENTED

1988 *Architectural Style on St. Eustatius.* Masters Thesis, Department of Anthropology, College of William and Mary, Williamsburg, Virginia.

1989a *Phase I Archeological Investigation of the Yachting Center Property, Baltimore, Maryland* (with R. Christopher Goodwin, and Michelle Moran). Submitted to The Yachting Center.

1989b *Architectural Survey of the Town of Oranjestad, St. Eustatius, Netherlands Antilles.* An interim report on the initial survey. Prepared for the Government of St. Eustatius and the College of William and Mary.

- 1990a *Phase I and II Archeological Investigations of Bachelor's Hope Farm, St. Mary's County, Maryland* (with R. Christopher Goodwin, Martha Williams, and Kathryn M. Kuranda). Submitted to Archetype.
- 1990b *Phase II Archeological Testing of Sites 44FX923 and 44FX924, Fairfax County, Virginia* (with R. Christopher Goodwin, and Martha R. Williams) Submitted to Copper Land Company.
- 1990c A Preliminary Study of Welgelegen, St. Maarten, Netherlands Antilles (with Norman Barka). *St. Maarten Archaeological Research Series, No. 1*. Ms. on file, Department of Anthropology, College of William and Mary, Williamsburg, Virginia.
- 1990d *Phase I & II Archeological Investigations in the Shaw and Fourteenth Street Urban Renewal Areas, Washington, D.C.* (with R. Christopher Goodwin, and Michelle T. Moran). Submitted to the Government of the District of Columbia.
- 1990e *Phase I Archeological Investigation at the Meadows, Baltimore County, Maryland*, (with R. Christopher Goodwin, and Kathryn M. Kuranda). Submitted to The Macks Group.
- 1991a *Phase I Intensive Archeological Investigations of the Proposed Cattail Creek Country Club, Oakland, Howard County, Maryland* (with R. Christopher Goodwin, and Michelle T. Moran). Submitted to Cattail Creek Country Club.
- 1991b *Phase II and IIIA Archeological Investigations of the Signal Hill and Bobby Tracts, Prince William County, Virginia; Volume I: The Non-Military Sites*, (with R. Christopher Goodwin, and Martha R. Williams, with contributions by Lawrence Hewitt). Submitted to City of Manassas Park.
- 1991c *Phase II and IIIA Archeological Investigations of the Signal Hill and Bobby Tracts, Prince William County, Virginia; Volume II: The Military Sites*, (with R. Christopher Goodwin, and Martha R. Williams, with contributions by Lawrence Hewitt). Submitted to City of Manassas Park.
- 1991d *Phase I and II Intensive Archeological Investigations of the James Drane House, Accident, Garrett County, Maryland*, (with R. Christopher Goodwin, April L. Fehr, and Michelle T. Moran) Submitted to the Town of Accident.
- 1991e *Archeological Inventory and Testing of the Monocacy - Mount Airy 230 kV Transmission Line, the 230 kV Eaglehead Loop, and the Eaglehead 230 kV Substation, Frederick County, Maryland*, (with R. Christopher Goodwin, Michelle T. Moran, Thomas W. Neumann, Christopher R. Polglase, with contributions by Pamela Crane). Submitted to Allegheny Power System.
- 1991f *Combined Phase I and Phase II Archeological Investigations of Centre 9500, Howard County, Maryland*, (with R. Christopher Goodwin, Michelle T. Moran, with contributions by Thomas W. Neumann, and Kathryn M. Kuranda). Submitted to Land Design Engineering, Inc.
- 1991g *Phase I Intensive Archeological Investigations of the Ice House Square Gettysburg, Adams County, Pennsylvania*, (with R. Christopher Goodwin, Ralph Draughon, Jr., Michelle T. Moran, with contributions by Elizabeth S. Pena, and Peter H. Morrison). Submitted to Historic Properties of Gettysburg, Inc.

- 1991h *Phase II Archeological Investigations of 18PR377, Barnes Farm, Prince George's County, Maryland*, (with R. Christopher Goodwin, Ralph Draughon, Jr., Michelle T. Moran, Christopher R. Polglase, and Cynthia A. Whitley, with contributions by Thomas W. Neumann). Submitted to the U.S. Army Corps of Engineers, Baltimore District.
- 1991i *Phase I Archeological Investigations of the Willows of Potomac and Shady Grove Road Club Developments, Montgomery County, Maryland*, (with R. Christopher Goodwin, and Michelle T. Moran). Submitted to Traville Development Corporation, and Traville Joint Venture.
- 1991j *Phase I Archeological Investigations of the Traville Development Corporation (CENAB-OP-RS, 90-00132-5), Willows of Potomac Shady Grove Road Club (CENAB-OP-RX, 91-0048-9), and Traville Partnership (CENAB-OP-RP, 91-00713-5) Properties, Montgomery County, Maryland* (with R. Christopher Goodwin, and Michelle T. Moran). Submitted to Traville Development Corporation, Shady Grove Road Club, and Traville Partnership.
- 1991k *Archeological and Architectural Investigations at Camden Yards, Baltimore, Maryland* (with R. Christopher Goodwin, Martha R. Williams, Kathryn M. Kuranda, Elizabeth Pena, and with a contribution by David B. Landon). Submitted to the Maryland Stadium Authority.
- 1991l *Archeological and Historical Investigations of the South Road Area, Sully Historic Site, Fairfax County, Virginia* (with R. Christopher Goodwin, Martha R. Williams, Cynthia A. Whitley, and with contributions by Pamela Crane). Submitted to the Fairfax County Park Authority.
- 1992a *Phase I and Phase II Archeological and Architectural Investigations for the Proposed Site of the William H. Natcher Building, National Institutes of Health, Bethesda, Maryland* (with R. Christopher Goodwin, and Kathryn M. Kuranda). Prepared for AEPA Architects Engineers.
- 1992b *Phase IA Reconnaissance of the Proposed Harwood's Mill Raw Water Pipeline in James City County, York County and the City of Newport News, Virginia* (with Thomas W. Davis, and Michelle T. Moran with contributions by Thomas W. Neumann). Submitted to Gannett Fleming, Inc.
- 1992c *Phase I and II Archeological Investigations at Benjamin Banneker Historical Park, Baltimore County, Maryland* (with Michelle T. Moran, Martha R. Williams, Michael A. Simons, and Justine Woodard). Submitted to Baltimore County, Maryland.
- 1992d *Phase IB Terrestrial and Underwater Archeological Investigations of the Proposed Cogentrix Coal-Fired Power Plant, Mayaguez, Puerto Rico* (with R. Christopher Goodwin, Jack B. Irion, and Martha R. Williams). Submitted to ENSR Consulting and Engineering.
- 1992e *Phase I Archeological Investigations of Portions of the Proposed Nicholson's Manor Subdivision, Baltimore County, Maryland* (with Michael A. Simons and Katherine E. Grandine). Submitted to McKee and Associates, Inc.
- 1992f *Phase I Archeological Investigations of the Running Cedar Subdivision, Anne Arundel County, Maryland* (with Michelle T. Moran and Peter H. Morrison). Submitted to Messick & Associates, Inc.
- 1992g *Phase IA Investigations of the Proposed Dalecarlia to Chain Bridge Water Supply Main Project, Washington, D.C., and Montgomery County, Maryland* (with Martha R. Williams). Submitted to Gannett Fleming, Inc.

- 1992h *Phase I Archeological Investigations of Parcel 4 of the Sandy Hill Creative Disposal Project Expansion, Prince George's County, Maryland* (with R. Christopher Goodwin, Pamela Crane, Estella Bryans-Munson, and Cynthia Whitley). Submitted to Loiderman Associates, Inc.
- 1993a *Phase II Archeological Investigations of the Proposed ASR-9 Radar Facility, Anacostia, Washington, D.C., S.E.* (with Martha R. Williams, Donald J. Maher, Michael A. Simons, and with contributions by S. Justine Woodard, J. Hampton Tucker and Katherine E. Grandine). Submitted to Information Systems & Networks Corporation.
- 1993b *Phase I Investigation of Segment "O" of the Harwood's Mill Raw Water Pipeline York County, Virginia* (with Colby A. Child, Jr. and Thomas W. Davis). Submitted to Gannett Fleming, Inc.
- 1993c *Phase II/III Archeological Investigations of the Gott's Court Parking Facility, Annapolis, Maryland* (with Michelle T. Moran, David Landon and with contributions by Martha R. Williams, Kathleen F. Child, S. Justine Woodard, Emlen Myers and Theresa Reimer). Submitted to City of Annapolis.
- 1993d *Phase I Archeological Investigations of Portions of Pemberton Historical Park Wicomico County, Maryland* (with Michelle T. Moran and with contributions by Thomas Davis, Kathleen Child, Martha R. Williams and S. Justine Woodard). Submitted to Wicomico County, Department of Recreation and Parks.
- 1993e *Phase II Archeological Investigations of Portions of the Sanders/Rawls Section of the "Coston Family Cemetery," Onslow County, North Carolina* (with Martha Williams, John J. Mintz, Kathleen F. Child, and S. Justine Woodard. Submitted to the Atlantic Division, Naval Facilities Engineering Command.
- 1993f *Archeological Investigations for the Fiber-Optic Line Project, Carlisle Barracks, Cumberland County, Pennsylvania* (with John J. Mintz, Martha R. Williams, S. Justine Woodard, William T. Dod, Donald J. Maher, and with contributions by David B. Landon, and Theresa C. Reimer). Submitted to the U.S. Army Communications Electronic Command.
- 1994a *Phase I/II Archeological Investigations for the Proposed Baltimore Convention Center Expansion Baltimore, Maryland* (with Martha R. Williams). Submitted to the Maryland Stadium Authority.
- 1994b *Phase I Archeological Survey of 860 Acres at Naval Station Roosevelt Roads, Ceiba, Puerto Rico (Contract N62470-92-D-8965, D.O. 9)* (with Jose R. Oliver, Eliza Edwards, John A. Calabrese, and Donald J. Maher). Submitted to the Naval Facilities Engineering Command.
- 1994c *Phase I Cultural Resource Investigations Undertaken at the U.S. Army Reserve Area Maintenance Support Activity (AMSA) Clarksburg, WV D.O. No. 35* (with Kathryn M. Kuranda, Eliza H. Edwards, Leo P. Hirrel, and Hugh McAloon). Submitted to the U.S. Army Corps of Engineers, Baltimore District.
- 1994d *Phase I Archeological Investigations of the Proposed Urbana Sewer and Water Connector, Frederick County, Maryland* (with Colby A. Child, Geoffrey E. Melhuish, and Hugh B. McAloon). Submitted to Ward Corporation.
- 1995a *Archeological Investigations at the Maggie L. Walker National Historic Site, Richmond, Virginia* (with Martha R. Williams). Submitted to the National Park Service, Mid-Atlantic Region.

- 1995b *Phase I Archeological Investigations at the Proposed Vanderback Subdivision, Adams County, Pennsylvania* (with Leo Hirrel). Submitted to Group Insurance Services.
- 1995c *Bishop Hill Graveyard Upper Prince's Quarter Sint Maarten - A Report on Emergency Mitigative Measures*. Prepared for VROM Department of Planning and Environment, Sint Maarten.
- 1995d *Archeological Mitigation for the Natural Gas Line, Carlisle Barracks, Carlisle, Pennsylvania* (with Martha R. Williams and Andrew D. Madsen). Prepared for the U.S. Army Corps of Engineers, Baltimore District.
- 1996a *Historic and Archeological Resources Protection Plan for NAVSTA Roosevelt Roads, Cieba, Puerto Rico* (with Martha R. Williams and Julian Granberry). Prepared for the Atlantic Division, Naval Facilities Engineering Command.
- 1996b *Archeological and Architectural Survey of NSGA Sabana Seca, Sabana Seca, Puerto Rico* (with Brooke V. Best, Ellen Saint Onge, and Michael A. Simons). Prepared by the Atlantic Division, Naval Facilities Engineering Command.
- 1996c *Cultural Resources Management Investigations for the Main Street Reconstruction Project, Annapolis, Anne Arundel County, Maryland* (with April L. Fehr, Martha R. Williams, David Landon, Andrew D. Madsen, Kathleen Child, and Michele Williams). Draft. Prepared for City of Annapolis.
- 1997a *Cultural Resources Stabilization Study of Site 12VPR2-66, and Field Verification of Survey Results for 200 Acres on Vieques Island, NAVSTA Roosevelt Roads, Vieques, Puerto Rico* (with Mike A. Simons and Connie A. Capozzola). Prepared for the Atlantic Division, Naval Facilities Engineering Command.
- 1997b *Intensive Archeological Resource Surveys of Portions of NRTF Isabela, NRTF Aguada, and NRRF Salinas, Puerto Rico* (with Michael A. Simons and Connie A. Capozzola). Prepared for the Atlantic Operations, Naval Facilities Engineering Command, Norfolk, Virginia.
- 1997c *Intensive Archeological and Architectural Investigations of Portions of Ice House Square, Gettysburg, Adams County, Pennsylvania* (with Michelle T. Moran, Hugh B. McAloon, Deborah Cannan, with contributions by Kathleen F. Child, William P. Giglio, and Michael A. Simons). Prepared for Gettysburg College.
- 1997d *Archeological and Architectural Investigations at NAVSTA Roosevelt Roads (Year 3), Ceiba, Puerto Rico* (with Geoffrey Melhuish, W. Patrick Giglio, and Ellen Saint Onge). Prepared for the Atlantic Division, Naval Facilities Engineering Command.
- 1997e *Archeological Survey and Evaluation of Various Sites, NSGA Sabana Seca, Puerto Rico - Volume I* (with Michael A. Simons and John Clarke). Prepared for the Atlantic Division, Naval Facilities Engineering Command.
- 1998a *Archeological Survey of 850 Acres Within AFETA Camp Peary, York County, Virginia* (Principal Investigator; by Suzanne Sanders, Colby Child, Martha Williams, and Leo Hirrel). Prepared for the Atlantic Division, Naval Facilities Engineering Command.

- 1998b *Archeological and Architectural Investigations for the Proposed Gateway Circle Project, Annapolis, Maryland* (Co-Principal Investigator with Christopher R. Polglase; Nora Sheehan, Katherine Grandine, and Elaine Kiernan). Prepared for City of Annapolis.
- 1998c *Archeological Mitigation of the J.S. Berry Brick Mill (18BC89) and Pawley Stoneware Kiln (18BC88), at the Proposed Ravens' Stadium, Baltimore, Maryland* (with Martha R. Williams). Prepared for Maryland Stadium Authority.
- 1998d *Phase I Archeological Investigations, Phase II Evaluation, and Phase III Mitigation Studies Related to the Replacement of the HTW Piping, United States Naval Academy, Annapolis, Maryland* (Co-Principal Investigator with Principal Investigator; Nora Sheehan and Martha Williams). Prepared for RMF Engineering, Inc.
- 1998e *Archeological Investigations at NAVSTA Roosevelt Roads (Year 3), Ceiba, Puerto Rico* (with Ellen Saint Onge and R. Christopher Goodwin). Prepared for the Atlantic Division, Naval Facilities Engineering Command.
- 1999a Revised National Register Nomination for Central Playa Grande (12VPR2-101) (Principal Investigator; Ellen Saint Onge). Prepared for Naval Facilities Engineering Command.
- 1999b *Phase I Archeological Investigations for the Proposed Military Housing, NAVSTA Roosevelt Roads, Ceiba, Puerto Rico* (Principal Investigator). Prepared for The Environmental Company.
- 1999c *Archeological Evaluation of Caballo 3 (12VPr2-209) Vieques Naval Reservation, Vieques, Puerto Rico* (Principal Investigator). Prepared for The Environmental Company, Inc.
- 1999d *Archeological Investigations Related to the Loudoun County Courthouse Expansion, Including Site 44LD567, Leesburg, Virginia* (Principal Investigator; Nora Sheehan and Martha Williams). Prepared for Department of Historic Resources, Petersburg, Virginia.
- 1999e National Register Nomination Form for Rio Cocal 1 (SS2), NSGA Sabana Seca, Puerto Rico (Principal Investigator; Ellen Saint Onge). Prepared for the Atlantic Division, Naval Facilities Engineering Command.
- 1999f *Phase I-III Archeological Investigations for the Chilled Water Line Upgrade (P-165), Including site 18AP83, U.S. Naval Academy, Annapolis, Maryland* (Co-Principal investigator with Christopher Polglase; Nora Sheehan, Martha Williams, and Eleanor Breen). Submitted to Michael Baker, Jr., Inc.
- 1999g *Archeological Evaluation of Dudderar Farm (18FR729), Urbana, Frederick County, Maryland* (Principal Investigator; Sonja Ingram, Kathryn Kuranda, Hugh McAloon, and Geoffrey Melhuish). Submitted to Monocacy Land Company, LLC.
- 1999h *Phase II Archeological Evaluation of the Creek's Farm Site (18AN1130), Anne Arundel County, Maryland* (Principal Investigator; by Ellen Saint Onge and Elaine Kiernan). Prepared for Alan Boehm.
- 1999i *Archeological Survey of Portions of the Smith Property, Prince George's County, Maryland* (Principal Investigator; with Elaine Kiernan and John Clarke). Prepared for Percontee, Inc.

- 1999j *Archeological Evaluation of Mosquito 3 (3/97-B3), Vieques Naval Reservation, Vieques, Puerto Rico* (Principal Investigator). Prepared for the Atlantic Division, Naval Facilities Engineering Command.
- 1999k *Archeological Evaluation of Fat Oxen (18FR732), Frederick County, Maryland* (Principal Investigator; with Laurie Paonessa and Elaine Kiernan). Prepared for Monocacy Land Company, LLC.
- 1999l *Archeological Investigations at Stop 7 ½, San Juan, Puerto Rico*. Prepared for the Atlantic Division, Naval Facilities Engineering Command.
- 2000a *Archeological Investigations at the Juvenile Justice Center, Baltimore, Maryland* (with Nora Sheehan, M.A., and Martha R. Williams, M.A., M.Ed.). Submitted to Maryland Department of General Services.
- 2000b *Phase I Archeological Investigations at Watts Branch within the C&O Canal National Historic Park, Montgomery County, Maryland* (Principal Investigator, with Ellen Saint Onge, M.A.). Submitted to C&O Canal National Historic Park.
- 2000c *Integrated Cultural Resource Management Plan – Archeology for Naval Station Roosevelt Roads including Vieques Naval Reservation* (Co Principal Investigator with R. Christopher Goodwin). Prepared for the Atlantic Division, Naval Facilities Engineering Command.
- 2000d *Archeological Survey and Evaluation of Selected Sites at NSGA Sabana Seca, Sabana Seca, Puerto Rico (Volume 5)* (Co Principal Investigator; with Ellen Saint Onge). Prepared for the Atlantic Division, Naval Facilities Engineering Command.
- 2000e *Phase IB Archeological Testing at the Church Home and Hospital, Baltimore, Maryland* (with Martha Williams and Laurie Paonessa). Prepared for the Johns Hopkins Hospital.
- 2000f *Archeological Evaluation of the Campbell Farmstead (18FR752), Frederick County, Maryland* (Principal Investigator; by Laurie Paonessa). Prepared for Millennium Development Group, LLC.
- 2001a *Archeological Survey and Evaluation of Selected Sites at NSGA Sabana Seca, Sabana Seca, Puerto Rico (Volume 5)* (Principal Investigator with R. Christopher Goodwin) with Ellen Saint Onge, R. Christopher Goodwin, Dave D. Davis, and Christian Davenport). Prepared for the Atlantic Division, Naval Facilities Engineering Command.
- 2001b *Integrated Cultural Resource Management Plan - Archeology for Naval Security Group Activity Sabana Seca* (Co-Principal Investigator with R. Christopher Goodwin) with Ellen Saint Onge, Jennifer Tobey, and Antonio Curet). Prepared for the Atlantic Division, Naval Facilities Engineering Command.
- 2001c *Report on Archeological Survey of the Planned Botany Bay Estate Development Access road Alignments, St. Thomas, USVI: Testing Pursuant to Minor CZM Land Development Permit No. CZT-70-01L An Addendum to "Final Report on Reconnaissance and Selected Phase I Archeological Investigation at Botany Bay, St. Thomas, USVI." (Righter 2001)* (Principal Investigator with R. Christopher Goodwin; with Jennifer Brown). Prepared for Botany Bay Limited Partnership, L.L.P. c/o William Karr & Associates, Inc.

- 2001d *Patterns & Transformations in the Prehistory and History of Vieques—R. Christopher Goodwin, Ph.D. and Dave D. Davis, Ph.D. General Editors—Technical Series: Archeological Survey and Evaluation of the Vieques Naval Reservation, Municipality of Vieques, Puerto Rico—Volume I: Archeological Survey and inventory of the VNR* (with Michael A. Simons, R. Christopher Goodwin, Dave D. Davis, and Frank Ventro). Prepared for Atlantic Division.
- 2001e *Phase II Archeological Evaluation of the Burgee Springhouse (18FR725) for the Proposed Frederick County Public Schools Urbana Elementary, Frederick County, Maryland* (Principal Investigator with Christopher R. Polglase; by Daniel Grose, Suzanne Sanders, and Brian Clevon). Prepared for Frederick County Public Schools.
- 2002a *Archeological Survey and Inventory of Selected Portions of Estate Botany Bay, and Evaluatory Testing of the Plantation Site, St. Thomas, United States Virgin Islands* (Principal Investigator with R. Christopher Goodwin; by Suzanne L. Sanders and Jennifer A. Brown). Prepared for William Karr & Associates, Inc.
- 2002b *Archeological Survey of the Proposed Regasification Facility, South Riding Point, Grand Bahama Island, The Bahamas* (Principal Investigator with R. Christopher Goodwin; with Jennifer Brown and R. Christopher Goodwin). Prepared for CH2M Hill / El Paso Global LNG Company LTD.
- 2002c *Archeological, Historical, and Architectural Reconnaissance Study of Crab Cay, Exuma Sound, The Bahamas* (Principal Investigator with R. Christopher Goodwin; with Kathryn M. Kuranda, R. Christopher Goodwin, and Jennifer A. Brown). Prepared for Islands By Design Ltd.
- 2002d *Archeological Reconnaissance Study of the Proposed Enighed Estates Development, Cruz Bay Quarter, St. John, U.S.V.I. – Letter Report* (Principal Investigator with R. Christopher Goodwin; by Suzanne L. Sanders and Jennifer A. Brown). Prepared for William Karr and Associates.
- 2002e *Archeological Reconnaissance Study of the Proposed Hoffman Estates Development, Nullyburg, St. Thomas, U.S.V.I. – Letter Report* (Principal Investigator with R. Christopher Goodwin; by Suzanne L. Sanders and Jennifer A. Brown). Prepared for William Karr and Associates.
- 2003f *Archeological and Historical Reconnaissance Study of 870 Acres, Rum Cay, The Bahamas* (Principal Investigator with R. Christopher Goodwin; with Jennifer A. Brown). Prepared for Islands by Design, Ltd.
- 2003g *Archeological Survey of the Proposed Boat Ramp, Vieques Airport, Vieques Island, Puerto Rico* (with Jennifer A. Brown and R. Christopher Goodwin). Prepared for Ecology and Environment, Inc.
- 2003h *Patterns & Transformations in the Prehistory and History of Vieques; Volume II: Archeological Evaluation of Historic Period Sites* (with Jennifer A. Brown, Dave D. Davis, R. Christopher Goodwin, and Frank Vento). Prepared for the Atlantic Division, Naval Facilities Engineering Command.
- 2003i *Archeological Monitoring for Soil Removal, Stop 7 ½; Addendum to Archeological Investigations at Stop 7 ½, San Juan, Puerto Rico*. Prepared for Shaw Environmental, Inc.

- 2003j *Archeological Survey and Evaluation of Sites at NSWC Sabana Seca, Sabana Seca, Puerto Rico, Volume IV, Evaluation of Prehistoric Site Rio Cocal 1* (with R. Christopher Goodwin, Jose Oliver, Dave D. Davis, Jennifer Brown, and Michael A. Simons). Prepared for the Atlantic Division, Naval Facilities Engineering Command.
- 2003k *Ecosystem Restoration Report (ERR) for the Boqueron Wildlife Refuge, Cabo Rojo, Puerto Rico; Archeological Survey*. Prepared for the U.S. Army Corps of Engineers, Jacksonville District under subcontract to CDM Federal Programs Corporation, Inc.
- 2004a *Archeological Mitigation for the Geothermal HVAC Replacement Project Carlisle Barracks, Carlisle, Pennsylvania* (with Ellen C. Saint Onge and Martha R. Williams). Prepared for Co-Energy Group LLC.
- 2004b *Phase I Archeological Survey of the Proposed Sweetwater Crossing Subdivision, Washington County, Maryland* (Co-Principal Investigator with Christopher R. Polglase; with Daniel Grose and Chris Heidenrich). Prepared for Ted and Sharon Lapkoff.
- 2004c *Phase I Archeological Investigation of 15 Acres within the West Campus, Shepherd College, Jefferson County, West Virginia* (Principal Investigator; with Brian Clevon). Prepared for Shepherd College.

CHRISTIAN D. DAVENPORT, M.A.

ZOOARCHEOLOGIST

Christian D. Davenport, Zooarcheologist, received his B.A. in Anthropology (*cum laude*) from Franklin Pierce College, and his M.A. in Anthropology (*magna cum laude*) from the University of Tennessee at Knoxville, in 1999. His twenty plus years of experience includes work on all phases of archeological investigations in New England, the Mid-Atlantic, and the Southeast. He has filled positions ranging from field technician for cultural resource management firms in Maryland, Virginia, and Tennessee to field school director at Franklin Pierce College. In Tennessee he worked for the Tennessee Valley Authority (TVA) where he checked landowners compliance with Section 106 and 110 of the National Historic Preservation Regulations.

Since joining Goodwin & Associates, Inc., in August 1999, as the firm's zooarcheologist, Mr. Davenport has analyzed faunal remains from prehistoric sites in Puerto Rico; seventeenth century sites in Ann Arundel, Baltimore, Charles, Frederick, and St. Mary's counties, Maryland; an eighteenth century site in Annapolis, Maryland; seventeenth century sites in Virginia; and, Contact Period Native American sites in West Virginia.

Mr. Davenport's experience and training includes undergraduate and graduate-level course work in human osteology; excavation of twenty eighteenth and nineteenth century burials at the Quaker cemetery site in Alexandria, Virginia; analysis of the human remains from two historic period burials in New Hampshire; and, analysis and recording of a Pre-Contact burial from Sabana Seca, Puerto Rico. analysis and recording of Pre-Contact burials from the island of Vieques, Puerto Rico, supervised the excavation of 84 skeletons and analyzed 62 of the 84 from a Washington County cemetery. Monitored the mechanical soil removal from Church Circle in Annapolis Maryland to ensure no human remains were disturbed.

CHRISTIAN D. DAVENPORT M.A., RPA
FAUNAL ANALYST / ASSISTANT LAB DIRECTOR / CREW CHIEF

EDUCATION

M.A., Anthropology, University of Tennessee, Knoxville, TN, 1999

B.A., Anthropology, Cum Laude, Franklin Pierce College, Rindge, NH, 1993

FIELD SCHOOLS

Maritime Archaeological and Historical Society, MD - Learned various underwater excavation techniques (Class work only), 1994

Adams Point, NH - Learned various excavation techniques on a coastal Late Woodland Native American settlement, 1991

PROFESSIONAL EXPERIENCE

Faunal Analyst/Assistant Lab Director/Crew Chief, R. Christopher Goodwin & Associates, Inc., Frederick, Maryland, August 1999 – present

Teaching, Introduction to Physical Anthropology, University of Baltimore, Baltimore, Maryland, Spring 2000

Teaching, Man in the Biological World, University of Baltimore, Baltimore, Maryland, Fall 2000-2001

Teaching, The Fossil Trail, John Hopkins University, Baltimore, Maryland, Summer 2001

Archeologist, Tennessee Valley Authority (TVA), Norris, Tennessee, May- August 1999

Crew Chief, University of Tennessee, Knoxville, Tennessee, December 1996- Aug. 1999

Analyst, Department of Transportation, University of Tennessee, Knoxville, Tennessee, September 1997

Analyst, Wilbur Smith Associates, Lexington, Kentucky, June-August 1997

Research Associate, Pink Palace Museum, Memphis, Tennessee, August 1997-Aug 1996

Field Technician, John Milner and Associates, Alexandria, Virginia, June-July 1995

Field Technician, Joseph Hopkins Associates Inc., Baltimore, Maryland, August 1994

Field Technician, Alexandria Archaeology, Alexandria, Virginia, February-June 1994

Field Technician, Greenhorn & O'Mara, Beltsville, Maryland, June 1993-February 1994

Field Technician, Epoch, Dunkirk, Maryland, January 1992

Assistant Archaeologist, Howard County Parks and Recreation, Ellicott City, Maryland, 1985-1986

Field Technician, Upper Patuxent Archaeological Society, Ellicott City, Maryland, Summer 1983-1984

MANUSCRIPTS, PUBLICATIONS, AND PAPERS PRESENTED

1991 *Report and Analysis of Burial 4 "B" and 5.* Prepared by Franklin Pierce College.

- 1992 *Faunal Report on Adams Point New Hampshire NH40-14 and NH40-14A 1991 Summer Excavation* (PI. Dr. Howard Hecker). Prepared by Franklin Pierce College.
- 1993 Honors Thesis: *Estimations of Human Population Size at Adams Point New Hampshire During the Late Middle Woodland*. Initial analysis of College faunal material from Adams Point, NH. Made inferences of meat ratios, duration of occupation and estimation of human population. Thesis was cited in the site report which was submitted to state archaeologist (PI. Dr. Howard Hecker).
- 1995a *Identification of Species of Equus from Cortical Bone Micro Structure*. Poster presentation at the Society of Vertebrate Paleontologists Paleontologists dealing with differences between Equus species over time.
- 1995b *Shepherdstown, WV (46JF325) Faunal Remains*. Phase III faunal report for the Site 46JF325 (PI. Dr. Stuart Fiedel). Prepared by John Milner Associates.
- 1995c *Roane County, TN (40RE192) Faunal Remains* (with Dr. Walter Klippel). Prepared by Department of Transportation, University of Tennessee.
- 1996a First hand analysis of thin sectioning of horse bone to set a Fossil Beds precedent of microstructure morphology for the first "true" species of *Equus* (*Equus simplicidens*). Hagerman.
- 1996b Faunal analysis of a possible Paleoindian horse kill from Fort Wayne, IN (PI. Dr. Robert Jeske). Prepared by Indiana Purdue University.
- 1996c *Late Quaternary Vertebrates of the Central Mississippi River Valley*. Published in *Current Research of the Pleistocene* (with M. Ruddell, R. Brister, J. Conoway, P. Delcort, and R. Saucier).
- 1997a *Report on the Phase II Faunal Material Recovered at Watts Bar Reservoir* (PI. Dr. Michael Elam). Prepared by University of Tennessee.
- 1997b *A Report on the Faunal Remains from the Richardville Site, A Prehistoric and Historic Miami Home in Fort Wayne*. Allen County, IN (PI. Dr. Robert Jeske). Prepared by Indiana Purdue University.
- 1998a *A Histological Approach for Distinguishing the Postcrainal Material of Fossil and Recent Members of the Genus Equus* (with M. Ruddell). Submitted to *International Journal of Osteology*.
- 1998b *A Demonstration of Two New Methods of Determining Sex and Weight of Odocoileus virginianus with Implication to Game Selection and Status*. Presented at International Congress of Archaeozoologists, Victoria, British Columbia.
- 1998c *Quaternary Vertebrate Paleontology of the Mid-South: New Clues for Paleoindian Subsistence Strategies* (with M. Ruddell). Presented at the annual Mid-South Archaeological meeting dealing with Paleoindian subsistence in a nontraditional environment.
- 1998d *Report on the Freshwater Gastropods Recovered at Fort Loudon Reservoir 40KN15, Knox County, TN* (PI. Dr. Sue Frankenberg). Prepared for University of Tennessee.

- 1998e *Report on Logan's Fort Faunal Material 15LI95, KY* (PI. Dr. Kim McBride). Prepared by Kentucky Arch. Survey.
- 1998f *Report on the Phase I Faunal Material Recovered at Fort Loudon Reservoir 40KN15. Knox County, TN.* (PI. Dr. Sue Frankenberg). Prepared by University of Tennessee.
- 1998g *Report on the Phase I Faunal Material Recovered at Melton Hill Reservoir.* Sites: 40AN83, 40AN85, 40AN79, 40AN15, 40AN114, 40AN115, AN4, 40KN156, 40KN170, 40KN171, 40KN175, and 40KN188 (PI. Dr. Sue Frankenberg). Prepared by University of Tennessee.
- 1998h *Report on the Phase II Faunal Material Recovered at Rarity Bay 40LD179, Monroe County, TN* (PI. Dr. Sue Frankenberg). Prepared by University of Tennessee.
- 1998i *Report on the Faunal Remains from a Small Multicomponent Rock Shelter (15CU27) in Cumberland County, KY* (PI. Andrew Bradberry). Prepared by Cultural Resource Analysts, Inc.
- 1998j *EPR Analysis of Fossil Tooth Enamel: Signal Source and Composition* (with R. Weeks, M. Elam, and J. Bogard). Presented at the annual meeting of the Society for American Archaeology dealing with electron spin resonance dating of fossil horse tooth enamel.
- 1999a *Cultural Resource Report on the Faunal Remains from Argosee (12D520).* An early Analysts, Inc. 19th- 20th century multi-structure historic Site (PI. Andrew Bradberry). Prepared by Cultural Resource Analysts, Inc.
- 1999b *Report on the Phase I Faunal Material Recovered From Tellico Reservoir.* Prepared by University of Tennessee.
- 1999c *Report on the Phase I Faunal Material Recovered from Cherokee Reservoir.* Prepared by University of Tennessee.
- 1999d *Report of the Phase III Faunal Material Recovered from the Tipton House(40LD179)*(PI. Dr. Sue Frankenberg). Prepared by University of Tennessee.
- 1999e *Age of the Harrison Street Beast: Electro Paramagnetic Resonance Spectra from Tooth Enamel* (with R. Weeks, M. Elam, and J. Bogard). Submitted to *American Antiquity*.
- 1999f Thesis: *Estimating Sex and Weight of Odocoileus virginianus (Whitetail Deer) with Implications to Human Status Toqua (40MR6).* University of Tennessee
- 1999g *Determining Sex and Weight of Odocoileus virginianus (Whitetail Deer) with Implications to Human Status at Toqua (40MR6).* Presented at Trail of Tears Conference, Sweetwater, Tennessee.
- 1999h *Report on the Faunal Remains from Moorefield (46HY89).* A Contact Period Native American burial ground in West Virginia
- 2000a *Colonial Subsistence Practices in Maryland.* Presented at the February Archaeology Meeting of the Upper Patuxant Archaeological Society.

- 2000b Faunal analysis for *Data Recovery at the West Family Cemetery (44AX183), Block 2, Hoffman Properties, Alexandria, Virginia* (by Martha R. Williams and David R. Soldo). Submitted to Hoffman Management.
- 2000c Faunal analysis for *Phase II Archeological Evaluation of Six Sites at Naval Air Station Oceana and Naval Auxiliary Landing Field Fentress, Virginia Beach and Chesapeake, Virginia* (by Michael B. Hornum, Sonja Ingram, Henry W. Measells, Jennifer Brown, and Brad Burkholder). Submitted to Atlantic Division, Naval Facilities Engineering Command.
- 2000d Faunal analysis for *Phase II Evaluation of Portions of Site 18CH673, Naval Surface Warfare Center, Indian Head, Charles County, Maryland* (by Thomas W. Davis, Colleen Popson, Peter Godwin, and Daniel Grose). Submitted to Atlantic Division, Naval Facilities Engineering Command.
- 2000e Faunal analysis for *Phase II Archeological Resources Evaluation of Sites 44YO771 and 44YO772 at King's Creek Plantation, York County, Virginia* (by Ann Markell and Christopher R. Polglase). Submitted to King's Creek Plantation LLC.
- 2000f *Supplemental Analysis of Faunal, Botanical, Soil Samples from the Towne Neck Site (18AN944) at the U.S. Naval Academy, Annapolis, MD* (with Ann Markell and Justine McKnight). Submitted to Michael Baker Jr., Inc.
- 2000g *Phase III Archeological Data Recovery at Site 18ST704, Naval Air Station Patuxent River, St. Mary's County, Maryland* (with Michael B. Hornum, Andrew D. Madsen, John Clarke, Kathleen M. Child, and Martha R. Williams). Submitted to TAMS Consultants, Inc.
- 2000h Faunal analysis for *Phase I-III Archeological Investigations for the Chilled Water Line Upgrade (P-165), Including Site 18AP83, U.S. Naval Academy, Annapolis, Maryland* (by Nora B. Sheehan, Martha R. Williams, and Eleanor E. Breen). Prepared for Michael Baker, Jr., Inc.
- 2000i *Phase I Cultural Resources Survey for the Maryland Mass Transit Police Operations Facility, Baltimore City, Maryland* (with Nathaniel Patch and Katherine Grandine). Prepared for Whitman, Requardt & Associates, LLP.
- 2000j *Report on the Faunal Remains from Rumney's Tavern (18AN48) in Lodontowne Maryland*. A colonial tavern site.
- 2000k *Report on the Faunal Remains from Site 18AN871 In Lodontowne Maryland*. A colonial house site.
- 2000l *Report on the Faunal Remains from Three Sites on Kent Island*. Three small faunal assemblages.
- 2000m *Report on the Faunal Remains from Cherry Point, North Carolina*. A small prehistoric faunal assemblage.
- 2001a *Archeological Survey and Evaluation of Selected Sites at NSGA Sabana Seca, Sabana Seca, Puerto Rico (Volume 5)* (with Suzanne Sanders, Ellen Saint Onge, R. Christopher Goodwin, and Dave D. Davis). Prepared for Atlantic Division, Naval Facilities Engineering Command.

- 2001b *Phase I Cultural Resources Survey for the Proposed Emerson Section 2 Development, Howard County, Maryland* (with Michael B. Hornum and Scott Meacham). Prepared for The Howard Research and Development Corporation.
- 2001c *Phase I Archeological Investigations for the Enyart Property, Anne Arundel County, Maryland* (with Michael B. Hornum and Nathaniel Patch). Prepared for Washington Homes.
- 2001d *Identification of the Genus Equus Based on Histology*. Presented at the Institut für Anthropolgy, Universität Göttingen, Germany. In the workshop “Osteons: Their Use in Age Determination, Species Identification, and Differential Diagnosis.”
- 2001e *Report on the Faunal Remains From Federated Charity Privy*. Report on animal remains from an early 19th century outhouse.
- 2002a *Cultural Resource Survey and Evaluation for the Four Seasons at Kent Island, Queen Anne's County, Maryland* (with Thomas W. Davis, Martha Williams, Jennifer A. Tobey, Jennifer E. Borneman, Christopher Schaney, Mitzy Schramke, and Scott Meacham). Prepared for Fossett & Brugger Chartered on behalf of Washington Homes, Inc.
- 2002b *Phase I Archeological Survey for the Proposed Allegheny Heights Wind Energy Project, Garrett County, Maryland* (with J. Emmett Brown, Chris Heidenrich, Kate Gallagher, Lori Ricard, and Michael Hornum). Prepared for Clipper Windpower, Inc.

KRISTEN J. BASTIS, B.A.
ARCHEOLOGIST I

Ms. Kristen Bastis earned a Bachelor of Arts degree in English (1992) and Anthropology (1993) at The University of Connecticut. Ms. Bastis has conducted research in Connecticut, Illinois, California, Ohio, Pennsylvania, Maryland, Virginia and Germany.

Her research interests include; Zooarcheology, human remains and mortuary practices, New England Contact Period and Mid-western Prehistory, and the development of complex societies.

Ms. Bastis has served as a field archeologist and laboratory technician for The Public Archeology Survey Team, Museum Monrepos, The Center for American Archeology, Brian F. Smith and Associates, Brian F. Mooney and Associates, and R. Christopher Goodwin and Associates, Inc. She has served as an office assistant and field assistant at the Office of State Archeology in Connecticut and as a Laboratory Director and Instructor for The Center for American Archeology's National Science Foundation's Young Scholars Program.

KRISTEN J. BASTIS, B.A.

ARCHEOLOGIST I

Education

Bachelor of Arts in English, The University of Connecticut, Storrs, CT, 1992

Bachelor of Arts in Anthropology, The University of Connecticut, Storrs, CT, 1993

Field School, The University of Connecticut, 1992

Field School, The University of Chicago at The Center for American Archeology, 1994

Professional Experience

Archeologist II/Crew Member, R. Christopher Goodwin & Associates, Inc., Frederick, Maryland, May 1997-present.

Public Archeology Survey Team (PAST), Storrs, CT, Summer 1992

Office of State Archeology, Storrs, CT, Fall 1992

Museum Monrepos Neiwied Germany, August 1993 - December 1993

The Center for American Archeology Kampsville II, August 1994 - September 1996

Brian F. Smith and Associates, San Diego, CA, September 1996 - March 1997

Brian F. Mooney and Associates, San Diego, CA, March 1997

R. Christopher Goodwin and Associates, Inc., Frederick, MD, May 1997 - Present.

Special Skills

Analysis of Human Remains

Publications

- 1996 Journal of Student Research – Ed. Steven B. Oppenheimer, California State University, Northridge, California. Burgess International Group, Inc
- 1996 Journal of Student Research Abstracts Vol. II
- 1999 *Phase I/II Archeological Investigations at Gunpowder Meeting House and Phase III Archeological Mitigation of Impacts to Site 8HA242, Quiet Lodge, Aberdeen Proving Ground, Harford County, Maryland* (with Thomas Davis, Meril Dunn, and Katherine Grandine). Submitted to Environmental Conservation and Restoration Division, Aberdeen Proving Ground, and Roy F. Weston, Inc.
- 2000a *Interim Report on Cultural Resource Survey for the Proposed Eastchester Marine Pipeline, Suffolk and Bronx Counties, New York* (with Jeffrey H. Maymon, Jean B. Pelletier, Richard Vidutis, Martha Williams, Peter Godwin, W. Patrick Giglio, Sarah Milstead, Larkin Post, Brian Stone, Katherine Grandine, and Christopher R. Polglase). Prepared for ENSR.

- 2000b *Third Supplemental Report on Archeological Survey of the Proposed Independence Pipeline Corridor Through Defiance, Henry, Wood, Seneca, Huron, Ashland, Wayne, Stark, Summit, and Columbiana Counties, Ohio (Independence Pipeline Cultural Resource Report No. 16* (with Colby A. Child, Jr., William Lowthert IV, Peter Godwin, Joshua Roth, Jesse Kulp, Matthew Thaler, Joshua Weller, Christopher Schaney, Mitzy Schramke, Jason Kranch, Matthew Gill, and Jeffrey H. Maymon). Prepared for ANR Pipeline Company.
- 2000c *Phase III Data Recovery at the Monocacy Boulevard Site (18PR750), Frederick County, Maryland* (with Jeffrey H. Maymon). Prepared for Buckeye Development Construction Company, Inc.
- 2000d *Archeological Monitoring and Data Recovery for Intersection Improvements (MD 17) in Burkittsville, Frederick County, Maryland; Archeological Report No. 238* (with April Fehr and Brian Clevon). Prepared for the Maryland State Highway Administration.

Curriculum Vita
Donna Catherine Boyd

Permanent Address:

Home
489 Easter Creek Road NW
Riner Virginia 24149
(540) 763-2320

Work
Dept. of Sociology/Anthropology
Radford University
Radford Virginia 24142
(540) 831-5856
e-mail: doboyd@runet.edu

Education:

1988 Ph.D. Anthropology, University of Tennessee, Knoxville.
Dissertation title: "A Functional Model for Masticatory-
Related Mandibular, Dental, and Craniofacial Microevolu-
tionary Change Derived From a Selected Southeastern
Indian Skeletal Temporal Series"

1984 M.A. Anthropology, University of Tennessee, Knoxville.
Thesis title: "A Biological Investigation of Skeletal
Remains From the Mouse Creek Phase and a Comparison with
Two Late Mississippian Skeletal Populations from Middle
and East Tennessee"

1981 B.A. Anthropology, University of Tennessee, Knoxville.

Major Fields of Interest:

Human Osteology; Skeletal Biology; Forensic Anthropology; Human
Paleontology; Primate Anatomy, Behavior and Paleontology; South-
eastern Archaeology

Appointments:

1995- Associate Professor, Department of Sociology/
present Anthropology, Radford University, Radford VA

1999- Adjunct Member, Virginia State Medical Examiner's
present Office, Western District

1989-95 Assistant Professor, Department of Sociology/
Anthropology, Radford University, Radford VA

1986-87 Instructor, University of Tennessee, Knoxville TN

1984-86 Graduate Teaching Assistant, University of Tennessee,
Knoxville TN

Professional Organizations:

American Association of Physical Anthropologists
Sigma Xi Research Society of North America
Southeastern Archaeological Conference
Council of Virginia Archaeologists
Lambda Alpha Anthropology Honor Society
Virginia Academy of Sciences

Editorial Positions:

1992- Annual Reviews in Physical Anthropology, Dushkin
present Publishing Group

1986-88 Coeditor, Anthropology Newsletter, University of
Tennessee, Knoxville

Teaching Experience:

1989- Radford University:
present Anthropology 121--Cultural Anthropology
Anthropology 220--Physical Anthropology
Anthropology 220H--Physical Anthropology Honors
Anthropology 320--Human Osteology
Anthropology 330--Primate Studies
Anthropology 410--Human Origins
Anthropology 420--Forensic Anthropology
Interdisciplinary Studies 198, 199: Studies in
Science, Social Science, and Humanities

1989 Co-instructor, Tennessee Governor's School for
Tennessee Studies, Archaeology Project Group,
East Tennessee State University (summer)

1987 University of Tennessee
Anthropology 2510--Human Origins
Anthropology 2530--Human Cultures

1984- University of Tennessee (substitute and part-time)
1986 Anthropology courses in Primate Studies, Human
Paleontology, and African Prehistory)

Honors, Grants, Awards, and Service:

- 1998 Recipient of the Donald N. Dedmon Professorial Award
- for Teaching Excellence, Radford University
- 1998-99 Member of the Faculty Development Strand for Supporting
Scholarship and Creative Activity Among Faculty
- 1997-98 Co-Chair of Personnel Committee, Radford University
- 1996- Secretary for the Radford University Institutional
present Review Board for the Review of Human Subjects
- 1994 Participant in Radford University's Oral Communication
Retreat, Pipestem, West Virginia
- 1992-95 Committee member of the Radford University Department
of Sociology/Anthropology Assessment Committee
- 1992-93 Recipient of Radford University Faculty Professional
and Instructional Development Grant (\$1953.00)--for
development of a human osteology laboratory
- 1990- Committee member of the Radford University Department
present of Sociology/Anthropology Dean's Scholar Selection
Committee
- 1990- Faculty Sponsor of the Radford University chapter of
present Lambda Alpha (Anthropology honor society)
- 1990 Recipient of a Radford University Foundation Grant
(\$1414.80)--"A Reconnaissance Survey of Virginia
Prehistoric Human Skeletal Remains"
- 1987 Graduate Teaching Assistant Training Seminar Panel
Discussant; Univ. of Tennessee, Knoxville
- 1987 Recipient of the University of Tennessee Chancellor's
Graduate Teaching Award (for excellence in class-
room teaching)
- 1987 Fulbright Scholarship--First Alternate Status to France

- 1984-87 Teaching Assistantships, Department of Anthropology,
University of Tennessee, Knoxville
- 1983 Recipient of the Anthropology Department Scholarship,
University of Tennessee, Knoxville
- 1982-98 Member of the Phi Kappa Phi Honor Society
- 1979-80 Recipient of the Roddy Scholarship, University of
Tennessee, Knoxville
- 1978-79 Recipient of the Sherwood Scholarship, University of
Tennessee, Knoxville

Field Research:

- 1995 Physical Anthropologist, 44JC32--consultant for re-
moval of historic human cemetery remains from Utopia
1, Kingsmill on the James, James City County, Va.
- 1995 Physical Anthropologist, 44SK309--consultant for re-
moval of historic human cemetery remains from
Suffolk, Virginia
- 1994 Physical Anthropologist, 44SM4 (Fox Site)--consultant
for removal of prehistoric human remains from Late
Woodland site in Smyth County, Virginia
- 1994 Physical Anthropologist, 44LB169 (Bone Cave)--
consultant for removal of prehistoric human remains
from Woodland period burial cave
- 1992 Physical Anthropologist, Lake Hole Cave--on-site
analysis of prehistoric human skeletal remains
from a cave in Johnson County, Tennessee
- 1990 Physical Anthropologist, 44SK309--consultant for
removal of two historic graves from the city of
Suffolk, Virginia
- 1990 Physical Anthropologist, 44SM7 (Bonham site)--
consultant and excavator of prehistoric (Late
Woodland) remains from Smyth County, Virginia

- 1986 Field Supervisor, Chickamauga Reservoir Reconnaissance Survey, University of Tennessee--survey of non-inundated prehistoric sites in the Chickamauga Reservoir, southeastern Tennessee
- 1986 Field Volunteer, Tipton Haynes Historical Farm and Plum Grove Archaeological Projects, Washington County, Tennessee--excavation of prehistoric components of both areas
- 1985 Field Assistant, Grotte XVI Archaeological Project, Dordogne, France--excavation of multicomponent prehistoric cave (one month full time)
- 1983-84 Field Assistant, Watauga Archaeological Project, University of Tennessee--controlled surface collection and testing
- 1981 Field Assistant, Henry Site, University of Tennessee--controlled surface collection and testing
- 1979 Field Assistant, Tellico Archaeological Survey, University of Tennessee--controlled surface collection and plowzone testing of probabilistic survey area

Laboratory Research:

- 1999 Laboratory Supervisor--analysis of two unidentified forensic cases (Pittsylvania and Highland Counties) for the Virginia State Medical Examiner's Office, Western District
- 1998-99 Laboratory Supervisor--analysis of human skeletal remains from two historic African-American cemeteries (44CP568 and 44HE950) near Richmond, Virginia; also a prehistoric human burials from 44SK11, Suffolk County, Virginia
- 1998 Laboratory Supervisor, 44TZ6 (Hoge site)--analysis of human skeletal remains from a late prehistoric site in Tazewell County, Virginia

- 1996-97 Laboratory Supervisor, 44KG6 (Nanzattico Ossuary)-- analysis of human skeletal remains from a late prehistoric ossuary in King George County, Virginia
- 1995-96 Laboratory Supervisor, 44JC32 (Utopia A)--analysis of human skeletal remains from a 17th century cemetery on the Kingsmill on the James, James City County, Virginia
- 1995 Laboratory Supervisor, 44BA31 (Hidden Valley Rock-shelter)--analysis of human skeletal remains from a prehistoric rockshelter in Bath County, Virginia
- 1995 Laboratory Supervisor, 44SK309 (Suffolk)--analysis of human skeletal remains from an 18th century historic Virginia cemetery in Suffolk
- 1995 Laboratory Supervisor, Forensic Case 95-1--analysis of an unidentified cranium delivered by the Lynchburg, Virginia Police
- 1994-95 Laboratory Supervisor, 44LD4 (Fisher site)--analysis of human skeletal remains from a Late Woodland burial in Loudoun County, Virginia
- 1994 Laboratory Supervisor, 44LE169 (Bone Cave)--analysis of human skeletal remains from a Woodland burial cave in Lee County, Virginia
- 1993 Laboratory Supervisor, 44PY144 (Hurt site)--analysis of human skeletal remains from Pittsylvania County, Virginia
- 1993 Laboratory Supervisor, 44PG151 (Jordan's Point)--analysis of human skeletal remains from Prince George County, Virginia
- 1992-93 Laboratory Supervisor, Lake Hole Cave--analysis of human skeletal remains from a prehistoric cave in Johnson County, Tennessee

- 1992-93 Laboratory Supervisor, 44JC308 (Governor's Land)--
analysis of prehistoric human skeletal remains from
James City County, Virginia
- 1991 Laboratory Supervisor, 44SM7 (Bonham site)--analysis
of prehistoric human skeletal remains from Smyth
County, Virginia
- 1991 Laboratory Supervisor, 44NH277--analysis of prehistoric
ossuary from Northampton County, Virginia
- 1991 Laboratory Supervisor, Forensic Case 91-1--analysis
of human skeletal remains from Pulaski delivered
by the Virginia State Police
- 1990 Laboratory Supervisor, 44SK309--analysis of two
historic burials from the city of Suffolk, Virginia
- 1990 Laboratory Supervisor, 15BR9--analysis of prehistoric
human skeletal remains from Breathitt County, KY
- 1990 Laboratory Supervisor, 44PG333 (Jordan's Point)--
analysis of prehistoric ossuary from Prince George
County, Virginia
- 1987 Laboratory Supervisor, 44MY3 (Hall site)--analysis
of prehistoric burial from Montgomery County, VA
- 1987-88 Dissertation Research, University of Tennessee (Depart-
ment of Anthropology and McClung Museum)--intensive
metric and morphological assessment of selected
prehistoric human skeletal remains
- 1986 Laboratory Supervisor, Chickamauga Reservoir Recon-
naissance Survey, University of Tennessee (McClung
Museum)--supervision of archaeological reconnias-
sance research, mapping, etc.
- 1985 Data Processor, Grotte XVI Project, University of
Tennessee (Department of Anthropology)--data entry
and computer assistance in relation to prehistoric
cultural remains from a cave in the Dordogne, France

- 1984-85 Data Processor, Watauga Archaeological Project, University of Tennessee (Department of Anthropology)-- data entry, computer assistance
- 1983-85 Laboratory Assistant, University of Tennessee (McClung Museum)--curation of museum prehistoric remains
- 1982-84 Laboratory Supervisor, Mouse Creek Skeletal Project, University of Tennessee (McClung Museum)--curation and analysis of Mouse Creek prehistoric human skeletal remains
- 1981-83 Data Processor, Tellico Archaeological Survey, University of Tennessee (McClung Museum)--archaeological data entry, computer assistance
- 1980-81 Laboratory Assistant, Tellico Archaeological Survey, University of Tennessee (McClung Museum)--curation of prehistoric archaeological remains
- 1979 Laboratory Assistant, Brown site, University of Tennessee (Department of Anthropology)--curation of prehistoric human skeletal remains

Publications/Reports:

- 1999 Review of Feast of the Dead: Aboriginal Ossuaries in Maryland, by Dennis C. Curry, The Archeological Society of Maryland, Inc. Southeastern Archaeologist: In Press.
- 1999 A Skeletal Analysis of Two Individuals From the Nansemond Site (44SK11), Suffolk County, Virginia. Report submitted to James River Institute for Archaeology, Inc. (with C. Clifford Boyd).
- 1999 The Skeletal Anatomy of Human Remains From Historic Virginia Site 44CF568, Chesterfield County. Report submitted to Gray and Pape, Inc. (with Clifford Boyd).
- 1999 The Robinson Cemetery (44HE950): Skeletal Analysis of A Nineteenth-Century African-American Burial Ground in Henrico County, Virginia. Report submitted to Gray and Pape, Inc. (with Clifford Boyd).

- 1999 Forensic Case 99-1--Unidentified Human Skeleton From Pittsylvania County, Virginia. Report submitted to the Virginia State Medical Examiner's Office, Western District.
- 1999 Forensic Case 99-2--Unidentified Human Cranium From Highland County, Virginia. Report submitted to the Virginia State Medical Examiner's Office, Western District.
- 1998 An Analysis of Human Skeletal Remains From the Hoge Site (44TZ6), Tazewell County, Virginia. Report submitted to the Virginia Department of Historic Resources, Richmond (with C. Clifford Boyd).
- 1997 Osteological Comparison of Prehistoric Native Americans From Southwest Virginia and East Tennessee Mortuary Caves. *Journal of Cave and Karst Studies* 59(3): 160-165 (with C. Clifford Boyd).
- 1997 A Skeletal Analysis of the People of Nanzatico Ossuary (44KG6), King George County, Virginia. Report submitted to the Virginia Department of Historic Resources, Richmond (with C. Clifford Boyd).
- 1997 Review of Skeletal Biology in the Great Plains: Migration, Warfare, Health and Subsistence, edited by Douglas W. Owsley and Richard Jantz, Smithsonian Institution Press, Washington, D.C., 1994. *North American Archaeologist* 18(1):86-89.
- 1997 Review of A Greenville Burial Ground: Human Remains and Mortuary Elements in British Columbia Prehistory, by Jerome S. Cybulski. *North American Archaeologist* 18(1):83-85.
- 1996 The Human Skeletal Remains From Lake Hole Mortuary Cave, Tennessee. In *Upland Archaeology in the East: Symposium No. 6*, edited by E. Barfield and M. Barber, pp. 79-90. ASV Special Publication No. 38 (Part 6) (with C. Clifford Boyd).

- 1996 An Osteological Analysis of Human Remains From Two Mississippian Shaft-and-Chamber Burials From the Colson Site (44LE211), Lee County, Virginia. Report submitted to Louis Berger and Associates, Richmond, Virginia (with C. Clifford Boyd).
- 1996 An Osteological Description of the Human Remains From the Wheeler Site (44BK311), Buckingham County, Virginia. Report submitted to Longwood College, Farmville, Virginia (with C. Clifford Boyd).
- 1996 An Osteological Analysis of 18th Century Human Skeletal Remains From Utopia 1 (44JC32), Kingsmill on the James, James City County, Virginia. Report submitted to James River Institute for Archaeology, Inc., Williamsburg, Virginia (with C. Clifford Boyd).
- 1996 Skeletal Correlates of Human Behavior in the Americas. Journal of Archaeological Method and Theory 3(3): 189-251.
- 1995 An Osteological Assessment of Prehistoric Remains From Hidden Valley Rockshelter, 44BA31, Bath County, Virginia. Report submitted to the U.S. Forest Service, Roanoke, Virginia.
- 1995 Human Skeletal Remains From the Marshall Tract Burial Ground (44SK309), Suffolk, Virginia. Report submitted to MAAR Associates, Inc. (with C. Clifford Boyd).
- 1995 Skeletal Biology of Prehistoric Native Virginians: Past, Present and Future. Quarterly Bulletin, Archaeological Society of Virginia 2-8.
- 1995 An Osteological Analysis of Recently Excavated Human Burials From the Fox Site (44SM4), Smyth County, Virginia. Report submitted to the Department of Historic Resources, Richmond, Virginia.
- 1995 Osteological Summary of Human Burial 94-B-1 From the Fisher Site (44LD4), Loudoun County, Virginia. Report submitted to the Department of Historic Resources, Richmond, Virginia.

- 1995 Forensic Investigation of Human Skeletal Remains from Lynchburg, Virginia (Case 95-01). Report submitted to the Lynchburg Police.
- 1994 The Skeletal Biology of Native Americans from the Hurt Site (44PY144), Pittsylvania County, Virginia. Report submitted to Preservation Technologies, Inc., Salem, Virginia (with C. Clifford Boyd).
- 1994 Human Remains. In Phase II Archaeological Investigations at Bone Cave (44LB169), Lee County, Virginia, by Larry R. Kimball and Thomas R. Whyte, pp. 22-24, 31-37. Appalachian State University Laboratories of Archaeological Science, Boone, North Carolina (with C. Clifford Boyd).
- 1994 Review of Black Mesa Anasazi Health: Reconstructing Life From Patterns of Death and Disease, by Debra L. Martin, Alan H. Goodman, George J. Armelagos, and Ann L. Magennis. *North American Archaeologist* 15(3):269-273.
- 1993 Review of Human Osteology, by Tim D. White and Pieter Folkens. *North American Archaeologist* 14(4):386-388.
- 1993 The Osteology of Native American Skeletons From Governor's Land, 44JC308. Report submitted to the James River Institute for Archaeology, Inc., Williamsburg, Virginia (with C. Clifford Boyd).
- 1993 Osteological Analysis of Two Native American Burials From 44PG151, the Richard Bland Site at Jordan's Point. Report submitted to the Department of Historic Resources, Richmond, Virginia (with C. Clifford Boyd).
- 1992 Late Woodland Mortuary Variability in Virginia. In Middle and Late Woodland Research in Virginia: A Synthesis, T. Rheinhardt and M.E. Hodges, editors, pp. 249-275. Special Publication No. 29, The Archaeological Society of Virginia. The Dietz Press, Richmond, Virginia (with C. Clifford Boyd).

- 1992 Skeletal Analysis of Prehistoric Human Remains From the Bonham Site, 44SM7. In The Bonham Site (44SM7): A Late Woodland Complex in Smyth County, Virginia, C. Clifford Boyd, editor. Report submitted to the Department of Historic Resources, Richmond, Virginia.
- 1991 Forensic Investigation of Skeletal Remains From Pulaski County, Virginia (Case 91-01). Report submitted to the Virginia State Police, Wytheville.
- 1991 Osteological Analysis of Prehistoric Ossuaries at 44NH277, Northampton County, Virginia. Report submitted to the Department of Historic Resources, Richmond, Virginia.
- 1991 A Multidimensional Investigation of Biocultural Relationships Among Three Late Prehistoric Societies in Tennessee. American Antiquity 56:75-87 (with C. Clifford Boyd).
- 1991 Skeletal Analysis of Two Burials From Prehistoric Site 15BR9, Breathitt County, Kentucky. In Prehistoric Site 15BR9, Breathitt County, Kentucky, C. McIlhany, editor.
- 1990 Osteologic Examination of Two Historic Graves, Suffolk, Virginia (44SK309). Report submitted to the College of William and Mary, Archaeological Project Center.
- 1990 Osteological Analysis of Prehistoric Ossuary at Jordan's Point (44PG333/1). Report submitted to the Department of Historic Resources, Richmond, Virginia.
- 1990 Review of The Siouan Project: Seasons I and II, edited by Roy S. Dickens, Jr., H. Trawick Ward, and R. P. Stephen Davis, Jr. North American Archaeologist 11(1):69-72 (with C. Clifford Boyd).
- 1989 A Comparison of Tennessee Archaic and Mississippian Maximum Femoral Lengths and Midshaft Diameters: Subsistence Change and Postcranial Variability. Southeastern Archaeology 8(2):107-116 (with C. Clifford Boyd).

- 1988 A Functional Model For Masticatory-Related Mandibular, Dental, and Craniofacial Microevolutionary Change Derived From A Selected Southeastern Indian Skeletal Temporal Series. Ph.D. Dissertation, The University of Tennessee, Knoxville.
- 1987 Human Skeletal Analysis. In The 1986 Salvage Excavations at the Plum Grove Site (40WG17), Washington County, Tennessee, C. Clifford Boyd, editor. Report submitted to the U.S. Forest Service, Cherokee National Forest, Cleveland, Tennessee, and the Center for Appalachian Studies and Services, East Tennessee State University, Johnson City, Tennessee.
- 1986 A Survey and Assessment of Extant Data Pertaining to Prehistoric Cultural Resources of the Chickamauga Reservoir. Report submitted to the Tennessee Valley Authority, Knoxville, Tennessee.
- 1986 A Comparison of Mouse Creek Phase to Dallas and Middle Cumberland Culture Skeletal Remains. In Skeletal Analysis in Southeastern Archaeology, Janey Levy, editor. Raleigh: North Carolina Archaeological Council Publication No. 24, pp. 103-126.
- 1985 New Upper Pleistocene Hominid Remains From Vindija Cave, Croatia, Yugoslavia. American Journal of Physical Anthropology 68(3):375-383 (with Fred H. Smith and Mirko Malez).
- 1985 An Early Nineteenth-Century Log Structure in Washington County, Tennessee. Tennessee Anthropologist 10(2): 123-133 (with C. Clifford Boyd).
- 1984 A Biological Investigation of Skeletal Remains From the Mouse Creek Phase and A Comparison With Two Late Mississippian Skeletal Populations From Middle and East Tennessee. M.A. Thesis, Department of Anthropology, University of Tennessee, Knoxville.

- 1982 A Preliminary Demographic Comparison of Skeletons From Three Mouse Creek Phase Sites in the Chickamauga Basin, Tennessee. M.S. on file, McClung Museum, University of Tennessee, Knoxville.

Presented Papers, Seminars, Invited Lectures:

- 1999 Demography and Pathologies of Individuals From Eighteenth and Nineteenth-Century African-American Cemeteries. Paper presented at the 77th Annual Meeting of the Virginia Academy of Science, Old Dominion University, Norfolk, Virginia, May 28 (with C. Clifford Boyd, Jr.).
- 1999 A Regional Perspective on the Skeletal Manifestations of Slavery. Paper presented at the 68th Annual Meeting of the American Association of Physical Anthropologists, Columbus, Ohio (with C. Clifford Boyd, Jr.).
- 1998 Theoretical, Methodological, and Ethical Issues in the Study of Human Bone: An Example From the Hoge Site (44TZ6), Tazewell County, Virginia. Paper presented at the 76th Annual Meeting of the Virginia Academy of Science, George Mason University, Fairfax, Virginia, May 29 (with C. Clifford Boyd and Mike Mirro).
- 1998 Prehistoric and Historic Human Skeletal Analysis at Radford University. Invited Lecture for the New River Chapter of the Archeological Society of Virginia, April 9.
- 1997 A Skeletal and Behavioral Analysis of the People From Nanzatico Ossuary. Paper presented at the 1997 Annual Meeting of the Archeological Society of Virginia (with C. Clifford Boyd and Dave Hazzard).
- 1997 A Biocultural Comparison of Early Anglo-American and African-American Skeletal Populations from Coastal Virginia. Poster presented at the 62nd Annual Meeting of the Society for American Archaeology, Nashville, Tennessee.

- 1996 Skeletal Biology III (posters). Session chaired at the 65th Annual Meeting of the American Association of Physical Anthropologists, Research Triangle Park, North Carolina, April 12.
- 1996 Evaluating Behavioral Inferences From Human Skeletal Morphology: Case Studies From Virginia and Tennessee. Paper presented at the 65th Annual Meeting of the American Association of Physical Anthropologists, Research Triangle Park, North Carolina, April 11.
- 1995 The Skeletal Biology of Individuals From Late Prehistoric Mortuary Caves in Western Virginia and East Tennessee. Paper presented in the Symposium on Cave Archaeology, National Speleological Society Convention, Blacksburg, Virginia, July 17 (with C. Clifford Boyd).
- 1995 A Skeletal Comparison of Human Remains From Two Late Woodland Sites in Smyth County, Virginia. Paper presented at the 73rd Annual Meeting of the Virginia Academy of Science, May 23-26 (with C. Clifford Boyd).
- 1995 Excavation at the Hurt Power Plant (44PY144), Pittsylvania County, Virginia: A Contact Period Saponia Village on the Middle Roanoke (Staunton) River. Paper presented at the 1995 Middle Atlantic Archaeological Conference, Ocean City, Maryland, April 7-9 (with M.B. Barber, M.F. Barber, C. Clifford Boyd, M.E. Hodges, and E.E. Barfield).
- 1994 Mortuary Variability and Skeletal Biology of Contact Period Siouan Groups in Virginia and North Carolina. Paper presented at the 51st Annual Meeting of the Southeastern Archaeological Conference, Lexington, Kentucky, Nov. 9-12 (with C. Clifford Boyd and Mike Barber).
- 1994 Skeletal Biology of Prehistoric Native Virginians: Past, Present and Future. Invited Lecture, Council of Virginia Archaeologists Symposium on The Archaeological Study of Human Burials: Examining Scientific, Humanistic, and Legal Issues, Norfolk, VA, Oct. 14.

- 1994 Forensic Analysis of Human Skeletal Remains. Invited Lecture, Radford University Forensic Chemistry course.
- 1993 The Human Skeletal Remains from Lake Hole Mortuary Cave, Tennessee. Paper presented at the 50th Annual Meeting of the Southeastern Archaeological Conference, Raleigh, North Carolina, Nov. 3-6 (with C. Clifford Boyd).
- 1992 Analysis and Interpretation of Human Skeletal Remains. Invited Lecture, Anthropology Department, College of William and Mary, Williamsburg, Virginia, Nov. 9.
- 1992 The Bonham Site (44SM7): A Late Woodland Village Complex in Southwest Virginia. Paper presented at the 49th Annual Meeting of the Southeastern Archaeological Conference, Little Rock, Arkansas (with Clifford Boyd).
- 1992 Late Woodland Mortuary Variability in Central and Western Virginia. Paper presented at the 57th Annual Meeting of the Society for American Archaeology, Pittsburg, Pennsylvania (with C. Clifford Boyd).
- 1992 Archaeological Investigation of Lake Hole Mortuary Cave. Paper presented at the 57th Annual Meeting of the Society for American Archaeology, Pittsburg, Pennsylvania (with Larry R. Kimball, Thomas R. Whyte, and C. Clifford Boyd).
- 1992 A Preliminary Investigation of Human Skeletal Remains From Lake Hole Cave. Paper presented at the Upland Archaeology in the East: Symposium V, Boone, North Carolina (with C. Clifford Boyd).
- 1991 Biological Relationships of Late Prehistoric Societies in Middle and East Tennessee. Paper presented at the 69th Annual Meeting of the Virginia Academy of Science, Blacksburg, Virginia.
- 1990 Treatment of Human Skeletal Remains. Seminar/Workshop at the 1990 Annual Meeting of the Archeological Society of Virginia, Richmond, Virginia (with Noel Boaz).

- 1990 Late Woodland Mortuary Variability in Virginia. Paper presented at the Council of Virginia Archaeologists' Symposium on Middle and Late Woodland in Virginia, Roanoke, Virginia (with C. Clifford Boyd).
- 1989 A Biocultural Comparison of the Middle Cumberland, Dallas and Mouse Creek Cultures. Paper presented at the 46th Annual Meeting of the Southeastern Archaeological Conference, Tampa, Florida (with C. Clifford Boyd).
- 1989 Effects of Subsistence and Technological Change on Masticatory Anatomy Across a Prehistoric Skeletal Sample from Tennessee. Paper presented at the 54th Annual Meeting of the Society for American Archaeology, Atlanta, Georgia (with C. Clifford Boyd).
- 1988 Dietary-Related Functional Change in Mandibular Morphology in Archaic Through Mississippian Skeletal Samples From Tennessee. Paper presented at the 45th Annual Meeting of the Southeastern Archaeological Conference, New Orleans, Louisiana.
- 1987 Biocultural Relationships Between Three Late Mississippian Groups: Mouse Creek, Dallas, and Middle Cumberland. Paper presented at the 44th Annual Meeting of the Southeastern Archaeological Conference, Charleston, South Carolina (with C. Clifford Boyd).
- 1985 Additional Upper Pleistocene Hominid Remains From Vindija Cave, Croatia, Yugoslavia. Paper presented at the 54th Annual Meeting of the American Association of Physical Anthropologists, Knoxville, Tennessee (with Fred H. Smith and Mirko Malez).

References:

Dr. Cheryl Tieman
Professor and Chairperson
Dept. of Sociology and Anthropology
Radford University
Radford VA 24142
(540) 831-5253

Dr. Stephen H. Lerch
Associate Dean
College of Arts and Sciences
Radford University
Radford VA 24142
(540) 831-6515

Dr. Fred H. Smith
Professor and Chairperson
Department of Anthropology
Northern Illinois University
DeKalb, Illinois 60115
(815) 753-0246

Dr. William M. Bass
Professor Emeritus
Department of Anthropology
University of Tennessee
Knoxville, Tennessee 37996-0720
(423) 974-4408

Dr. Jefferson Chapman
Research Professor and Curator,
Frank H. McClung Museum
The Frank H. McClung Museum
University of Tennessee
Knoxville, Tennessee 37996-0720
(423) 974-2144

Dr. Richard L. Jantz
Professor, Department of Anthropology
University of Tennessee
Knoxville, Tennessee 37996-0720
(423) 974-4408

(Revised 7/20/99)

12. Please provide the expected timetable for:

Excavation	<u>June, 2000</u>
Osteological Analysis	<u>October, 2000</u>
Preparation of the final report	<u>January, 2001</u>
Final Disposition	<u>December, 2000</u>

13. Please provide a statement of the goals and objectives of the project.

(see attached statement)

14. Please provide the location and a brief description of the plan for the short-term curation of the human skeletal remains and associated artifacts.

At Goodwin & Associates, Inc. located in Frederick, Maryland
(preliminary cleaning & inventory; waterscreening of associated soils)

15. Is a disposition other than reburial proposed? YES NO

If your answer to the question above is "YES", please attach a statement of the reasons for alternative disposition and the benefits to be gained thereby.

Hoffman Management will provide an appropriate protected reinterment site, arrange for reburial by a licensed funeral director, and erect one or more appropriate marker(s) for the relocated remains.

Item 13.

RESEARCH DESIGN AND MITIGATION PLAN
WEST FAMILY BURIAL VAULT
HOFFMAN PROPERTIES, ALEXANDRIA, VIRGINIA

The study proposed in this mitigation plan will combine both Phase II and Phase III levels of investigation. Phase II investigations will be undertaken to determine and document the limits and extent of additional burials, if any, in the vicinity of the previously identified vault feature. Phase III investigations are designed to:

- (1) confirm through excavation the presence or absence of human remains in each identified additional burial;
- (2) identify the individuals interred within the vault feature and in other associated burial shafts, if any;
- (3) obtain forensic data for each individual, to the extent permitted by preservation of the remains; and
- (4) compare the individual and collective results of specialized analyses with similar data obtained from contemporary burials in Alexandria and adjacent Fairfax County to create a profile of morbidity and mortality among late eighteenth century populations in Northern Virginia.

These objectives will be realized through a combination of archival research, field investigations, and specialized analyses.

Archival research

Background research will focus on determining the identity of each individual, by combining the results of forensic analyses with contemporary death records and obituary notices available in the records of Fairfax County, the City of Alexandria, and various churches of the period. The results of the forensic and botanical analyses also will be compared with those obtained from investigations of contemporary burials within the Alexandria area, including those interred at Christ Church cemetery, and other contemporary burials in the greater Chesapeake region.

Field Methods.

The Phase II stage of the proposed study will entail the mechanized stripping of a 100 x 100 ft area surrounding the vault feature on its eastern, northern, and western sides to determine whether additional grave shafts or burial vaults are present. The location of all features exposed within this 100 x 100 ft area will be photographed and located on a master map of previously identified historic features on the Hoffman property. Each grave shaft will be assigned a discrete numeric designation.

Phase III investigations will entail manual excavation and recordation of all burials within the project area; removal of the remains, associated grave goods and coffin hardware from the previously identified burial vault and from any additional burials identified during the Phase II investigations; and specialized analyses of the human remains and other classes of cultural materials.

All fill within the interior of the vault or within each exposed grave shaft will be removed in 15cm (0.5 ft) increments within natural or cultural strata where present. All shaft fill material will be dry-screened through 0.625 cm (1/4 in) hardware mesh, and a 2-liter soil sample of fill also will be retained. Soils directly associated with coffins and/or human remains will be waterscreened through 1/16 in mesh to recover skeletal fragments and cultural materials. The characteristics of each level within natural strata will be documented, including the depth and thickness of the level, soil types, soil colors, and presence or absence of human remains or associated artifacts. Photographs and scale plan views of selected levels within each burial feature will be utilized to document internal features at appropriate intervals during excavation. All exposed human remains, together with associated grave goods and coffin hardware, will be mapped to scale and photodocumented *in situ*, and data concerning each burial will be recorded on a burial record form. The remains, together with associated artifacts such as coffin furniture, shroud pins, clothing

related items (e.g., buttons) and items of personal adornment, then will be removed and retained for laboratory analysis. Wooden coffin parts will be mapped and photographed *in situ*, and where sufficiently preserved, up to five samples will be retained and submitted for analysis by a qualified ethnobotanist. However, no attempt will be made to remove, retain, and conserve coffin material.

Laboratory analysis.

Laboratory analysis will include three specialized procedures:

- The remains of each interred individual, together with photographic and scaled drawings of the burial, will be provided to a qualified forensic anthropologist for analysis.
 1. Both cranial and post-cranial members will be evaluated to determine, where possible, the age, sex, racial affiliation, and physical morphology of the deceased. Remains also will be examined for evidence of pathologies, trauma, and/or skeletal abnormalities resulting from nutritional deficiencies, stress, or other cultural and environmental factors.
 2. X-rays will be taken where appropriate to support basic skeletal analysis.
 3. DNA analysis may be performed, where appropriate and when skeletal preservation allows, for remains of individuals identified through skeletal analysis as African-American.
- Ethnobotanical analysis will include:
 1. examination of retained wood samples to determine tree species utilized for coffin construction, and
 2. analysis of botanical remains from burial shaft fill to assess seasonality and to identify botanical species present in the historic landscape at the time of burial.
- All cultural artifacts obtained from discrete burials or burial shafts (e.g., coffin furniture, shroud pins, clothing parts, and jewelry) will be identified as to type, material, number, provenience, and other significant character-defining attributes.

Following completion of fieldwork, forensic and ethnobotanical analyses, and laboratory processing, the results of these studies will be summarized as a chapter within the overall report to be produced on the archeological investigation of the Hoffman Property; the full texts of the technical forensic and botanical analyses will be included as appendices to that report. The final technical report will incorporate comparative cultural information with the results of the osteological analysis. The report will meet Federal standards as defined in *Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines* (48 FR 44716-44742, September 29, 1983) and the Virginia Department of Historic Resources' *Guidelines for Preparing Identification and Evaluation Reports for Submission Pursuant to Sections 106 and 110, National Historic Preservation Act, Environmental Impact Reports of State Agencies, Virginia Appropriations Act, 1992 Session Amendments* (June 1992).

ALL APPLICANTS MUST SIGN

I hereby apply for the permit for the activities I have described herein. I agree to allow the duly authorized representatives of the Department of Historic Resources to enter upon the property at reasonable times to inspect and photograph site conditions.

I hereby certify that there are adequate resources to carry out the research design and the proposed disposition of the remains required under the permit. I understand that work conducted under a permit will not be considered complete until all reports and documentation have been submitted and reviewed by the department to meet all conditions specified as part of the approved permit. Failure to complete the conditions of the permit within the permitted time limit may result in revocation of the permit and constitute grounds for denial of future applications.

I hereby certify that the information submitted in this application is true and accurate to the best of my knowledge.

Hoffman Buildings, L.P.

APPLICANT'S SIGNATURE

President

Hoffman Buildings Mgmt. Co., Inc.

March 28, 2000

DATE

APPENDIX B

**VA DEPARTMENT OF HISTORIC
RESOURCES SITE FORM: 44AX183**

VIRGINIA DEPARTMENT OF HISTORIC RESOURCES ARCHAEOLOGICAL SITE INVENTORY FORM

GENERAL PROPERTY INFORMATION

VDHR Site Number: 44AX183
Other VDHR Number:

City/County:

Site Class: Terrestrial, Open Air ___ Terrestrial, Cave/ Rockshelter ___ Submerged
Temporary Designation:

Specialized Contexts: Colony to Nation; Early National Period; Funerary

Resource Name: West Family Cemetery

Open to public: Y N

Is there a CRM report: Y N (draft in progress)

Ownership Status: Private
 ___ Public/Local
 ___ Public/State
 ___ Public/Federal

Gov. Modifier _____
Gov. Modifier _____
Gov. Modifier _____

Cultural Affiliation:

- | | |
|------------------|-----------------|
| African-American | |
| English | Native American |
| French | Other |
| German | Scotch-Irish |
| Italian | Unknown |
| Jewish | None |
| Multiple | Hugenot |

Temporal Affiliation: ca. 1770-1805

Thematic Contexts:

Context	Example	Comments
Funerary	Cemetery/burial vault	

Site Function: Family Cemetery

LOCATION INFORMATION

UTM Center: Zone 18 Northing 320 170 Easting 429 670

UTM Coords:

Zone	North	East

Loran:

Restricted UTM Data? : Yes No

Physiographic Province: Coastal plain

Aspect: South

Drainage: Cameron Run/Great Hunting Creek

Direction: South

Landform: Hill slope

Site Dimensions: 50 x 100 ft

Slope: <5% percent

Elevation: 20-30 ft amsl

Site Soils:

Adjacent Soils:

Distance: 1,400 ft

Nearest Water Source: Taylor Branch (1,130 ft west)

Acreage: 0.11

Survey Description:

Phase I identification during monitoring of construction on site; Phase II: mechanized stripping of cemetery area;

Phase III: archeological removal of all human remains

Site Condition(s)

<input type="checkbox"/> 25-49% of Site Destroyed
<input type="checkbox"/> 50-74% of Site Destroyed
<input type="checkbox"/> 75-99% of Site Destroyed
<input type="checkbox"/> Destruction of Surface and Subsurface Deposits
<input type="checkbox"/> Intact Cultural Level
<input type="checkbox"/> Intact Stratified Cultural Levels
<input type="checkbox"/> Less than 25% of Site Destroyed
<input type="checkbox"/> No Surface Deposits but With Subsurface Integrity
<input type="checkbox"/> Site deliberately buried
<input type="checkbox"/> Site Totally Destroyed
<input type="checkbox"/> Surface Deposits Present And With Subsurface Integrity
<input type="checkbox"/> Surface Deposits Present But Subsurface Not Tested
<input type="checkbox"/> Surface Deposits Present But With No Subsurface Integrity
<input type="checkbox"/> Unknown Portion of Site Destroyed
<input type="checkbox"/> Subsurface Integrity
<input type="checkbox"/> Surface Features
<input type="checkbox"/> Surface Deposits
<input type="checkbox"/> Site Condition Unknown

Survey Strategy: Historic Map Projection

Surface Testing

Informant

Subsurface Testing

Observation

Data recovery

USGS Quadrangle: Alexandria VA-MD

Current Land Use:

Date of Use: June, 2001 Example: _____

Land Uses: Commercial development

Comments:

*** Attach photocopy of appropriate section of USGS 7.5 minute series topographical map showing site boundaries



Scale: 1:24,000

SPECIMENS

Specimens Obtained: Yes No

Depository: (1) Reburial (2) Alexandria Archaeology

Assemblage Description:

- (1) Human remains
- (2) related funerary materials, non-human faunal remains, modern and historic surface scatter from overburden, including glass, ceramics, metals

Specimens Reported: Yes No

Owner Name:
Assemblage Description:

Owner Address:

Field Notes: Yes No

Depository: Alexandria Archaeology

Photographic Documentation: Yes No

Depository: Alexandria Archaeology

BIBLIOGRAPHIC DOCUMENTATION:

Depository for Bibliographic Information: Fairfax County Judicial Archives

Reference Numbers: _____

Bibliographic Source: Land Records, Wills

Organization: Fairfax County Circuit Court

Additional Comments: Additional source materials obtained from Fairfax County Public Library (Virginia Room) and Virginia Room, Kate Waller Barrett Branch, Alexandria Public Library.

GRAPHIC MEDIA DOCUMENTATION:

Control ID Photo Date	Photo Media	Depository	Frame (s)

Report(s): Yes No Depository: Alexandria Archaeology, Review and Compliance (VDHR)

1. Executive Summary : August, 2000
2. (Draft) Technical Report (in progress)

CRM EVENT INFORMATION

Date	Event ID	Event Type	CRMPerson (First)	CRMPerson (Last)	Remarks
12/1999 - 2/2000	Identification (Phase I)	Phase I Study	Martha	Williams	Initial identification of cemetery site; verified presence of human remains. Executive summary
5/2000- 6/2000	Evaluation/ Mitigation	Phase II/III	Martha	Williams	Exposure and documentation of cemetery; removal of all remains

INDIVIDUAL/ORG AGENCY MAILING INFORMATION

Owner Category: _____ Owner _____ Occupant _____ Tenant _____ Informant _____ Property Mgr. _____
Honorific: Mr First Name: Roger Last Name: Kiper Suffix: _____
Title: Senior Vice-President
Company: Hoffman Management, Inc.
Mailing Address: 2461 Eisenhower Avenue
City: Alexandria State: VA
ZIP CODE: 22331 Country: US
Phone 1/Extension: 703-960-4700 Phone 2/Extension: _____

SURVEYOR'S NOTES:

Site contained an 8 X 10 ft brick burial vault and 7 exterior individual burials. All remains were in very poor condition. Individual burials had been truncated; vault roof had collapsed and commingled remains within the structure. Post-excavation skeletal analysis indicated 7 individuals within vault (2 adult m; 3 adult f; 1 5-7 yo child; 1 infant); all shroud burials in pine coffins. Two individuals identified as Col. George West (d 1786) and Mrs. Sybil West (d 1787). Burials outside of vault identified only two adult m, 1 adult f, one infant; three unidentified. Two burials clothed, all others in shrouds. Possible African American affiliation of one individual indicated by inclusion of hexagonal clear quartz crystal in the coffin.

Surveyed By: _____ Affiliation: _____ Date: _____
Address: _____

Form Completed By: Martha Williams Affiliation: Goodwin & Associates, Inc. Date: 31 Jan 2003
Address: 241 E. Fourth Street, Suite 100, Frederick, Maryland, 21701

For VDHR Staff Only	
Virginia Register Status:	
National Register Status:	
Easement Status:	
VDHR Library Reference Number (s) :	
VDHR Number Assigned By:	Date:
Date Entered By:	Date:
Revisions/Updates By:	Date:

APPENDIX C

**REPORT ON OSTEOLOGICAL
ANALYSIS OF HUMAN REMAINS
FROM SITE 44AX183
(BOYD AND BOYD 2001)**

**A SKELETAL ANALYSIS OF HUMAN REMAINS FROM
ALEXANDRIA'S 18TH CENTURY WEST SITE CEMETERY, 44AX183**

by

Donna C. Boyd

and

C. Clifford Boyd, Jr.

Professors of Anthropology
Dept. of Sociology and Anthropology
Radford University
Radford Virginia 24142

June 2001

Report submitted to R. Christopher Goodwin and Associates, Inc., Frederick, Maryland

LIST OF FIGURES

- Figure C-1. Spatial Representation of Individuals A Through F, Feature 1.
- Figure C-2. Individual A, Feature 1.
- Figure C-3. Close-up of Lumbar Vertebra (FS# 179) With Lesions, Individual A, Feature 1.
- Figure C-4. Individual B, Feature 1.
- Figure C-5. Individual C, Feature 1.
- Figure C-6. Individual D, Feature 1.
- Figure C-7. Innominate Fragments Represented by FS# 88 and 91, Feature 1.
- Figure C-8. Individual E, Feature 1.
- Figure C-9. Left and Right Temporals (FS# 239), Individual E, Feature 1 (note lesions of left temporal).
- Figure C-10. Periostitis of Left Ulna (FS# 237) of Individual E, Feature 1.
- Figure C-11. Individual F, Feature 1.
- Figure C-12. Misshapen right rib of Individual F, Feature 1 (FS# 208).

Introduction

In this report, we present the results of our analysis of human remains from 44AX183, the historic West cemetery of Alexandria, Virginia. These remains, likely dating to the late 18th and early 19th century, were unearthed in the summer of 2000 as a consequence of construction of a multiplex theater for the Hoffinan project. Human remains were recovered from within a brick burial vault as well as associated individual graves to the east of the vault.

This human skeletal analysis includes a complete bone inventory of all bones recovered and identified from within the vault and surrounding graves (Appendix A) as well as an osteometric summary (Appendix B) of all bone measurements. Detailed summaries of each individual from within the graves consist of discussions of basic demographic parameters (age, sex, stature). The same data are presented for the burial vault interments along with a determination of Minimum Number of Individuals (MNI) from within the vault. Better preservation of these remains allows an evaluation of overall levels of health and disease (paleopathology). Attempts are made at identification of specific individuals (individuation) at the West cemetery through correlating the biological and historical (e.g., genealogical) data. Our ultimate goal is to learn as much as possible about the historic inhabitants of the West family cemetery.

First, however, is a consideration of methodological concerns encountered in the course of the West site skeletal analysis. This includes curational procedures as well as a description of methods of determination of age, sex, stature, MNI, paleopathology, and attempts at individuation.

Methodology

Curation and Initial Analysis

Due to the very poor preservation of the individual graves surrounding the burial vault, initial field analysis by us of the human remains contained within them was necessary. Identification and measurement of many bones were made *in situ*. In many cases, these fragile remains were removed en bloc and sent to our laboratory for further study. Upon receiving the West site cemetery remains in our laboratory, those bones which were isolated field specimens were cleaned, separated from nonhuman animal bone and sorted as to context. Remains which arrived en bloc were generally poorly preserved; assessments of bone ID, age, sex, and osteometrics for these *in situ* elements were made in the laboratory before careful excavation and cleaning of them. Very fragile remains were not excavated in the laboratory or cleaned—they were simply observed *in situ*.

Identification of skeletal elements was accomplished with the aid of the osteological manuals of Bass (1995) and White (2000), as well as skeletal models and comparative collections available in our laboratory. Curation procedures and data recording generally followed the recommended standards of Buikstra and Ubelaker (1994), Jantz and Moore-Jansen (1988), Moore-Jansen et al. (1994) and Owsley and Jantz (1996).

Standard skeletal indicators of nutrition, health, and disease were also collected from this sample. These included evidence for infection, trauma, degenerative conditions, dental pathology, and non-specific stress. Identification of pathologies followed the standard paleopathology texts of Aufderheide and Rodriguez-Martin (1998) and Ortner and Putschar (1981). Incidences of non-specific infection

include osteitis and periostitis and can only infrequently be linked with a specific disease process (Kelley 1989; Rothschild 1992). Incidences of premortem, perimortem, and postmortem injury or alteration to bone (trauma) were noted and tabulated. Degenerative conditions were as well-these are conditions due primarily to age-related wear of bone such as osteoarthritis of the major joint surfaces (elbows, knees, vertebrae, hands, feet). In the dentition, evidence of oral health was assessed by recording the number and distribution of caries as well as other dental conditions like dental loss and attrition (according to the standards of Scott [1979]). Enamel hypoplasia lines across the enamel of subadult and adult teeth have been linked with periodic episodes of non-specific stress during the formative years (Goodman 1991).

Determination of Vital Statistics

Adult sex determination relied on visual and metric evaluation of the pelvis, sacrum, cranium and limb bones following Bass (1995), France (1998), Keen (1950), Krogman and Iscan (1986), and Phenice (1969). Pelvic dimensions indicative of sex which were diagnostic at the West site were the presence of a ventral arc and pre-auricular groove, length of the pubic bone, width of the subpubic angle and sciatic notch, and degree of build-up of bone on the sacro-iliac articular surface. Cranial features indicative of sex included degree of muscle marking (e.g., at the supra-orbital ridge, mastoid, and occipital protuberance), morphology of the upper eye orbit border, as well as shape of the mental eminence (chin). Postcranial measurements were secondarily used for sex determination and included femur midshaft circumference (Black 1978), femur head diameter, tibia circumference at nutrient foramen (Symes and Jantz 1983) and maximum length and width of the talus (Steele 1976) (also see France 1998). Determination of sex of the subadults at the West cemetery was not possible.

Determination of subadult age was based primarily on comparison of subadult teeth to the dental eruption standards of Schour and Massler (1941) and calcification standards of Moorrees, Fanning and Hunt (1963a, 1963b). In a few instances, cranial and postcranial bony element size and ossification status could be compared to McKern and Stewart (1957) and Scheuer and Black (2000).

Adult age determination relied heavily on degenerative processes such as pubic symphysis deterioration (Suchey and Katz 1998), morphological changes of the auricular surface of the ilium (Lovejoy et al. 1985), degree of osteoarthritic affliction of joint areas (Stewart 1958) and dental attrition (Scott 1979). Suture closure has recently been found to be more genetically variable than previously thought (Hershkovitz et al. 1997); as a result, only general indicators of age were estimated using suture closure rates of the cranium. Since most all of these aging methods rely on long term, cumulative degenerative processes with much intra- and interpopulational variability, only general age ranges could be established for most adults. This problem was compounded by the poor preservation and commingling (in the vault) of many of the human remains.

Given the contextual history and archaeology of the West cemetery, ethnic affiliation for these individuals is assumed to be Caucasian. No independent confirmation of this status from the biological evidence could be made due to the absence of well-preserved middle and lower facial regions (the best area for skeletal racial determination [Gill 1998; Rhine 1990]).

Stature was determined primarily from maximum long bone measurements taken from the femur and tibia. Trotter (1970), Owsley (1995) and Owsley and Jantz (1996) were consulted for regression formula for stature determination for these individuals.

MNI and Individuation

Burial vault commingling of human remains necessitated an assessment of MNI. This is a conservative technique describing the minimum number of individuals which could account for all bony elements in an assemblage. It takes into account not only duplication of bony elements and their side (right, left), but also the age and sex represented by the remains and their contextual integrity. For the West cemetery vault, all of these variables were important in the determination of MNI. For example, all significant skeletal fragments were checked against other similar fragments for possible "joins." Major skeletal elements (e.g., long bones) were compared in terms of their size, morphology, and overall appearance to assess similarities and possible associations. Evaluation of the coordinates of major elements' distribution on a map was essential in assessing contextual probabilities of association as well.

Historical genealogical information from the West family then was compared to the biological data. Ages and sexes of individuals believed to be interred in the West cemetery were cross-checked with the vital statistical data gleaned from the skeletal analysis in an attempt at specific individuation (naming) of these individuals.

Results

External Graves - Features 200, 201, 202, 203, 204, 207, and 208

As noted previously, the individual graves surrounding the burial vault were poorly preserved, with much skeletal analysis occurring in the field before removal. The seven features containing human remains are described here individually in terms of the bony elements represented and the biological information which could be gleaned from them. Full skeletal inventories for all bone recovered from them can be found in Appendix A.

Feature 200 - Older Adult Male. Damaged by construction, most portions of this individual were represented by stains only. These included the clavicles, scapulae, ribs, left humerus, left innominate, left femur, left fibula, and left foot. The right side of the lower postcranium was most significantly damaged by construction, being generally absent. Preserved bony portions of Feature 200 included fragments belonging to the right humerus, left tibia, ribs and cranium.

Robusticity of the right humerus suggested that this individual was male, while the advanced dental attrition of the second mandibular molar indicated an older age. A maximum tibia length of 350 mm produced a stature estimate of 64.8 inches +/- 2.2 inches (range = 62.6 - 67 inches) according to Trotter (1970) or 65.8 inches +/- 3 inches (range = 62.8 - 68.8 inches) following Owsley and Jantz's (1996) modern forensic data.

Feature 201 - Unidentifiable Adult. This burial was obliterated by the backhoe during construction, with no identifiable bone preserved. However, the length of the grave (1.8 m) implies an adult individual.

Feature 202 - Adult Male. Although most portions from this individual were little more than organic stains, the right innominate and right and left femora and tibiae represent the best preserved bone. Cranial portions were not preserved. The right innominate and left humerus appear to be in correct anatomical position; however, the right femur and right and left fibulae have been disturbed (likely as a result of natural decay). The narrow sciatic notch of the innominate and large, robust humerus indicate that this individual was probably a male.

Age is adult, greater than 23 years, based on epiphyseal fusion of the iliac crest (McKern and Stewart 1957).

Feature 203 - Infant (6 months - 1 year). Again, this burial consisted of little more than dark, organic stains, particularly in the region of the innominates and ribs. Excavation of the block in the laboratory revealed a subadult mandible with a fragile *in situ* dentition. Calcification development of the unerupted left mandibular deciduous molar indicated an infant between 6 months and a year old, as did the maximum femur length and overall grave dimensions.

Feature 204 - Older Adult Female. In spite of the more well-defined organic stains in this feature compared to those of the other graves, bone preservation was still poor. Field analysis of the remains *in situ* noted a wide sciatic notch of the left innominate, typical of females. Laboratory analysis revealed gracile cranial fragments and a rounded mandible also typical of females. An older adult age is suggested by the extensive antemortem dental loss (all mandibular teeth were lost pre-mortem with the exception of the right second molar) with concomitant alveolar resorption and thinning of the mandibular corpus, advanced dental wear, and complete to nearly complete closure of the sagittal and lambdoidal ectocranial sutures.

Feature 207 - Older Adult. Determination of sex could not be made from this grave, which consisted of very poorly preserved and fragile cranial and postcranial fragments. A molar crown recovered from a mandibular stain manifested significant dental attrition; this alone suggested an older age for this individual.

Feature 208 - Unidentifiable Adult. Impacted by prior construction of a sewer line, the grave consisted primarily of organic stains with the exception of the humeri and right femur. The left femur had been post-depositionally moved adjacent to the right femur. Although the long bones appear more gracile than those of the male in Feature 202, the left femur head maximum diameter of 44 mm indicated an equivocal gender assessment for this individual (Bass 1995).

Feature Summary. Skeletal analysis of these seven very poorly preserved individual graves identified the remains of one infant (6 months to 1 year) and six adults (three of whom could be aged as older adults). More precise age estimates cannot be made, given the poor preservation of the remains. Of these six adults, two were probable males, one was female, and the remaining three were indeterminate in terms of sex. Poor preservation also precluded the identification of any pathologies for these individuals.

Feature 1 (Burial Vault)

Context and Bone Identification. Bone recovered from the burial vault was labeled with either a "FS" (Field Specimen) or "SS" (Soil Sample) number and was derived from Levels 1 through 6 in Test Units 1, 2, and 3. Appendix A lists each identified bone, its context and preservation. Assessments of the age and sex of the bony elements are noted, where possible.

As can be seen, the preponderance of human remains was recovered from the middle of the burial vault as represented by Test Unit 2, particularly Levels 2 through 4. However, Test Units 1 and 3 also evidenced appreciable amounts of bone. Few bones were complete; the majority of the remains consisted of fragmentary long bone shafts, vertebral bodies and arches, and isolated teeth. Bony

elements from "SS" contexts were scattered throughout the three test units and levels and were particularly small and fragmentary, consisting primarily of small hand and foot bone fragments and numerous unidentifiable cranial and postcranial fragments.

When Field Specimen number bones are represented spatially (Figure 1), two general patterns can be seen. First, there is considerable mixing and commingling of remains across and between units and levels. For example, subadult remains believed to be associated with Individual F are scattered across Test Units 1, 2 and 3 and Levels 1 through 6. Collapse of the brick burial vault wall undoubtedly played a role in this disturbance. But in spite of the significant mixing, some bone clustering and associations can be made. The most obvious illustration of this is the partially articulated postcranium of an individual spread out across Test Units 2 and 3 and Levels 2, 3, 4, and 5 (see discussion below of Individual A).

MNI. The most common diagnostic elements useful for burial vault MNI determination were the innominate, radius, and humerus. Four right adult innominate portions (representing four separate adults) were manifested by Field Specimens #21, 43, 91, and 173. Similarly, four right humerus (FS# 40, 65, 67, 236) and four left radius (FS# 38, 166, 225, and 237A) shafts also indicated the presence of four distinct adults. Thus, it would appear that a minimum of four adults is buried within the vault; however, when the age, sex, and contextual information from various test units and levels were taken into consideration, an additional adult is indicated (see below for more detailed explanation).

At least two subadults are also present in the burial vault. A younger infant below the age of 6 months and a 5 - 7 1/2 year old child are represented by miscellaneous dental, cranial, and postcranial fragments. This results in a final MNI estimation of seven individuals (five adults and two subadults) for the West site burial vault (Figure 1). More detailed descriptions of each individual, its age, sex, and pathologies, follow.

Individual A (25 - 35 year old Female). Table 1 lists the FS contexts believed to be associated with this young female, the most complete individual in the vault. Predominantly articulated across Level 4 (although present in Levels 2, 3, and 5 as well), she is approximately 80% complete and represented by all significant body portions except for cranial and cervical and lumbar vertebrae (Figure 2). The first cervical vertebra (atlas), however, is partially preserved. The mandible exists in right and left halves (FS# 68 and 110) which fit together near the symphysis. FS#s 133 through 138 likely represent her articulated left foot, 129 through 131 as well as 141 and 145 her partial right foot, and 167 and 176 her right and left hands.

All long bones showed full epiphyseal fusion (including the left clavicle), indicating an age above 23 years (McKern and Stewart 1957). The intersacral segment between S1 and S2 of the sacrum, however, was unfused, indicating an age below 33 years (McKern and Stewart 1957). In support of this age assessment, only moderate dental wear was recorded on the *in situ* mandibular dentition, and no evidence of osteoarthritis was seen on the major joint areas (elbow, shoulder, knee, vertebrae).

The innominates manifested wide sciatic notches with large pre-auricular sulci typical of a female. The right innominate showed a significant degree of parturitional pitting which has been loosely correlated with parturition by past researchers (Suchey et al. 1979). The rounded chin formed by the right and left mandible halves also suggested a female gender, as did the majority of long bone metrics (Appendix B).

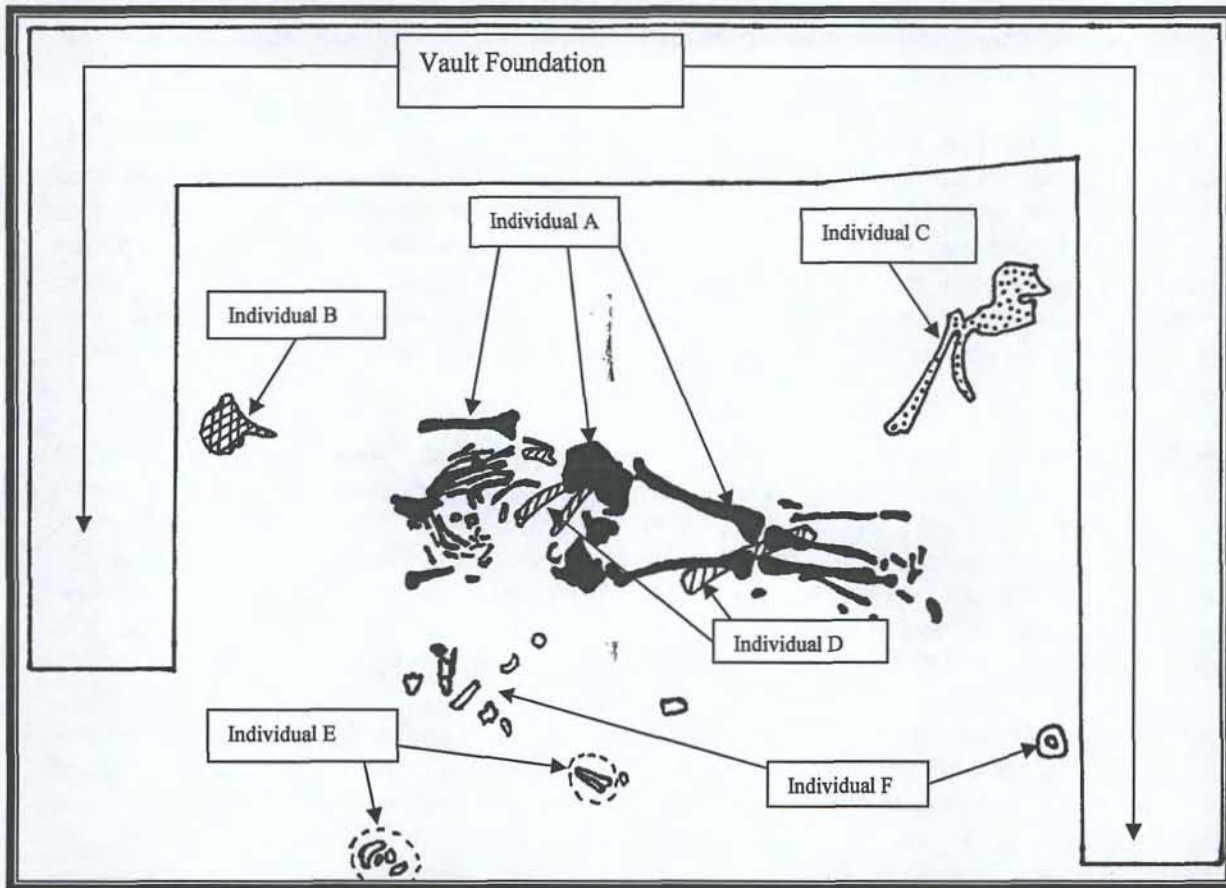


Figure C-1. Spatial Representation of Individuals A – F: West Family Burial Vault (44AX183)

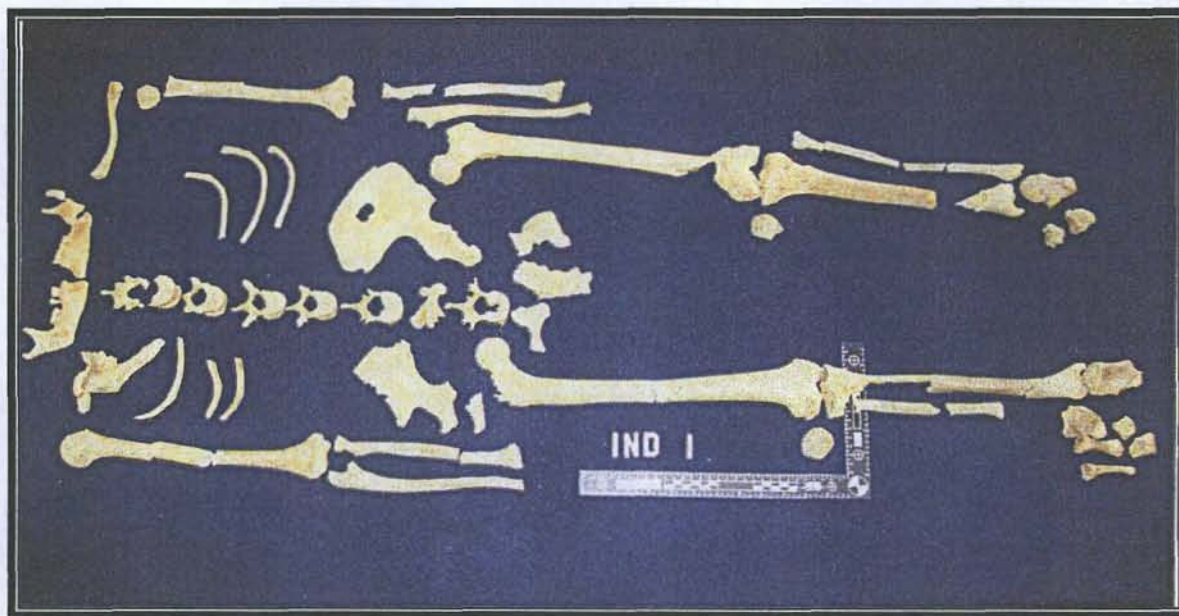


Figure C-2. Skeletal Elements, Individual A: West Family Burial Vault (44AX183)

Table C-1. FS Contexts Believed To Be Associated With Burial Vault Individual A

FS#	Test Unit	Level	Bone	Side
26	2	2	scapula	L
31	2	2	rib	L
32	2	2	rib	L
44	2	2	rib	?
45	2	3	rib	?
46	2	3	rib	L
47	2	3	rib (first)	L
48	2	3	clavicle	L
49	2	3	rib	?
50	2	3	rib	?
51	2	3	rib	L
52	2	3	rib	?
53	2	3	rib	L
54	2	3	rib	L
55	2	3	rib	R
56	2	3	long bone fragment	?
57	2	3	vertebra (thoracic)	-
58	2	3	3 rib shafts; 1 vertebra (thoracic)	?
59	2	3	vertebra (thoracic)	-
61	2	3	humerus	L
67	2	3	humerus	R
68	2	4	mandible	L
109	2	4	ulna	L
110	2	4	mandible	R
129	3	4	foot (metatarsal)	?
131	3	4	foot (metatarsal #3)	R
132	3	4	foot (medial cuneiform); navicular	R, R
133	3	4	foot (calcaneus)	L
134	3	4	foot (metatarsal #5)	L
135	3	4	foot (metatarsal #4)	L
136	3	4	hand (metacarpal #3)	L
137	3	4	foot (metacarpal #2)	L
138	3	4	foot (metatarsal #1)	L
139	3	4	patella	L
141	3	4	foot (calcaneus)	R
145	3	4	foot (lateral cuneiform)	R
146	3	4	tibia	R
147	3	4	fibula	R
148	3	4	tibia	L
149	3	4	fibula; foot (lateral cuneiform)	L, L
150	3	4	foot (talus)	R, L

Table C-1 (continued).

FS#	Test Unit	Level	Bone	Side
151	3	4	patella	R
152	2	4	hand (phalanx - intermediate)	?
153	2	4	2 rib fragments	?
155	2	4	rib	L
156	2	4	vertebra (thoracic)	-
157	2	4	hand (phalanx - intermediate)	?
158	2	4	vertebra (thoracic); 2 ribs	R, L
158	2	4	rib	?
160	2	4	clavicle	R
161	2	4	vertebra (cervical - atlas)	-
162	2	4	2 vertebral arches (thoracic)	-
163	2	4	vertebral arch (thoracic)	-
164	2	4	scapula	R
165	2	4	thoracic vertebra # 8 - 12	-
165	2	4	vertebral arch (lumbar); rib	?
167	2	4	hand (metacarpals 1, 2)	R, L
167	2	4	hand (metacarpals 4, 5)	R, R
167	2	4	rib; long bone shaft fragment	?
167	2	4	hand (phalanges - proximal, intermediate)	?
167	2	4	hand (scaphoid)	?
168	2	4	vertebra (lumbar); long bone shaft	?
168	2	4	femur	R
169	2	4	femur	L
171	2	4	innominate	L
172	2	4	sacrum	-
173	2	4	innominate	R
174	2	4	vertebra (lumbar)	-
174	2	4	foot (phalanx - proximal)	-
176	2	4	hand (capitate, scaphoid)	L, L
176	2	4	hand (metacarpal #4, 5)	L, L
176	2	4	long bone shaft	?
177	2	4	radius; ulna	R, R
178	2	4	rib	?
179	2	4	vertebra (lumbar)	-
219	3	5	foot (cuboid)	R

The *in situ* mandibular dentition preserved the right canine, first and second premolars and second and third molars, while the left corpus contained the canine, first and second premolars, and first and second molars. The right first molar and left third molar were lost antemortem; the right central and lateral incisors were lost postmortem.

Pathologies were visible in the mandibular dentition of this individual. A large distal interproximal carie (cavity) was evident on the right second premolar, while a moderate-sized distal occlusal and interproximal carie affected the left first molar. Enamel hypoplasia lines were noted on the mandibular right and left canines (approximately 4.5 mm and 5.0 mm from the cemento-enamel junctions, respectively) as well as the right first premolar. Evidence of prior infection was suggested by partially healed lesions on a lumbar vertebral body (Figure 3), as well as a tarsal (foot--cuboid) bone.

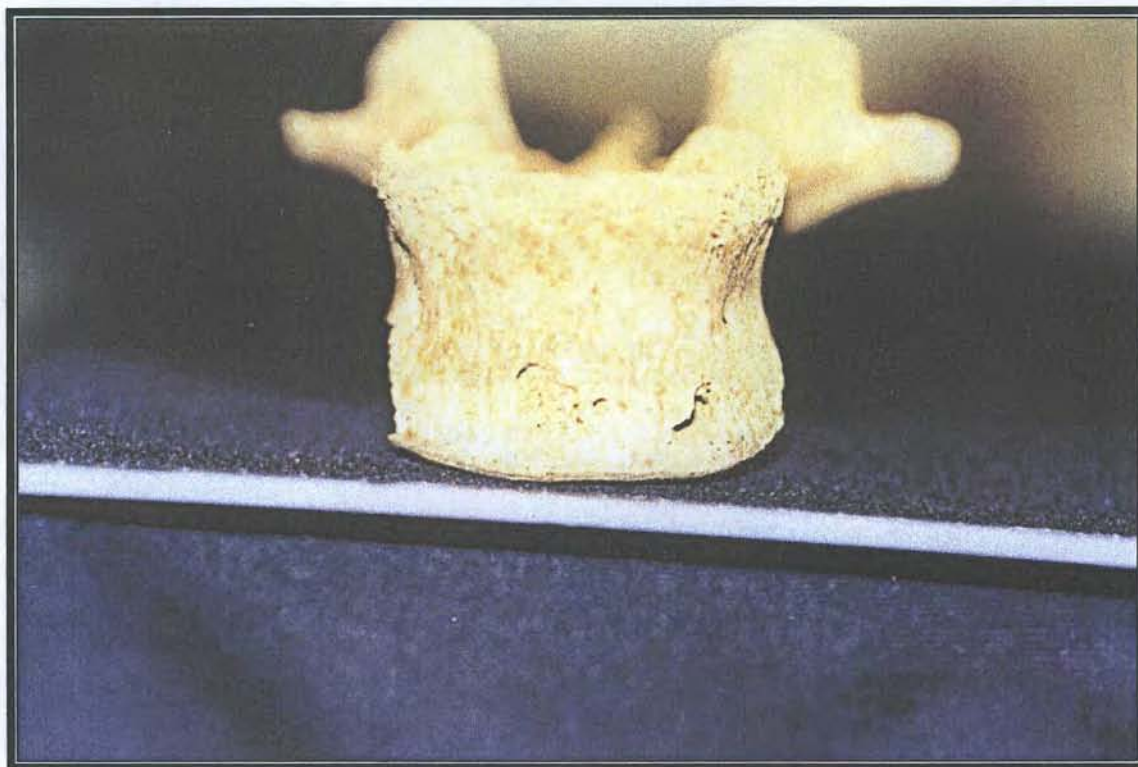


Figure C-3. Lesion on vertebra, Individual A: West Family Burial Vault (44AX183)

A moderately deep trough of thinned bone transected the sacro-iliac auricular surface of the innominates; since this was a bilateral expression it is believed to represent an anomaly peculiar to this individual. Maximum length of the right humerus (280 mm) produced a stature estimate of 61.2 inches +/- 3.0 inches (range = 58.2 - 64.2 inches) (Owsley and Jantz 1996).

Individual B (45+ year old Female). Test Unit 1, Level 2, FS# 21 reflects a right innominate in three fragments (ilium, ischium, pubis including the inferior third of the pubic symphysis) (Figure 4). This incomplete pubic symphysis corresponded with a pubic symphysis aging score of Stage 5 (mean age = 48.1 years, but with a range of 25 - 83 years) (Suchey and Katz 1998). The partially preserved auricular surface corresponded to Lovejoy et al. (1985) Stage VII at least (possibly VIII, but the iliac



Figure C-4. Skeletal Elements, Individual B: West Family Burial Vault (44AX183)

portion was too poorly preserved to confirm), suggesting an age above 50 years. The slight amount of osteoarthritis along the rim of the auricular surface generally supported this age assessment.

The presence of a well-defined ventral arc, wide subpubic concavity and moderately wide sciatic notch indicates that this pelvic bone belonged to a female. Parturition pitting was evident in the region of the pre-auricular sulcus, suggesting that this female had given birth (Suchey et al. 1979). Unfortunately, no other human remains are in close contextual association with this bone; no other bony elements could be definitively correlated with this individual.

Individual C (40 – 55 year old Male). Field Specimen #40 (right humerus), 41 (right rib), and 43 (right innominate and rib) are spatially rather isolated in Test Unit 3, Level 2, and likely represent the remains of an older male (Figure 5). The humerus shaft and head are robust as are the rib shafts, while the innominate (representing the ilium and ischium in at least 41 pieces) manifests a narrow sciatic notch typical of males.

The only indication of age for this male was the morphology of the auricular surface of the innominate corresponding generally with Lovejoy et al.'s (1985) Stage V to VI (40 to 55 years of age). The surface was granular with deterioration of the apex but with only moderate osteoarthritic lipping and breakdown of the border and overall showed a younger appearance in comparison to the auricular surface of Individual B. Maximum length of the right humerus (325 mm) produced a forensic stature estimate of 68.2 inches +/- 3.4 inches (range = 64.8 - 71.6 inches) (Owsley and Jantz 1996). No pathologies were noted for these bony elements and no other remains could be definitively associated with them.



Figure C-5. Skeletal Elements, Individual C: West Family Burial Vault (44AX183)

Individual D (Adult Male). Four long bones appeared to reflect this more robust male recovered from the middle of the burial vault (Figure 6). In Test Unit 2, Level 2, the robust long bones of the right radius (FS# 37), left radius (FS# 38), and left humerus (FS #39), although not articulated, were in fairly close anatomical association with each other. The left radius was slightly more gracile than the right (as evidenced by a metric comparison of the two), but fell within the standard deviation for stature for the right radius. In Test Unit 3, Level 3, a right humerus (FS #65) displayed similar morphology and metrics as the left humerus in Level 2. Maximum length of the left humerus (342 mm) produced a forensic stature estimate of 70.4 inches +/- 3.4 inches (range = 67 - 73.8 inches) (Owsley and Jantz 1996).

No signs of osteoarthritis were seen on the preserved joint areas of these long bones. No other more specific age indicators were present for this rather poorly preserved (and sparsely represented) individual.

Two robust innominate fragments (Figure 7) representing a right ischium (FS #91, Test Unit 1, Level 4) and left sciatic notch of the ilium (FS #88, Test Unit 2, Level 4) likely belong to the same male and may in fact be associated with this individual or Individual C.

Individual E (Young to Middle aged Adult Female). In Test Unit 2, Level 6, are the seemingly associated remains of numerous cranial and postcranial fragments and teeth (FS# 236, 237A, and 239) likely belonging to an adult female (Figure 8). Twenty-six small (and gracile-looking) cranial fragments reflected all major portions of the cranium, including the right frontal, right zygomatic, right and left temporals, left and right parietals, and occipital. The left temporal manifested a small mastoid typical of a female. In addition, a partial mandibular corpus preserved the left lateral canine and first and second



Figure C-6. Skeletal Elements, Individual D: West Family Burial Vault (44AX183)



Figure C-7. Innominate Elements, Adult Male (Individual C or D): West Family Burial Vault (44AX183)



Figure C-8. Skeletal Elements, Individual E: West Family Burial Vault (44AX183)

premolar tooth sockets as well as fragmentary portions of the inferior right corpus. Ten identifiable loose teeth and five tooth fragments (all of similar morphology and staining) were found in proximity to these cranial and mandibular fragments; although it cannot be said with certainty that they indeed belong to her, one of the teeth, a left mandibular second premolar, fit into the very fragile mandibular corpus fragment. In terms of MNI, all of these teeth could (being conservative) fit into this individual's dentition. These teeth established the age for this individual as a young to middle aged adult, since the recorded dental wear was equivalent to (or in some cases less than) that noted for Individual A, aged 25 - 35 years.

Postcranial elements consisted of a right distal humerus, left radius and ulna shafts, and miscellaneous small scapula, humerus and vertebral fragments. Again, they cannot be definitively

associated with this individual, but are all gracile-looking and are the only other human remains in the near vicinity of these cranial and dental elements in Level 6.

In terms of pathologies for this individual, dental caries were most prominent (large interproximal caries on the right maxillary lateral incisor, left mandibular second premolar, and a mandibular third molar), with four roots unidentifiable likely as a result of carious dental degeneration. In addition, two enamel hypoplasia bands were measured at 1.0 mm and 6.0 mm from the cemento-enamel junction of the right maxillary lateral incisor. Finally, the petrous portion of the left temporal was pathologically enlarged near the internal auditory meatus (Figure 9); perhaps related to this condition was the presence of lesions around the mastoid suggestive of mastoiditis. Endocranially, the right and left parietal showed evidence of osteitis. Postcranially, there was also evidence of infection as indicated by partially healed periostitis of the proximal left ulna (Figure 10).

Individual F (5 – 7 ½ year old Child). Table 2 lists the contexts which may be associated with this child. The majority is confined to Test Unit 2, Levels 4 and 5, although right innominate portions (FS# 106) and an unidentifiable cranial fragment (FS# 143) were in Test Unit 3, Level 4 and a subadult proximal humerus fragment (FS# 237B) was recovered from Test Unit 2, Level 6 (Figure 11). In addition, numerous SS numbers from Test Units 1, 2, and 3 are small subadult fragments which could also accompany this individual.

The subadult age of this individual is supported by the absence of epiphyseal fusion of the rib, clavicle, femoral condyle, and humerus head. The right innominate portions of the pubis, ischium and os acetabuli were also unfused, indicating an age below 10 years. All vertebral fragments showed recent fusion of bodies to arches (but with mamillary processes undeveloped), suggesting an age of 6 to 8 years (Scheuer and Black 2000). The clavicle length of 92.5 mm was also consistent with a child this age (Scheuer and Black 2000).

The dentition offered the most precise estimate of age for this subadult. A total of 13 isolated subadult teeth was recovered from the burial vault; 12 were identifiable in terms of their specific location in the dental corpus (Table 3). Of these, four were erupted deciduous teeth showing heavy dental wear and initial root resorption. The remaining teeth were adult ones with incomplete root development; some had erupted and some had not. Given that all of these subadult teeth were derived from non-specific SS# contexts that were widely separated spatially (from Test Unit 2, Levels 4 and 5, and Test Unit 3, Levels 2 and 4), it cannot be ascertained if they are truly associated with one another. Analysis of the dental ages that these teeth represent (Table 3), however, reveals that, conservatively speaking for the purposes of MNI, all indeed could be. Dental calcification standards following Moorrees, Fanning and Hunt (1963a, b) applied to these teeth (particularly the incompletely developed adult ones) indicate a 5 to 7 1/2 year old child.

Evidence of trauma in the postcranium occurred in the form of a misshapen right rib (Figure 12). Periosteal reaction and bone remodeling in the region of the trauma indicated at least partial healing.

Individual G (0 - 6 month old Infant). This infant is represented by a single unerupted deciduous mandibular lateral incisor (SS#10,016, Test Unit 3, Level 3), a left mandibular corpus (FS#268, Test Unit 2, Level 4) and a tiny petrous portion of a temporal (SS# 10,024, Test Unit 3, Level 4). The mandibular corpus manifested unerupted (and with no root development) deciduous molars (dm1 and dm2) in the crypt. An age of 0 - 6 months was established via dental calcification standards for the incompletely developed deciduous incisor and molars.



Figure C-9. Pathology in temporal region, Individual E: West Family Burial Vault (44AX183)



Figure C-10. Lesions on Ulna, Individual E: West Family Burial Vault (44AX183)



Figure C-11. Skeletal Elements, Individual F: West Family Burial Vault (44AX183)



Figure C-12. Subadult Rib with Fracture, Individual F: West Family Burial Vault (44AX183)

Table C-2. Contexts Believed To Be Associated With Burial Vault Individual F

Context	Test Unit	Level	Bone	Side
FS 106	3	4	innominate (ischium, pubis)	R
FS 121	2	4	femur (distal epiphysis)	L
FS 123	2	4	humerus (proximal epiphysis)	?
FS 124	2	4	rib (first)	R
FS 127	2	4	clavicle	R
FS 143	3	4	cranial	?
FS 206	2	5	vertebra (thoracic)	-
FS 208	2	5	vertebral arch (thoracic)	-
FS 208	2	5	vertebra (thoracic)	-
FS 208	2	5	vertebra (lumbar)	-
FS 208	2	5	rib (shaft)	R
FS 209	2	5	vertebra (lumbar)	-
FS 211	2	5	hand (metacarpal)	-
FS 237B	2	6	humerus (proximal)	?
FS 239	2	6	vertebral arch fragment; cranial fragment	?
SS 10011	1	2	temporal (zygomatic arch)	L
SS 10017	2	3	cranial (petrous)	L
SS 10017	2	3	MC1; MC5	?
SS 10017	2	3	hand (phalanx - intermediate)	?
SS 10017	2	3	foot (cuneiform - intermediate)	R
SS 10018	2	3	cranial	?
SS 10022	2	4	deciduous second maxillary molar	R
SS 10022	2	4	deciduous lateral mandibular incisor	R
SS 10027	2	4	hand (phalanx)	?
SS 10027	2	4	rib shaft; long bone shaft	?
SS 10027	2	4	adult lateral mandibular incisor	R
SS 10027	2	4	deciduous canine	?
SS 10028	2	5	tibia (proximal)	?
SS 10028	2	5	rib shaft; vertebral body	?
SS 10028	2	5	hand (epiphysis)	-
SS 10028	2	5	foot (phalanx - distal)	-
SS 10028	2	5	hand (phalanges - intermediate, distal)	-
SS 10028	2	5	adult maxillary canine	L
SS 10028	2	5	adult mandibular central incisor	L
SS 10028	2	5	deciduous maxillary canine	?
SS 10028	2	5	unidentified tooth crown	?
SS 10030	2	6	2 cranial fragments	?
SS 10030	2	6	clavicle	L
SS 10030	2	6	hand (capitate)	?
SS 10030	2	6	maxillary corpus fragment	?
SS 10009	3	1	hand ? (phalanx)	?
SS 10016	3	3	adult maxillary first premolar	?

Table C-2 (continued).

Context	Test Unit	Level	Bone	Side
SS 10016	3	3	adult maxillary first premolar	L
SS 10016	3	3	foot (metatarsal #3)	R
SS 10016	3	3	foot (metatarsal #3)	?
SS 10024	3	4	hand (capitate)	R
SS 10024	3	4	postcranial shaft	?
SS 10024	3	4	hand (phalanx - distal)	?
SS 10024	3	4	foot (lateral cuneiform)	L
SS 10024	3	4	adult maxillary first molar	L
SS 10024	3	4	adult maxillary second molar	L
SS 10024	3	4	adult maxillary second molar	R
SS 10024	3	4	adult maxillary second premolar	L
SS 10031	3	6	hand (phalanx - distal)	?

Table C-3. Dental Ages Represented by Teeth Believed to be Associated with Burial Vault Individual F

Context	Tooth	Development	Dental Age
SS 10022	deciduous second maxillary molar	root 3/4+	1 1/2 yrs+
SS 10027	adult lateral mandibular incisor (unerupted)	root 1/4	5 1/2 yrs (range=4 1/2-7)
SS 10027	deciduous canine (heavy wear; resorption)	root comp.	4 - 7 yrs
SS 10028	adult maxillary canine (unerupted)	root 1/4	5 1/2 yrs (range=4 1/2-7)
SS 10028	adult mandibular central incisor (unerupted)	root 1/4	6 1/2 yrs (range=5-7 1/2)
SS 10028	deciduous maxillary canine (heavy wear; resorption)	root comp.	4 - 7 yrs
SS 10016	adult maxillary first premolar (unerupted)	root initial	5 1/2 yrs (range=4 1/2-7)
SS 10016	adult maxillary first premolar (unerupted)	root 1/4	6 1/2 yrs (range=5 1/2-8 1/2)
SS 10024	adult maxillary first molar	root 3/4	6 yrs (range=5-7)
SS 10024	adult maxillary second molar (unerupted)	root initial	7 yrs (range=5 1/2-8 1/2)
SS 10024	adult maxillary second molar (unerupted)	root initial	7 yrs (range=5 1/2-8 1/2)
SS 10024	adult maxillary second premolar (unerupted)	root initial	7 yrs (range=5 1/2-8 1/2)

West Site Demographic Summary and Individuation

Table 4 summarizes the vital statistics of the West site cemetery and burial vault interments. A minimum of 14 individuals was identified, half from the burial vault and half from outside the vault. Of this total, three were subadult (two infants below the age of one). Of the 11 adults, five were female, three were male, and three were of indeterminate sex. Only one individual was confirmed to be a young adult (25 - 35 years); one was confirmed as an older adult, while the remaining adults were either middle aged or too poorly preserved to allow determination of a specific age.

Historic documents record the presence of Sybil West and her son George West in the West family burial vault. At the time of her death, Sybil was approximately 83 years of age; George's age is unknown, but based on the age of his mother, he was perhaps in his 50s or early 60s when he died in 1785 (two years before his mother). Sybil's husband, Hugh, was approximately 50 years of age when he died. Specific ages for the remainder of their children and grandchildren are not known.

When directly comparing the genealogical history of the West family with the cemetery and vault biostatistics, only limited diagnostic individuations can be suggested. For example, the only individual within the vault who could possibly represent the elderly Sybil West is Individual B. Individual C, the 40 - 55 year old male, may represent her husband, Hugh, but could also be her son George or John or even one of her grandsons. The young adult female, Individual A, may represent Sybil West Carlyle, daughter of Hugh and Sybil, who died in 1769 shortly after giving birth to an infant. The infant, perhaps represented by Individual G, died soon thereafter. Alternatively, the young mother and infant may be represented by the individual graves outside the burial vault (particularly Features 203 and 204). The identities of the 5 - 7 1/2 year old child and the other adults remain a mystery. Without more detailed information about the ages of the West family ancestors or DNA analysis (which may be impossible, considering the poor condition of the bone), more accurate individuation is not possible.

Miscellaneous Bone Paleopathology and Clues to Historic Levels of Health

A significant amount of non-diagnostic bone within the vault could not be associated with particular individuals; however, an analysis of paleopathological indicators allows insight into the health of this 18th century cemetery population. Table 5 summarizes the paleopathological conditions noted for these remains as well as the identified individuals from the burial vault. As can be seen, dental caries were the most common type of pathology, with a total of 17 caries recorded on 15 adult teeth (two teeth manifested two caries each); this represents 20.5% (15/73) of the total number of adult teeth recovered from the vault. Also indicative of poor dental health is evidence for significant antemortem dental loss in the right and left mandibular corpi belonging to Individual A, in spite of her young age (25 - 35 years old).

Table C-4. West Cemetery Vital Statistical Summary

Context	Age	Sex
<i>Burial Vault</i>		
Individual A	25 - 35 years	F
Individual B	45+ years	F
Individual C	40 - 55 years	M
Individual D	Adult	M
Individual E	Young to Middle Adult	F
Individual F	5 - 7 1/2 years	?
Individual G	0 - 6 months	?
Feature 200	Older Adult	?
Feature 201	Adult	?
Feature 202	Adult	M
Feature 203	6 months- 1 year	?
Feature 204	Adult	F
Feature 207	Older Adult	?
Feature 208	Adult	F

Evidence of non-specific infection ranked as the second most common pathology, as evidenced by osteitic pitting of the endocranium of FS# 60 and 239, periostitis of a left ulna of FS# 237A, and partially healed lesions of a cuboid (FS# 150), lumbar vertebral body (FS# 179), and left temporal (FS# 239). Two ribs (FS# 22 and 208) showed signs of malformation and remodeling, possibly as a result of healed trauma. Finally, there were three instances of dental enamel hypoplasia (two from the same individual-A), indicating significant non-specific stress in the formative years.

Conclusions

Although poor preservation of West cemetery human remains precluded definitive individuation of them, much important information was gained through their analysis. This was especially true of the better preserved remains from the vault. We gained insight into the lives of the fourteen individuals interred in the cemetery--their ages, sexes, statures, and health and disease. We recommend that these remains be returned to the living family descendants for reburial as soon as possible.

Table C-5. Summary of Pathologies Noted For West Cemetery Human Remains

Context	Test Unit	Level	Individual	Pathology
FS 21	1	2	B	osteoarthritis of auricular surface of innominate; parturition pitting
SS 10011	1	2	?	dental carie (distal/interproximal) of maxillary first premolar; enamel hypoplasia of incisor
SS 10020	1	4	?	dental caries (occlusal + mesial) of mand. second molar
SS 10020	1	4	?	dental carie (occlusal) of mandibular third molar
SS 10026	1	5	?	dental caries (2 mesial) of maxillary central incisor
SS 10007	2	1	?	dental carie (interproximal) of max. canine
FS 22	2	2	?	healed trauma of caudal surface of rib
FS 60	2	3	?	abnormal thickening and remodeling of parietal
FS 79B	2	4	?	dental carie (occlusal) of maxillary third molar
FS 179	2	4	A	partially healed lesions of lumbar vertebral body
FS 68	2	4	A	dental carie (interproximal) of mandibular first molar; enamel hypoplasia of left canine antemortem loss of left third molar with resorption
FS 110	2	4	A	dental carie (interproximal) of mandibular second molar; enamel hypoplasia lines on right mandibular canine and first premolar antemortem loss of mandibular first molar with resorption
FS 208	2	5	F	healed fracture of subadult right rib
FS 237	2	6	E	partially healed periostitis of proximal left ulna
FS 239	2	6	E	partially healed lesions of left temporal
FS 239	2	6	E	endocranial osteitis of right and left parietal
SS 10030	2	6	?	dental carie (occlusal) of maxillary central incisor
SS 10009	3	1	?	dental carie (interprox.) of mandib. central incisor
SS 10009	3	1	?	dental carie (interprox.) of max. second premolar
SS 10016	3	3	?	dental carie (interprox.) of max. first molar
FS 239	2	6	E	dental carie (interprox.) of max. lateral incisor; enamel hypoplasia of max. lateral incisor
FS 239	2	6	E	dental carie (interprox.) of mand. second premolar
FS 239	2	6	E	dental carie (interprox.) of mand. third molar
FS 150	3	4	A	small healed lesion of cuboid (foot)

REFERENCES CITED

- Aufderheide, A. C. and C. Rodriguez-Martin
1998 *The Cambridge Encyclopedia of Human Paleopathology*. Cambridge: Cambridge University Press.
- Bass, W. M.
1995 *Human Osteology: A Laboratory and Field Manual of the Human Skeleton* (4th edition). Columbia: Missouri Archaeological Society, University of Columbia.
- Black, T. K. III
2000 A new method for assessing the sex of fragmentary skeletal remains: femoral shaft circumference. *American Journal of Physical Anthropology* 48:227-231.
- Buikstra, J. E. and D. H. Ubelaker
1994 *Standards for Data Collection From Human Skeletal Remains: Proceedings of a Seminar at the Field Museum of Natural History*. Fayetteville, Arkansas: Arkansas Archaeological Survey Research Series No. 44.
- France, D. L.
1998 Observational and metric analysis of sex in the skeleton. In *Forensic Osteology: Advances in the Identification of Human Remains* (2nd edition), Kathleen J. Reichs, editor, pp. 163-186. Springfield, Illinois: Charles C. Thomas.
- Gill, G. W.
1998 Craniofacial criteria in the skeletal attribution of race. In *Forensic Osteology: Advances in the Identification of Human Remains* (2nd edition), Kathleen J. Reichs, editor, pp. 293-317. Springfield, Illinois: Charles C. Thomas.
- Goodman, A. H.
1991 Stress, adaptation, and enamel developmental defects. In *Human Paleo-Pathology: Current Syntheses and Future Options*, D.J. Ortner and A.C. Aufderheide, editors, pp. 280-287. Smithsonian Institution Press, Washington, D. C.
- Herskovitch, I., B. Latimer, O. Dutour, L. M. Jellema, S. Wish-Baratz, C. Rothschild, and B.M. Rothschild
1997 Why do we fail in aging the skull from the sagittal suture? *American Journal of Physical Anthropology* 103:365-373.
- Jantz, R. L. and P. H. Moore-Jansen
1988 *A Data Base for Forensic Anthropology: Structure, Content, and Analysis*. Knoxville, Tennessee: University of Tennessee, Knoxville, Dept. of Anthropology, Report of Investigations No 47.

- Keen, J.A.
1950 A study of the difference between male and female skulls. *American Journal of Physical Anthropology* 8:65-79.
- Kelley, M. A.
1989 Infectious Disease. In *Reconstruction of Life From the Skeleton*, M. Iscan and K. Kennedy, eds., pp. 191-199. New York: Alan R. Liss.
- Krogman, W. M. and M. Y. Iscan
1986 *The Human Skeleton in Forensic Medicine* (2nd edition). Springfield, Illinois: Charles C. Thomas.
- Lovejoy, C. O., R. S. Meindl, T.R. Pryzbeck, and R. P. Mensforth
1985 Chronological metamorphosis of the auricular surface of the ilium: a new method for the determination of adult skeletal age at death. *American Journal of Physical Anthropology* 68:15-28.
- McKern, T. W. and T. D. Stewart
1957 *Skeletal Age Changes in Young American Males, Analyzed From the Standpoint of Identification*. Technical Report EP-45 Headquarters Quartermaster Research and Development Command, Natick, Massachusetts.
- Moore-Jansen, P. H., S. D. Owsley, and R. L. Jantz
1994 *Data Collection Procedures for Forensic Skeletal Material*. Knoxville, Tennessee: The University of Tennessee, Knoxville, Dept. of Anthropology, Report of Investigations No. 48.
- Moorrees, C. F. A., E. A. Fanning, and E. E. Hunt
1963a Age formation by stages for ten permanent teeth. *Journal of Dental Research* 42:1490-1502.
1963b Formation and resorption of three deciduous teeth in children. *American Journal of Physical Anthropology* 21:205-213.
- Ortner, D. J. and W. G. J. Putschar
1981 *Identification of Pathological Conditions in Human Skeletal Remains*. Smithsonian Contributions to Anthropology No. 28. Smithsonian Institution Press, Washington, D. C.
- Owsley, S. D.
1995 Should we estimate biological or forensic stature? *Journal of Forensic Sciences* 40:768-773.
- Owsley, S. D. and R. L. Jantz
1996 *FORDISC 2.0: Personal Computer Forensic Discriminant Functions*. Knoxville: The University of Tennessee.
- Phenice, T.
1969 A newly developed visual method of sexing the *os pubis*. *American Journal of Physical Anthropology* 30:297-301.

- Rhine, S.
1990 Non-metric skull racing. In *Skeletal Attribution of Race*, GW Gill and S Rhine, editors, pp. 9-20. Albuquerque, New Mexico: Maxwell Museum of Anthropology, Anthropology Papers No. 4.
- Rothschild, B. M.
1992 Advances in Detecting Disease in Earlier Human Populations. In *Skeletal Biology of Past Peoples: Research Methods*, S. Saunders and A. Katzenberg, editors, pp. 131-151. New York: Wiley-Liss.
- Scheuer, L. and S. Black
2000 *Developmental Juvenile Osteology*. San Diego: Academic Press.
- Schour, I. and M. Massler
1941 The development of the human dentition. *Journal of the American Dental Association* 28:1153-1160.
- Scott, E. C.
1979 Dental wear scoring technique. *American Journal of Physical Anthropology* 51:213-218.
- Steele, D. G.
1976 The estimation of sex on the basis of the talus and calcaneus. *American Journal of Physical Anthropology* 45:581-588.
- Stewart, T. D.
1958 The rate of development of vertebral osteoarthritis in American whites and its significance in skeletal age identification. *The Leech* 28:144-151.
- Suchey, J. M. and D. Katz
1998 Applications of pubic age determination in a forensic setting. In *Forensic Osteology: Advances in the Identification of Human Remains* (2nd edition), Kathleen J. Reichs, editor, pp. 204-236. Springfield, Illinois: Charles C. Thomas.
- Suchey, J. M., D. V. Wiseley, R. F. Green, and T. T. Noguchi
1979 Analysis of dorsal pitting in the *os pubis* in an extensive sample of modern American females. *American Journal of Physical Anthropology* 51(4):517-540.
- Symes, S. A., and R. L. Jantz
1983 Discriminant function sexing of the tibia. Paper presented at the 35th Annual Meeting of the American Academy of Forensic Sciences, Cincinnati.
- Trotter, M.
1970 Estimation of stature from intact long bones. In *Personal Identification in Mass Disasters*, TD Stewart, editor, pp. 71-83. Washington, D. C.: National Museum of Natural History, Smithsonian Institution.
- White, T. D.
2000 *Human Osteology*. San Diego: Academic Press.

APPENDIX A

44AX183 SKELETAL INVENTORY

INVENTORY RECORDING FORM FOR COMPLETE SKELETONS

Site Name/Number 44 AX 183 / West Observer _____
 Feature/Burial Number Feat. 200 / _____ Date _____
 Burial/Skeleton Number _____ / _____
 Present Location of Collection RU Lab

CRANIAL BONES AND JOINT SURFACES

	L(left)	R(right)		L	R
Frontal	<u>3</u>	<u>3</u>	Sphenoid	—	—
Parietal	<u>3</u>	<u>3</u>	Zygomatic	—	—
Occipital	<u>3</u>	<u>3</u>	Maxilla	—	—
Temporal	—	—	Palatine	—	—
TMJ	—	—	Mandible	—	—

POSTCRANIAL BONES AND JOINT SURFACES

	L	R		L	?	R
Clavicle	—	—	Os Coxae	—	?	—
Scapula	—	—	Ilium	—	<u>3</u>	—
Body	—	—	Ischium	—	<u>3</u>	—
Glenoid f.	—	—	Pubis	—	—	—
Patella	—	—	Acetabulum	—	—	—
Sacrum	—	—	Auric. Surface	—	—	—

VERTEBRAE (individual)

	Centrum	Neural Arch
C1	—	—
C2	—	—
C7	—	—
T10	—	—
T11	—	—
T12	—	—
L1	—	—
L2	—	—
L3	—	—
L4	—	—
L5	—	—

VERTEBRAE (grouped)

	#Present/# Complete	
	Centra	Neural Arches
C3-6	—/—	—/—
T1-T9	—/—	—/—

Sternum: Manubrium — Body —

RIBS (individual)

	L	R
1st	—	—
2nd	—	—
11th	—	—
12th	—	—

RIBS (grouped)

	#Present/# Complete		
	L	R	Unsided
3-10	<u>9/0</u>	<u>6/0</u>	<u>3/0</u>

Series/Burial/Skeleton 44A/183
 Observer/Date Feat, 200

LONG BONES

	Proximal Epiphysis	Diaphysis			Distal Epiphysis
		Proximal Third	Middle Third	Distal Third	
Left Humerus	—	—	—	—	—
Right Humerus	—	<u>3</u>	<u>3</u>	<u>3</u>	—
Left Radius	—	—	—	—	—
Right Radius	—	—	—	—	—
Left Ulna	—	—	—	—	—
Right Ulna	—	—	—	—	—
Left Femur	—	—	—	—	—
Right Femur	—	—	—	—	—
Left Tibia	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
Right Tibia	—	—	—	—	—
Left Fibula	—	—	—	—	—
Right Fibula	—	—	—	—	—
Left Talus	—	—	—	—	—
Right Talus	—	—	—	—	—
Left Calcaneus	—	—	—	—	—
Right Calcaneus	—	—	—	—	—

HAND (# Present/# Complete)

	L	R	Unsid
# Carpals	—/—	—/—	—/—
# Metacarpals	—/—	—/—	—/—
# Phalanges	—/—	—/—	—/—

FOOT (# Present/# Complete)

	L	R	Unsid
# Tarsals	2/0	—/—	—/—
# Metatarsals	4/0	—/—	—/—
# Phalanges	—/—	—/—	—/—

Comments: Damaged by backbone; most bones represented by stains only, including clavicle, scapula, ribs, left humerus, left innominate, left fibula, left foot.
Left femur almost nonexistent; also right lower postcranium

Robust right humerus → probable male

Advanced dental attrition of M2 → older adult

Maximum tibia length = 350 mm

A poorly preserved molar crown (adult) with moderate dental wear was also recovered.

INVENTORY RECORDING FORM FOR COMPLETE SKELETONS

Site Name/Number 44AX183 / West Observer _____

Feature/Burial Number Feat. 201 / _____ Date _____

Burial/Skeleton Number _____ / _____

Present Location of Collection RA Lab _____

CRANIAL BONES AND JOINT SURFACES

	L(left)	R(right)		L	R
Frontal	___	___	Sphenoid	___	___
Parietal	___	___	Zygomatic	___	___
Occipital	___	___	Maxilla	___	___
Temporal	___	___	Palatine	___	___
TMJ	___	___	Mandible	___	___

POSTCRANIAL BONES AND JOINT SURFACES

	L	R		L	R
Clavicle	___	___	Os Coxae		
Scapula			Ilium	___	___
Body	___	___	Ischium	___	___
Glenoid f.	___	___	Pubis	___	___
Patella	___	___	Acetabulum	___	___
Sacrum	___	___	Auric. Surface	___	___

VERTEBRAE (individual)

	Centrum	Neural Arch
C1	___	___
C2	___	___
C7	___	___
T10	___	___
T11	___	___
T12	___	___
L1	___	___
L2	___	___
L3	___	___
L4	___	___
L5	___	___

VERTEBRAE (grouped)

	#Present/# Complete	
	Centra	Neural Arches
C3-6	___/___	___/___
T1-T9	___/___	___/___

Sternum: Manubrium ___ Body ___

RIBS (individual)

	L	R
1st	___	___
2nd	___	___
11th	___	___
12th	___	___

RIBS (grouped)

	#Present/# Complete		
	L	R	Unsided
3-10	___/___	___/___	___/___

Series/Burial/Skeleton 44AX183
 Observer/Date Feat. 201

LONG BONES

	Proximal Epiphysis	Diaphysis			Distal Epiphysis
		Proximal Third	Middle Third	Distal Third	
Left Humerus	—	—	—	—	—
Right Humerus	—	—	—	—	—
Left Radius	—	—	—	—	—
Right Radius	—	—	—	—	—
Left Ulna	—	—	—	—	—
Right Ulna	—	—	—	—	—
Left Femur	—	—	—	—	—
Right Femur	—	—	—	—	—
Left Tibia	—	—	—	—	—
Right Tibia	—	—	—	—	—
Left Fibula	—	—	—	—	—
Right Fibula	—	—	—	—	—
Left Talus	—	—	—	—	—
Right Talus	—	—	—	—	—
Left Calcaneus	—	—	—	—	—
Right Calcaneus	—	—	—	—	—

HAND (# Present/# Complete)

	L	R	Unsided
# Carpals	—/—	—/—	—/—
# Metacarpals	—/—	—/—	—/—
# Phalanges	—/—	—/—	—/—

FOOT (# Present/# Complete)

	L	R	Unsided
# Tarsals	—/—	—/—	—/—
# Metatarsals	—/—	—/—	—/—
# Phalanges	—/—	—/—	—/—

Comments: This burial was obliterated by the backhoe. No identifiable bone was preserved. The length of the grave (1.8 m) implied an adult individual.
Two nails and some coffin wood were preserved.
Two unidentifiable tooth crown fragments (one probably is a molar) were also recovered.

INVENTORY RECORDING FORM FOR COMPLETE SKELETONS

Site Name/Number 44 AX 183 / West Observer _____

Feature/Burial Number Feat. 202 / _____ Date _____

Burial/Skeleton Number _____ / _____

Present Location of Collection RU Lab

CRANIAL BONES AND JOINT SURFACES

	L(left)	R(right)		L	R
Frontal	___	___	Sphenoid	___	___
Parietal	___	___	Zygomatic	___	___
Occipital	___	___	Maxilla	___	___
Temporal	___	___	Palatine	___	___
TMJ	___	___	Mandible	___	___

POSTCRANIAL BONES AND JOINT SURFACES

	L	R		L	R
Clavicle	<u>3</u>	___	Os Coxae	___	___
Scapula	___	___	Ilium	___	<u>3</u>
Body	<u>3</u>	___	Ischium	___	<u>3</u>
Glenoid f.	<u>3</u>	___	Pubis	<u>3</u> ?	<u>3</u>
Patella	___	___	Acetabulum	___	<u>3</u>
Sacrum	___	___	Auric. Surface	___	___

VERTEBRAE (individual)

	Centrum	Neural Arch
C1	___	___
C2	___	___
C7	___	___
T10	___	___
T11	___	___
T12	___	___
L1	___	___
L2	___	___
L3	___	___
L4	___	___
L5	___	___

VERTEBRAE (grouped)

	#Present/# Complete	
	Centra	Neural Arches
C3-6	___/___	___/___
T1-T9	___/___	___/___

Sternum: Manubrium ___ Body ___

RIBS (individual)

	L	R
1st	___	___
2nd	___	___
11th	___	___
12th	___	___

RIBS (grouped)

	#Present/# Complete		
	L	R	Unsided
3-10	<u>8</u> / <u>0</u>	<u>5</u> / <u>0</u>	___/___

Series/Burial/Skeleton 44AX183
 Observer/Date Feet. 202

LONG BONES

	Diaphysis				
	Proximal Epiphysis	Proximal Third	Middle Third	Distal Third	Distal Epiphysis
Left Humerus	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
Right Humerus	—	—	—	—	—
Left Radius	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	—
Right Radius	—	—	—	—	—
Left Ulna	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	—
Right Ulna	—	—	—	—	—
Left Femur	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>6</u>
Right Femur	<u>3</u>	<u>3</u>	<u>3</u>	<u>6</u>	<u>6</u>
Left Tibia	<u>3</u>	<u>3</u>	<u>3</u>	<u>6</u>	<u>6</u>
Right Tibia	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>6</u>
Left Fibula	—	<u>3</u>	<u>3</u>	<u>6</u>	—
Right Fibula	—	<u>3</u>	<u>3</u>	<u>6</u>	—
Left Talus	—	—	—	—	—
Right Talus	—	—	—	—	—
Left Calcaneus	—	—	—	—	—
Right Calcaneus	—	—	—	—	—

HAND (# Present/# Complete)

	L	R	Unsided
# Carpals	<u>1</u>	<u>1</u>	<u>1</u>
# Metacarpals	<u>1</u>	<u>1</u>	<u>1</u>
# Phalanges	<u>1</u>	<u>1</u>	<u>1</u>

FOOT (# Present/# Complete)

	L	R	Unsided
# Tarsals	<u>1</u>	<u>1</u>	<u>1</u>
# Metatarsals	<u>1</u>	<u>1</u>	<u>1</u>
# Phalanges	<u>1</u>	<u>1</u>	<u>1</u>

Comments: Again, bones are little more than organic stains.
 Right innominate, femora and tibia are best preserved. Brass/copper buttons noted around waist.
 Right innominate and left humerus in correct anatomical position. Disturbance of right femur and right and left fibulae.

Narrow sciatic notch of innominate and robust humerus → probable male

Ilia crest of innominate fused → 23 yrs +

INVENTORY RECORDING FORM FOR COMPLETE SKELETONS

Site Name/Number 44AK183 / West Observer _____
 Feature/Burial Number Feat. 203 / _____ Date _____
 Burial/Skeleton Number _____ / _____
 Present Location of Collection RU Lab

CRANIAL BONES AND JOINT SURFACES

	L(left)	R(right)		L	R
Frontal	___	___	Sphenoid	___	___
Parietal	___	___	Zygomatic	___	___
Occipital	___	___	Maxilla	<u>3</u>	<u>3</u>
Temporal	___	___	Palatine	___	___
TMJ	___	___	Mandible	<u>3</u>	<u>3</u>

POSTCRANIAL BONES AND JOINT SURFACES

	L	R		L	R
Clavicle	___	___	Os Coxae		
Scapula			Ilium	___	___
Body	___	___	Ischium	___	___
Glenoid f.	___	___	Pubis	___	___
Patella	___	___	Acetabulum	___	___
Sacrum	___	___	Auric. Surface	___	___

VERTEBRAE (individual)

	Centrum	Neural Arch
C1	___	___
C2	___	___
C7	___	___
T10	___	___
T11	___	___
T12	___	___
L1	___	___
L2	___	___
L3	___	___
L4	___	___
L5	___	___

VERTEBRAE (grouped)

	#Present/# Complete	
	Centra	Neural Arches
C3-6	___/___	___/___
T1-T9	___/___	___/___

Sternum: Manubrium ___ Body ___

RIBS (individual)

	L	R
1st	___	___
2nd	___	___
11th	___	___
12th	___	___

RIBS (grouped) - stains only

	#Present/# Complete		
	L	R	Unsided
3-10	___/___	___/___	___/___

Series/Burial/Skeleton 44AX183
 Observer/Date Feat. 203

LONG BONES

	Proximal Epiphysis	Diaphysis			Distal Epiphysis
		Proximal Third	Middle Third	Distal Third	
Left Humerus	—	—	—	—	—
Right Humerus	—	—	—	—	—
Left Radius	—	—	—	—	—
Right Radius	—	—	—	—	—
Left Ulna	—	—	—	—	—
Right Ulna	—	—	—	—	—
Left Femur	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	—
Right Femur	—	—	—	—	—
Left Tibia	—	—	—	—	—
Right Tibia	—	—	—	—	—
Left Fibula	—	—	—	—	—
Right Fibula	—	—	—	—	—
Left Talus	—	—	—	—	—
Right Talus	—	—	—	—	—
Left Calcaneus	—	—	—	—	—
Right Calcaneus	—	—	—	—	—

HAND (# Present/# Complete)

	L	R	Unsided
# Carpals	—/—	—/—	—/—
# Metacarpals	—/—	—/—	—/—
# Phalanges	—/—	—/—	—/—

FOOT (# Present/# Complete)

	L	R	Unsided
# Tarsals	—/—	—/—	—/—
# Metatarsals	—/—	—/—	—/—
# Phalanges	—/—	—/—	—/—

Comments: Burial consists of little more than organic stains. Poorly preserved femur, but maximum length estimate (87mm) implies a 0.5-1.0 year old. No teeth present in field, but mandible* observed in lab. length of grave = subadult.

* Lab analysis of mandible; complete but very poorly preserved tooth row with left deciduous M₂ unerupted. An adult left M₁ crown showed no root development. Also present were 2 molar crowns associated with maxilla fragments. There were 6 unidentifiable tooth crown fragments.

Estimated dental age = 6 months - 1 year

INVENTORY RECORDING FORM FOR COMPLETE SKELETONS

Site Name/Number 44 AX 183 / West Observer _____
 Feature/Burial Number Feat. 204 / _____ Date _____
 Burial/Skeleton Number _____ / _____
 Present Location of Collection RU Lab

CRANIAL BONES AND JOINT SURFACES

	L(left)	R(right)		L	R
Frontal	—	—	Sphenoid	—	—
Parietal	<u>3</u>	<u>3</u>	Zygomatic	—	—
Occipital	<u>3</u>	<u>3</u>	Maxilla	—	—
Temporal	—	—	Palatine	—	—
TMJ	—	—	Mandible	<u>3</u>	<u>3</u>

POSTCRANIAL BONES AND JOINT SURFACES

	L	?	R		L	R
Clavicle	<u>3</u>	.	<u>3</u>	Os Coxae	—	—
Scapula	—	—	—	Ilium	<u>3</u>	<u>3</u>
Body	—	<u>3</u>	—	Ischium	<u>3</u>	<u>3</u>
Glenoid f.	—	—	—	Pubis	<u>3</u>	<u>3</u>
Patella	—	—	—	Acetabulum	—	—
Sacrum	—	—	—	Auric. Surface	—	—

VERTEBRAE (individual)

	Centrum	Neural Arch
C1	—	—
C2	—	—
C7	—	—
T10	—	—
T11	—	—
T12	—	—
L1	—	—
L2	—	—
L3	—	—
L4	—	—
L5	—	—

VERTEBRAE (grouped)

	#Present/# Complete	
	Centra	Neural Arches
C3-6	<u>1/0</u>	—/—
T1-T9	<u>1/0</u>	—/—

Sternum: Manubrium — Body —

RIBS (individual)

	L	R
1st	—	—
2nd	—	—
11th	—	—
12th	—	—

RIBS (grouped)

	#Present/# Complete		
	L	R	Unsided
3-10	<u>—/—</u>	<u>—/—</u>	<u>5/0</u>

Series/Burial/Skeleton 44A183
 Observer/Date Feet. 204

LONG BONES

	Proximal Epiphysis	Diaphysis			Distal Epiphysis
		Proximal Third	Middle Third	Distal Third	
Left Humerus	—	3	3	3	—
Right Humerus	—	3	3	3	—
Left Radius	—	3	3	3	—
Right Radius	—	—	—	—	—
Left Ulna	—	3	3	3	—
Right Ulna	—	—	—	—	—
Left Femur	—	3	3	3	—
Right Femur	—	3	3	3	—
Left Tibia	—	3	3	3	—
Right Tibia	—	3	3	3	—
Left Fibula	—	3	3	3	—
Right Fibula	—	3	3	3	—
Left Talus	—	—	—	—	—
Right Talus	—	—	—	—	—
Left Calcaneus	—	—	—	—	—
Right Calcaneus	—	—	—	—	—

HAND (# Present/# Complete)

	L	R	Unsid
# Carpals	—/—	—/—	—/—
# Metacarpals	—/—	—/—	—/—
# Phalanges	—/—	—/—	—/—

FOOT (# Present/# Complete)

	L	R	Unsid
# Tarsals	—/—	—/—	—/—
# Metatarsals	—/—	—/—	—/—
# Phalanges	—/—	—/—	—/—

Comments: Mercury-contaminated; well defined organic stains. In situ delicate foot bones.

Left innominate = wide sciatic notch → female.
Older age suggested by extensive antemortem dental loss (all teeth lost in mandible except RM₂), advanced dental wear, and complete exterior fusion of sagittal suture. Nearly complete closure of lambdoidal suture.

Gracile cranium and rounded chin

INVENTORY RECORDING FORM FOR COMPLETE SKELETONS

Site Name/Number 44AX183 / West Observer _____

Feature/Burial Number Feat. 207 / _____ Date _____

Burial/Skeleton Number _____ / _____

Present Location of Collection RU Lab

CRANIAL BONES AND JOINT SURFACES

	L(left)	R(right)		L	R
Frontal	—	—	Sphenoid	—	—
Parietal	<u>3</u>	<u>3</u>	Zygomatic	—	—
Occipital	<u>3</u>	<u>3</u>	Maxilla	—	—
Temporal	—	—	Palatine	—	—
TMJ	—	—	Mandible	<u>3</u>	<u>3</u>

POSTCRANIAL BONES AND JOINT SURFACES

	L	R		L	R
Clavicle	—	—	Os Coxae	—	—
Scapula	—	—	Ilium	<u>3</u>	—
Body	—	<u>3</u>	Ischium	—	—
Glenoid f.	—	—	Pubis	—	—
Patella	—	—	Acetabulum	—	—
Sacrum	<u>3</u>	—	Auric. Surface	—	—

VERTEBRAE (individual)

	Centrum	Neural Arch
C1	—	—
C2	—	—
C7	—	—
T10	—	—
T11	—	—
T12	—	—
L1	—	—
L2	—	—
L3	—	—
L4	—	—
L5	—	—

VERTEBRAE (grouped)

	#Present/# Complete	
	Centra	Neural Arches
C3-6	<u>1</u>	<u>1</u>
T1-T9	<u>3/0</u>	<u>3/0</u>

Sternum: Manubrium — Body —

RIBS (individual)

	L	R
1st	—	—
2nd	—	—
11th	—	—
12th	—	—

RIBS (grouped)

	#Present/# Complete		
	L	R	Unsided
3-10	<u>12/0</u>	<u>12/0</u>	<u>1</u>

Series/Burial/Skeleton 44AX183
 Observer/Date Feat. 207

LONG BONES

	Proximal Epiphysis	Diaphysis			Distal Epiphysis
		Proximal Third	Middle Third	Distal Third	
Left Humerus	—	<u>3</u>	<u>3</u>	—	—
Right Humerus	—	—	—	—	—
Left Radius	<u>3</u>	<u>3</u>	<u>3</u>	—	—
Right Radius	—	—	—	—	—
Left Ulna	<u>3</u>	<u>3</u>	<u>3</u>	—	—
Right Ulna	—	—	—	—	—
Left Femur	—	<u>3</u>	<u>3</u>	—	—
Right Femur	—	—	—	—	—
Left Tibia	—	<u>3</u>	<u>3</u>	—	—
Right Tibia	—	—	—	—	—
Left Fibula	—	<u>3</u>	<u>3</u>	—	—
Right Fibula	—	—	—	—	—
Left Talus	—	—	—	—	—
Right Talus	—	—	—	—	—
Left Calcaneus	—	—	—	—	—
Right Calcaneus	—	—	—	—	—

HAND (# Present/# Complete)

	L	R	Unsided
# Carpals	—/—	—/—	—/—
# Metacarpals	—/—	—/—	—/—
# Phalanges	—/—	—/—	—/—

FOOT (# Present/# Complete)

	L	R	Unsided
# Tarsals	—/—	—/—	—/—
# Metatarsals	—/—	—/—	—/—
# Phalanges	—/—	—/—	—/—

Comments: Very poorly preserved cranial and postcranial remains. A molar crown fragment shows advanced dental attrition suggesting an older age.
length of grave (~6ft) = adult.

INVENTORY RECORDING FORM FOR COMPLETE SKELETONS

Site Name/Number 44 AX 183 / West Observer _____
 Feature/Burial Number F. 208 / _____ Date _____
 Burial/Skeleton Number _____ / _____
 Present Location of Collection RU Lab

CRANIAL BONES AND JOINT SURFACES

	L(left)	R(right)		L	R
Frontal	—	—	Sphenoid	—	—
Parietal	<u>3</u>	<u>3</u> ?	Zygomatic	—	—
Occipital	—	—	Maxilla	—	—
Temporal	—	—	Palatine	—	—
TMJ	—	—	Mandible	—	—

POSTCRANIAL BONES AND JOINT SURFACES

	L	R		L	R
Clavicle	—	—	Os Coxae	—	—
Scapula	—	—	Ilium	—	<u>3</u>
Body	—	—	Ischium	—	<u>3</u>
Glenoid f.	—	—	Pubis	—	—
Patella	—	—	Acetabulum	—	—
Sacrum	—	—	Auric. Surface	—	—

VERTEBRAE (individual)

	Centrum	Neural Arch
C1	—	—
C2	—	—
C7	—	—
T10	—	—
T11	—	—
T12	—	—
L1	—	—
L2	—	—
L3	—	—
L4	—	—
L5	—	—

VERTEBRAE (grouped)

	#Present/# Complete	
	Centra	Neural Arches
C3-6	—/—	—/—
T1-T9	—/—	—/—

Sternum: Manubrium — Body —

RIBS (individual)

	L	R
1st	—	—
2nd	—	—
11th	—	—
12th	—	—

RIBS (grouped)

	#Present/# Complete		
	L	R	Unsided
3-10	<u>3/0</u>	<u>3/0</u>	<u>—/—</u>

Series/Burial/Skeleton 44AX183
 Observer/Date Feat. 208

LONG BONES

	Proximal Epiphysis	Diaphysis			Distal Epiphysis
		Proximal Third	Middle Third	Distal Third	
Left Humerus	—	<u>3</u>	<u>3</u>	<u>3</u>	—
Right Humerus	—	<u>3</u>	<u>3</u>	<u>3</u>	—
Left Radius	—	—	—	—	—
Right Radius	—	<u>3</u>	<u>3</u>	<u>3</u>	—
Left Ulna	—	—	—	—	—
Right Ulna	—	<u>3</u>	<u>3</u>	<u>3</u>	—
Left Femur	<u>3</u>	<u>3</u>	<u>3</u>	—	—
Right Femur	<u>3</u>	<u>3</u>	<u>3</u>	—	—
Left Tibia	—	—	—	—	—
Right Tibia	—	—	—	—	—
Left Fibula	—	—	—	—	—
Right Fibula	—	—	—	—	—
Left Talus	—	—	—	—	—
Right Talus	—	—	—	—	—
Left Calcaneus	—	—	—	—	—
Right Calcaneus	—	—	—	—	—

HAND (# Present/# Complete)

	L	R	Unsided
# Carpals	—/—	—/—	—/—
# Metacarpals	—/—	—/—	—/—
# Phalanges	—/—	—/—	—/—

FOOT (# Present/# Complete)

	L	R	Unsided
# Tarsals	—/—	—/—	—/—
# Metatarsals	—/—	—/—	—/—
# Phalanges	—/—	—/—	—/—

Comments: Affected by 1940s sewer line. Consist
mainly of dark organic stains. Right femur
and right and left humeri are best preserved
portions. Left femur has been postdepositionally
moved next to right femur.
Grave length (1.7m) implies adult.
Left femur head maximum diameter = 44mm
Equivocal sex assignment

APPENDIX B

44AX183 OSTEOMETRICS

CRANIAL AND POSTCRANIAL MEASUREMENT RECORDING FORM: ADULT REMAINS

Site Name/Number 44 AX 183 , West Observer _____
 Feature/Burial Number Feat I , Date _____
 Burial/Skeleton Number FS# 37 , _____
 Present Location of Collection RU Lab

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterick**

Cranial Measurements

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Maximum Cranial Length: _____ 2. Maximum Cranial Breadth: _____ 3. Bizygomatic Diameter: _____ 4. Basion-Bregma Height: _____ 5. Cranial Base Length: _____ 6. Basion-Prosthion Length: _____ 7. Maxillo-Alveolar Breadth: _____ 8. Maxillo-Alveolar Length: _____ 9. Biauricular Breadth: _____ 10. Upper Facial Height: _____ 11. Minimum Frontal Breadth: _____ 12. Upper Facial Breadth: _____ 13. Nasal Height: _____ 14. Nasal Breadth: _____ 15. Orbital Breadth: _____ 16. Orbital Height: _____ 17. Biorbital Breadth: _____ | <ol style="list-style-type: none"> 18. Interorbital Breadth: _____ 19. Frontal Chord: _____ 20. Parietal Chord: _____ 21. Occipital Chord: _____ 22. Foramen Magnum Length: _____ 23. Foramen Magnum Breadth: _____ 24. Mastoid Length: _____ 25. Chin Height: _____ 26. Height of the Mandibular Body: _____ 27. Breadth of the Mandibular Body: _____ 28. Bigonial Width: _____ 29. Bicondylar Breadth: _____ 30. Minimum Ramus Breadth: _____ 31. Maximum Ramus Breadth: _____ 32. Maximum Ramus Height: _____ 33. Mandibular Length: _____ 34. Mandibular Angle: _____ |
|--|---|

Series/Burial/Skeleton 44 AX 183 Feat I
Observer/Date TU 2 LEV 2 FS# 37

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Postcranial Measurements

- | | |
|---|---|
| 35. Clavicle: Maximum Length: _____ | 57. Os Coxae: Iliac Breadth: _____ |
| 36. Clavicle: Ant.-Post. Diameter at Midshaft: _____ | 58. Os Coxae: Pubis Length: _____ |
| 37. Clavicle: Sup.-Inf. Diameter at Midshaft: _____ | 59. Os Coxae: Ischium Length: _____ |
| 38. Scapula: Height: _____ | 60. Femur: Maximum Length: _____ |
| 39. Scapula: Breadth: _____ | 61. Femur: Bicondylar Length: _____ |
| 40. Humerus: Maximum Length: _____ | 62. Femur: Epicondylar Breadth: _____ |
| 41. Humerus: Epicondylar Breadth: _____ | 63. Femur: Maximum Diameter of the Femur Head: _____ |
| 42. Humerus: Vertical Diameter of Head: _____ | 64. Femur: Ant.-Post. Subtrochanteric Diameter: _____ |
| 43. Humerus: Maximum Diameter at Midshaft: _____ | 65. Femur: Medial-Lateral Subtrochanteric Diameter: _____ |
| 44. Humerus: Minimum Diameter at Midshaft: _____ | 66. Femur: Anterior-Posterior Midshaft Diameter: _____ |
| 45. Radius: Maximum Length: <u>268 mm</u> | 67. Femur: Medial-Lateral Midshaft Diameter: _____ |
| 46. Radius: Anterior-Posterior Diameter at Midshaft: <u>15 mm</u> | 68. Femur: Midshaft Circumference: _____ |
| 47. Radius: Medial-Lateral Diameter at Midshaft: <u>17 mm</u> | 69. Tibia: Length: _____ |
| 48. Ulna: Maximum Length: _____ | 70. Tibia: Maximum Proximal Epiphyseal Breadth: _____ |
| 49. Ulna: Anterior-Posterior Diameter: _____ | 71. Tibia: Maximum Distal Epiphyseal Breadth: _____ |
| 50. Ulna: Medial-Lateral Diameter: _____ | 72. Tibia: Max. Diameter at the Nutrient Foramen: _____ |
| 51. Ulna: Physiological Length: _____ | 73. Tibia: Med.-Lat. Diameter at Nutrient Foramen: _____ |
| 52. Ulna: Minimum Circumference: _____ | 74. Tibia: Circumference at the Nutrient Foramen: _____ |
| 53. Sacrum: Anterior Length: _____ | 75. Fibula: Maximum Length: _____ |
| 54. Sacrum: Anterior Superior Breadth: _____ | 76. Fibula: Maximum Diameter at Midshaft: _____ |
| 55. Sacrum: Max. Transverse Diameter of Base: _____ | 77. Calcaneus: Maximum Length: _____ |
| 56. Os Coxae: Height: _____ | 78. Calcaneus: Middle Breadth: _____ |

CRANIAL AND POSTCRANIAL MEASUREMENT RECORDING FORM: ADULT REMAINS

Site Name/Number 44 Ax 183 , West Observer _____
 Feature/Burial Number Feat 1 , Date _____
 Burial/Skeleton Number PS# 38 , _____
 Present Location of Collection RU Lab

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Cranial Measurements

- | | |
|--|---|
| 1. Maximum Cranial Length: _____
2. Maximum Cranial Breadth: _____
3. Bizygomatic Diameter: _____
4. Basion-Bregma Height: _____
5. Cranial Base Length: _____
6. Basion-Prosthion Length: _____
7. Maxillo-Alveolar Breadth: _____
8. Maxillo-Alveolar Length: _____
. Biauricular Breadth: _____
J. Upper Facial Height: _____
11. Minimum Frontal Breadth: _____
12. Upper Facial Breadth: _____
13. Nasal Height: _____
14. Nasal Breadth: _____
15. Orbital Breadth: _____
16. Orbital Height: _____
17. Biorbital Breadth: _____ | 18. Interorbital Breadth: _____
19. Frontal Chord: _____
20. Parietal Chord: _____
21. Occipital Chord: _____
22. Foramen Magnum Length: _____
23. Foramen Magnum Breadth: _____
24. Mastoid Length: _____
25. Chin Height: _____
26. Height of the Mandibular Body: _____
27. Breadth of the Mandibular Body: _____
28. Bigonial Width: _____
29. Bicondylar Breadth: _____
30. Minimum Ramus Breadth: _____
31. Maximum Ramus Breadth: _____
32. Maximum Ramus Height: _____
33. Mandibular Length: _____
34. Mandibular Angle: _____ |
|--|---|



Series/Burial/Skeleton 44AX183 Feat I
Observer/Date TUO LEV 2 FS#38

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk***

Postcranial Measurements

- | | |
|---|---|
| 35. Clavicle: Maximum Length: _____ | 57. Os Coxae: Iliac Breadth: _____ |
| 36. Clavicle: Ant.-Post. Diameter at Midshaft: _____ | 58. Os Coxae: Pubis Length: _____ |
| 37. Clavicle: Sup.-Inf. Diameter at Midshaft: _____ | 59. Os Coxae: Ischium Length: _____ |
| 38. Scapula: Height: _____ | 60. Femur: Maximum Length: _____ |
| 39. Scapula: Breadth: _____ | 61. Femur: Bicondylar Length: _____ |
| 40. Humerus: Maximum Length: _____ | 62. Femur: Epicondylar Breadth: _____ |
| 41. Humerus: Epicondylar Breadth: _____ | 63. Femur: Maximum Diameter of the Femur Head: _____ |
| 42. Humerus: Vertical Diameter of Head: _____ | 64. Femur: Ant.-Post. Subtrochanteric Diameter: _____ |
| 43. Humerus: Maximum Diameter at Midshaft: _____ | 65. Femur: Medial-Lateral Subtrochanteric Diameter: _____ |
| 44. Humerus: Minimum Diameter at Midshaft: _____ | 66. Femur: Anterior-Posterior Midshaft Diameter: _____ |
| 45. Radius: Maximum Length: <u>261 mm</u> | 67. Femur: Medial-Lateral Midshaft Diameter: _____ |
| 46. Radius: Anterior-Posterior Diameter at Midshaft: <u>13 mm</u> | 68. Femur: Midshaft Circumference: _____ |
| 47. Radius: Medial-Lateral Diameter at Midshaft: <u>15 mm</u> | 69. Tibia: Length: _____ |
| 48. Ulna: Maximum Length: _____ | 70. Tibia: Maximum Proximal Epiphyseal Breadth: _____ |
| 49. Ulna: Anterior-Posterior Diameter: _____ | 71. Tibia: Maximum Distal Epiphyseal Breadth: _____ |
| 50. Ulna: Medial-Lateral Diameter: _____ | 72. Tibia: Max. Diameter at the Nutrient Foramen: _____ |
| 51. Ulna: Physiological Length: _____ | 73. Tibia: Med.-Lat. Diameter at Nutrient Foramen: _____ |
| 52. Ulna: Minimum Circumference: _____ | 74. Tibia: Circumference at the Nutrient Foramen: _____ |
| 53. Sacrum: Anterior Length: _____ | 75. Fibula: Maximum Length: _____ |
| 54. Sacrum: Anterior Superior Breadth: _____ | 76. Fibula: Maximum Diameter at Midshaft: _____ |
| 55. Sacrum: Max. Transverse Diameter of Base: _____ | 77. Calcaneus: Maximum Length: _____ |
| 56. Os Coxae: Height: _____ | 78. Calcaneus: Middle Breadth: _____ |

CRANIAL AND POSTCRANIAL MEASUREMENT RECORDING FORM: ADULT REMAINS

Site Name/Number 44 AX 183 1 West Observer _____
 Feature/Burial Number Feat. 1 1 Date _____
 Burial/Skeleton Number FS # 39 1
 Present Location of Collection RU Lab

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterick**

Cranial Measurements

- | | |
|---|--|
| <p>1. Maximum Cranial Length: _____
 2. Maximum Cranial Breadth: _____
 3. Bizygomatic Diameter: _____
 4. Basion-Bregma Height: _____
 5. Cranial Base Length: _____
 6. Basion-Prosthion Length: _____
 7. Maxillo-Alveolar Breadth: _____
 8. Maxillo-Alveolar Length: _____
 . Biauricular Breadth: _____
 J. Upper Facial Height: _____
 11. Minimum Frontal Breadth: _____
 12. Upper Facial Breadth: _____
 13. Nasal Height: _____
 14. Nasal Breadth: _____
 15. Orbital Breadth: _____
 16. Orbital Height: _____
 17. Biorbital Breadth: _____</p> | <p>18. Interorbital Breadth: _____
 19. Frontal Chord: _____
 20. Parietal Chord: _____
 21. Occipital Chord: _____
 22. Foramen Magnum Length: _____
 23. Foramen Magnum Breadth: _____
 24. Mastoid Length: _____
 25. Chin Height: _____
 26. Height of the Mandibular Body: _____
 27. Breadth of the Mandibular Body: _____
 28. Bigonial Width: _____
 29. Bicondylar Breadth: _____
 30. Minimum Ramus Breadth: _____
 31. Maximum Ramus Breadth: _____
 32. Maximum Ramus Height: _____
 33. Mandibular Length: _____
 34. Mandibular Angle: _____</p> |
|---|--|



Series/Burial/Skeleton 44 AX 183 Feat 7
Observer/Date TUC 2 LEV 2 FS# 39

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Postcranial Measurements

- | | |
|--|---|
| 35. Clavicle: Maximum Length: _____ | 57. Os Coxae: Iliac Breadth: _____ |
| 36. Clavicle: Ant.-Post. Diameter at Midshaft: _____ | 58. Os Coxae: Pubis Length: _____ |
| 37. Clavicle: Sup.-Inf. Diameter at Midshaft: _____ | 59. Os Coxae: Ischium Length: _____ |
| 38. Scapula: Height: _____ | 60. Femur: Maximum Length: _____ |
| 39. Scapula: Breadth: _____ | 61. Femur: Bicondylar Length: _____ |
| 40. Humerus: Maximum Length: <u>342 mm</u> | 62. Femur: Epicondylar Breadth: _____ |
| 41. Humerus: Epicondylar Breadth: _____ | 63. Femur: Maximum Diameter of the Femur Head: _____ |
| 42. Humerus: Vertical Diameter of Head: <u>47 mm</u> | 64. Femur: Ant.-Post. Subtrochanteric Diameter: _____ |
| 43. Humerus: Maximum Diameter at Midshaft: <u>23 mm</u> | 65. Femur: Medial-Lateral Subtrochanteric Diameter: _____ |
| 44. Humerus: Minimum Diameter at Midshaft: <u>18 mm</u> | 66. Femur: Anterior-Posterior Midshaft Diameter: _____ |
| 45. Radius: Maximum Length: _____ | 67. Femur: Medial-Lateral Midshaft Diameter: _____ |
| 46. Radius: Anterior-Posterior Diameter at Midshaft: _____ | 68. Femur: Midshaft Circumference: _____ |
| 47. Radius: Medial-Lateral Diameter at Midshaft: _____ | 69. Tibia: Length: _____ |
| 48. Ulna: Maximum Length: _____ | 70. Tibia: Maximum Proximal Epiphyseal Breadth: _____ |
| 49. Ulna: Anterior-Posterior Diameter: _____ | 71. Tibia: Maximum Distal Epiphyseal Breadth: _____ |
| 50. Ulna: Medial-Lateral Diameter: _____ | 72. Tibia: Max. Diameter at the Nutrient Foramen: _____ |
| 51. Ulna: Physiological Length: _____ | 73. Tibia: Med.-Lat. Diameter at Nutrient Foramen: _____ |
| 52. Ulna: Minimum Circumference: _____ | 74. Tibia: Circumference at the Nutrient Foramen: _____ |
| 53. Sacrum: Anterior Length: _____ | 75. Fibula: Maximum Length: _____ |
| 54. Sacrum: Anterior Superior Breadth: _____ | 76. Fibula: Maximum Diameter at Midshaft: _____ |
| 55. Sacrum: Max. Transverse Diameter of Base: _____ | 77. Calcaneus: Maximum Length: _____ |
| 56. Os Coxae: Height: _____ | 78. Calcaneus: Middle Breadth: _____ |

CRANIAL AND POSTCRANIAL MEASUREMENT RECORDING FORM: ADULT REMAINS

Site Name/Number 44 AX 183 / West Observer _____
 Feature/Burial Number Feat. I / _____ Date _____
 Burial/Skeleton Number PS # 40 / _____
 Present Location of Collection RU Lab

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterick**

Cranial Measurements

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Maximum Cranial Length: _____ 2. Maximum Cranial Breadth: _____ 3. Bizygomatic Diameter: _____ 4. Basion-Bregma Height: _____ 5. Cranial Base Length: _____ 6. Basion-Prosthion Length: _____ 7. Maxillo-Alveolar Breadth: _____ 8. Maxillo-Alveolar Length: _____ . Biauricular Breadth: _____ J. Upper Facial Height: _____ 11. Minimum Frontal Breadth: _____ 12. Upper Facial Breadth: _____ 13. Nasal Height: _____ 14. Nasal Breadth: _____ 15. Orbital Breadth: _____ 16. Orbital Height: _____ 17. Biorbital Breadth: _____ | <ol style="list-style-type: none"> 18. Interorbital Breadth: _____ 19. Frontal Chord: _____ 20. Parietal Chord: _____ 21. Occipital Chord: _____ 22. Foramen Magnum Length: _____ 23. Foramen Magnum Breadth: _____ 24. Mastoid Length: _____ 25. Chin Height: _____ 26. Height of the Mandibular Body: _____ 27. Breadth of the Mandibular Body: _____ 28. Bigonial Width: _____ 29. Bicondylar Breadth: _____ 30. Minimum Ramus Breadth: _____ 31. Maximum Ramus Breadth: _____ 32. Maximum Ramus Height: _____ 33. Mandibular Length: _____ 34. Mandibular Angle: _____ |
|--|---|

Series/Burial/Skeleton 44AX 183 Feat 1
Observer/Date TU 3 LEV 2 FS#40

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk***

Postcranial Measurements

- | | |
|--|---|
| 35. Clavicle: Maximum Length: _____ | 57. Os Coxae: Iliac Breadth: _____ |
| 36. Clavicle: Ant.-Post. Diameter at Midshaft: _____ | 58. Os Coxae: Pubis Length: _____ |
| 37. Clavicle: Sup.-Inf. Diameter at Midshaft: _____ | 59. Os Coxae: Ischium Length: _____ |
| 38. Scapula: Height: _____ | 60. Femur: Maximum Length: _____ |
| 39. Scapula: Breadth: _____ | 61. Femur: Bicondylar Length: _____ |
| 40. Humerus: Maximum Length: <u>325 mm</u> | 62. Femur: Epicondylar Breadth: _____ |
| 41. Humerus: Epicondylar Breadth: <u>57.5 mm</u> | 63. Femur: Maximum Diameter of the Femur Head: _____ |
| 42. Humerus: Vertical Diameter of Head: _____ | 64. Femur: Ant.-Post. Subtrochanteric Diameter: _____ |
| 43. Humerus: Maximum Diameter at Midshaft: <u>22 mm</u> | 65. Femur: Medial-Lateral Subtrochanteric Diameter: _____ |
| 44. Humerus: Minimum Diameter at Midshaft: <u>19 mm</u> | 66. Femur: Anterior-Posterior Midshaft Diameter: _____ |
| 45. Radius: Maximum Length: _____ | 67. Femur: Medial-Lateral Midshaft Diameter: _____ |
| 46. Radius: Anterior-Posterior Diameter at Midshaft: _____ | 68. Femur: Midshaft Circumference: _____ |
| 47. Radius: Medial-Lateral Diameter at Midshaft: _____ | 69. Tibia: Length: _____ |
| 48. Ulna: Maximum Length: _____ | 70. Tibia: Maximum Proximal Epiphyseal Breadth: _____ |
| 49. Ulna: Anterior-Posterior Diameter: _____ | 71. Tibia: Maximum Distal Epiphyseal Breadth: _____ |
| 50. Ulna: Medial-Lateral Diameter: _____ | 72. Tibia: Max. Diameter at the Nutrient Foramen: _____ |
| 51. Ulna: Physiological Length: _____ | 73. Tibia: Med.-Lat. Diameter at Nutrient Foramen: _____ |
| 52. Ulna: Minimum Circumference: _____ | 74. Tibia: Circumference at the Nutrient Foramen: _____ |
| 53. Sacrum: Anterior Length: _____ | 75. Fibula: Maximum Length: _____ |
| 54. Sacrum: Anterior Superior Breadth: _____ | 76. Fibula: Maximum Diameter at Midshaft: _____ |
| 55. Sacrum: Max. Transverse Diameter of Base: _____ | 77. Calcaneus: Maximum Length: _____ |
| 56. Os Coxae: Height: _____ | 78. Calcaneus: Middle Breadth: _____ |

CRANIAL AND POSTCRANIAL MEASUREMENT RECORDING FORM: ADULT REMAINS

Site Name/Number 44 AX 183 / West Observer _____
 Feature/Burial Number Feat 1 Date _____
 Burial/Skeleton Number FS # 65
 Present Location of Collection RU Lab

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Cranial Measurements

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Maximum Cranial Length: _____ 2. Maximum Cranial Breadth: _____ 3. Bizygomatic Diameter: _____ 4. Basion-Bregma Height: _____ 5. Cranial Base Length: _____ 6. Basion-Prosthion Length: _____ 7. Maxillo-Alveolar Breadth: _____ 8. Maxillo-Alveolar Length: _____ <li style="padding-left: 20px;">Biauricular Breadth: _____ <li style="padding-left: 20px;">Upper Facial Height: _____ 11. Minimum Frontal Breadth: _____ 12. Upper Facial Breadth: _____ 13. Nasal Height: _____ 14. Nasal Breadth: _____ 15. Orbital Breadth: _____ 16. Orbital Height: _____ 17. Biorbital Breadth: _____ | <ol style="list-style-type: none"> 18. Interorbital Breadth: _____ 19. Frontal Chord: _____ 20. Parietal Chord: _____ 21. Occipital Chord: _____ 22. Foramen Magnum Length: _____ 23. Foramen Magnum Breadth: _____ 24. Mastoid Length: _____ 25. Chin Height: _____ 26. Height of the Mandibular Body: _____ 27. Breadth of the Mandibular Body: _____ 28. Bigonial Width: _____ 29. Bicondylar Breadth: _____ 30. Minimum Ramus Breadth: _____ 31. Maximum Ramus Breadth: _____ 32. Maximum Ramus Height: _____ 33. Mandibular Length: _____ 34. Mandibular Angle: _____ |
|---|---|



Series/Burial/Skeleton 44AX183 Feat J
Observer/Date TU 2 LEV 3 FS# 65

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Postcranial Measurements

- | | |
|--|---|
| 35. Clavicle: Maximum Length: _____ | 57. Os Coxae: Iliac Breadth: _____ |
| 36. Clavicle: Ant.-Post. Diameter at Midshaft: _____ | 58. Os Coxae: Pubis Length: _____ |
| 37. Clavicle: Sup.-Inf. Diameter at Midshaft: _____ | 59. Os Coxae: Ischium Length: _____ |
| 38. Scapula: Height: _____ | 60. Femur: Maximum Length: _____ |
| 39. Scapula: Breadth: _____ | 61. Femur: Bicondylar Length: _____ |
| 40. Humerus: Maximum Length: _____ | 62. Femur: Epicondylar Breadth: _____ |
| 41. Humerus: Epicondylar Breadth: <u>59 mm</u> | 63. Femur: Maximum Diameter of the Femur Head: _____ |
| 42. Humerus: Vertical Diameter of Head: _____ | 64. Femur: Ant.-Post. Subtrochanteric Diameter: _____ |
| 43. Humerus: Maximum Diameter at Midshaft: <u>23 mm</u> | 65. Femur: Medial-Lateral Subtrochanteric Diameter: _____ |
| 44. Humerus: Minimum Diameter at Midshaft: <u>19 mm</u> | 66. Femur: Anterior-Posterior Midshaft Diameter: _____ |
| 45. Radius: Maximum Length: _____ | 67. Femur: Medial-Lateral Midshaft Diameter: _____ |
| 46. Radius: Anterior-Posterior Diameter at Midshaft: _____ | 68. Femur: Midshaft Circumference: _____ |
| 47. Radius: Medial-Lateral Diameter at Midshaft: _____ | 69. Tibia: Length: _____ |
| 48. Ulna: Maximum Length: _____ | 70. Tibia: Maximum Proximal Epiphyseal Breadth: _____ |
| 49. Ulna: Anterior-Posterior Diameter: _____ | 71. Tibia: Maximum Distal Epiphyseal Breadth: _____ |
| 50. Ulna: Medial-Lateral Diameter: _____ | 72. Tibia: Max. Diameter at the Nutrient Foramen: _____ |
| 51. Ulna: Physiological Length: _____ | 73. Tibia: Med.-Lat. Diameter at Nutrient Foramen: _____ |
| 52. Ulna: Minimum Circumference: _____ | 74. Tibia: Circumference at the Nutrient Foramen: _____ |
| 53. Sacrum: Anterior Length: _____ | 75. Fibula: Maximum Length: _____ |
| 54. Sacrum: Anterior Superior Breadth: _____ | 76. Fibula: Maximum Diameter at Midshaft: _____ |
| 55. Sacrum: Max. Transverse Diameter of Base: _____ | 77. Calcaneus: Maximum Length: _____ |
| 56. Os Coxae: Height: _____ | 78. Calcaneus: Middle Breadth: _____ |

CRANIAL AND POSTCRANIAL MEASUREMENT RECORDING FORM: ADULT REMAINS

Site Name/Number 44 AX 183 | West | Observer _____

Feature/Burial Number Feat. 1 | _____ | Date _____

Burial/Skeleton Number FS# 67 | _____

Present Location of Collection RU Lab

Record all measurements to the nearest millimeter, in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Cranial Measurements

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Maximum Cranial Length: _____ 2. Maximum Cranial Breadth: _____ 3. Bizygomatic Diameter: _____ 4. Basion-Bregma Height: _____ 5. Cranial Base Length: _____ 6. Basion-Prosthion Length: _____ 7. Maxillo-Alveolar Breadth: _____ 8. Maxillo-Alveolar Length: _____ . Biauricular Breadth: _____ J. Upper Facial Height: _____ 11. Minimum Frontal Breadth: _____ 12. Upper Facial Breadth: _____ 13. Nasal Height: _____ 14. Nasal Breadth: _____ 15. Orbital Breadth: _____ 16. Orbital Height: _____ 17. Biorbital Breadth: _____ | <ol style="list-style-type: none"> 18. Interorbital Breadth: _____ 19. Frontal Chord: _____ 20. Parietal Chord: _____ 21. Occipital Chord: _____ 22. Foramen Magnum Length: _____ 23. Foramen Magnum Breadth: _____ 24. Mastoid Length: _____ 25. Chin Height: _____ 26. Height of the Mandibular Body: _____ 27. Breadth of the Mandibular Body: _____ 28. Bigonial Width: _____ 29. Bicondylar Breadth: _____ 30. Minimum Ramus Breadth: _____ 31. Maximum Ramus Breadth: _____ 32. Maximum Ramus Height: _____ 33. Mandibular Length: _____ 34. Mandibular Angle: _____ |
|--|---|

Series/Burial/Skeleton 44 AX 183 Feet 1
Observer/Date TU 2 LEV 3 FS# 67

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Postcranial Measurements

- | | |
|--|---|
| 35. Clavicle: Maximum Length: _____ | 57. Os Coxae: Iliac Breadth: _____ |
| 36. Clavicle: Ant-Post. Diameter at Midshaft: _____ | 58. Os Coxae: Pubis Length: _____ |
| 37. Clavicle: Sup.-Inf. Diameter at Midshaft: _____ | 59. Os Coxae: Ischium Length: _____ |
| 38. Scapula: Height: _____ | 60. Femur: Maximum Length: _____ |
| 39. Scapula: Breadth: _____ | 61. Femur: Bicondylar Length: _____ |
| 40. Humerus: Maximum Length: <u>280 mm</u> | 62. Femur: Epicondylar Breadth: _____ |
| 41. Humerus: Epicondylar Breadth: <u>53 mm</u> | 63. Femur: Maximum Diameter of the Femur Head: _____ |
| 42. Humerus: Vertical Diameter of Head: _____ | 64. Femur: Ant-Post. Subtrochanteric Diameter: _____ |
| 43. Humerus: Maximum Diameter at Midshaft: <u>21 mm</u> | 65. Femur: Medial-Lateral Subtrochanteric Diameter: _____ |
| 44. Humerus: Minimum Diameter at Midshaft: <u>15 mm</u> | 66. Femur: Anterior-Posterior Midshaft Diameter: _____ |
| 45. Radius: Maximum Length: _____ | 67. Femur: Medial-Lateral Midshaft Diameter: _____ |
| 46. Radius: Anterior-Posterior Diameter at Midshaft: _____ | 68. Femur: Midshaft Circumference: _____ |
| 47. Radius: Medial-Lateral Diameter at Midshaft: _____ | 69. Tibia: Length: _____ |
| 48. Ulna: Maximum Length: _____ | 70. Tibia: Maximum Proximal Epiphyseal Breadth: _____ |
| 49. Ulna: Anterior-Posterior Diameter: _____ | 71. Tibia: Maximum Distal Epiphyseal Breadth: _____ |
| 50. Ulna: Medial-Lateral Diameter: _____ | 72. Tibia: Max. Diameter at the Nutrient Foramen: _____ |
| 51. Ulna: Physiological Length: _____ | 73. Tibia: Med.-Lat. Diameter at Nutrient Foramen: _____ |
| 52. Ulna: Minimum Circumference: _____ | 74. Tibia: Circumference at the Nutrient Foramen: _____ |
| 53. Sacrum: Anterior Length: _____ | 75. Fibula: Maximum Length: _____ |
| 54. Sacrum: Anterior Superior Breadth: _____ | 76. Fibula: Maximum Diameter at Midshaft: _____ |
| 55. Sacrum: Max. Transverse Diameter of Base: _____ | 77. Calcaneus: Maximum Length: _____ |
| 56. Os Coxae: Height: _____ | 78. Calcaneus: Middle Breadth: _____ |

CRANIAL AND POSTCRANIAL MEASUREMENT RECORDING FORM: ADULT REMAINS

Site Name/Number 44 AX 183 | West | Observer _____
 Feature/Burial Number Feat. I | _____ | Date _____
 Burial/Skeleton Number FS #109 | _____ | _____
 Present Location of Collection RU Lab | _____ | _____

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Cranial Measurements

- | | |
|------------------------------------|---|
| 1. Maximum Cranial Length: _____ | 18. Interorbital Breadth: _____ |
| 2. Maximum Cranial Breadth: _____ | 19. Frontal Chord: _____ |
| 3. Bizygomatic Diameter: _____ | 20. Parietal Chord: _____ |
| 4. Basion-Bregma Height: _____ | 21. Occipital Chord: _____ |
| 5. Cranial Base Length: _____ | 22. Foramen Magnum Length: _____ |
| 6. Basion-Prosthion Length: _____ | 23. Foramen Magnum Breadth: _____ |
| 7. Maxillo-Alveolar Breadth: _____ | 24. Mastoid Length: _____ |
| 8. Maxillo-Alveolar Length: _____ | 25. Chin Height: _____ |
| 9. Biauricular Breadth: _____ | 26. Height of the Mandibular Body: _____ |
| 10. Upper Facial Height: _____ | 27. Breadth of the Mandibular Body: _____ |
| 11. Minimum Frontal Breadth: _____ | 28. Bigonial Width: _____ |
| 12. Upper Facial Breadth: _____ | 29. Bicondylar Breadth: _____ |
| 13. Nasal Height: _____ | 30. Minimum Ramus Breadth: _____ |
| 14. Nasal Breadth: _____ | 31. Maximum Ramus Breadth: _____ |
| 15. Orbital Breadth: _____ | 32. Maximum Ramus Height: _____ |
| 16. Orbital Height: _____ | 33. Mandibular Length: _____ |
| 17. Biorbital Breadth: _____ | 34. Mandibular Angle: _____ |

Series/Burial/Skeleton 44AX183, Feat 1
Observer/Date TU 2 LEV 4 FS# 109

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Postcranial Measurements

- | | |
|--|---|
| 35. Clavicle: Maximum Length: _____ | 57. Os Coxae: Iliac Breadth: _____ |
| 36. Clavicle: Ant.-Post. Diameter at Midshaft: _____ | 58. Os Coxae: Pubis Length: _____ |
| 37. Clavicle: Sup.-Inf. Diameter at Midshaft: _____ | 59. Os Coxae: Ischium Length: _____ |
| 38. Scapula: Height: _____ | 60. Femur: Maximum Length: _____ |
| 39. Scapula: Breadth: _____ | 61. Femur: Bicondylar Length: _____ |
| 40. Humerus: Maximum Length: _____ | 62. Femur: Epicondylar Breadth: _____ |
| 41. Humerus: Epicondylar Breadth: _____ | 63. Femur: Maximum Diameter of the Femur Head: _____ |
| 42. Humerus: Vertical Diameter of Head: _____ | 64. Femur: Ant.-Post. Subtrochanteric Diameter: _____ |
| 43. Humerus: Maximum Diameter at Midshaft: _____ | 65. Femur: Medial-Lateral Subtrochanteric Diameter: _____ |
| 44. Humerus: Minimum Diameter at Midshaft: _____ | 66. Femur: Anterior-Posterior Midshaft Diameter: _____ |
| 45. Radius: Maximum Length: _____ | 67. Femur: Medial-Lateral Midshaft Diameter: _____ |
| 46. Radius: Anterior-Posterior Diameter at Midshaft: _____ | 68. Femur: Midshaft Circumference: _____ |
| 47. Radius: Medial-Lateral Diameter at Midshaft: _____ | 69. Tibia: Length: _____ |
| 48. Ulna: Maximum Length: <u>224 mm</u> | 70. Tibia: Maximum Proximal Epiphyseal Breadth: _____ |
| 49. Ulna: Anterior-Posterior Diameter: <u>12 mm</u> | 71. Tibia: Maximum Distal Epiphyseal Breadth: _____ |
| 50. Ulna: Medial-Lateral Diameter: <u>14 mm</u> | 72. Tibia: Max. Diameter at the Nutrient Foramen: _____ |
| 51. Ulna: Physiological Length: _____ | 73. Tibia: Med.-Lat. Diameter at Nutrient Foramen: _____ |
| 52. Ulna: Minimum Circumference: _____ | 74. Tibia: Circumference at the Nutrient Foramen: _____ |
| 53. Sacrum: Anterior Length: _____ | 75. Fibula: Maximum Length: _____ |
| 54. Sacrum: Anterior Superior Breadth: _____ | 76. Fibula: Maximum Diameter at Midshaft: _____ |
| 55. Sacrum: Max. Transverse Diameter of Base: _____ | 77. Calcaneus: Maximum Length: _____ |
| 56. Os Coxae: Height: _____ | 78. Calcaneus: Middle Breadth: _____ |

CRANIAL AND POSTCRANIAL MEASUREMENT RECORDING FORM: ADULT REMAINS

Site Name/Number 44 AX 183 1 West Observer _____

Feature/Burial Number Foot 7 1 Date _____

Burial/Skeleton Number FS # 127 1

Present Location of Collection RU Lab

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Cranial Measurements

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Maximum Cranial Length: _____ 2. Maximum Cranial Breadth: _____ 3. Bizygomatic Diameter: _____ 4. Basion-Bregma Height: _____ 5. Cranial Base Length: _____ 6. Basion-Prosthion Length: _____ 7. Maxillo-Alveolar Breadth: _____ 8. Maxillo-Alveolar Length: _____ 9. Biauricular Breadth: _____ 10. Upper Facial Height: _____ 11. Minimum Frontal Breadth: _____ 12. Upper Facial Breadth: _____ 13. Nasal Height: _____ 14. Nasal Breadth: _____ 15. Orbital Breadth: _____ 16. Orbital Height: _____ 17. Biorbital Breadth: _____ | <ol style="list-style-type: none"> 18. Interorbital Breadth: _____ 19. Frontal Chord: _____ 20. Parietal Chord: _____ 21. Occipital Chord: _____ 22. Foramen Magnum Length: _____ 23. Foramen Magnum Breadth: _____ 24. Mastoid Length: _____ 25. Chin Height: _____ 26. Height of the Mandibular Body: _____ 27. Breadth of the Mandibular Body: _____ 28. Bigonial Width: _____ 29. Bicondylar Breadth: _____ 30. Minimum Ramus Breadth: _____ 31. Maximum Ramus Breadth: _____ 32. Maximum Ramus Height: _____ 33. Mandibular Length: _____ 34. Mandibular Angle: _____ |
|--|---|



Series/Burial/Skeleton 44AX183, Feat 2
Observer/Date TU 2 LEV 4 FS #127

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Postcranial Measurements

- 35. Clavicle: Maximum Length: 92 mm
- 36. Clavicle: Ant-Post. Diameter at Midshaft: _____
- 37. Clavicle: Sup.-Inf. Diameter at Midshaft: _____
- 38. Scapula: Height: _____
- 39. Scapula: Breadth: _____
- 40. Humerus: Maximum Length: _____
- 41. Humerus: Epicondylar Breadth: _____
- 42. Humerus: Vertical Diameter of Head: _____
- 43. Humerus: Maximum Diameter at Midshaft: _____
- 44. Humerus: Minimum Diameter at Midshaft: _____
- 45. Radius: Maximum Length: _____
- 46. Radius: Anterior-Posterior Diameter at Midshaft: _____
- 47. Radius: Medial-Lateral Diameter at Midshaft: _____
- 48. Ulna: Maximum Length: _____
- 49. Ulna: Anterior-Posterior Diameter: _____
- 50. Ulna: Medial-Lateral Diameter: _____
- 51. Ulna: Physiological Length: _____
- 52. Ulna: Minimum Circumference: _____
- 53. Sacrum: Anterior Length: _____
- 54. Sacrum: Anterior Superior Breadth: _____
- 55. Sacrum: Max. Transverse Diameter of Base: _____
- 56. Os Coxae: Height: _____
- 57. Os Coxae: Iliac Breadth: _____
- 58. Os Coxae: Pubis Length: _____
- 59. Os Coxae: Ischium Length: _____
- 60. Femur: Maximum Length: _____
- 61. Femur: Bicondylar Length: _____
- 62. Femur: Epicondylar Breadth: _____
- 63. Femur: Maximum Diameter of the Femur Head: _____
- 64. Femur: Ant.-Post. Subtrochanteric Diameter: _____
- 65. Femur: Medial-Lateral Subtrochanteric Diameter: _____
- 66. Femur: Anterior-Posterior Midshaft Diameter: _____
- 67. Femur: Medial-Lateral Midshaft Diameter: _____
- 68. Femur: Midshaft Circumference: _____
- 69. Tibia: Length: _____
- 70. Tibia: Maximum Proximal Epiphyseal Breadth: _____
- 71. Tibia: Maximum Distal Epiphyseal Breadth: _____
- 72. Tibia: Max. Diameter at the Nutrient Foramen: _____
- 73. Tibia: Med.-Lat. Diameter at Nutrient Foramen: _____
- 74. Tibia: Circumference at the Nutrient Foramen: _____
- 75. Fibula: Maximum Length: _____
- 76. Fibula: Maximum Diameter at Midshaft: _____
- 77. Calcaneus: Maximum Length: _____
- 78. Calcaneus: Middle Breadth: _____

CRANIAL AND POSTCRANIAL MEASUREMENT RECORDING FORM: ADULT REMAINS

Site Name/Number 44AX 183 / West Observer _____

Feature/Burial Number Feat 7 / _____ Date _____

Burial/Skeleton Number FS # 141 / _____

Present Location of Collection RU Lab / _____

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Cranial Measurements

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Maximum Cranial Length: _____ 2. Maximum Cranial Breadth: _____ 3. Bizygomatic Diameter: _____ 4. Basion-Bregma Height: _____ 5. Cranial Base Length: _____ 6. Basion-Prosthion Length: _____ 7. Maxillo-Alveolar Breadth: _____ 8. Maxillo-Alveolar Length: _____ Biauricular Breadth: _____ J. Upper Facial Height: _____ 11. Minimum Frontal Breadth: _____ 12. Upper Facial Breadth: _____ 13. Nasal Height: _____ 14. Nasal Breadth: _____ 15. Orbital Breadth: _____ 16. Orbital Height: _____ 17. Biorbital Breadth: _____ | <ol style="list-style-type: none"> 18. Interorbital Breadth: _____ 19. Frontal Chord: _____ 20. Parietal Chord: _____ 21. Occipital Chord: _____ 22. Foramen Magnum Length: _____ 23. Foramen Magnum Breadth: _____ 24. Mastoid Length: _____ 25. Chin Height: _____ 26. Height of the Mandibular Body: _____ 27. Breadth of the Mandibular Body: _____ 28. Bigonial Width: _____ 29. Bicondylar Breadth: _____ 30. Minimum Ramus Breadth: _____ 31. Maximum Ramus Breadth: _____ 32. Maximum Ramus Height: _____ 33. Mandibular Length: _____ 34. Mandibular Angle: _____ |
|--|---|



Series/Burial/Skeleton 44AX183, Feat 1
Observer/Date TU 3, LEV 4, FS#141

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Postcranial Measurements

- | | |
|--|---|
| 35. Clavicle: Maximum Length: _____ | 57. Os Coxae: Iliac Breadth: _____ |
| 36. Clavicle: Ant.-Post. Diameter at Midshaft: _____ | 58. Os Coxae: Pubis Length: _____ |
| 37. Clavicle: Sup.-Inf. Diameter at Midshaft: _____ | 59. Os Coxae: Ischium Length: _____ |
| 38. Scapula: Height: _____ | 60. Femur: Maximum Length: _____ |
| 39. Scapula: Breadth: _____ | 61. Femur: Bicondylar Length: _____ |
| 40. Humerus: Maximum Length: _____ | 62. Femur: Epicondylar Breadth: _____ |
| 41. Humerus: Epicondylar Breadth: _____ | 63. Femur: Maximum Diameter of the Femur Head: _____ |
| 42. Humerus: Vertical Diameter of Head: _____ | 64. Femur: Ant.-Post. Subtrochanteric Diameter: _____ |
| 43. Humerus: Maximum Diameter at Midshaft: _____ | 65. Femur: Medial-Lateral Subtrochanteric Diameter: _____ |
| 44. Humerus: Minimum Diameter at Midshaft: _____ | 66. Femur: Anterior-Posterior Midshaft Diameter: _____ |
| 45. Radius: Maximum Length: _____ | 67. Femur: Medial-Lateral Midshaft Diameter: _____ |
| 46. Radius: Anterior-Posterior Diameter at Midshaft: _____ | 68. Femur: Midshaft Circumference: _____ |
| 47. Radius: Medial-Lateral Diameter at Midshaft: _____ | 69. Tibia: Length: _____ |
| 48. Ulna: Maximum Length: _____ | 70. Tibia: Maximum Proximal Epiphyseal Breadth: _____ |
| 49. Ulna: Anterior-Posterior Diameter: _____ | 71. Tibia: Maximum Distal Epiphyseal Breadth: _____ |
| 50. Ulna: Medial-Lateral Diameter: _____ | 72. Tibia: Max. Diameter at the Nutrient Foramen: _____ |
| 51. Ulna: Physiological Length: _____ | 73. Tibia: Med.-Lat. Diameter at Nutrient Foramen: _____ |
| 52. Ulna: Minimum Circumference: _____ | 74. Tibia: Circumference at the Nutrient Foramen: _____ |
| 53. Sacrum: Anterior Length: _____ | 75. Fibula: Maximum Length: _____ |
| 54. Sacrum: Anterior Superior Breadth: _____ | 76. Fibula: Maximum Diameter at Midshaft: _____ |
| 55. Sacrum: Max. Transverse Diameter of Base: _____ | 77. Calcaneus: Maximum Length: <u>72 mm</u> |
| 56. Os Coxae: Height: _____ | 78. Calcaneus: Middle Breadth: <u>36 mm</u> |

CRANIAL AND POSTCRANIAL MEASUREMENT RECORDING FORM: ADULT REMAINS

Site Name/Number 44 AX 183 / West Observer _____

Feature/Burial Number Feat 7 / _____ Date _____

Burial/Skeleton Number P5 #150 / _____

Present Location of Collection RU Lab / _____

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterick**

Cranial Measurements

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Maximum Cranial Length: _____ 2. Maximum Cranial Breadth: _____ 3. Bizygomatic Diameter: _____ 4. Basion-Bregma Height: _____ 5. Cranial Base Length: _____ 6. Basion-Prosthion Length: _____ 7. Maxillo-Alveolar Breadth: _____
 Maxillo-Alveolar Length: _____
 Biauricular Breadth: _____ 10. Upper Facial Height: _____ 11. Minimum Frontal Breadth: _____ 12. Upper Facial Breadth: _____ 13. Nasal Height: _____ 14. Nasal Breadth: _____ 15. Orbital Breadth: _____ 16. Orbital Height: _____ 17. Biorbital Breadth: _____ | <ol style="list-style-type: none"> 18. Interorbital Breadth: _____ 19. Frontal Chord: _____ 20. Parietal Chord: _____ 21. Occipital Chord: _____ 22. Foramen Magnum Length: _____ 23. Foramen Magnum Breadth: _____ 24. Mastoid Length: _____ 25. Chin Height: _____ 26. Height of the Mandibular Body: _____ 27. Breadth of the Mandibular Body: _____ 28. Bigonial Width: _____ 29. Bicondylar Breadth: _____ 30. Minimum Ramus Breadth: _____ 31. Maximum Ramus Breadth: _____ 32. Maximum Ramus Height: _____ 33. Mandibular Length: _____ 34. Mandibular Angle: _____ |
|--|---|

Series/Burial/Skeleton 44A183, Feet 1
Observer/Date TU 3 LEV 4 FS#150

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Postcranial Measurements

- | | |
|--|---|
| 35. Clavicle: Maximum Length: _____ | 57. Os Coxae: Iliac Breadth: _____ |
| 36. Clavicle: Ant.-Post. Diameter at Midshaft: _____ | 58. Os Coxae: Pubis Length: _____ |
| 37. Clavicle: Sup.-Inf. Diameter at Midshaft: _____ | 59. Os Coxae: Ischium Length: _____ |
| 38. Scapula: Height: _____ | 60. Femur: Maximum Length: _____ |
| 39. Scapula: Breadth: _____ | 61. Femur: Bicondylar Length: _____ |
| 40. Humerus: Maximum Length: _____ | 62. Femur: Epicondylar Breadth: _____ |
| 41. Humerus: Epicondylar Breadth: _____ | 63. Femur: Maximum Diameter of the Femur Head: _____ |
| 42. Humerus: Vertical Diameter of Head: _____ | 64. Femur: Ant.-Post. Subtrochanteric Diameter: _____ |
| 43. Humerus: Maximum Diameter at Midshaft: _____ | 65. Femur: Medial-Lateral Subtrochanteric Diameter: _____ |
| 44. Humerus: Minimum Diameter at Midshaft: _____ | 66. Femur: Anterior-Posterior Midshaft Diameter: _____ |
| 45. Radius: Maximum Length: _____ | 67. Femur: Medial-Lateral Midshaft Diameter: _____ |
| 46. Radius: Anterior-Posterior Diameter at Midshaft: _____ | 68. Femur: Midshaft Circumference: _____ |
| 47. Radius: Medial-Lateral Diameter at Midshaft: _____ | 69. Tibia: Length: _____ |
| 48. Ulna: Maximum Length: _____ | 70. Tibia: Maximum Proximal Epiphyseal Breadth: _____ |
| 49. Ulna: Anterior-Posterior Diameter: _____ | 71. Tibia: Maximum Distal Epiphyseal Breadth: _____ |
| 50. Ulna: Medial-Lateral Diameter: _____ | 72. Tibia: Max. Diameter at the Nutrient Foramen: _____ |
| 51. Ulna: Physiological Length: _____ | 73. Tibia: Med.-Lat. Diameter at Nutrient Foramen: _____ |
| 52. Ulna: Minimum Circumference: _____ | 74. Tibia: Circumference at the Nutrient Foramen: _____ |
| 53. Sacrum: Anterior Length: _____ | 75. Fibula: Maximum Length: _____ |
| 54. Sacrum: Anterior Superior Breadth: _____ | 76. Fibula: Maximum Diameter at Midshaft: _____ |
| 55. Sacrum: Max. Transverse Diameter of Base: _____ | 77. Calcaneus: Maximum Length: _____ |
| 56. Os Coxae: Height: _____ | 78. Calcaneus: Middle Breadth: _____ |
| | 79. Talus: maximum length <u>48 mm</u> |
| | 80. Talus: maximum width <u>38 mm</u> |

Steele (1976) discriminant function for sex

$$(\text{Max. L})(0.42002) + (\text{Max. W})(0.41096)$$

$$(48)(0.42002) + (38)(0.41096) = 35.78$$

$$\text{sectioning pt} = 38.75$$

female

CRANIAL AND POSTCRANIAL MEASUREMENT RECORDING FORM: ADULT REMAINS

Site Name/Number N4AX 183 1 West Observer _____
 Feature/Burial Number Feast I 1 Date _____
 Burial/Skeleton Number FS # 166 1
 Present Location of Collection RU Lab

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Cranial Measurements

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Maximum Cranial Length: _____ 2. Maximum Cranial Breadth: _____ 3. Bizygomatic Diameter: _____ 4. Basion-Bregma Height: _____ 5. Cranial Base Length: _____ 6. Basion-Prosthion Length: _____ 7. Maxillo-Alveolar Breadth: _____ 8. Maxillo-Alveolar Length: _____ <li style="padding-left: 20px;">Biauricular Breadth: _____ <li style="padding-left: 20px;">Upper Facial Height: _____ 11. Minimum Frontal Breadth: _____ 12. Upper Facial Breadth: _____ 13. Nasal Height: _____ 14. Nasal Breadth: _____ 15. Orbital Breadth: _____ 16. Orbital Height: _____ 17. Biorbital Breadth: _____ | <ol style="list-style-type: none"> 18. Interorbital Breadth: _____ 19. Frontal Chord: _____ 20. Parietal Chord: _____ 21. Occipital Chord: _____ 22. Foramen Magnum Length: _____ 23. Foramen Magnum Breadth: _____ 24. Mastoid Length: _____ 25. Chin Height: _____ 26. Height of the Mandibular Body: _____ 27. Breadth of the Mandibular Body: _____ 28. Bigonial Width: _____ 29. Bicondylar Breadth: _____ 30. Minimum Ramus Breadth: _____ 31. Maximum Ramus Breadth: _____ 32. Maximum Ramus Height: _____ 33. Mandibular Length: _____ 34. Mandibular Angle: _____ |
|---|---|

Series/Burial/Skeleton 44AX183 Feat 7
Observer/Date TU2 LEV4 FS#166

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Postcranial Measurements

- | | |
|---|---|
| 35. Clavicle: Maximum Length: _____ | 57. Os Coxae: Iliac Breadth: _____ |
| 36. Clavicle: Ant.-Post. Diameter at Midshaft: _____ | 58. Os Coxae: Pubis Length: _____ |
| 37. Clavicle: Sup.-Inf. Diameter at Midshaft: _____ | 59. Os Coxae: Ischium Length: _____ |
| 38. Scapula: Height: _____ | 60. Femur: Maximum Length: _____ |
| 39. Scapula: Breadth: _____ | 61. Femur: Bicondylar Length: _____ |
| 40. Humerus: Maximum Length: _____ | 62. Femur: Epicondylar Breadth: _____ |
| 41. Humerus: Epicondylar Breadth: _____ | 63. Femur: Maximum Diameter of the Femur Head: _____ |
| 42. Humerus: Vertical Diameter of Head: _____ | 64. Femur: Ant.-Post. Subtrochanteric Diameter: _____ |
| 43. Humerus: Maximum Diameter at Midshaft: _____ | 65. Femur: Medial-Lateral Subtrochanteric Diameter: _____ |
| 44. Humerus: Minimum Diameter at Midshaft: _____ | 66. Femur: Anterior-Posterior Midshaft Diameter: _____ |
| 45. Radius: Maximum Length: <u>208 mm</u> | 67. Femur: Medial-Lateral Midshaft Diameter: _____ |
| 46. Radius: Anterior-Posterior Diameter at Midshaft: <u>10 mm</u> | 68. Femur: Midshaft Circumference: _____ |
| 47. Radius: Medial-Lateral Diameter at Midshaft: <u>14 mm</u> | 69. Tibia: Length: _____ |
| 48. Ulna: Maximum Length: _____ | 70. Tibia: Maximum Proximal Epiphyseal Breadth: _____ |
| 49. Ulna: Anterior-Posterior Diameter: _____ | 71. Tibia: Maximum Distal Epiphyseal Breadth: _____ |
| 50. Ulna: Medial-Lateral Diameter: _____ | 72. Tibia: Max. Diameter at the Nutrient Foramen: _____ |
| 51. Ulna: Physiological Length: _____ | 73. Tibia: Med.-Lat. Diameter at Nutrient Foramen: _____ |
| 52. Ulna: Minimum Circumference: _____ | 74. Tibia: Circumference at the Nutrient Foramen: _____ |
| 53. Sacrum: Anterior Length: _____ | 75. Fibula: Maximum Length: _____ |
| 54. Sacrum: Anterior Superior Breadth: _____ | 76. Fibula: Maximum Diameter at Midshaft: _____ |
| 55. Sacrum: Max. Transverse Diameter of Base: _____ | 77. Calcaneus: Maximum Length: _____ |
| 56. Os Coxae: Height: _____ | 78. Calcaneus: Middle Breadth: _____ |

CRANIAL AND POSTCRANIAL MEASUREMENT RECORDING FORM: ADULT REMAINS

Site Name/Number 44 AX 183 1 West Observer _____
 Feature/Burial Number Feat 7 Date _____
 Burial/Skeleton Number FS # 168
 Present Location of Collection RU Lab

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterick**

Cranial Measurements

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Maximum Cranial Length: _____ 2. Maximum Cranial Breadth: _____ 3. Bizygomatic Diameter: _____ 4. Basion-Bregma Height: _____ 5. Cranial Base Length: _____ 6. Basion-Prosthion Length: _____ 7. Maxillo-Alveolar Breadth: _____ 8. Maxillo-Alveolar Length: _____ <li style="padding-left: 20px;">Biauricular Breadth: _____ <li style="padding-left: 20px;">Upper Facial Height: _____ 11. Minimum Frontal Breadth: _____ 12. Upper Facial Breadth: _____ 13. Nasal Height: _____ 14. Nasal Breadth: _____ 15. Orbital Breadth: _____ 16. Orbital Height: _____ 17. Biorbital Breadth: _____ | <ol style="list-style-type: none"> 18. Interorbital Breadth: _____ 19. Frontal Chord: _____ 20. Parietal Chord: _____ 21. Occipital Chord: _____ 22. Foramen Magnum Length: _____ 23. Foramen Magnum Breadth: _____ 24. Mastoid Length: _____ 25. Chin Height: _____ 26. Height of the Mandibular Body: _____ 27. Breadth of the Mandibular Body: _____ 28. Bigonial Width: _____ 29. Bicondylar Breadth: _____ 30. Minimum Ramus Breadth: _____ 31. Maximum Ramus Breadth: _____ 32. Maximum Ramus Height: _____ 33. Mandibular Length: _____ 34. Mandibular Angle: _____ |
|---|---|

Series/Burial/Skeleton 44AX 183 Feat I
Observer/Date TU 2 LEV 4 FS#168

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk***

Postcranial Measurements

- | | |
|--|---|
| 35. Clavicle: Maximum Length: _____ | 57. Os Coxae: Iliac Breadth: _____ |
| 36. Clavicle: Ant.-Post. Diameter at Midshaft: _____ | 58. Os Coxae: Pubis Length: _____ |
| 37. Clavicle: Sup.-Inf. Diameter at Midshaft: _____ | 59. Os Coxae: Ischium Length: _____ |
| 38. Scapula: Height: _____ | 60. Femur: Maximum Length: <u>341 mm</u> |
| 39. Scapula: Breadth: _____ | 61. Femur: Bicondylar Length: _____ |
| 40. Humerus: Maximum Length: _____ | 62. Femur: Epicondylar Breadth: _____ |
| 41. Humerus: Epicondylar Breadth: _____ | 63. Femur: Maximum Diameter of the Femur Head: <u>38 mm</u> |
| 42. Humerus: Vertical Diameter of Head: _____ | 64. Femur: Ant.-Post. Subtrochanteric Diameter: _____ |
| 43. Humerus: Maximum Diameter at Midshaft: _____ | 65. Femur: Medial-Lateral Subtrochanteric Diameter: _____ |
| 44. Humerus: Minimum Diameter at Midshaft: _____ | 66. Femur: Anterior-Posterior Midshaft Diameter: _____ |
| 45. Radius: Maximum Length: _____ | 67. Femur: Medial-Lateral Midshaft Diameter: _____ |
| 46. Radius: Anterior-Posterior Diameter at Midshaft: _____ | 68. Femur: Midshaft Circumference: <u>77 mm</u> |
| 47. Radius: Medial-Lateral Diameter at Midshaft: _____ | 69. Tibia: Length: _____ |
| 48. Ulna: Maximum Length: _____ | 70. Tibia: Maximum Proximal Epiphyseal Breadth: _____ |
| 49. Ulna: Anterior-Posterior Diameter: _____ | 71. Tibia: Maximum Distal Epiphyseal Breadth: _____ |
| 50. Ulna: Medial-Lateral Diameter: _____ | 72. Tibia: Max. Diameter at the Nutrient Foramen: _____ |
| 51. Ulna: Physiological Length: _____ | 73. Tibia: Med.-Lat. Diameter at Nutrient Foramen: _____ |
| 52. Ulna: Minimum Circumference: _____ | 74. Tibia: Circumference at the Nutrient Foramen: _____ |
| 53. Sacrum: Anterior Length: _____ | 75. Fibula: Maximum Length: _____ |
| 54. Sacrum: Anterior Superior Breadth: _____ | 76. Fibula: Maximum Diameter at Midshaft: _____ |
| 55. Sacrum: Max. Transverse Diameter of Base: _____ | 77. Calcaneus: Maximum Length: _____ |
| 56. Os Coxae: Height: _____ | 78. Calcaneus: Middle Breadth: _____ |

CRANIAL AND POSTCRANIAL MEASUREMENT RECORDING FORM: ADULT REMAINS

Site Name/Number 44AX 183 1 West Observer _____
 Feature/Burial Number Feat. J 1 Date _____
 Burial/Skeleton Number Fs # 169 1
 Present Location of Collection RU Lab

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Cranial Measurements

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Maximum Cranial Length: _____ 2. Maximum Cranial Breadth: _____ 3. Bizygomatic Diameter: _____ 4. Basion-Bregma Height: _____ 5. Cranial Base Length: _____ 6. Basion-Prosthion Length: _____ 7. Maxillo-Alveolar Breadth: _____ 8. Maxillo-Alveolar Length: _____ <li style="padding-left: 20px;">Biauricular Breadth: _____ <li style="padding-left: 20px;">Upper Facial Height: _____ 11. Minimum Frontal Breadth: _____ 12. Upper Facial Breadth: _____ 13. Nasal Height: _____ 14. Nasal Breadth: _____ 15. Orbital Breadth: _____ 16. Orbital Height: _____ 17. Biorbital Breadth: _____ | <ol style="list-style-type: none"> 18. Interorbital Breadth: _____ 19. Frontal Chord: _____ 20. Parietal Chord: _____ 21. Occipital Chord: _____ 22. Foramen Magnum Length: _____ 23. Foramen Magnum Breadth: _____ 24. Mastoid Length: _____ 25. Chin Height: _____ 26. Height of the Mandibular Body: _____ 27. Breadth of the Mandibular Body: _____ 28. Bigonial Width: _____ 29. Bicondylar Breadth: _____ 30. Minimum Ramus Breadth: _____ 31. Maximum Ramus Breadth: _____ 32. Maximum Ramus Height: _____ 33. Mandibular Length: _____ 34. Mandibular Angle: _____ |
|---|---|

Series/Burial/Skeleton 44AX183 Feet I
Observer/Date TU 2 LEV 4 Ps# 169

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Postcranial Measurements

- | | |
|--|---|
| 35. Clavicle: Maximum Length: _____ | 57. Os Coxae: Iliac Breadth: _____ |
| 36. Clavicle: Ant.-Post. Diameter at Midshaft: _____ | 58. Os Coxae: Pubis Length: _____ |
| 37. Clavicle: Sup.-Inf. Diameter at Midshaft: _____ | 59. Os Coxae: Ischium Length: _____ |
| 38. Scapula: Height: _____ | 60. Femur: Maximum Length: _____ |
| 39. Scapula: Breadth: _____ | 61. Femur: Bicondylar Length: _____ |
| 40. Humerus: Maximum Length: _____ | 62. Femur: Epicondylar Breadth: _____ |
| 41. Humerus: Epicondylar Breadth: _____ | 63. Femur: Maximum Diameter of the Femur Head: <u>38 mm</u> |
| 42. Humerus: Vertical Diameter of Head: _____ | 64. Femur: Ant.-Post. Subtrochanteric Diameter: _____ |
| 43. Humerus: Maximum Diameter at Midshaft: _____ | 65. Femur: Medial-Lateral Subtrochanteric Diameter: _____ |
| 44. Humerus: Minimum Diameter at Midshaft: _____ | 66. Femur: Anterior-Posterior Midshaft Diameter: _____ |
| 45. Radius: Maximum Length: _____ | 67. Femur: Medial-Lateral Midshaft Diameter: _____ |
| 46. Radius: Anterior-Posterior Diameter at Midshaft: _____ | 68. Femur: Midshaft Circumference: <u>77 mm</u> |
| 47. Radius: Medial-Lateral Diameter at Midshaft: _____ | 69. Tibia: Length: _____ |
| 48. Ulna: Maximum Length: _____ | 70. Tibia: Maximum Proximal Epiphyseal Breadth: _____ |
| 49. Ulna: Anterior-Posterior Diameter: _____ | 71. Tibia: Maximum Distal Epiphyseal Breadth: _____ |
| 50. Ulna: Medial-Lateral Diameter: _____ | 72. Tibia: Max. Diameter at the Nutrient Foramen: _____ |
| 51. Ulna: Physiological Length: _____ | 73. Tibia: Med.-Lat. Diameter at Nutrient Foramen: _____ |
| 52. Ulna: Minimum Circumference: _____ | 74. Tibia: Circumference at the Nutrient Foramen: _____ |
| 53. Sacrum: Anterior Length: _____ | 75. Fibula: Maximum Length: _____ |
| 54. Sacrum: Anterior Superior Breadth: _____ | 76. Fibula: Maximum Diameter at Midshaft: _____ |
| 55. Sacrum: Max. Transverse Diameter of Base: _____ | 77. Calcaneus: Maximum Length: _____ |
| 56. Os Coxae: Height: _____ | 78. Calcaneus: Middle Breadth: _____ |

CRANIAL AND POSTCRANIAL MEASUREMENT RECORDING FORM: ADULT REMAINS

Site Name/Number 44 AX 183 / West Observer _____
 Feature/Burial Number Feat. 7 / _____ Date _____
 Burial/Skeleton Number PS # 177 / _____
 Present Location of Collection RU Lab

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Cranial Measurements

- | | |
|------------------------------------|---|
| 1. Maximum Cranial Length: _____ | 18. Interorbital Breadth: _____ |
| 2. Maximum Cranial Breadth: _____ | 19. Frontal Chord: _____ |
| 3. Bizygomatic Diameter: _____ | 20. Parietal Chord: _____ |
| 4. Basion-Bregma Height: _____ | 21. Occipital Chord: _____ |
| 5. Cranial Base Length: _____ | 22. Foramen Magnum Length: _____ |
| 6. Basion-Prosthion Length: _____ | 23. Foramen Magnum Breadth: _____ |
| 7. Maxillo-Alveolar Breadth: _____ | 24. Mastoid Length: _____ |
| 8. Maxillo-Alveolar Length: _____ | 25. Chin Height: _____ |
| Biauricular Breadth: _____ | 26. Height of the Mandibular Body: _____ |
| Upper Facial Height: _____ | 27. Breadth of the Mandibular Body: _____ |
| 11. Minimum Frontal Breadth: _____ | 28. Bigonial Width: _____ |
| 12. Upper Facial Breadth: _____ | 29. Bicondylar Breadth: _____ |
| 13. Nasal Height: _____ | 30. Minimum Ramus Breadth: _____ |
| 14. Nasal Breadth: _____ | 31. Maximum Ramus Breadth: _____ |
| 15. Orbital Breadth: _____ | 32. Maximum Ramus Height: _____ |
| 16. Orbital Height: _____ | 33. Mandibular Length: _____ |
| 17. Biorbital Breadth: _____ | 34. Mandibular Angle: _____ |

Series/Burial/Skeleton 44 AX 183, Feat 1

Observer/Date TUA LEV4 FS# 177

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Postcranial Measurements

- | | |
|---|---|
| 35. Clavicle: Maximum Length: _____ | 57. Os Coxae: Iliac Breadth: _____ |
| 36. Clavicle: Ant.-Post. Diameter at Midshaft: _____ | 58. Os Coxae: Pubis Length: _____ |
| 37. Clavicle: Sup.-Inf. Diameter at Midshaft: _____ | 59. Os Coxae: Ischium Length: _____ |
| 38. Scapula: Height: _____ | 60. Femur: Maximum Length: _____ |
| 39. Scapula: Breadth: _____ | 61. Femur: Bicondylar Length: _____ |
| 40. Humerus: Maximum Length: _____ | 62. Femur: Epicondylar Breadth: _____ |
| 41. Humerus: Epicondylar Breadth: _____ | 63. Femur: Maximum Diameter of the Femur Head: _____ |
| 42. Humerus: Vertical Diameter of Head: _____ | 64. Femur: Ant.-Post. Subtrochanteric Diameter: _____ |
| 43. Humerus: Maximum Diameter at Midshaft: _____ | 65. Femur: Medial-Lateral Subtrochanteric Diameter: _____ |
| 44. Humerus: Minimum Diameter at Midshaft: _____ | 66. Femur: Anterior-Posterior Midshaft Diameter: _____ |
| 45. Radius: Maximum Length: <u>208 mm</u> | 67. Femur: Medial-Lateral Midshaft Diameter: _____ |
| 46. Radius: Anterior-Posterior Diameter at Midshaft: <u>11 mm</u> | 68. Femur: Midshaft Circumference: _____ |
| 47. Radius: Medial-Lateral Diameter at Midshaft: <u>14 mm</u> | 69. Tibia: Length: _____ |
| 48. Ulna: Maximum Length: _____ | 70. Tibia: Maximum Proximal Epiphyseal Breadth: _____ |
| 49. Ulna: Anterior-Posterior Diameter: _____ | 71. Tibia: Maximum Distal Epiphyseal Breadth: _____ |
| 50. Ulna: Medial-Lateral Diameter: _____ | 72. Tibia: Max. Diameter at the Nutrient Foramen: _____ |
| 51. Ulna: Physiological Length: _____ | 73. Tibia: Med.-Lat. Diameter at Nutrient Foramen: _____ |
| 52. Ulna: Minimum Circumference: _____ | 74. Tibia: Circumference at the Nutrient Foramen: _____ |
| 53. Sacrum: Anterior Length: _____ | 75. Fibula: Maximum Length: _____ |
| 54. Sacrum: Anterior Superior Breadth: _____ | 76. Fibula: Maximum Diameter at Midshaft: _____ |
| 55. Sacrum: Max. Transverse Diameter of Base: _____ | 77. Calcaneus: Maximum Length: _____ |
| 56. Os Coxae: Height: _____ | 78. Calcaneus: Middle Breadth: _____ |

CRANIAL AND POSTCRANIAL MEASUREMENT RECORDING FORM: ADULT REMAINS

Site Name/Number 44 AX 183 / West Observer _____
 Feature/Burial Number Feat 1 / _____ Date _____
 Burial/Skeleton Number FS # 222 / _____
 Present Location of Collection RU Lab / _____

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Cranial Measurements

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Maximum Cranial Length: _____ 2. Maximum Cranial Breadth: _____ 3. Bizygomatic Diameter: _____ 4. Basion-Bregma Height: _____ 5. Cranial Base Length: _____ 6. Basion-Prosthion Length: _____ 7. Maxillo-Alveolar Breadth: _____ 8. Maxillo-Alveolar Length: _____ 9. Biauricular Breadth: _____ 10. Upper Facial Height: _____ 11. Minimum Frontal Breadth: _____ 12. Upper Facial Breadth: _____ 13. Nasal Height: _____ 14. Nasal Breadth: _____ 15. Orbital Breadth: _____ 16. Orbital Height: _____ 17. Biorbital Breadth: _____ | <ol style="list-style-type: none"> 18. Interorbital Breadth: _____ 19. Frontal Chord: _____ 20. Parietal Chord: _____ 21. Occipital Chord: _____ 22. Foramen Magnum Length: _____ 23. Foramen Magnum Breadth: _____ 24. Mastoid Length: _____ 25. Chin Height: _____ 26. Height of the Mandibular Body: _____ 27. Breadth of the Mandibular Body: _____ 28. Bigonial Width: _____ 29. Bicondylar Breadth: _____ 30. Minimum Ramus Breadth: _____ 31. Maximum Ramus Breadth: _____ 32. Maximum Ramus Height: _____ 33. Mandibular Length: _____ 34. Mandibular Angle: _____ |
|--|---|

Series/Burial/Skeleton 44 AX 183, Feat. 7
Observer/Date TU 3 LEV 5 FS# 222

Record all measurements to the nearest millimeter; in the case of bilateral measurements, take measurement on the left side. If right side is substituted, place an (R) next to the measurement. If bones are fragmented, measurements should not be taken, but dimensions should be estimated for minor erosion or reconstruction; identify these with an asterisk**

Postcranial Measurements

- | | |
|--|---|
| 35. Clavicle: Maximum Length: _____ | 57. Os Coxae: Iliac Breadth: _____ |
| 36. Clavicle: Ant.-Post. Diameter at Midshaft: _____ | 58. Os Coxae: Pubis Length: _____ |
| 37. Clavicle: Sup.-Inf. Diameter at Midshaft: _____ | 59. Os Coxae: Ischium Length: _____ |
| 38. Scapula: Height: _____ | 60. Femur: Maximum Length: _____ |
| 39. Scapula: Breadth: _____ | 61. Femur: Bicondylar Length: _____ |
| 40. Humerus: Maximum Length: _____ | 62. Femur: Epicondylar Breadth: _____ |
| 41. Humerus: Epicondylar Breadth: _____ | 63. Femur: Maximum Diameter of the Femur Head: _____ |
| 42. Humerus: Vertical Diameter of Head: _____ | 64. Femur: Ant.-Post. Subtrochanteric Diameter: _____ |
| 43. Humerus: Maximum Diameter at Midshaft: _____ | 65. Femur: Medial-Lateral Subtrochanteric Diameter: _____ |
| 44. Humerus: Minimum Diameter at Midshaft: _____ | 66. Femur: Anterior-Posterior Midshaft Diameter: _____ |
| 45. Radius: Maximum Length: _____ | 67. Femur: Medial-Lateral Midshaft Diameter: _____ |
| 46. Radius: Anterior-Posterior Diameter at Midshaft: _____ | 68. Femur: Midshaft Circumference: _____ |
| 47. Radius: Medial-Lateral Diameter at Midshaft: _____ | 69. Tibia: Length: _____ |
| 48. Ulna: Maximum Length: _____ | 70. Tibia: Maximum Proximal Epiphyseal Breadth: _____ |
| 49. Ulna: Anterior-Posterior Diameter: _____ | 71. Tibia: Maximum Distal Epiphyseal Breadth: _____ |
| 50. Ulna: Medial-Lateral Diameter: _____ | 72. Tibia: Max. Diameter at the Nutrient Foramen: _____ |
| 51. Ulna: Physiological Length: _____ | 73. Tibia: Med.-Lat. Diameter at Nutrient Foramen: _____ |
| 52. Ulna: Minimum Circumference: _____ | 74. Tibia: Circumference at the Nutrient Foramen: _____ |
| 53. Sacrum: Anterior Length: _____ | 75. Fibula: Maximum Length: _____ |
| 54. Sacrum: Anterior Superior Breadth: _____ | 76. Fibula: Maximum Diameter at Midshaft: _____ |
| 55. Sacrum: Max. Transverse Diameter of Base: _____ | 77. Calcaneus: Maximum Length: _____ |
| 56. Os Coxae: Height: _____ | 78. Calcaneus: Middle Breadth: _____ |
| | 79. Talus: Maximum length <u>55 mm</u> |
| | 80. Talus: Maximum width <u>36.5 mm</u> |

Steele (1976) discriminant function for sex
 $(\text{Max. L})(0.42002) + (\text{Max. W})(0.41096)$
 $(55)(0.42002) + (36.5)(0.41096) = 38.10114$
sectioning pt. = 38.75

44AX183 Bone Inventory
 Test Unit 3--Burial Vault

Appendix A: 44AX183 SKELETAL INVENTORY

CONTEXT	LEVEL	BONE	SIDE	SEGMENT	RESERV.	COUNT	AGE	SEX
FS 40	2	humerus	R	all	1	1	Adult	M?
FS 41	2	rib	R	shaft	2	1	Adult	?
FS 42	2	temporal	L	mastoid	2	1	Adult	?
FS 43	2	innominate	R	all	2	1	Adult	M?
FS 43	2	rib	R	shaft	2	1	Adult	?
FS 65	3	humerus	R	all	1	1	Adult	M?
FS 65	3	temporal	?	squamosal	3	1	Adult	?
FS 65	3	temporal	L	petrous	2	1	Adult	?
FS 65	3	temporal	R	petrous	3	1	Adult	?
FS 66	4	postcranial	?	?	3	2	Adult	?
FS 69	4	postcranial	?	?	3	3	Adult	?
FS 69	4	canine	L-max.	-	1	1	Adult	?
FS 69	4	canine	R-mand.	-	1	1	Adult	?
FS 77	4	f. phalanx	proximal	first	1	1	Adult	?
FS 97	4	cranial	?	?	3	1	Adult	?
FS 98	4	foot	?	metatarsal	2	1	Adult	?
FS 99	4	long bone	?	shaft	3	1	Adult	?
FS 100	4	rib	?	shaft	3	1	Adult	?
FS 101	4	postcranial	?	shaft	3	1	Adult	?
FS 102	4	foot	L	med. cuneiform	1	1	Adult	?
FS 103	4	foot	R	talus	2	1	Adult	?
FS 104	4	foot	L	metatarsal #2	2	1	Adult	?
FS 105	4	foot	?	metatarsal	2	1	Adult	?
FS 106	4	innominate	R	ischium, pubis	2	1	Subadult	?
FS 129	4	foot	?	metatarsal	2	1	Adult	?
FS 131	4	foot	R	metatarsal #3	2	1	Adult	?
FS 132	4	foot	R	med. cuneiform	1	1	Adult	?
FS 132	4	foot	R?	navicular	2	1	Adult	?
FS 133	4	foot	L	calcaneus	1	1	Adult	?
FS 134	4	foot	L	metatarsal #5	2	1	Adult	?
FS 135	4	foot	L	metatarsal #4	2	1	Adult	?
FS 136	4	hand	L	metacarpal #3	2	1	Adult	?
FS 137	4	foot	L	metatarsal #2	1	1	Adult	?
FS 138	4	foot	L	metatarsal #1	1	1	Adult	?
FS 139	4	patella	L	-	1	1	Adult	?
FS 141	4	foot	R	calcaneus	1	1	Adult	?
FS 142	4	foot	L	talus	2	1	Adult	?
FS 143	4	cranial	?	?	3	2	Subadult	?
FS 145	4	foot	R	lat. cuneiform	2	1	Adult	?
FS 146	4	tibia	R	shaft	2	1	Adult	?
FS 147	4	fibula	R	shaft	2	1	Adult	?
FS 148	4	tibia	L	shaft	1	1	Adult	?
FS 149	4	fibula	L	shaft	2	1	Adult	?
FS 149	4	foot	L	lat. cuneiform	1	1	Adult	?
FS 150	4	foot	R	talus	1	1	Adult	F
FS 150	4	foot	L	talus	1	1	Adult	?
FS 150	4	foot	L	cuboid	2	1	Adult	?

Preservation Codes:

- 1 = greater than 75% complete;
- 2 = 25 - 75% complete;
- 3 = less than 25% complete.

44AX183 Bone Inventory
Test Unit 3--Burial Vault

FS 150	4	foot	?	metatarsal #1	2	1	Adult	?
FS 151	4	patella	R	-	1	1	Adult	?
FS 217	5	rib	?	shaft	3	1	Adult	?
FS 218	5	cranial	?	parietal	3	4	Adult	?
FS 219	5	foot	R	cuboid	2	1	Adult	?
FS 220	5	foot	?	cuboid?	3	1	Adult	?
FS 221	5	foot	R	calcaneus	3	1	Adult	?
FS 222	5	foot	L	talus	1	1	Adult	F?
FS 222	5	tibia	?	distal	3	1	Adult	?
FS 222	5	fibula	?	proximal	3	1	Adult	?
FS 223	5	foot	L	cuboid	2	1	Adult	?
FS 223	5	f. phalanx	?	proximal 1st	2	1	Adult	?
FS 223	5	foot	L	metatarsal #3	1	1	Adult	?
FS 223	5	foot	?	metatarsal	2	1	Adult	?
SS 10009	1	h. phalanx	?	?	1	1	Subadult	?
SS 10009	1	long bone	?	shaft	3	18	Adult	?
SS 10009	1	incisor	mand.	central	1	1	Adult	?
SS 10009	1	premolar	L-max.	second	1	1	Adult	?
SS 10015	2	long bone	?	?	3	24	Adult	?
SS 10016	3	long bone	?	?	3	243	Adult	?
SS 10016	3	h. phalanx	?	distal	2	1	Adult?	?
SS 10016	3	premolar	max.	first	2	1	Subadult	?
SS 10016	3	hand	L-max.	hamate	1	1	Adult	?
SS 10016	3	dec. incisor	L-mand.	lateral	2	1	Subadult	?
SS 10016	3	premolar	L-max.?	first	2	1	Subadult	?
SS 10016	3	molar	L-max.	first	1	1	Adult	?
SS 10016	3	cranial	-	sphenoid	3	1	Adult	?
SS 10016	3	cranial	-	occipital	3	1	Adult	?
SS 10016	3	cranial	?	?	3	18	Adult	?
SS 10016	3	long bone	?	shaft	3	6	Adult	?
SS 10016	3	foot	R	metatarsal #3	1	1	Subadult	?
SS 10016	3	foot	?	metatarsal #3	2	1	Subadult	?
SS 10024	4	cranial	?	?	3	10	Adult	?
SS 10024	4	hand	R	capitate	1	1	Subadult	?
SS 10024	4	temporal	?	petrous	2	1	Subadult	?
SS 10024	4	postcranial	?	shaft	3	6	Subadult?	?
SS 10024	4	h. phalanx	?	distal	1	1	Subadult	?
SS 10024	4	postcranial	?	shaft	3	150	Adult	?
SS 10024	4	foot	L	metatarsal #1	1	1	Adult	?
SS 10024	4	f. phalanx	L	proximal	1	1	Adult	?
SS 10024	4	f. phalanx	?	proximal	1	2	Adult	?
SS 10024	4	phalanx	?	shaft	2	1	Adult	?
SS 10024	4	foot	L	metatarsal #4	1	1	Adult	?
SS 10024	4	foot	L	lat. Cuneiform	1	1	Subadult?	?
SS 10024	4	canine	L-mand.	-	1	1	Adult	?
SS 10024	4	incisor	L-max.	central	1	1	Adult	?
SS 10024	4	molar	L-max.	first	2	1	Subadult	?
SS 10024	4	molar	L-max.	second	2	1	Subadult	?
SS 10024	4	molar	R-max.	second	2	1	Subadult	?
SS 10024	4	premolar	L-max.	second	2	1	Subadult	?
SS 10031	6	postcranial	?	shaft	3	159	Adult	?

Preservation Codes:

1 = greater than 75% complete;

2 = 25 - 75% complete;

3 = less than 25% complete.

44AX183 Bone Inventory
 Test Unit 3--Burial Vault

SS 10031	6	maxilla	L	corpus	2	1	Adult	?
SS 10031	6	cranial	R	frontal	3	1	Adult	?
SS 10031	6	maxilla	L	frontal process	3	1	Adult	?
SS 10031	6	innominate	?	ilium	3	2	Adult	?
SS 10031	6	fibula	?	shaft	3	1	Adult	?
SS 10031	6	foot	R	metatarsal #5	1	1	Adult	?
SS 10031	6	rib	?	shaft	3	2	Adult	?
SS 10031	6	f. phalanx	?	intermediate	1	2	Adult	?
SS 10031	6	h. phalanx	?	intermediate	2	2	Adult	?
SS 10031	6	h. phalanx	?	intermediate	1	1	Subadult	?
SS 10031	6	h. phalanx	?	distal	1	1	Adult	?
SS 10034	6	incisor	R-max.	lateral	1	1	Adult	?
SS 10034	6	premolar	L-mand.	first	1	1	Adult	?
SS 10034	6	incisor	R-mand.	central	1	1	Adult	?
SS 10034	6	incisor	R-mand.	lateral	1	1	Adult	?
SS 10034	6	incisor	L-mand.	lateral	2	1	Adult	?

Preservation Codes:

1 = greater than 75% complete;

2 = 25 - 75% complete;

3 = less than 25% complete.

APPENDIX D

**ANALYSIS OF BOTANICAL
SPECIMENS FROM SITE 44AX183
(MCKNIGHT 2001)**

RESULTS OF ANALYSIS:
FLOTATION-RECOVERED ARCHEOBOTANICAL REMAINS AND WOOD SAMPLES
FROM SITE 44AX183, WEST FAMILY BURIAL VAULT, ALEXANDRIA, VIRGINIA

Introduction

Archeobotanical investigations associated with the West Family burial vault included the analysis of 11 2-liter flotation samples and 28 samples of wood fibers collected from the vault interior.

Methods

Flotation Samples

During excavation, standard 2-liter soil samples were obtained from unscreened fill secured from across the base of selected stratigraphic levels. Soil samples were thoroughly dried, then packed in vinyl bags prior to flotation processing. Samples were individually processed in a modified SMAP (Shell Mound Archaeological Project) - type system using available water pressure to separate organic materials from the soil matrix (Watson 1976). A water overflow onto a nylon stocking captured suspended (floating) organic debris, while a bottom screen equipped with a 1/16 inch mesh sieve secured non-floating materials. These floating and non-floating portions were air-dried.

Each processed sample was passed through geologic sieves to separate size fractions of recovered plant remains. The greater-than-or-equal-to 2 millimeter fraction was examined with a binocular microscope under low magnification (10X to 40X) and sorted into broad categories of material. Non-botanical and non-carbonized plant remains were separated as an aggregate and not further categorized. Carbonized plant remains were sorted into taxonomic categories (wood, seed, nut, et cetera.). The less than 2 millimeter fraction was examined under low magnification and the remains of seeds were removed for analysis. Each category of vegetative material was quantified by weight and fragment count.

Identifications were routinely attempted on all seed remains recovered, and on a sub-sample of 20 randomly selected wood fibers from each sample in accordance with standard practice (Pearsall 1989). Identifications of all classes of botanical remains were made to the genus level when possible, to the family level when limited diagnostic morphology was available, and to the species level only when the assignment could be made with absolute certainty.

All identifications were made under low magnification (10X to 40X) with the aide of standard texts (Martin and Barkely 1961; Montgomery 1977; Panshin and deZeeuw 1980; USDA 1985), and checked against plant specimens from a modern comparative collection representative of the flora of northern Virginia and vicinity. Specimens were weighed using an electronic balance accurate to 0.01 grams.

Wood Samples

Key elements of the vault interior were sampled for species identification by removing a small section of wood fibers. Wood samples were stored as-recovered in vinyl bags. Many samples were recovered in a moist or saturated state, and were not dried prior to analysis. In order to achieve a clear traverse section of

wood fibers which is required for analysis, exposed fibers were shaved with a scalpel. Each specimen was then examined under 10X-40X magnification and key anatomical features were noted. The structure of each specimen was compared with appropriate keys (Constantine 1987; Edlin 1969; Panshin and deZeeuw 1980) and checked against wood specimens from a comparative reference collection representative of the flora of the project area.

Results of Analysis

Flotation Samples

Soil flotation of sediments from the West Family vault yielded culturally significant plant remains as well as natural vegetative inclusions. Flotation of 22 liters of cultural fill produced a total of 23.18 grams of plant material, or a mean average of 1.05 grams of archeobotanical material per liter of sediment. This material included non-carbonized seed remains, non-carbonized wood fibers, wood charcoal, and acorn remains. A complete inventory of flotation-recovered plant remains is provided in Table 01.

Wood. Wood remains totaled 778 specimens weighing 23.16 grams. This included 7 wood charcoal fragments (weighing 0.08 grams) and 771 non-carbonized wood fragments weighing 23.08 grams. A sub-sample of 154 wood fragments (a maximum of 20 fragments per sample) was randomly selected for identification. Species identified included (in order of abundance) yellow or southern pine (*Pinus sp.*)(44 per cent of the identified sub-sample; n=154), unspecified pine (*Pinus sp.*)(42 per cent), deciduous taxa (14 per cent) and white oak (*Quercus sp. Leucobalanus group*)(<1 per cent).

Nut. A single non-carbonized acorn (*Quercus sp.*) cap fragment (weighing 0.02 grams) was recovered.

Seeds. Non-carbonized seeds were recovered in abundance. Ten of the 11 flotation samples analyzed from the West Family vault contained seed remains. A total of 622 seeds and seed fragments were identified. Specimens identified included (in order of abundance) raspberry or blackberry (*Rubus sp.*) (132 seeds); strawberry (*Fragaria sp.*)(109 seeds); cinquefoil (*Potentilla sp.*)(74 seeds); chickweed (*Stellaria media* (64 seeds); goosegrass (*Eleusine indica*)(56 seeds); Princess tree (*Paulownia tomentosa*)(46 seeds); pigweed (*Amaranthus sp.*)(42 seeds); poke (*Phytolacca americana* (22 entire seeds, 21 fragments); carpetweed (*Mollugo verticillata*)(12 seeds); elderberry (*Sambucus canadensis*)(10 seeds); three-seeded mercury (*Acalypha sp.*)(8 seeds); jimson weed (*Datura stramonium*)(5 seeds); sheep sorrel (*Oxalis stricta*) (2 seeds); sedge (*Carex sp.* (1 seed); dandelion (*Taraxacum sp.*)(1 seed); grape (*Vitis sp.*)(1 seed); and members of the buckwheat (*POLYGONACEAE*) (2 seeds); grass (*POACEAE*) (2 seeds), and nightshade (*SOLANACEAE*) (12 seeds) families.

Other Vegetative Remains. Miscellaneous plant-related materials were confined to numerous creamy-white, papery fragments measuring <2mm in size that were contained in a single flotation sample secured from Feature 202 (BS8002, Level 1). This material resembled the interior lining of *Paulownia tomentosa* seed capsules. Forty-four seeds identified as *P. tomentosa* were recovered from this same sample.

Wood Samples. Twenty-eight discrete wood samples were submitted for identification from various architectural and funerary elements of the West Family vault interior. The wood sample inventory and results of analysis are presented in Table 02.

Pine species dominated the wood assemblage. Ten (36 per cent) of the 28 samples analyzed were identified as Southern or yellow pine species (*Pinus sp.*), and an additional 16 specimens (57 per cent) were classified as unspecified pine (*Pinus sp.*). One sample was severely distorted and was classified simply as a diffuse porous taxa, and a single sample was unidentifiable.

A single sample from Feature 202 (SM5018, Sample No. 15) exhibited an adherent layer of a black substance, possibly paint or tar, on one radial longitudinal surface. Another sample (SS10030) from Feature 1, Level 6 included 2 brass tacks.

Discussion

The analysis of plant remains recovered from the West Family burial vault (44AX183) lends insight into burial vault and furniture construction preferences, the economic stature of the family and recent land use practices.

The predominance of pine species within the site assemblage documents that locally available lumber was employed in the construction of the vault proper and of interior furnishings. The use of pine strongly suggests that economic considerations may have been a limiting factor; pine was a lower-cost option than other popular woods for coffin and vault construction, such as cedar, black walnut, or the array of tropical hardwoods that were available to the more affluent by the early 1800's (Constantine 1959:318; Panshin and deZeeuw 1980:540-541; Edlin 1969:129).

Twentieth-century land use over the West Family vault has included a trailer park and parking lot, and these manifestations have effectively obliterated any significant landscape elements which may have had significance to the design and active maintenance of the burial chamber. The paucity of persistent vegetative elements, either in extant landscape features or in durable archeo-historical plant macro-remains severely limits the interpretation of land use and landscape design associated with the West Family burial vault.

The abundant non-carbonized seeds recovered in the vault flotation samples are directly associated with recent land use practices. Although the persistence of non-carbonized plant remains from rare contexts such as consistently xeric or inundated environments is not uncommon (Hastorf and Popper 1988; Minnis 1981; Pearsall 1989), such soil conditions do not characterize the West Family burial vault. The presence of 'fresh' seed remains within flotation samples from open-site environments usually is considered as evidence of modern seed contamination caused by plowing, aeolian processes, rodent or insect burrowing, root action, soil erosion and deposition, or by a combination of these factors (Minnis 1981; Keepax 1977; Smith 1985).

Evidence supporting the assertion that the seed assemblage from the West Family vault is modern in origin is provided by four key factors: 1) that the assemblage is composed of a diagnostic association of ruderal weedy taxa which typify waste-places; 2) that the seed assemblage includes abundant aggressive exotic (non-native) species (jimson weed (*Datura stramonium*), goose grass (*Eleusine indica*), princess tree (*Paulownia tomentosa*), chickweed (*Stellaria media*) and dandelion (*Taraxacum sp.*)); 3) that some of the species represented were documented on-site prior to recent pre-excavation clearing (i.e. particularly Princess tree [*Paulownia tomentosa*] which produces abundant seeds contained in an ovoid, beaked dehiscent capsule measuring up to 2 " long (which encloses up to 2000 small winged seeds - a large tree may produce 20 million seeds in a year). The Princess tree was introduced from China in 1834; it subsequently escaped from cultivation from southern New York (Dirr 1990: 581-582) and is now common on marginal soils in urban settings; and 4) that some of the species represented exhibit delicate parts which do not show any effects of organic degradation associated with long-term interment (i.e. feathery wings surrounding [*P. tomentosa*] or the pappus attachments of [*Taraxacum sp.*] achenes).

Summary

This analysis of botanical remains from Site 44AX183 documents the use of locally available pine species for the construction of the vault and funerary furniture, and aids in an assessment of the economic stature of the West Family. Unfortunately, the recovered remains did not yield any data significant to an interpretation of interred plant elements (either symbolic, decorative or functional - as in flowers, odor-masking additions or 'folk-medicine'). Nor did the recovered remains appear to have any connection with the dietary composition of individuals interred in the vault. While edible plant species were represented within the flotation assemblage, inedible and even poisonous species were also; it would be imprudent to associate these remains directly with the corporeal remains.

The data also fail to aid our understanding of local landscape conditions associated with the design, use and maintenance of the vault. While abundant seed remains were recovered, it is highly unlikely that these were directly associated with historic vault construction or human interment. Rather, it is probable that they relate to modern landscape conditions and are intrusive into archaeological contexts.

Table D-1. Results of Botanical Analysis: Flotation Samples: West Family Cemetery (44AX183)

Sample Number	BS8000	BS8001	BS8002	BS8003	BS8004	BS8005	BS8006	BS8007	BS8008	BS8009	BS8010	TOTALS
Block	4	4	4	4	4	4	4	4			4	11 samples
Excavation Unit				2		3			Burial NW Quad	Burial W1/2	3	
Coordinates	N1807.5 E1873	N1811.5 E1834	N1802.9 E1862.5	N1800 E1826	N1802.9 E1862.5	N1800 E1828.9	N1805.5 E1862.5	N1807.5 E1863	N1802.8 E1871	N1802 E1852.5	N1800 E1828.9	
Feature	207	208	202	1 vault	202	1 vault		204	200	201	1 vault	
Level	3	1	1	1	1	1	1	1	1	1	4	
Depth	1.7-1.7 fbd	0.7-1.15 fbd	0.5-0.5 fbd	0.8-1.51 fbd	0.5-0.5 fbd	1.1-1.7 fbd	0.65-0.8 fbd	0.55-1.5 fbd	1.1-1.4 fbd	0.5-0.6 fbd	2.5-2.9 fbd	
Soil Volume (liters)	2	2	2	2	2	2	2	2	2	2	2	22
Total Charcoal Weight (grams)	3.43	0	0	0.35	0.29	0.44	0.03	0.08	0.24	0.54	17.78	23.18
carbonized WOOD (total count)	0	0	0	0	0	1	0	5	1	1	0	8
total weight (grams)	0	0	0	0	0	0.01	0	0.04	0.01	0.02	0	0.08
<i>Pinus sp. (southern pine group)</i>								5		1		6
<i>Quercus sp. (white oak group)</i>							1					1
<i>Jedidhous taxa</i>									1			1
non-carbonized WOOD (total count)	220	0	0	36	42	163	4	6	18	67	215	771
total weight (grams)	3.43	0	0	0.35	0.29	0.43	0.03	0.04	0.23	0.5	17.78	23.08
<i>Pinus sp. (pine)</i>	20							2	6	18	19	65
<i>Pinus sp. (southern pine group)</i>					20	19	2					61
<i>Jedidhous taxa</i>				20								20
total combined wood fragments identified	20	0	0	20	20	20	4	11	19	20	20	154
NUT REMAINS (total count)	0	0	0	0	0	0	0	0	0	1	0	1
total weight (grams)	0	0	0	0	0	0	0	0	0	0.02	0	0.02
<i>Quercus sp. (oak acorn cup fragment)</i>										1		1
non-carbonized SEED REMAINS (total count)	0	18	88	93	9	56	60	3	243	35	17	622
<i>Amaranthus sp. (pigweed)</i>			1	21		5	2	1		10	2	42
<i>Acalypha sp. (three-seeded mercury)</i>				5			1			2		8
<i>Carex sp. (sedge)</i>											1	1
<i>Datura stramonium (jimson weed)</i>						5						5
<i>Elymus indica (goose grass)</i>		1	9				45	1				56
<i>Fragaria sp. (strawberry)</i>		16	19	3	4	5	3	1	48	10		109
<i>Mollugo verticillata (carpetweed)</i>							9	1			2	12
<i>Oxalis stricta (sheep sorrel)</i>					1		1					2
<i>Panicum tomentosum (princess tree)</i>			44			1				1		46
<i>Phytolacca americana (poke) entire</i>			7	3		7	1				4	22
fragments			12	1	2		3				3	21
<i>Potentilla sp. (cinquefoil)</i>			3			1			66	4		74
<i>Rubus sp. (blackberry/raspberry)</i>		2	1	3	1	3			113	8	1	132
<i>Sambucus canadensis (elderberry)</i>						10						10
<i>Stellaria media (chickweed)</i>				47		10	3				4	64
<i>Taraxacum sp. (dandelion)</i>									1			1
<i>Vitis sp. (grape)</i>									1			1
POLYGONACEAE (buckwheat family)									2			2
POLYACEAE (grass family)				1	1							2
SOIANACEAE (nightshade family)									12			12
OTHER <2mm debris												1 of 11

REFERENCES CITED

- Constantine, Albert J.
1987 *Know Your Woods, A Complete Guide to Trees, Woods and Veneers*. Charles Scribner's Sons, New York.
- Dirr, Michael A.
1990 *Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation and Uses*. Fourth Edition. Stipes Publishing Company, Champaign, Illinois.
- Edlin, Herbert L.
1969 *What Wood is That? A Manual of Wood Identification*. The Viking Press, New York.
- Hastorf, C.A., V.S. Popper, eds.
1988 *Current Paleoethnobotany*. The University of Chicago Press, Chicago.
- Keepax, Carole
1977 Contamination of Archaeological Deposits by Seeds of Modern Origin with Particular Reference to the Use of Flotation Machines. *Journal of Archaeological Science* 4:221-229.
- Martin A. and W. Barkely
1961 *Seed Identification Manual*. University of California Press, Berkeley.
- Minnis, Paul E.
1981 Seeds in Archeological Sites: Sources and Some Interpretive Problems. *American Antiquity* 46:143-151.
- Montgomery, Frederick Howard
1977 *Seeds and Fruits of Plants of Eastern Canada and Northeastern United States*. University of Toronto Press, Toronto.
- Panshin, Alexis and Carl deZeeuw
1980 *Textbook of Wood Technology*. Volume 1, 4th edition. McGraw Hill, New York.
- Pearsall, D.
1989 *Paleoethnobotany: A Handbook of Procedures*. Academic Press, San Diego.
- Smith, E.
1985 Recovery and Processing of Botanical Remains. In *The Analysis of Prehistoric Diets*, edited by Robert Gilbert and James Mielke, pp. 97-123. Academic Press, New York.
- United States Department of Agriculture
1985 *Handbook on Seeds of Browse - Shrubs and Forbs*. Technical Publication R8-TP8. USDA Forest Service, Southern Region, Atlanta Georgia.
- Watson, Patty Jo
1976 In Pursuit of Prehistoric Subsistence: A Comparative Account of Some Contemporary Flotation Techniques. *Mid-Continental Journal of Archaeology*. Volume 1, No. 1.

APPENDIX E

**REPORT ON ANALYSIS OF
NON-HUMAN FAUNAL REMAINS
FROM SITE 44AX183
(DAVENPORT 2001)**

FAUNAL ANALYSIS OF NON-HUMAN REMAINS: SITE 44AX183

Christian Davenport, M. A.

R. Christopher Goodwin & Associates, Inc.

This section will address the non-human faunal material recovered from the phase III archaeological testing of Site 44AX183 the West Family Vault.] A total of 4,667 pieces (961.37 grams) of non-human faunal material were analyzed from selected proveniences within the vault feature. Faunal material was identified using the the author's personal comparative collection and various osteological and species manuals (Cannon 1987; Gilbert 1993; Gilbert *etal.*1996; Olsen 1968, 1996; Sobolik and Steele 1996). The objectives of this study were to identify recovered faunal material and, to analyze the faunal assemblage in regards to its spatial distribution within the vault feature.

Zooarchaeological Methods

Faunal material first was coded according to provenience, which was established using feature, unit and FS numbers. The faunal material was then sorted by taxonomic class (i.e. mammal, aves, reptile, etc.), and by size, using the five categories shown in Table 1.

Table E-1. Size Categories

Category	Faunal Equivalent
Very Small	Squirrel size down
Small	Muskrat to woodchuck
Medium	Raccoon to dog
Large	Goat to pig
Very large	Elk to cow

Adoption of these categories facilitated rough sorting of the materials based on the size of the animal. Where possible, further identifications were made to one or more of the following taxonomic levels: class, order, family, genus or species. The identity of each element and the estimated maturity of each species were determined by assessing degrees of epiphyseal fusion and tooth wear. When possible, specimens were refitted and counted as a single entity. The Number of Individual Specimens Present

(NISP) was calculated by counting each skeletal element that was identifiable to a taxonomic level as a single animal, regardless of the side, size or state of fusion of that element.

Bone fragments that were small in size and displayed no diagnostic features, but that were deemed to have come from a large mammal were considered to represent human bone fragments. These remains were placed in a bag labeled "questionable human," and were held to be reburied with the other human remains.

Results

A total of 4,667 pieces (961.37 grams) of faunal material was analyzed from Site 44AX183. The relatively high number of non-human faunal remains resulted from the employment of water screening as a recovery method for the project. Of the 4,667 pieces of bone, 493 (25.63g) were very small (>1 cm). Although some of these pieces, such as very small mammal teeth, were identifiable, most fragments could not be identified to a specific taxonomic class (Table 2).

The faunal materials recovered from the excavation of Site 44AX183 were extremely well preserved. This was likely due to the presence of the shell mortar that was used in the construction of the vault; as shells decompose they release calcium carbonate into the soil and raise the ambient pH levels, aiding in bone preservation. Furthermore, the very moist condition of the soils within the vault helped to maintain an anaerobic environment.

Kingdom: Vertebrate (animals with backbones) (NISP 462; 16.82g).

Vertebrates commonly inhabit all environments throughout the world, and comprised the principal faunal materials recovered from Site 44AX183. A total of 462 specimens could not be identified beyond this general designation.

Class: Mammals (many different names) (NISP 450; 56.54g). Mammals are found on every continent except Antarctica. Given the small size and fragmentary nature of the remains from this site, most specimens could not be identified beyond the taxonomic category of Class.

The following represents the analytical results for those mammalian remains that could be placed in more specific classificatory categories.

- Family: *Vespertilionidae* (plain nose bats) (NISP 3; .3g). These bats have simple unmodified muzzles (Burt and Grossenheider 1980).
- Family: *Cricetidae* (Mice/voles/rats) (NISP 85; 3.81g.). This family includes small to medium sized rodents that can be found worldwide. They live mostly on and in the ground, in trees, in aquatic environments, and in rocky situations (Burt and Grossenheider 1980). However, the total NISP figure presented for this category is

Table E-2. NISP Counts by Taxonomic Class

Taxonomic Class	Common Name	NISP	Weight in g.
Anura	Frog/toads	238	8.49
Amphibian	Amphibians	36	0.7
Passeriformes	Perching Birds	50	4.22
Picidae	Woodpecker	3	0.2
<i>Anas sp.</i>	Duck	3	1.9
<i>Gallus gallus</i>	Chicken	12	9.5
<i>Meleagris gallopova</i>	Turkey	1	3.3
Aves	Bird	27	7.6
Cricetidae	Mice, rats and voles	85	3.81
Soricidae	Shrews	7	0.6
Vespertilionidae	Bat	3	0.3
<i>Blarina bravacada</i>	Shorttail shrew	1	0.1
<i>Bos taurus</i>	Cattle	2	262
<i>Homo sapien</i>	Human	2764	488.9
<i>Microtus sp.</i>	Moles	18	4.01
<i>Procyon lotor</i>	Raccoon	1	1.9
<i>Sciurus sp.</i>	Squirrel	2	0.2
<i>Sus scrofa</i>	Swine	204	46.4
Mammal	Mammal	450	56.54
Osteichthyes	Fish	4	0.11
Serpentes	Snakes	84	2.11
Testudines	Turtle	101	25.45
Colubridae	Nonpoisonous	70	9.71
Viperidae	Poisonous	39	6.5
Vertebrate	Unidentified	462	16.82
Grand Total		4,667	961.37

- an inaccurate measurement in this case, because most of the very small unidentifiable bones recovered from the site could belong to this group.
- Family: Soricidae (shrew) (NISP 7; .6g) Shrews are found throughout the eastern United States (Burt and Grossenheider 1980).
 - Microtus sp. (vole) (NISP 18; 4.01g) Voles are found throughout the eastern United States.
 - Sciurus sp. (squirrels) (NISP 2; .2g.) Squirrels can be found worldwide except for Antarctica. Squirrels inhabit pine and hardwood forests (Burt and Grossenheider 1980). Species identification can not be made based on postcranial remains.
 - Bos taurus (cattle) (NISP 2; 262g.) Domesticated cattle were introduced to North America beginning in the 1500s, and have been a principal domesticated species on agricultural complexes since that time. Although they are utilized primarily as a food source (e.g., meat, milk), by-products such as hides and bones are processed to fulfill a variety of other functions.
 - Sus Scrofa (swine) (NISP 204; 46.4g.; MNI 4). These omnivores also were introduced to North America, presumably by the Spanish, during the sixteenth century. Because of their rapid reproductive rate and their ability to forage for themselves, they provided an inexpensive source of meat and protein in colonial America.
 - Procyon lotor (raccoon) (NISP 1; 1.9g.) The distribution of raccoons extends from Canada to Texas. They are abundant in hardwood swamps, mangroves, flood plains, wood lots, buildings and wetlands (Kaufmann 1992).
 - Blarina brevicauda (short-tail shrew) (NISP 1; .01g.). The short-tail shrew is the only poisonous mammal in eastern North America. Active during both day and night throughout the year, it preys on insects, worms and snails (Burt and Grossenheider 1980).
 - Homo sapiens (human) (NISP 2764; 488.9g). Human beings were represented in the general faunal assemblage by pieces of bone that could only have come from a large mammal, but that could not be identified positively given their fragmentary nature.

Class: Reptiles (snakes, turtles, lizards, etc).

- Order: *serpentes* (snake) (NISP 84; 2.11g.) Snakes can be found throughout the lower continental United States. The high NISP count is due to the large number of individual snake ribs recovered.
- Family: *colubridae* (constrictors) (NISP 70; 9.71g.) Identification is based on the absence of a haemal spine on the vertebra. 78% of the snakes of the world belong to this family. They range in size from small ground snakes to several seven-foot long species (Conant and Collins 1991), and can be found throughout the lower continental United States.
- Family: *viperidae* (pit vipers) (NISP 39; 6.5g.) Identification is based on the presence of a haemal spine on the vertebra (Conant and Collins 1991). Examples include rattlesnakes, cottonmouths and copperheads, all of which commonly are found throughout the lower continental United States.
- Order: *Testudines* (turtle)(NISP 101; 25.45g.) Turtles occur in all the continents except Antarctica and are particularly abundant in eastern North America (Conant and Collins 1991). Certain species are utilized as a source of food.

Class: Amphibian (frogs/toads/salamanders) (NISP 36; 7g.) Frogs, toads, and salamanders can be found on every continent except Antarctica. The amphibian remains from Site 44AX183 were so fragmentary and small that attribution was possible only to the order level.

- Order: *Anura* (toad/frog) (NISP 238; 8.49g.) Because moisture is necessary for amphibian survival, it is not surprising that numerous remains were recovered, given the location of the site close to Cameron Run and its drainages.

Class: Aves (birds) (NISP 27; 7.6g) Birds species occur on all continents throughout the world. The fragile nature and the fragmentary state of the remains from Site 44AX183 precluded identification of most bones in this category beyond the class level.

- Order: *Passeriformes* (small perching birds)(NISP 50; 4.22g) Given the high numbers of perching birds and the fragmentary nature of the remains species identification is not possible.
- Family: *Picidae* (woodpeckers)/flickers (NISP 3, .2g) Woodpeckers are common throughout North America, particularly in mature forest areas. In the twentieth century, deforestation and loss of habitats have reduced their numbers significantly (Pearson *et.al* 1936).
- *Anas sp.* (domestic duck/ wild duck) (NISP 3; 1.9g) Wild ducks are found from Florida to New England. Favored habitats include marshes, wooded swamps,

grain fields, ponds, rivers, lakes and bays (Peterson and Peterson 1980). Prior to the mid-twentieth century, the marshes along Cameron Run would have provided excellent habitat for these birds, which often are hunted and consumed.

- *Meleagris gallopavo* (wild/domestic turkey) (NISP 1; 3.3g). Wild turkeys prefer dense woodlands and swampy environments, and have been known to migrate long distances during the fall in search of forest mast on which to subsist (Pearson *et.al* 1936). Wild turkeys were a frequent part of the colonial diet, particularly in the early colonial period.
- *Gallus gallus* (chicken)(NISP 12; 9.5g). Chickens were introduced to North America beginning in the 1500s.

Class: Osteichthyes (bony fishes) (NISP 4; .11g). Bony fish can be found throughout the world. Locally, the annual runs of anadromous species such as herring and rockfish up the Potomac River supported numerous commercial fisheries during the eighteenth and nineteenth centuries. The paucity of fish remains from this site is, therefore, somewhat surprising.

Interpretation

The vault was divided into three test units that were numbered consecutively from west to east. Test Unit 1, first excavated in February 2000, was much narrower than the other two units, because it was designed specifically to determine whether human remains were present within the vault structure. In contrast, Test Units 2 and 3 divided the remainder of the vault into two equal and larger sections; being larger in volume, each of these units yielded far larger faunal samples than did Test Unit 1. Each test unit was excavated in 0.5 ft levels; there were a total of seven levels. In terms of their faunal content, Levels 1-6 contained both cultural and noncultural deposits; that is, both domestic (cattle/pig) and nondomestic animal remains were recovered. The majority of the interpretations that follow are derived from analysis of the contents of levels 1-6 of Test Units 2-3, to eliminate the problem of unequal sample size.

Although the overall faunal sample from the vault is small, much can be said about the assemblage. The 4,667 skeletal elements that were analyzed represented 25 animal taxa, including birds, fish, and reptiles. It is unlikely that many of these remains have cultural significance; that is to say, these animals were not interred purposely with the dead. It is more likely that they represent the combined results of entrapment, trapped animals, the residue of prey animals, or faunal remains that may have originated elsewhere on the site. Few bones displayed gnawing marks, a characteristic that generally suggests quick disposal. Although there undoubtedly had been heavy machinery on the site, the bones also displayed few compression stress fractures.

Field observations and records that document the general rubble pattern within the vault interior suggest that the roof of the vault collapsed and commingled the contents of the vault. The excavations in Test Unit 3 also revealed a conical-shaped concentration of cobbles in the northeastern corner of the vault that may represent a separate fill episode. Mixed within this cobble-brick rubble layer were numerous small and medium-sized animal remains, including the remains of three to four suckling pigs (Level 4). The presence of an apparently discrete fill episode raised the possibility that analysis of the animal remains could help to establish a sequence for the fill episodes within the vault.

The issue of sequencing the fill episodes was addressed by examining the amount and type of faunal material within each level. Analysis revealed that the remains of certain animals were confined to specific levels within the vault. Rodents, frogs and toads were present in every level. Some unexpected (e.g., domesticated) animals, including swine, cattle, chicken, and turkey, also were present. Turtle (testudines) remains were confined to the middle levels of the vault; both poisonous and nonpoisonous snakes apparently were late arrivals to the vault. The important animals to this analysis are the small animals mice and frogs and the unexpected animals previously mentioned.

The combined faunal subassemblage from Level 1 in Test Units 2 and 3 produced 868 pieces of faunal material, of which 349 elements (40.2 per cent) were non-human animal remains. Interestingly, this level yielded the highest numbers of amphibian and reptilian remains (Anura: $n = 134$; serpentes: $n = 66$; colubridae: $n = 41$; viperidae: $n = 27$), a distribution that suggested that by the time the animal remains were deposited in Level 1, the lower levels of the vault likely had filled with silt, thereby allowing only animals with small body profiles to access the upper levels. Frogs/toads also were well represented ($n = 53$), as were rodents (Cricetidae: $n = 13$) and many small perching birds (passeriformes: $n=20$). These animals may represent prey remains of larger animals such as snakes.

Level 2 produced 379 elements of faunal material of which 134 (35.4 per cent) were non-human animal remains. One raccoon humerus was recovered; this omnivorous animal could account for some of the other faunal remains, but this is problematic given that no gnaw marks were present on any of the other remains. Frogs/toads again were well represented (Anura: $n = 15$), but few rodent (Cricetidae: $n=4$) remains were included. In contrast many small perching birds (passeriformes: $n=14$), including some woodpecker/flicker (picidae: $n=3$) remains, were recovered; these likely represent the prey remains of larger animals. However, snake remains (serpentes: $n = 9$, colubridae: $n = 6$ and viperidae: $n = 6$) were significantly less prevalent than in Level 1. This decrease may support the notion that most of the vault had been almost completely silted in at this time, thereby affording few hiding spaces for small animals.

Level 3 produced 341 pieces of faunal material, of which 225 (65.99 per cent) were non-human animal remains. Only 4 small perching bird (passeriformes) remains were recovered from this level. Frogs/toads were numerous (Anura: $n = 24$), and rodent remains increased (Cricetidae: $n = 10$).

Surprisingly, one cow (*Bos taurus*) element also was recovered from this level suggesting that there was a sizable opening into the vault at this point and this level had not as yet silted in. Snake remains (serpentes: n = 1, colubridae: n = 18 and viperidae: n = 5) were even less prevalent than they had been in Level 2. Level 3 was the first level from which turtle remains (testudines: n = 43) were encountered, thereby offering some support for the notion that the majority of the vault may have been still standing or recently collapsed with large voids within the rubble at the time of their entry.

Level 4 produced 1,521 elements of faunal material, of which 805 (52.9 per cent) represented non-human animal remains. The number of frog and toad remains (Anura: n=61) increased, as did those of mice and moles (Cricetidae: n=34). The remains of these small creatures probably represent animals that were entrapped within the vault. Interestingly, chicken (*Gallus gallus*: n=12), suckling pig (*Sus scrofa*: n=186) and turtle (testudines: n=33) were also present. The fact that any of these domestic species were present suggests that there must have been a hole in the vault wall or roof that provided enough room for such skeletal remains to be introduced into the rubble. Only one snake element (viperidae) was identified, offering support for snakes being recently deposited within the vault.

Level 5 produced 441 pieces faunal material of which 161 (36.5 per cent) represented non-human animal remains. The number of frog and toad remains (Anura: n=65) increased steadily, while mice and moles decreased (Cricetidae: n=14). This distribution may represent animals becoming trapped in the vault, unable to find their way out. Some small/medium avian remains (*Anas*: n = 3) were recovered; these are thought to have filtered down into the lower soil matrices. Two elements represented pig (*Sus scrofa*) remains, but these apparently had also filtered down from the heavier concentration above in Level 4. Important here is the fact that somehow the vault had been compromised to the outside environment and silted in to Level 5.

Level 6 produced 1,068 bone fragments, of which only 217 (20.3 per cent) were non-human animal remains. The total number of elements is elevated due to the number of unidentifiable large mammal (tentatively identified as human) remains. Level 6 is thought to represent the original floor of the vault, where most remains of small animals probably settled. Most of the non-human animal remains present at this level represented very small animals like mice, moles (Cricetidae: n=9), and frogs/toads (Anura: n=10); these remains may represent animals that initially were deposited within the upper levels but whose remains filtered down to lower levels. Both swine remains (*Sus scrofa*: n = 11) and snake remains (colubridae: n= 5) were recovered from this level and also may have filtered down from above.

Level 7 produced 3 bone fragments, none of which none represented animal remains. The total absence of small animal remains within this level supports the idea that Level 6 represented the original deposit within the vault.

Review of the Number of Individual Specimens Present (NISP) counts (regardless of taxonomic class) in relation to the excavation levels revealed a trimodal distribution that featured three high NISP counts separated by two low NISP counts. The first peak was noted in Level 1 and is mostly comprised of small animal remains. The NISP counts decline in Levels 2 and 3, but rise to a second peak in Level 4. The majority of this increase is due to the high number of human remains. Another sharp decline is apparent in Level 5. The last peak is evident in Level 6, again due to the increase in human remains.

These distributions are important to understanding the collapse sequence of the vault. In the field it was observed that the upper skeletons in Levels 2 and 4 were very scattered while the lowest skeleton was in a roughly standard anatomical position. It appears that when the vault collapsed it did so violently and that it was this collapse that was the agent that scattered the human remains in Level 4. The lowest skeleton however, was protected from this fate, probably because some silt already had crept into the vault and covered these remains. The lower NSIP counts in Level 5 compared to both Levels 4 and 6, tend to support this hypothesis. If a break in the vault wall and resulting siltation had not occurred, then one would expect constant NISP counts of very small animals like frogs and rodents. Further support for this hypothesis is furnished by the distribution of the remains of the suckling pigs; all but 14 elements of these remains were recovered from Level 4, including numerous bones in the immature pig skeleton. Had Levels 5 and 6 not been completely silted in, one certainly would have found more pig remains in the lower levels.

Small Animal Entrapment

The distributions and speciation of other small animals also contribute insights to the site formation processes that created the stratigraphy inside the vault. Whyte (1991) performed a actualistic experiment in which 15 pits near the edge of the Tennessee River were left open for 378 days. The results of this experiment have far reaching implications. Over 267 vertebrates representing 22 species and 811 land snails were counted over the length of the experiment (Whyte 1991). Table 3 illustrates the general categories and frequency of animal remains deposited in these pits.

Table 3. Animal Class and Number Entrapped

Animal Class	Individuals Entrapped
Amphibians	77
Reptiles	97
Aves	1
Mammals	91
Terrestrial Snails	811
Total	1,077

Data from Whyte (1991)

The entrapped amphibians included frogs and toads, but no salamanders. Reptiles were very prevalent in the pits with each pit entrapping an average of 12 turtles each (Whyte 1991). Of particular relevance to the present study is that fact that 13 young stinkpot turtles (*Sternotherus oderatus*) were entrapped. Only one young king snake (*Lampropeltis getulus*) was entrapped (Whyte 1991). Similar to the snake, one young wood duck (*Aix sponsa*) was entrapped (Whyte 1991). Mammals also were very prevalent; species represented included possums, short-tailed shrews, mice, moles and young rabbits (Whyte 1991).

Whyte's study revealed some basic patterns that typify small animal entrapment. First, it demonstrated that consideration of the stratigraphic placement of small animal remains is very important to clearly demonstrate that entrapment indeed occurred as a result of natural processes (White 1991:170). Secondly, those remains in deeper deposits are more likely to be intrusive since this is where such remains will accumulate (White 1991:170). Third, shells of land snails will accumulate along the walls of pits and directly below the deposits that trapped them in place.

Whyte's data also provided an inferred seasonal model for entrapment. His study suggested that amphibians are most likely to be entrapped between the months of May and September. Turtles on the other hand have a bimodal distribution with entrapment likely to occur between February and April and later from July to December. Mammals are most likely to be entrapped between May and July.

Relation to West Family Vault

In effect, the West Family burial vault is comparable to the entrapment pits utilized by Whyte as the basis of his study. Once the integrity of the vault was compromised it should have acted much like Whyte's pits along the river trapping animals. Although minor swings in the NISP counts of animals per level could not be discerned, the data permitted us to make a rough estimate of when animals may have become entrapped within the vault, and consequently, when during the year the vault itself collapsed.

Although the turtle remains were not identified beyond the taxonomic level testudines, Whyte's findings suggest that these most likely were entrapped between May and July, while young turtles are more likely to be trapped in the later summer and fall months (August through November)(Whyte 1991). Thus it is likely that the turtle remains in the vault span these seasons. Like adult turtles, amphibians are most likely to be entrapped between the months of May and August (Whyte 1991). Taken together, the frog and toad and turtle remains suggest that entrapment (and the vault collapse) probably occurred during the summer months.

Conclusions

The collapse and subsequent silting in of the vault was a complex process. In all likelihood this process was on-going during several decades, and that it occurred in two major stages as evidenced by the vertical distribution of the human remains. Bones of small animals like frogs and rodents were equally distributed throughout the vault, while those from animals like pigs, snakes and turtles were confined to specific levels. While the animal remains from vault were not associated directly with the interments themselves process, they do offer insights into the relative chronology of the vault's collapse and its subsequent in-filling.

REFERENCES CITED

- Burnt, William and Philip Grossenheider
1980 *The Peterson Field Guide to Mammals of North America North of Mexico* Houghton Mifflin Company NY.
- Cannon, Debbi
1987 Marine Fish Osteology: A Manual for Archaeologists. In *Department of Archaeology, Simon Fraser University, Burnaby, B.C. Publication 18*. Department of Archaeology, Simon Fraser University, Vancouver.
- Conant, Roger and Joseph Collins
1991 *The Peterson Guide to Reptiles and Amphibians*. Houghton Mifflin Company, New York.
- Gilbert, Miles
1993 *Mammalian Osteology*. Missouri Archaeology Society, Inc. Press.
- Gilbert, Miles, Larry Martin and Howard Savage
1996 *Avian Osteology*. Missouri Archaeology Society, Inc. Press.
- Kaufmann, John
1992 Raccoon and Allies (*Procyon lotor* and Allies) In *Wild Mammals of North America Biology Management Economics*. Edited by Joseph A. Chapman and George A. Feldhamer. Johns Hopkins University Press, Baltimore.
- Lyman, Lee
1994 *Vertebrate Taphonomy*. Cambridge University Press, London.
- Olsen, Stanley
1968 Fish, Amphibian and Reptile Remains from Archaeological Sites: Part 1. Southeastern and Southwestern United States: Appendix the Osteology of the Wild Turkey. In *Papers of the Peabody Museum of Archaeology and Ethnology* 56(2).

1996 Mammal Remains from Archaeological Sites: Part 1 Southeastern and Southwestern United States. In *Papers of the Peabody Museum of Archaeology and Ethnology* 56(1).
- Pearson, Gilbert, John Burroughs, Edward Forbush, William Finley, George Gladden, Herbert Job, Nelson Nichols, and Ellis Burdick.
1932 *Birds of America*. Doubleday and Company, Inc., Garden City, NY.
- Peterson, Roger and Virginia Peterson
1980 *The Peterson Field Guide to Birds*, Houghton Mifflin Company, New York.
- Sobolik, Kristin and Gentry Steele
1996 *A Turtle Atlas to Facilitate Archaeological Identifications*. Hot Springs Press, Fenske Companies, Rapid City, SD.

Whyte, Thomas

1991 Small-Animal Remains in Archaeological Pit Features. In *Beamers, Bobwhites, and Blue Points: Tributes to the Career of Paul W. Parmalee*. Edited by J. Purdue, W. Klippel, and B. Styles. Pp. 277-284. Illinois State Museum Scientific Papers Vol XXIII and University of Tennessee Department of Anthropology Report of Investigations No 52. Illinois State Museum, Springfield.

APPENDIX F

**SUPPLEMENTARY OSTEOLOGICAL
ANALYSIS OF HUMAN REMAINS
FROM SITE 44AX183
(OWSLEY 2003)**

Table 1 Unassociated permanent teeth from the West Family Vault (44AX183)

TOOTH	NUMBER		NUMBER CARIOUS		% CARIES		COMMENTS
	L	R	L	R	L	R	
Incisors							
Maxillae	4	5	1	1	25	20	Left and right I ¹ s each show two linear enamel defects. A matched pair of I ¹ s have short roots (6.0 and 8.2 mm).
Mandible	2	2	-	1	-	50	Two left I ₁ s have occlusal grooves consistent with small Taylor's notches.
Canines							
Maxillae	4	4	1	-	25	-	A small Taylor's notch is present on the right canine of a probable female.
Mandible	1	1	-	-	-	-	A possible pipe facet is present on the right canine of a probable male.
Premolars							
Maxillae	2	-	2	-	100	-	
Mandible	1	2	-	-	-	-	
Molars							
Maxillae	3	5	2	4	66.7	80	
Mandible	1	1	1	-	100	-	
Total	18	20	7	6	38.9	30	

This assemblage of unassociated teeth represents a minimum of five individuals. This number is based on the presence of four left and four right maxillary incisors, and four right maxillary canines of adults. None of the adult teeth have marked occlusal wear, indicating that only young to middle aged adults are represented. Also present is a right maxillary second molar of an adolescent aged about 10 to 11 years. This tooth has root three-fourths development.

44AX183-WEST-H

An elderly female is represented by the middle and distal phalanges of a left fifth finger. These phalanges are fully ankylosed in an extended position. The bones have a geriatric appearance. The determination of sex is based on their small size. In addition to ankylosis of the articulating joint, degenerative changes are visible on the proximal joint of the middle phalanx. This degeneration is characterized by lipping of the joint margin and porosity of its surface. Slight palmer ridging is exhibited on the middle phalanx.

SKELETAL INVENTORY

OMPID: 44 AX 183 - WEST - A	
ITE:	DATE:
EATURE:	RECORDER:
URIAL NO.:	

RACE: W
SEX: 02
AGE: 22 (25-34)

<u>CRANIAL BONES</u>	LEFT	RIGHT	SINGLE
FRONTAL			<u>2</u>
PARIETAL	_____	_____	
OCCIPITAL			<u>1</u>
TEMPORAL	<i>retromax temp. form</i> <u>2</u>	<i>retromax temp. only</i> <u>2</u>	
ZYGOMATIC	_____	_____	
MAXILLA	<u>2</u>	_____	
PALATINE	_____	_____	
MANDIBLE			<u>1</u>
HYOID			_____
<u>POSTCRANIAL BONES</u>	LEFT	RIGHT	SINGLE
STERNUM			
MANUBRIUM			_____
BODY			_____
XIPHOID			_____
SCAPULA	<u>2</u>	<u>2</u>	
CLAVICLE	<u>1</u>	<u>2</u>	
INNOMINATE	_____	_____	
SACRUM			<u>2</u>
COCCYX			_____
PATELLA	<u>1</u>	<u>1</u>	
FOOT BONES			
TALUS	<u>1</u>	<u>2</u>	
CALCANEUS	<u>1</u>	<u>1</u>	

sternal sp. of clavicle fully united

*- Squatting facets on distal tibiae
- marked bending of the distal ulnae
- possible rib modification due to criset/stays
flattening of the external surfaces (lt. rib 10) + abnormal downward curvature of Rt ribs 7-8?*

*Isotope sample - R1M2, R1C - Rt Tibial midsh
DNA sample - R1M3
R1Pm1*

A

BONES
 HUMERUS
 RADIUS
 ULNA
 HUMERUS
 CLAVICLE
 SCAPULA

LEFT
 |
 |
 |
 |
 |
 |
 |

RIGHT
 |
 |
 |
 |
 |
 |
 |

SURFACES
 TEMPOROMANDIBULAR
 HUMERUS - PROXIMAL
 HUMERUS - DISTAL
 RADIUS - PROXIMAL
 RADIUS - DISTAL
 ULNA - PROXIMAL
 ULNA - DISTAL
 INNOMINATE - ACETABULUM
 INNOMINATE - SACROILIAC
 FEMUR - PROXIMAL
 FEMUR - DISTAL
 TIBIA - PROXIMAL
 TIBIA - DISTAL

|
 2
 |
 |
 |
 |
 |
 |
 |
 |
 |
 |
 |
 |

|
 |
 |
 |
 |
 2
 |
 |
 |
 |
 |
 |
 |

BS
 1ST
 2ND
 3RD-10TH
 11TH
 12TH

LEFT
 |
 2
 7
 2
 |

RIGHT
 2
 2
 6
 2
 2

NO. COMPLETE
 LEFT RIGHT
 | 1/2

VERTEBRAE
 C1
 C2
 C3-C6
 C7
 T1-T9
 T10
 T11
 T12
 L1-L5
 L1
 L2
 L3
 L4
 L5

SINGLE
 2
 |
 |
 7
 |
 |
 |
 5
 |
 |
 2
 |
 |

|
 2

44A X 183 - WEST - A

SITE
FEATURE
BURIAL NO
RECORDER

COMPID
DATE
PROJECT

RIGHT MAXILLA LEFT

	PRE	OCC	BUC	LIN	INT	RT	PE	ABS	ABR	CAL	RES
DI1											
DI2											
DC											
DM1											
DM2											
I1											
I2											
C											
PM1											
PM2											
M1											
M2											
M3											

	PRE	OCC	BUC	LIN	INT	RT	PE	ABS	ABR	CAL	RES
DI1											
DI2											
DC											
DM1											
DM2											
I1	5							1			
I2	5							1			
C	5							1			
PM1	5							3			
PM2	3							4			
M1											
M2											
M3											

RIGHT MANDIBLE LEFT

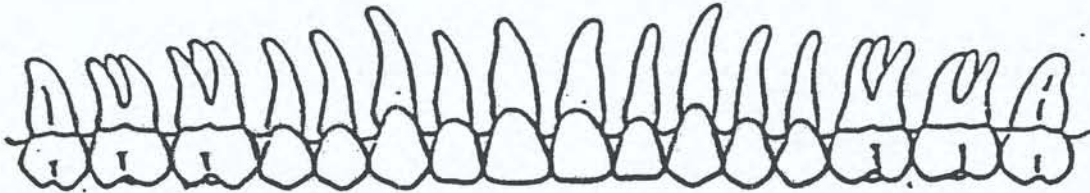
	PRE	OCC	BUC	LIN	INT	RT	PE	ABS	ABR	CAL	RES
DI1											
DI2											
DC											
DM1											
DM2											
I1	5							1			
I2	5							1			
C	2							1		2	
PM1	2				1			1		1	
PM2	2				3			1		1	
M1	4							5			
M2	2				2			1		2.2	
M3	2							1		2.1	

	PRE	OCC	BUC	LIN	INT	RT	PE	ABS	ABR	CAL	RES
DI1											
DI2											
DC											
DM1											
DM2											
I1	5							1			
I2	2							1	1	1	
C	2							1		2	
PM1	2				1			1			
PM2	2							1			
M1	2	2			3	5	2	2			1.9
M2	2				2			1			2.1
M3	5							1			

DENTAL WEAR

Catalog no. _____ Recorder _____ Date _____

44AX183 - WEST - A

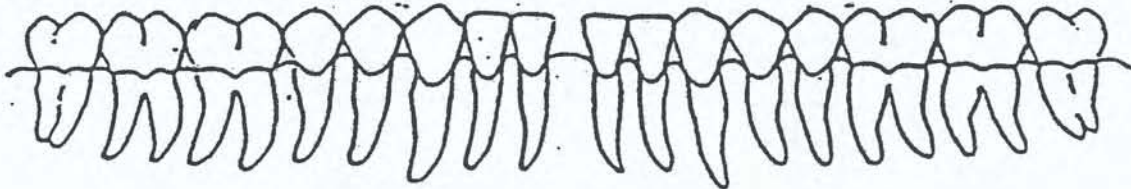


A																
B																

Right

Left

B																
A	3	2	/	2	2	2		3	2	2	2	6	6			



A = Stage of wear
(numeric codes 1 to 8 based on scoring stages by Smith 1984 [AJPA 63: 46])

STAGES OF WEAR

B = Plane of wear
(recorded only for stages of dental wear 4 to 8)

1. flat
2. concave
3. buccal slope
4. lingual slope
5. mesial slope
6. distal slope
7. concave-buccal
8. concave-lingual
9. concave-mesial
10. concave-distal
11. buccal-lingual
12. buccal-mesial
13. buccal-distal
14. lingual-mesial
15. lingual-distal
16. distal-mesial

	MOLARS	PREMOLARS	INCISORS & CANINES
	L	U	L U
1			
2			
3			
4			
5			
6			
7			
8			

99 = unobservable.

POST-CRANIAL MEASUREMENTS

Catalog no _____ Recorder KAB / DWO Date _____

1. Clavicle maximum length	(CML)	<u>(137)</u>	R	36. Ulna med/lateral diam of shaft	(UMD)	<u>12</u>	R
2. Clav ant/post diam midshaft	(CSD)	<u>11</u>		37. Ulna least circumf of shaft	(ULC)	<u>32</u>	
3. Clav sup/inf diam midshaft	(CVD)	<u>8</u>		38. Sacrum anterior length	(SAL)	_____	
4. Scapula maximum height	(SML)	_____		39. Sacrum ant/superior breath	(SAB)	_____	
5. Scapula maximum breath	(SMB)	_____		40. Sacrum maximum breath S1	(SMB)	_____	
6. Scapula spine length	(SLS)	_____		41. Innominate height	(INH)	<u>189</u>	
7. Scapula supraspinous length	(SSL)	_____		42. Iliac breath	(ILB)	<u>141</u>	
8. Scapula infraspinous length	(ISL)	_____		43. Pubis length	(FUL)	_____	
9. Scap glenoid cavity breath	(GCB)	<u>22</u>	✓	44. Ischium length	(ICL)	_____	
10. Scap glenoid cavity height	(GCH)	<u>30</u>	✓	45. Femur maximum length	(FML)	<u>395</u>	
11. Scap glenoid to inf angle	(GIL)	_____		46. Femur bicondylar length	(FOL)	<u>390</u>	
12. Manubrium length	(MML)	_____		47. Femur trochanteric length	(FTL)	<u>373</u>	
13. Mesosternum length	(MSL)	_____		48. Fem subtroch ant/post diam	(APD)	<u>23</u>	
14. Stenebra 1 width	(S1W)	_____		49. Fem subtroch med/lateral diam	(MLD)	<u>27</u>	
15. Stenebra 3 width	(S3W)	_____		50. Fem ant/post diam midshaft	(APS)	<u>27</u>	
16. Humerus maximum length	(HML)	<u>282</u>	✓	51. Fem med/lateral diam midshaft	(MLS)	<u>24</u>	
17. Humerus prox epiph breath	(BUE)	_____		52. Femur max vert diam of head	(VHD)	<u>39</u>	
18. Hum maximum diam midshaft	(MDS)	<u>21</u>	✓	53. Femur max horiz diam of head	(HHD)	<u>38</u>	
19. Hum minimum diam midshaft	(MDM)	<u>16</u>	✓	54. Fem ant/post diam lat condyle	(APL)	<u>(55)</u>	55 ✓
20. Hum max vert diam of head	(MDH)	<u>39</u>	✓	55. Fem ant/post diam med condyle	(APM)	<u>53</u>	
21. Humerus epicondylar breath	(EBR)	<u>53</u>	✓	56. Femur epicondylar breath	(FEB)	_____	
22. Hum least circumf of shaft	(LCS)	<u>56</u>	✓	57. Femur bicondylar breath	(BCB)	<u>65</u>	
23. Radius maximum length	(RML)	<u>208</u>		58. Femur min vert diam of neck	(VDN)	<u>26</u>	
24. Radius maximum diam of head	(RDH)	<u>20</u>		59. Femur circumference midshaft	(FCS)	<u>78</u>	
25. Radius ant/post diam of shaft	(RSD)	<u>10</u>		60. Tibia condylo-malleolar length	(TML)	_____	
26. Rad med/lateral diam of shaft	(RTD)	<u>15</u>		61. Tibia max breath prox epiph	(BPE)	_____	
27. Rad neck shaft circumference	(MCS)	<u>40</u>		62. Tibia max breath dist epiph	(BDE)	<u>42</u>	
28. Ulna maximum length	(UML)	<u>226</u>		63. Tibia ant/post diam nut for	(APN)	<u>30</u>	
29. Ulna physiological length	(UPL)	<u>200</u>		64. Tibia med/lateral diam nut for	(MLM)	<u>22</u>	
30. Ulna max breath olecranon	(BOP)	_____		65. Tibia position of nutr foramen	(CFL)	<u>100</u>	
31. Ulna min breath olecranon	(MBO)	<u>(17)</u>		66. Tibia circum at nutr foramen	(FCN)	<u>86</u>	
32. Ulna max width olecranon	(WOP)	_____		67. Fibula maximum length	(BML)	_____	
33. Ulna olec-radial notch	(ORL)	<u>(31)</u>		68. Fibula maximum diam midshaft	(FMD)	_____	
34. Ulna olec-coronoid length	(OCL)	<u>(21)</u>		69. Calcaneus maximum length	(CLL)	<u>72</u>	✓
35. Ulna ant/post diam of shaft	(UAD)	<u>15</u>		70. Calcaneus middle breath	(CMB)	<u>38</u>	✓

SKELETAL INVENTORY

OMPID: 44AX183 - WEST - B	
TE:	DATE:
EATURE:	RECORDER:
JRIAL NO.:	

RACE: W
SEX: 02
AGE: 45+

(45-59)

CRANIAL BONES

	LEFT	RIGHT	SINGLE
FRONTAL			_____
PARIETAL	_____	_____	
OCCIPITAL			_____
TEMPORAL	_____	_____	
ZYGOMATIC	_____	_____	
MAXILLA	_____	_____	
PALATINE	_____	_____	
MANDIBLE			_____
HYOID			_____

*- slight hyp of orbitals
A region*

auricular surface

- slight dental activity

- surface elevation

- fully developed pubic

symphysis that has not

separated to break down

- very slight possible

posterior part

- incomplete ^{RT} pubic symphysis

for histologic analysis

- 2nd sample - RT

OSTEOCRANIAL BONES

	LEFT	RIGHT	SINGLE
STERNUM			
MANUBRIUM			_____
BODY			_____
XIPHOID			_____
SCAPULA	_____	_____	
CLAVICLE	_____	_____	
INNOMINATE	_____	1	
SACRUM			_____
COCCYX			_____
PATELLA	_____	_____	
FOOT BONES			
TALUS	_____	_____	
CALCANEUS	_____	_____	

3 BONES

- HUMERUS
- RADIUS
- ULNA
- FEMUR
- TIBIA
- FIBULA

LEFT

7 SURFACES

- TEMPOROMANDIBULAR
- HUMERUS - PROXIMAL
- HUMERUS - DISTAL
- RADIUS - PROXIMAL
- RADIUS - DISTAL
- ULNA - PROXIMAL
- ULNA - DISTAL
- INNOMINATE - ACETABULUM
- INNOMINATE - SACROILIAC
- FEMUR - PROXIMAL
- FEMUR - DISTAL
- TIBIA - PROXIMAL
- TIBIA - DISTAL

LEFT

RIGHT

NO. COMPLETE
LEFT RIGHT

13

- 1ST
- 2ND
- 3RD-10TH
- 11TH
- 12TH

VERTEBRAE

SINGLE

- C1
- C2
- C3-C6
- C7
- T1-T9
- T10
- T11
- T12
- L1-L5
- L1
- L2
- L3
- L4
- L5

SKELETAL INVENTORY

OJMPID: 44 AX 183 - WEST - C	
FE:	DATE:
ATURE:	RECORDER:
IRIAL NO.:	

RACE: W
SEX: 01
AGE: ²⁵ 40-55 midpt

CRANIAL BONES	LEFT	RIGHT	SINGLE
FRONTAL			_____
PARIETAL	_____	_____	
OCCIPITAL			_____
TEMPORAL	_____	_____	
ZYGOMATIC	_____	_____	
MAXILLA	_____	_____	
PALATINE	_____	_____	
MANDIBLE			_____
HYOID			_____
STERNAL BONES	LEFT	RIGHT	SINGLE
STERNUM			
MANUBRIUM			_____
BODY			_____
XIPHOID			_____
SCAPULA	_____	_____	
CLAVICLE	_____	_____	
INNOMINATE	_____	_____ 2	
SACRUM			_____
COCCYX			_____
PATELLA	_____	_____	
FOOT BONES			
TALUS	_____	_____	
CALCANEUS	_____	_____	

~ 35-49

Rt auricular surface
 Coarse granular surface
 No apical activity
 No macroporosity

This male is slightly smaller than D, based on humerus measurements.

"C" has slightly (trace) more compact bone than "D" and may be slightly younger

Isotope - Rt Humerus midshaft

DNA - Rt Humerus midshaft

<u>BONES</u>	LEFT	RIGHT
HUMERUS	_____	<u>1</u>
RADIUS	_____	_____
ULNA	_____	_____
FEMUR	_____	_____
TIBIA	_____	_____
FIBULA	_____	_____
<u>JOINT SURFACES</u>		
TEMPOROMANDIBULAR	_____	_____
HUMERUS - PROXIMAL	_____	<u>2</u>
HUMERUS - DISTAL	_____	<u>2</u>
RADIUS - PROXIMAL	_____	_____
RADIUS - DISTAL	_____	_____
ULNA - PROXIMAL	_____	_____
ULNA - DISTAL	_____	<u>2</u>
INNOMINATE - ACETABULUM	_____	<u>2</u>
INNOMINATE - SACROILIAC	_____	_____
FEMUR - PROXIMAL	_____	_____
FEMUR - DISTAL	_____	_____
TIBIA - PROXIMAL	_____	_____
TIBIA - DISTAL	_____	_____

<u>VERTEBRAE</u>	LEFT	RIGHT	NO. COMPLETE	
			LEFT	RIGHT
1ST	_____	_____		
2ND	_____	_____	<u>0</u>	_____
3RD-10TH	<u>2</u>	_____		
11TH	_____	_____		
12TH	_____	_____		

<u>VERTEBRAE</u>	SINGLE
C1	_____
C2	_____
C3-C6	_____
C7	_____
T1-T9	_____
T10	_____
T11	_____
T12	_____
L1-L5	_____
L1	_____
L2	_____
L3	_____
L4	_____
L5	_____

POST-CRANIAL MEASUREMENTS

Catalog no _____ Recorder _____ Date _____

44AX183-WEST-C

R

- | | | | |
|-----------------------------------|-------|-------------|---|
| 1. Clavicle maximum length | (CML) | _____ | — |
| 2. Clav ant/post diam midshaft | (CSD) | _____ | — |
| 3. Clav sup/inf diam midshaft | (CVD) | _____ | — |
| 4. Scapula maximum height | (SML) | _____ | — |
| 5. Scapula maximum breath | (SMB) | _____ | — |
| 6. Scapula spine length | (SLS) | _____ | — |
| 7. Scapula supraspinous length | (SSL) | _____ | — |
| 8. Scapula infraspinous length | (ISL) | _____ | — |
| 9. Scap glenoid cavity breath | (GCB) | _____ | — |
| 10. Scap glenoid cavity height | (GCH) | _____ | — |
| 11. Scap glenoid to inf angle | (GIL) | _____ | — |
| 12. Manubrium length | (MML) | _____ | — |
| 13. Mesosternum length | (MSL) | _____ | — |
| 14. Sternebra 1 width | (S1W) | _____ | — |
| 15. Sternebra 3 width | (S3W) | _____ | — |
| 16. Humerus maximum length | (HML) | <u>324</u> | ✓ |
| 17. Humerus prox epiph breath | (BUE) | <u>51</u> | ✓ |
| 18. Hum maximum diam midshaft | (MDS) | <u>23</u> | ✓ |
| 19. Hum minimum diam midshaft | (MDM) | <u>19</u> | ✓ |
| 20. Hum max vert diam of head | (MDH) | _____ | — |
| 21. Humerus epicondylar breath | (EBR) | <u>(59)</u> | — |
| 22. Hum least circumf of shaft | (LCS) | _____ | — |
| 23. Radius maximum length | (RML) | _____ | — |
| 24. Radius maximum diam of head | (RDH) | _____ | — |
| 25. Radius ant/post diam of shaft | (RSD) | _____ | — |
| 26. Rad med/lateral diam of shaft | (RTD) | _____ | — |
| 27. Rad neck shaft circumference | (MCS) | _____ | — |
| 28. Ulna maximum length | (UML) | _____ | — |
| 29. Ulna physiological length | (UPL) | _____ | — |
| 30. Ulna max breath olecranon | (BOP) | _____ | — |
| 31. Ulna min breath olecranon | (MBO) | _____ | — |
| 32. Ulna max width olecranon | (WOP) | _____ | — |
| 33. Ulna olec-radial notch | (ORL) | _____ | — |
| 34. Ulna olec-coronoid length | (OCL) | _____ | — |
| 35. Ulna ant/post diam of shaft | (UAD) | _____ | — |

R

- | | | | |
|------------------------------------|-------|-------|---|
| 36. Ulna med/lateral diam of shaft | (UMD) | _____ | — |
| 37. Ulna least circumf of shaft | (ULC) | _____ | — |
| 38. Sacrum anterior length | (SAL) | _____ | — |
| 39. Sacrum ant/superior breath | (SAB) | _____ | — |
| 40. Sacrum maximum breath S1 | (SMB) | _____ | — |
| 41. Innominate height | (INH) | _____ | — |
| 42. Iliac breath | (ILB) | _____ | — |
| 43. Pubis length | (PUL) | _____ | — |
| 44. Ischium length | (SCL) | _____ | — |
| 45. Femur maximum length | (FML) | _____ | — |
| 46. Femur bicondylar length | (POL) | _____ | — |
| 47. Femur trochanteric length | (FTL) | _____ | — |
| 48. Fem subtroch ant/post diam | (APD) | _____ | — |
| 49. Fem subtroch med/lateral diam | (MLD) | _____ | — |
| 50. Fem ant/post diam midshaft | (APS) | _____ | — |
| 51. Fem med/lateral diam midshaft | (MLS) | _____ | — |
| 52. Femur max vert diam of head | (VHD) | _____ | — |
| 53. Femur max horiz diam of head | (HHD) | _____ | — |
| 54. Fem ant/post diam lat condyle | (APL) | _____ | — |
| 55. Fem ant/post diam med condyle | (APM) | _____ | — |
| 56. Femur epicondylar breath | (FEB) | _____ | — |
| 57. Femur bicondylar breath | (BCB) | _____ | — |
| 58. Femur min vert diam of neck | (VDN) | _____ | — |
| 59. Femur circumference midshaft | (FCS) | _____ | — |
| 60. Tibia condylo-malleolar length | (TML) | _____ | — |
| 61. Tibia max breath prox epiph | (BPE) | _____ | — |
| 62. Tibia max breath dist epiph | (BDE) | _____ | — |
| 63. Tibia ant/post diam nut for | (APN) | _____ | — |
| 64. Tibia med/lateral diam nut for | (MLM) | _____ | — |
| 65. Tibia position of nutr foramen | (CPL) | _____ | — |
| 66. Tibia circum. at nutr foramen | (PCN) | _____ | — |
| 67. Fibula maximum length | (BML) | _____ | — |
| 68. Fibula maximum diam midshaft | (FMD) | _____ | — |
| 69. Calcaneus maximum length | (CLL) | _____ | — |
| 70. Calcaneus middle breath | (CMB) | _____ | — |

SKELETAL INVENTORY

MMPID: 44AX183-WEST-D	
DATE:	DATE:
INITIALS:	RECORDER:
SERIAL NO.:	

RACE:	W
SEX:	01
AGE:	25 midpt Adult

CRANIAL BONES

	LEFT	RIGHT	SINGLE
FRONTAL			_____
PARIETAL	_____	_____	
OCCIPITAL			_____
TEMPORAL	_____	_____	
ZYGOMATIC	_____	_____	
MAXILLA	_____	_____	
PALATINE	_____	_____	
MANDIBLE			_____
HYOID			_____

~ 35-49

- moderately compact cancellous bone in the prox. rt humerus

- long bones have smooth cortical bone surfaces.

- NO O.A. on distal left radius, or distal humeri

POSTCRANIAL BONES

	LEFT	RIGHT	SINGLE
STERNUM			
MANUBRIUM			_____
BODY			_____
XIPHOID			_____
SCAPULA	_____	_____	
CLAVICLE	_____	_____	
INNOMINATE	2	2	
SACRUM			_____
COCCYX			_____
PATELLA	_____	_____	
FOOT BONES			
TALUS	_____	_____	
CALCANEUS	_____	_____	

2 partial ischium

2 Sciatic notch area

Isotope - left humerus, midshaft

DNA - left humerus, upper aspect of midshaft

BONES

HUMERUS	<u>1</u>	<u>1</u>
RADIUS	<u>1</u>	_____
ULNA	_____	_____
FEMUR	_____	_____
FIBIA	_____	_____
FIBULA	_____	_____
<u>T SURFACES</u>		
TEMPOROMANDIBULAR	_____	_____
HUMERUS - PROXIMAL	<u>2</u>	<u>1</u>
HUMERUS - DISTAL	<u>2</u>	<u>1</u>
RADIUS - PROXIMAL	<u>1</u>	_____
RADIUS - DISTAL	<u>1</u>	_____
ULNA - PROXIMAL	_____	_____
ULNA - DISTAL	_____	_____
INNOMINATE - ACETABULUM	_____	_____
INNOMINATE - SACROILIAC	_____	_____
FEMUR - PROXIMAL	_____	_____
FEMUR - DISTAL	_____	_____
TIBIA - PROXIMAL	_____	_____
TIBIA - DISTAL	_____	_____

D

	LEFT	RIGHT	NO. COMPLETE	
			LEFT	RIGHT
<u>3S</u>				
1ST	_____	_____		
2ND	_____	_____		
3RD-10TH	_____	_____	_____	_____
11TH	_____	_____		
12TH	_____	_____		

<u>VERTEBRAE</u>	SINGLE	
C1	_____	
C2	_____	
C3-C6	_____	_____
C7	_____	
T1-T9	_____	_____
T10	_____	
T11	_____	
T12	_____	
L1-L5	_____	
L1	_____	
L2	_____	
L3	_____	
L4	_____	
L5	_____	

POST-CRANIAL MEASUREMENTS

Catalog no _____ Recorder DWD/KSS Date _____

44 AX 183 - WEST - D

		R			R
1. Clavicle maximum length	(CML)	_____	36. Ulna med/lateral diam of shaft	(UMD)	_____
2. Clav ant/post diam midshaft	(CSD)	_____	37. Ulna least circumf of shaft	(ULC)	_____
3. Clav sup/inf diam midshaft	(CVD)	_____	38. Sacrum anterior length	(SAL)	_____
4. Scapula maximum height	(SML)	_____	39. Sacrum ant/superior breath	(SAB)	_____
5. Scapula maximum breath	(SMB)	_____	40. Sacrum maximum breath S1	(SMB)	_____
6. Scapula spine length	(SLS)	_____	41. Innominate height	(INH)	_____
7. Scapula supraspinous length	(SSL)	_____	42. Iliac breath	(ILB)	_____
8. Scapula infraspinous length	(ISL)	_____	43. Pubis length	(PUL)	_____
9. Scap glenoid cavity breath	(GCB)	_____	44. Ischium length	(ICL)	_____
10. Scap glenoid cavity height	(GCH)	_____	45. Femur maximum length	(FML)	_____
11. Scap glenoid to inf angle	(GIL)	_____	46. Femur bicondylar length	(FOL)	_____
12. Manubrium length	(MML)	_____	47. Femur trochanteric length	(FTL)	_____
13. Mesosternum length	(MSL)	_____	48. Fem subtroch ant/post diam	(APD)	_____
14. Stenebra 1 width	(S1W)	_____	49. Fem subtroch med/lateral diam	(MLD)	_____
15. Stenebra 3 width	(S3W)	_____	50. Fem ant/post diam midshaft	(APS)	_____
16. Humerus maximum length	(HML)	<u>344</u>	51. Fem med/lateral diam midshaft	(MLS)	_____
17. Humerus prox epiph breath	(BUE)	<u>55</u>	52. Femur max vert diam of head	(VHD)	_____
18. Hum maximum diam midshaft	(MDS)	<u>24</u>	53. Femur max horiz diam of head	(HHD)	_____
19. Hum minimum diam midshaft	(MDM)	<u>19</u>	54. Fem ant/post diam 1st condyle	(APL)	_____
20. Hum max vert diam of head	(MDH)	_____	55. Fem ant/post diam med condyle	(APM)	_____
21. Humerus epicondylar breath	(EBR)	_____	56. Femur epicondylar breath	(FEB)	_____
22. Hum least circumf of shaft	(LCS)	<u>67</u>	57. Femur bicondylar breath	(BCB)	_____
23. Radius maximum length	(RML)	<u>265</u>	58. Femur min vert diam of neck	(VDN)	_____
24. Radius maximum diam of head	(RDH)	<u>25</u>	59. Femur circumference midshaft	(FCS)	_____
25. Radius ant/post diam of shaft	(RSD)	<u>14</u>	60. Tibia condylo-malleolar length	(TML)	_____
26. Rad med/lateral diam of shaft	(RTD)	<u>16</u>	61. Tibia max breath prox epiph	(BPE)	_____
27. Rad neck shaft circumference	(MCS)	<u>52</u>	62. Tibia max breath dist epiph	(BDE)	_____
28. Ulna maximum length	(UML)	_____	63. Tibia ant/post diam nut for	(APN)	_____
29. Ulna physiological length	(UPL)	_____	64. Tibia med/lateral diam nut for	(MLM)	_____
30. Ulna max breath olecranon	(BOP)	_____	65. Tibia position of nutr foramen	(CPL)	_____
31. Ulna min breath olecranon	(MBO)	_____	66. Tibia circum. at nutr foramen	(PCN)	_____
32. Ulna max width olecranon	(WOP)	_____	67. Fibula maximum length	(BML)	_____
33. Ulna olec-radial notch	(ORL)	_____	68. Fibula maximum diam midshaft	(FMD)	_____
34. Ulna olec-coronoid length	(OCL)	_____	69. Calcaneus maximum length	(CLL)	_____
35. Ulna ant/post diam of shaft	(UAD)	_____	70. Calcaneus middle breath	(CMB)	_____

66

SKELETAL INVENTORY

OMPID: <u>44AX183-WEST-E</u>	
ITE:	DATE:
EATURE:	RECORDER:
URIAL NO.:	

RACE: <u>W</u>
SEX: <u>02</u>
AGE: <u>23</u> <u>YA-MA</u> <u>27-34</u>

CRANIAL BONES

	LEFT	RIGHT	SINGLE
FRONTAL			<u>2</u>
PARIETAL	<u>2</u>	<u>2</u>	
OCCIPITAL			
TEMPORAL	<u>1</u>	<u>2 portions</u>	
ZYGOMATIC	<u>2</u>	<u>1</u>	
MAXILLA			
PALATINE			
MANDIBLE			<u>2</u>
HYOID			

- Shallow meningeal artery impression
 - Rt Lambdoidal suture is 11 years, the {sagittal} coronal suture was found to be normally and subsequently
 - Basilar impression of skull is medium in size
 - The left ulna has a small superior crest

OSTEOCRANIAL BONES

	LEFT	RIGHT	SINGLE
STERNUM			
MANUBRIUM			
BODY			
XIPHOID			
SCAPULA		<u>2</u>	
CLAVICLE			
INNOMINATE			
SACRUM			
COCCYX			
PATELLA			
FOOT BONES			
TALUS			
CALCANEUS			

- No pathology
 - Slight thickening of the...
 - ...
 - ...
 - ...
 - ...

BONES

HUMERUS

LEFT

RIGHT

RADIUS

ULNA

FEMUR

TIBIA

FIBULA

JOINT SURFACES

TEMPOROMANDIBULAR

HUMERUS - PROXIMAL

HUMERUS - DISTAL

RADIUS - PROXIMAL

RADIUS - DISTAL

ULNA - PROXIMAL

ULNA - DISTAL

INNOMINATE - ACETABULUM

INNOMINATE - SACROILIAC

FEMUR - PROXIMAL

FEMUR - DISTAL

TIBIA - PROXIMAL

TIBIA - DISTAL

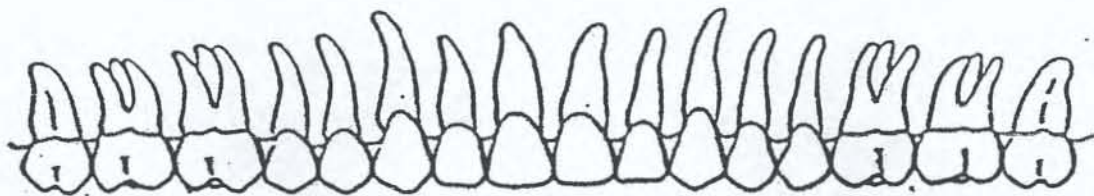
LEFT	RIGHT
7	
1	
2	

	LEFT	RIGHT	NO. COMPLETE	
			LEFT	RIGHT
1ST	_____	_____		
2ND	_____	_____		
3RD-10TH	_____	_____	_____	_____
11TH	_____	_____		
12TH	_____	_____		

VERTEBRAE

SINGLE

C1	2	
C2	2	
C3-C6	1	1
C7		
T1-T9		
T10		
T11		
T12		
L1-L5		
L1		
L2		
L3		
L4		
L5		

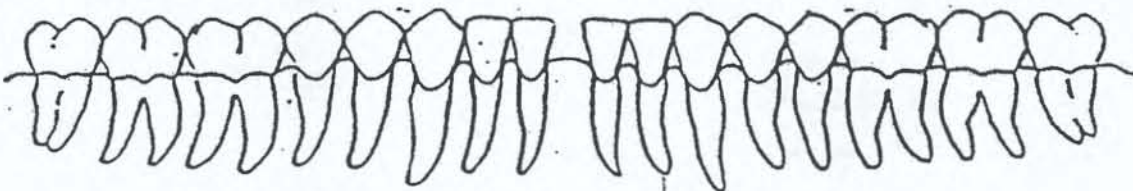


A	2					2	2	2					2	2
B														

Right

Left

B														
A	2	3	2	2	2	2	2	2	2	2	2	2	2	2



Crown broken

A = Stage of wear
(numeric codes 1 to 8 based on scoring stages by Smith 1984 [AJPA 63: 46])

STAGES OF WEAR

B = Plane of wear
(recorded only for stages of dental wear 4 to 8)

1. flat
2. concave
3. buccal slope
4. lingual slope
5. mesial slope
6. distal slope
7. concave-buccal
8. concave-lingual
9. concave-mesial
10. concave-distal
11. buccal-lingual
12. buccal-mesial
13. buccal-distal
14. lingual-mesial
15. lingual-distal
16. distal-mesial

	MOLARS	PREMOLARS	INCISORS & CANINES
	L	U	L
1			
2			
3			
4			
5			
6			
7			
8			

99 = unobservable.

SITE
FEATURE
BURIAL NO
RECORDER <i>K.P. 1000</i>

COMPID <i>44/1120-1000-1</i>
DATE
PROJECT

RIGHT	MAXILLA	LEFT
-------	---------	------

	PRE	OCC	BUC	LIN	INT	RT	PE	ABS	ABR	CAL	RES
DI1											
DI2											
DC											
DM1											
DM2											
I1	1									1	
I2	1			2						2	
C											
PM1											
PM2											
M1											
M2											
M3	1									1	

	PRE	OCC	BUC	LIN	INT	RT	PE	ABS	ABR	CAL	RES
DI1											
DI2											
DC											
DM1											
DM2											
I1	2							1		1	
I2	5							1			
C											
PM1											
PM2											
M1											
M2	1	1				1				1	
M3	1					3					

RIGHT	MANDIBLE	LEFT
-------	----------	------

	PRE	OCC	BUC	LIN	INT	RT	PE	ABS	ABR	CAL	RES
DI1											
DI2											
DC											
DM1											
DM2											
I1	1									2	
I2	2							1		1	
C	1									1	
PM1	1									2	
PM2	1									1	
M1	1				1					1	
M2	2							1		1	
M3	2	4	4	4	5	2	3			1	

	PRE	OCC	BUC	LIN	INT	RT	PE	ABS	ABR	CAL	RES
DI1											
DI2											
DC											
DM1											
DM2											
I1											
I2	2							1		2	
C	5							1			
PM1	2							1		1	
PM2	2				3		2	1		1	
M1	2	4	4	4	4	5	2	3		1	
M2	1	1								1	
M3	1	3	4				2			1	

SKELETAL INVENTORY

MMPID: 44AX183-WEST-E	
E:	DATE:
ATURE:	RECORDER: KSP / [Signature]
RIAL NO.:	

RACE:	W
SEX:	02
AGE:	23 YA-MA 27-34

<u>CRA</u> NIAL BONES	LEFT	RIGHT	SINGLE
FRONTAL			<u>2</u>
PARIETAL	<u>2</u>	<u>2</u>	
OCCIPITAL			
TEMPORAL	<u>1</u>	<u>2</u> petrous	
ZYGOMATIC	<u>2</u>	<u>1</u>	
MAXILLA			
PALATINE			
MANDIBLE			<u>2</u>
HYOID			

- shallow meningeal artery impressions

- Rt lambdoidal suture is still open, the {scutal and coronal} suture are closed endocranially and ectocranially

- Pacchianian impressions are small to medium in size.

- The left ulna has a small supinator crest

<u>OSTEO</u> CRANIAL BONES	LEFT	RIGHT	SINGLE
STERNUM			
MANUBRIUM			
BODY			
XIPHOID			
SCAPULA		<u>2</u>	
CLAVICLE			
INNOMINATE			
SACRUM			
COCCYX			
PATELLA			
FOOT BONES			
TALUS			
CALCANEUS			

- No pathology

- Slight shelving on max crested incis only (Rt max I2 shows no shelving)

Isotope - left radius, LM2, LM3

DNA - RM3
RM2

SITE
FEATURE
BURIAL NO
RECORDER <i>KSB/dwo</i>

COMPID <i>44AX133-WEST-5</i>
DATE
PROJECT

RIGHT MAXILLA LEFT

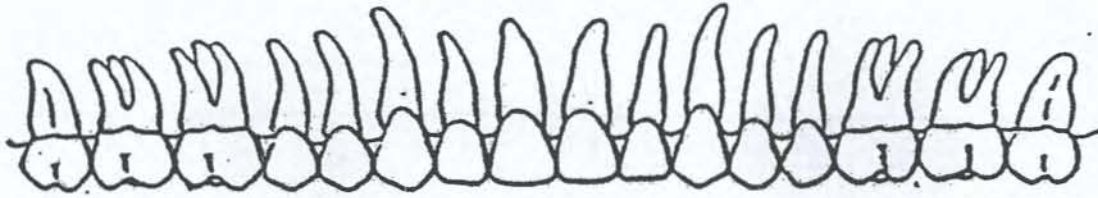
	PRE	OCC	BUC	LIN	INT	RT	PE	ABS	ABR	CAL	RES
DI1											
DI2											
DC											
DM1											
DM2											
I1	1									1	
I2	1				2					2	
C											
PM1											
PM2											
M1											
M2											
M3	1									1	

	PRE	OCC	BUC	LIN	INT	RT	PE	ABS	ABR	CAL	RES
DI1											
DI2											
DC											
DM1											
DM2											
I1	2							1		1	
I2	5							1			
C											
PM1											
PM2											
M1											
M2	1	1			1					1	
M3	1				3					1	

RIGHT MANDIBLE LEFT

	PRE	OCC	BUC	LIN	INT	RT	PE	ABS	ABR	CAL	RES
DI1											
DI2											
DC											
DM1											
DM2											
I1	1									2	
I2	2							1		1	
C	1									1	
PM1	1									2	
PM2											
M1	1				1					1	
M2	2							1		1	
M3	2	4	4	4	4	5	2	3		1	

	PRE	OCC	BUC	LIN	INT	RT	PE	ABS	ABR	CAL	RES
DI1											
DI2											
DC											
DM1											
DM2											
I1											
I2	2							1		2	
C	5							1			
PM1	5							1			
PM2	2				3		2	1		1	
M1	2	4	4	4	4	5	2	3		1	
M2	1	1								1	
M3	1	3	4				2			1	

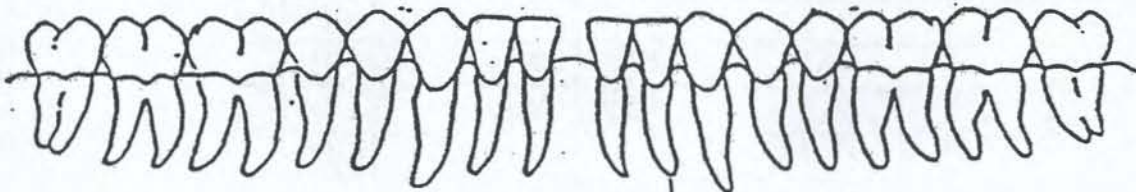


A	2					2	2	2					2	2
B														

Right

Left

B														
A	/	2	3	2	.	2	2	/		2	-	2	2	



Crown broken

A = Stage of wear
(numeric codes 1 to 8 based on scoring stages by Smith 1984 [AJPA 63: 46])

STAGES OF WEAR

B = Plane of wear
(recorded only for stages of dental wear 4 to 8)

1. flat
2. concave
3. buccal slope
4. lingual slope
5. mesial slope
6. distal slope
7. concave-buccal
8. concave-lingual
9. concave-mesial
10. concave-distal
11. buccal-lingual
12. buccal-mesial
13. buccal-distal
14. lingual-mesial
15. lingual-distal
16. distal-mesial

	MOLARS L	PREMOLARS U	L	INCISORS & CANNINES U	U
1					
2					
3					
4					
5					
6					
7					
8					

99 = unobservable.

SKELETAL INVENTORY

OJMPID: 44 AX 183 - WEST - F	
TE:	DATE:
ATURE:	RECORDER:
IRIAL NO.:	

RACE: W
SEX: O3
AGE: 5-7 1/2

Cranial Bones

	LEFT	RIGHT	SINGLE
FRONTAL			_____
PARIETAL	_____	_____	
OCCIPITAL			_____
TEMPORAL	_____	_____	
ZYGOMATIC	_____	_____	
MAXILLA	_____	_____	
PALATINE	_____	_____	
MANDIBLE			_____
HYOID			_____

possible O7, based on distal left femur intercondylar width and Rt pubis inferolateral ramus morphology.

dc =
dm =
(max) dm2 = Ac
I1 =
I2 =
I1 = R2/3
I2 = R1/3
C = R1/4

Scranial Bones

	LEFT	RIGHT	SINGLE
STERNUM			
MANUBRIUM			_____
BODY			_____
XIPHOID			_____
SCAPULA	_____	_____	
CLAVICLE	_____	1/2	
INNOMINATE	_____	_____	
SACRUM			_____
COCCYX			_____
PATELLA	_____	_____	
FOOT BONES			
TALUS	_____	_____	
CALCANEUS	_____	_____	

Pm1 =
Pm2 =
(max) m1 = R3/4+
(max) m2 = Cli
m3 =

pubis 3 inches infused

left mand. deciduous wear (concave) stage 4

Isotope sample - Rt 2nd rib + metacarpal
DNA - Rt clavicle
Rt max dm2
Lt max m1

BONES

HUMERUS	_____	_____
ADIUS	_____	_____
ULNA	_____	_____
EMUR	_____	_____
TIBIA	_____	_____
TIBULA	_____	_____

F

ART SURFACES

TEMPOROMANDIBULAR	_____	_____
HUMERUS - PROXIMAL	_____ _____	_____ _____
HUMERUS - DISTAL	_____	_____
RADIUS - PROXIMAL	_____	_____
RADIUS - DISTAL	_____	_____
ULNA - PROXIMAL	_____	_____
ULNA - DISTAL	_____	_____
INNOMINATE - ACETABULUM	_____	_____
INNOMINATE - SACROILIAC	_____	_____
FEMUR - PROXIMAL	_____	_____
FEMUR - DISTAL	_____ _____	_____
TIBIA - PROXIMAL	_____	_____
TIBIA - DISTAL	_____	_____

	LEFT	RIGHT	NO. COMPLETE	
			LEFT	RIGHT
<u>S</u>				
1ST	_____	_____ <u>2</u>		
2ND	_____	_____ <u>1</u>		
3RD-10TH	_____	_____	_____	_____
11TH	_____	_____		
12TH	_____	_____		

VERTEBRAE

SINGLE

C1	_____	
C2	_____	
C3-C6	_____	_____
C7	_____ <u>1</u>	_____ <u>3</u>
T1-T9	_____ <u>3</u>	
T10	_____	
T11	_____	
T12	_____	
L1-L5	_____ <u>2</u>	
L1	_____	
L2	_____	
L3	_____ _____	
L4	_____	
L5	_____ _____	

SITE	44AX183
FEATURE	
BURIAL NO	
RECORDER	KSB/DW

COMPID	44AX183-WEST-F
DATE	
PROJECT	

RIGHT MAXILLA LEFT

	PRE	OCC	BUC	LIN	INT	RT	PE	ABS	ABR	CAL	RES
DI1											
DI2											
DC											
DM1											
DM2											
I1											
I2											
C											
PM1											
PM2											
M1											
M2											
M3											

	PRE	OCC	BUC	LIN	INT	RT	PE	ABS	ABR	CAL	RES
DI1											
DI2											
DC											
DM1											
DM2											
I1											
I2											
C											
PM1											
PM2											
M1											
M2											
M3											

untyped

untyped

untyped

RIGHT MANDIBLE LEFT

	PRE	OCC	BUC	LIN	INT	RT	PE	ABS	ABR	CAL	RES
DI1											
DI2											
DC											
DM1											
DM2											
I1											
I2											
C											
PM1											
PM2											
M1											
M2											
M3											

	PRE	OCC	BUC	LIN	INT	RT	PE	ABS	ABR	CAL	RES
DI1											
DI2											
DC											
DM1											
DM2											
I1											
I2											
C											
PM1											
PM2											
M1											
M2											
M3											

untyped

untyped

SKELETAL INVENTORY

OMPID: 44 AX 183 - WEST - G	
TE:	DATE:
NATURE:	RECORDER:
TRIAL NO.:	

RACE: W
SEX: 03
AGE: 01 <i>Birth - Two months</i>

<u>CRANIAL BONES</u>	LEFT	RIGHT	SINGLE
FRONTAL			_____
PARIETAL	_____	_____	
OCCIPITAL			_____
TEMPORAL	_____	2	
ZYGOMATIC	_____	_____	
MAXILLA	_____	_____	
PALATINE	_____	_____	
MANDIBLE			_____
HYOID			_____

*Rt PETROUS
TEMPORAL*

*mandibular left lateral
incisor R1/4*

- petrous portion of temporal (Rt)

*- Numerous bones from a small, immature
mammal are present*

<u>POSTCRANIAL BONES</u>	LEFT	RIGHT	SINGLE
STERNUM			
MANUBRIUM			_____
BODY			_____
XIPHOID			_____
SCAPULA	_____	_____	
CLAVICLE	_____	_____	
INNOMINATE	_____	_____	
SACRUM			_____
COCCYX			_____
PATELLA	_____	_____	
FOOT BONES			
TALUS	_____	_____	
CALCANEUS	_____	_____	

*- Spatial location within the vault
is unknown, sample was
recovered from soil samples.*

*The nonhuman and two human
elements were separated. (bagged
separately)*

APPENDIX G

**COMPREHENSIVE ARTIFACT
INVENTORY FOR SITE 44AX183**

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN I 44AX183								
FS 1	BLOCK 4				Feature 002			SAMPLE FROM DRAIN
HISTORICS	Architecture	Manufactured	Brick	Whole		4		mend into two whole bricks; mortar remnants
						Total Count= 4	Total Weight=	
FS 2	BLOCK 4	N 1801	E 1822.5		Feature 001	Level 1	0.7 to 1.2 FTBD	
HISTORICS	Architecture	Manufactured	Brick	Fragment		2		gray body
						Total Count= 2	Total Weight=	
FS 3	BLOCK 4	N 1801	E 1822.5		Feature 001	Level 2	1.2 to 1.7 FTBD	
HISTORICS	Architecture	Metal	Machine Cut Nail, Common	Fragment		1		1815-1890
	Kitchen	Glass	Machine Made Bottle	Amber		1		1898-PRESENT
						Total Count= 2	Total Weight=	
FS 4	BLOCK 4	N 1801	E 1822.5		Feature 001	Level 3	1.7 to 1.8 FTBD	
HISTORICS	Architecture	Metal	Machine Cut Nail, Common	Fragment		1		1815-1890
						Total Count= 1	Total Weight=	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 268	BLOCK 4							DISTURBED SOILS IN WATERLINE TRENCH
HISTORICS	Mortuary	Metal	Coffin Handle	Bail Type		1		ferrous metal
						Total Count=	Total Weight=	
FS 19	BLOCK 4	N 1802	E 1852.5	Feature 201	Level 1	0.5 to 0.6	FTBD	BURIAL 1
HISTORICS	Architecture	Metal	Unidentified	Nail		4		
	Furniture	Biological	Furniture Element	Linoleum		3		
						Total Count=	Total Weight=	
FS 95	BLOCK 4	N 1802	E 1852.5	Feature 201	Level 1	FTBD		BURIAL 1
HISTORICS	Kitchen	Ceramic	Early White Stoneware	Slip Dipped		1		hollowware; base; poss. tankard, 1720-1775
						Total Count=	Total Weight=	
FS 96	BLOCK 4	N 1802	E 1852.5	Feature 201	Level 1	FTBD		BURIAL 1
HISTORICS	Architecture	Metal	Machine Cut Nail, Common	Fragment		20		1815-1890
						Total Count=	Total Weight=	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 5022	BLOCK 4	N 1802	E 1852.5	Feature 201	Level 1	0.5 to 0.6 FTBD		BURIAL 1; FOR REBURIAL
HISTORICS	Clothing	Metal	Metal Clothing	Brass Button		1	0	
ORGANICS	Organics					1		sample; soil containing human remains
						Total Count= 2	Total Weight= .	
FS 10012	BLOCK 4	N 1802	E 1852.5	Feature 201	Level 1	0.5 to 0.6 FTBD		BURIAL 1; E1/2 SOIL
HISTORICS	Kitchen	Glass	Table Glassware	Clear		1		rim; poss. drinking glass
						Total Count= 1	Total Weight=	
FS 200	BLOCK 4	N 1802.8	E 1871	Feature 200	Level 1	1.1 to 1.5 FTBD		BURIAL 1; LEVELS 1 & 2
HISTORICS	Mortuary	Metal	Coffin Nail	Cut		11	1815-1890	
						Total Count= 11	Total Weight=	
FS 8008	BLOCK 4	N 1802.8	E 1871	Feature 200	Level 1	1.1 to 1.4 FTBD		BURIAL 1: 2 LITER FLOTATION SAMPLE
HISTORICS	Miscellaneous	Metal	Unidentified Object	Iron/Steel		1		heavy fraction
						Total Count= 1	Total Weight=	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 10000	BLOCK 4	N 1802.8	E 1871	Feature 200	Level 1	1.1 to 1.4 FTBD		BURIAL 1
FAUNAL	Mammal, Large	Homo	sapian	Unidentified		25	0.2	
	Reptile, Small	Unidentified	unidentified	Carapace		2	0.3	1 carapce 1 mandiac
HISTORICS	Architecture	Ceramic	Miscellaneous	Sewerage/Drainage Pipe		1		
	Kitchen	Biological	Kitchen Use	Nut/Seed/Pit		1		
	Miscellaneous	Biological	Wood	Unmodified Wood		7		
	Miscellaneous	Biological	Wood	Unmodified Wood		1		
	Miscellaneous	Metal	Unidentified Object	Iron/Steel		3		
						Total Count=	40	Total Weight= .5
FS 5026	BLOCK 4	N 1802.8	E 1871	Feature 200	Level 2	1.4 to 1.5 FTBD		BURIAL 1; FOR REBURIAL
ORGANICS	Organics					1		sample; soil containing human remains
						Total Count=	1	Total Weight=
FS 5027	BLOCK 4	N 1802.8	E 1871	Feature 200	Level 2	1.4 to 1.5 FTBD		BURIAL 1; FOR REBURIAL
ORGANICS	Organics					1		sample; soil containing human remains
						Total Count=	1	Total Weight=

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 15	BLOCK 4	N 1802.8	E 1871	Feature 200, NE¼			1.2 to 1.2 FTBD	BURIAL 1
HISTORICS	Furniture	Biological	Furniture Element	Linoleum		1		
						Total Count= 1	Total Weight=	
FS 10001	BLOCK 4	N 1802.8	E 1871	Feature 200, NE¼	Level 1		1.05 to 1.05 FTBD	BURIAL 1
HISTORICS	Kitchen	Biological	Food Related	Bone		1		
						Total Count= 1	Total Weight=	
FS 10005	BLOCK 4	N 1802.8	E 1871	Feature 200, NE¼	Level 1		1.25 to 1.25 FTBD	BURIAL 1
FAUNAL	Mammal, Large	Homo	sapian	Unidentified		1	0.2	
						Total Count= 1	Total Weight= .2	
FS 14	BLOCK 4	N 1802.8	E 1871	Feature 200, NW¼			1.25 to 1.25 FTBD	BURIAL 1
HISTORICS	Architecture	Metal	Unidentified	Cut/Wrought Nail		4		
						Total Count= 4	Total Weight=	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 8	BLOCK 4	N 1802.8	E 1871	Feature 200, NW¼	Level 1	1	1.1 to 1.6 FTBD	BURIAL 1
HISTORICS	Architecture	Metal	Unidentified	Nail		1		
						Total Count=	Total Weight=	
						1		
FS 5000	BLOCK 4	N 1802.8	E 1871	Feature 200, NW¼	Level 1	1	1.1 to 1.4 FTBD	BURIAL 1, COFFIN WOOD
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	600.49 sample	
						Total Count=	Total Weight=	
						1	600.49	
FS 10006	BLOCK 4	N 1802.8	E 1871	Feature 200, NW¼	Level 1	1	1.25 to 1.25 FTBD	BURIAL 1
FAUNAL	Mammal, Large	Homo	sapian	Unidentified		22	0.2	
						Total Count=	Total Weight=	
						22	.2	
FS 5003	BLOCK 4	N 1802.8	E 1871	Feature 200, NW¼	Level 2	1	1.4 to 1.4 FTBD	BURIAL 1
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	114.86 sample	
						Total Count=	Total Weight=	
						1	114.86	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 6	BLOCK 4	N 1802.8	E 1871	Feature 200, SE¼	Level 1	1	1.1 to 1.6 FTBD	BURIAL 1
HISTORICS	Kitchen	Biological	Food Related	Bone		1		
	Mortuary	Metal	Coffin Handle	Bail Type		1		poss. handle; cast iron; raised letters, "...ERTT..."
						Total Count= 2	Total Weight=	
FS 7	BLOCK 4	N 1802.8	E 1871	Feature 200, SW¼	Level 1	1	1.1 to 1.6 FTBD	BURIAL 1
HISTORICS	Mortuary	Metal	Coffin Nail	Cut		1	1815-1890	
						Total Count= 1	Total Weight=	
FS 185	BLOCK 4	N 1802.9	E 1826.5	Feature 202	Level 2	2	0.9 to 1.2 FTBD	BURIAL 1
HISTORICS	Clothing	Metal	Metal Clothing	Brass Button		2		copper alloy; one part
						Total Count= 2	Total Weight=	
FS 188	BLOCK 4	N 1802.9	E 1826.5	Feature 202	Level 2	5	0.9 to 1.2 FTBD	BURIAL 1
HISTORICS	Clothing	Metal	Metal Clothing	Brass Button		5		one part; shank scar
	Clothing	Metal	Metal Clothing	Brass Button		1		poss. copper alloy
						Total Count= 6	Total Weight=	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 203	BLOCK 4	N 1802.9	E 1862.5	Feature 202	Level 1	0.5 to 1.2 FTBD		BURIAL 1; LEVELS 1 & 2
HISTORICS	Architecture	Metal	Unidentified	Nail		4		
						Total Count= 4	Total Weight=	
FS 5012	BLOCK 4	N 1802.9	E 1862.5	Feature 202	Level 1	0.5 to 0.5 FTBD		BURIAL 1; FOR REBURIAL
ORGANICS	Organics					1		sample; soil containing human remains and coffin wood
						Total Count= 1	Total Weight=	
FS 10010	BLOCK 4	N 1802.9	E 1862.5	Feature 202	Level 1	0.5 to 0.9 FTBD		BURIAL 1; SOIL
FAUNAL	Mammal, Large	Homo	sapian	Unidentified		1	0.1	
	Reptile, Small	Unidentified	unidentified	Rib		2	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		1	0.2	
HISTORICS	Architecture	Glass	Architectural Element	Window Glass		1		
	Kitchen	Glass	Machine Made Bottle	Clear		2		1898-PRESENT
	Miscellaneous	Metal	Unidentified Object	Iron/Steel		5		
	Miscellaneous	Stone	Miscellaneous Stone	Coal Slag		1		
	Mortuary	Biological	Coffin Wood	Fragment		1	10.65	sample
						Total Count= 14	Total Weight= 11.05	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 72	BLOCK 4	N 1802.9	E 1862.5	Feature 202	Level 2	0.9 to 1.1	FTBD	BURIAL 1
HISTORICS	Miscellaneous	Stone	Miscellaneous Stone	Unidentified Stone		1		poss. chert pebble, worked stone
						Total Count=	1	Total Weight=
FS 5018	BLOCK 4	N 1802.9	E 1862.5	Feature 202	Level 2	0.9 to 1.2	FTBD	BURIAL 1; WOOD SAMPLE
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	77.86	sample' poss. coffin wood
						Total Count=	1	Total Weight= 77.86
FS 5019	BLOCK 4	N 1802.9	E 1862.5	Feature 202	Level 2	0.9 to 1.2	FTBD	BURIAL 1; SAMPLE OF UNKNOWN
ORGANICS	Organics	Other	Burnt	Unworked		1	159.24	burned soil from top of coffin
						Total Count=	1	Total Weight= 159.24
FS 5024	BLOCK 4	N 1802.9	E 1862.5	Feature 202	Level 2	0.9 to 1.2	FTBD	BURIAL 1; WOOD SAMPLE
HISTORICS	Miscellaneous	Biological	Wood	Unmodified Wood		1	11.87	sample
						Total Count=	1	Total Weight= 11.87
FS 10023	BLOCK 4	N 1802.9	E 1862.5	Feature 202	Level 2	0.9 to 1.1	FTBD	BURIAL 1; SOIL
FAUNAL	vertebrate	Unidentified	unidentified	Unidentified		4	0.1	
HISTORICS	Kitchen	Biological	Food Related	Bone		4		

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
HISTORICS	Kitchen	Ceramic	Unidentified Ceramic	Unidentified White Body		1		indeterminate form; blue transfer printed; poss. whiteware or pearlware
	Mortuary	Biological	Coffin Wood	Fragment		1	2.55	sample
						Total Count=	10	Total Weight= 2.65
FS 190	BLOCK 4	N 1805.5	E 1862.5	Feature 203	Level 1	0.65 to 8	FTBD	BURIAL 1
HISTORICS	Architecture	Metal	Unidentified	Nail		6		
						Total Count=	6	Total Weight=
FS 191	BLOCK 4	N 1805.5	E 1862.5	Feature 203	Level 1	0.65 to 8	FTBD	BURIAL 1
HISTORICS	Architecture	Metal	Unidentified	Nail		2		
						Total Count=	2	Total Weight=
FS 272	BLOCK 4	N 1805.5	E 1862.5	Feature 203	Level 1	0.65		BURIAL 1
HISTORICS	Architecture	Metal	Unidentified	Nail		40		
						Total Count=	40	Total Weight=
FS 5016	BLOCK 4	N 1805.5	E 1862.5	Feature 203	Level 1	0.65 to 0.8	FTBD	BURIAL 1; WOOD SAMPLE
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	107.93	sample
						Total Count=	1	Total Weight= 107.93

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS	BLOCK 4		N 1805.5 E 1862.5	Feature 203	Level 1	0.65 to 0.85	FTBD	BURIAL 1; FOR REBURIAL
ORGANICS	Organics					1		sample; soil containing human remains
						Total Count=	1	Total Weight=
FS	BLOCK 4		N 1805.5 E 1862.5	Feature 203	Level 1	0.65 to 0.8	FTBD	BURIAL 1; 2 LITER FLOTATION SAMPLE
HISTORICS	Kitchen	Biological	Shell	Land Snail		1		heavy fraction
	Mortuary	Metal	Coffin Nail	Unidentified		8		heavy fraction
						Total Count=	9	Total Weight=
FS	BLOCK 4		N 1805.5 E 1862.5	Feature 203	Level 1	0.65 to 0.8	FTBD	BURIAL 1; FOR REBURIAL
ORGANICS	Organics					1		sample; soil containing human remains
						Total Count=	1	Total Weight=
FS 274	BLOCK 4		N 1807.5 E 1863	Feature 204				BURIAL 1; FROM SOIL TEST
HISTORICS	Clothing	Metal	Metal Clothing	Brass Button		1		
						Total Count=	1	Total Weight=

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 5038	BLOCK 4	N 1807.5	E 1863	Feature 204			1.8 to 2 FTBD	BURIAL 1; FOR REBURIAL
ORGANICS	Organics					1		sample; soil containing human remains
						Total Count=	1	Total Weight=
FS 273	BLOCK 4	N 1807.5	E 1863	Feature 204	Level 1		0.55 to 2 FTBD	BURIAL 1; LEVELS 1 & 2
HISTORICS	Architecture	Metal	Construction Hardware	Screw, General		2		
	Mortuary	Metal	Coffin Nail	Unidentified		12		
						Total Count=	14	Total Weight=
FS 8007	BLOCK 4	N 1807.5	E 1863	Feature 204	Level 1		0.55 to 1.5 FTBD	BURIAL 1: 2 LITER FLOTATION SAMPLE
HISTORICS	Kitchen	Biological	Shell	Land Snail		1		heavy fraction
						Total Count=	1	Total Weight=
FS 10019	BLOCK 4	N 1807.5	E 1863	Feature 204	Level 1		0.55 to 1.5 FTBD	BURIAL 1; SOIL
FAUNAL	Mammal, Large	Homo	sapian	Unidentified	Y	1	0.1	
	Mammal, Large	Homo	sapian	Unidentified		1	0.3	
	Mammal, Large	Unidentified	unidentified	Unidentified		1	0.1	
	vertebrate	Unidentified	unidentified	Unidentified		1	0.1	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
HISTORICS	Kitchen	Ceramic	Early White Stoneware	White Salt-Glaze, Plain		1		indeterminate form, 1720-1805
	Mortuary	Metal	Coffin Nail	Unidentified		17		
						Total Count= 22	Total Weight= .6	
FS 251	BLOCK 4	N 1807.5	E 1863	Feature 204	Level 2	1.85 to 1.85	FTBD	BURIAL 1; HUMAN REMAINS; BOYD'S ANALYSIS
HISTORICS	Architecture	Metal	Handwrought Rosehead	Fragment		1	0	1600-1815
	Clothing	Metal	Metal Clothing	Iron/Steel Button		3	0	
						Total Count= 4	Total Weight= .	
FS 258	BLOCK 4	N 1807.5	E 1863	Feature 204	Level 2	1.85 to 1.85	FTBD	BURIAL 1
HISTORICS	Clothing	Metal	Metal Clothing	Brass Button		1		
						Total Count= 1	Total Weight=	
FS 259	BLOCK 4	N 1807.5	E 1863	Feature 204	Level 2	2 to 2	FTBD	BURIAL 1
HISTORICS	Clothing	Metal	Metal Clothing	Brass Button		1		one part; wire shank
						Total Count= 1	Total Weight=	
FS 260	BLOCK 4	N 1807.5	E 1863	Feature 204	Level 2	1.55 to 1.55	FTBD	BURIAL 1
HISTORICS	Clothing	Metal	Metal Clothing	Brass Button		1		poss. copper alloy

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
						Total Count=	1	Total Weight=
FS 261	BLOCK 4	N 1807.5	E 1863	Feature 204	Level 2	1.85 to 1.85	FTBD	BURIAL 1
HISTORICS	Clothing	Metal	Metal Clothing	Brass Button		6		one part; shank scar
						Total Count=	6	Total Weight=
FS 262	BLOCK 4	N 1807.5	E 1863	Feature 204	Level 2	1.8 to 1.8	FTBD	BURIAL 1
HISTORICS	Clothing	Metal	Miscellaneous	Shoe Buckle		1		fragments in soil; poss. copper alloy
						Total Count=	1	Total Weight=
FS 263	BLOCK 4	N 1807.5	E 1863	Feature 204	Level 2	1.85 to 1.85	FTBD	BURIAL 1
HISTORICS	Clothing	Metal	Metal Clothing	Brass Button		1		one part; wire shank in place
	Clothing	Metal	Metal Clothing	Brass Button		1		one part; shank scar
						Total Count=	2	Total Weight=
FS 5034	BLOCK 4	N 1807.5	E 1863	Feature 204	Level 2	1.5 to 2	FTBD	BURIAL 1; WOOD SAMPLE
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	62.2	sample; poss. coffin wood
						Total Count=	1	Total Weight= 62.2

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 5037	BLOCK 4	N 1807.5	E 1863	Feature 204	Level 2	2 to 2 FTBD		BURIAL 1; WOOD SAMPLE
HISTORICS	Miscellaneous	Biological	Wood	Modified Wood		1	190.47	sample; wood from floor with sand
						Total Count= 1	Total Weight= 190.47	
FS 10032	BLOCK 4	N 1807.5	E 1863	Feature 204	Level 2	1.5 to 2 FTBD		BURIAL 1; SOIL
FAUNAL	Mammal, Large	Homo	sapian	Unidentified		16	0.8	
	Mammal, Large	Homo	sapian	Unidentified		4	0.1	
HISTORICS	Architecture	Metal	Handwrought Rosehead	Fragment		1		poss. hand wrought, 1600-1815
	Architecture	Metal	Unidentified	Cut/Wrought Nail		18		
	Clothing	Metal	Metal Clothing	White Metal Button		1		one part; cast; wire eye cast in place
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		3		pieces cross-mend with bottle; ca. 1850-1880
	Miscellaneous	Stone	Miscellaneous Stone	Unidentified Stone		1		poss. quartz crystal
	Mortuary	Biological	Coffin Wood	Fragment		1	85.06	sample; poss. coffin wood
						Total Count= 45	Total Weight= 85.96	
FS 5001	BLOCK 4	N 1807.5	E 1873	Feature 207		1.5 to 1.5 FTBD		BURIAL 1, COFFIN WOOD
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	509.71	sample
						Total Count= 1	Total Weight= 509.71	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 9	BLOCK 4		N 1807.5 E 1873	Feature 207	Level 2	1.5 to 1.5 FTBD		BURIAL 1, FROM HEAD AREA LEFT
HISTORICS	Mortuary	Metal	Coffin Nail	Cut		5		fragments, 1815-1890
	Mortuary	Metal	Coffin Nail	Unidentified		1		
						Total Count= 6	Total Weight=	
FS 10	BLOCK 4		N 1807.5 E 1873	Feature 207	Level 2	1.5 to 1.5 FTBD		BURIAL 1, FROM FOOT OF COFFIN
HISTORICS	Mortuary	Metal	Coffin Nail	Unidentified		1		
						Total Count= 1	Total Weight=	
FS 271	BLOCK 4		N 1807.5 E 1873	Feature 207	Level 2	1.35 to 1.35 FTBD		BURIAL 1
HISTORICS	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		4		cross-mended bottle; ca. 1850-1880
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		1		molded letters, "...AP..."; cross-mended bottle; ca. 1850-1880
	Kitchen	Glass	Non-Machine Made Lip	Dark Green		1		poss. tooled lip
						Total Count= 6	Total Weight=	
FS 5002	BLOCK 4		N 1807.5 E 1873	Feature 207	Level 3	1.5 to 1.5 FTBD		BURIAL 1, COFFIN WOOD & SOIL
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	207	sample; poss. coffin wood

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
						Total Count=	1	Total Weight= 207.
FS 94	BLOCK 4	N 1808.55	E 1860.2	Feature 204	Level 2	1.8 to 1.8 FTBD		BURIAL 1
HISTORICS	Miscellaneous	Metal	Unidentified Object	Non-Ferrous Metal		2		silver; mend
						Total Count=	2	Total Weight=
FS 5007	BLOCK 4	N 1811.5	E 1834	Feature 208	Level 1	0.7 to 1.15 FTBD		BURIAL 1
FAUNAL	Mammal, Large	Homo	sapian	Unidentified		25	0.2	
HISTORICS	Architecture	Metal	Unidentified	Cut/Wrought Nail		11		
						Total Count=	36	Total Weight= .2
FS 8001	BLOCK 4	N 1811.5	E 1834	Feature 208	Level 1	0.7 to 1.15 FTBD		BURIAL 1: 2 LITER FLOTATION SAMPLE
HISTORICS	Mortuary	Metal	Coffin Nail	Unidentified		1		heavy fraction
						Total Count=	1	Total Weight=
FS 5008	BLOCK 4	N 1811.5	E 1834	Feature 208	Level 2	1.15 to 1.3 FTBD		BURIAL 1
HISTORICS	Architecture	Metal	Unidentified	Cut/Wrought Nail		2		
	Kitchen	Biological	Food Related	Bone		1		
						Total Count=	3	Total Weight=

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 5029	BLOCK 4	N 1811.5	E 1835	Feature 208	Level 3	1.3 to 1.55 FTBD		BURIAL 1; FOR REBURIAL
ORGANICS	Organics					1		sample; soil containing human remains
						Total Count=	1	Total Weight=
FS 229	BLOCK 4	N 1811.5	E 1862.5	Feature 208	Level 2	1.15 to 1.3 FTBD		BURIAL 1
HISTORICS	Mortuary	Metal	Coffin Nail	Cut		10		1815-1890
						Total Count=	10	Total Weight=
FS 5	BLOCK 4	N 1818	E 1871	Feature 205	Level 2	0.6 to 0.85 FTBD		BURIAL 1
HISTORICS	Activities	Metal	Miscellaneous Hardware	Barbed Wire		1		POST 1870
	Architecture	Glass	Architectural Element	Window Glass		1		
	Architecture	Metal	Wire Nail, Common	2-4"		1		POST 1890
	Furniture	Ceramic	Miscellaneous	Flower Pot		1		
	Kitchen	Glass	Unidentified Bottle Glass	Clear		1		poss. machine made
	Miscellaneous	Synthetic	Miscellaneous	Plastic/Other		1		electrical tape
	Miscellaneous	Synthetic	Miscellaneous	Plastic/Other		1		
	Miscellaneous	Synthetic	Miscellaneous	Plastic/Other		1		"UNIVERSAL//12 14 18 WIRE"; plastic cap
						Total Count=	8	Total Weight=

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 275	BLOCK 4	Unit 01	N 1799	E 1826.5	Feature 001	Level 6	3 to 3.3 FTBD	VAULT
HISTORICS	Clothing	Biological	Fabric Clothing	Unidentified		1	0	
	Personal	Metal	Personal Use	Jewelry Part		1	0	gold earring
						Total Count= 2	Total Weight= .	
FS 86	BLOCK 4	Unit 01	N 1799.3	E 1825.5	Feature 001	Level 4	2.95 to 2.95 FTBD	VAULT
HISTORICS	Architecture	Metal	Unidentified	Nail		1		
						Total Count= 1	Total Weight=	
FS 5014	BLOCK 4	Unit 01	N 1800	E 1824.5	Feature 001	Level 2	1.9 to 2 FTBD	VAULT; COFFIN WOOD
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	646.4	sample
						Total Count= 1	Total Weight= 646.4	
FS 10011	BLOCK 4	Unit 01	N 1800	E 1824.5	Feature 001	Level 2	1.9 to 2 FTBD	VAULT; SOIL
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Longbone		2	0.01	
	Mammal, Large	Homo	sapian	Unidentified		2	0.1	
	Mammal, Large	Homo	sapian	Unidentified		50	9.7	
	Mammal, Small	Unidentified	unidentified	Crainial Element		4	2.2	
	Mammal, Small	Unidentified	unidentified	Ulna		1	0.3	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
HISTORICS	Architecture	Metal	Construction Hardware	Screw, General		1		
	Architecture	Metal	Unidentified	Nail		24		
	Kitchen	Biological	Kitchen Use	Nut/Seed/Pit		6		
	Mortuary	Biological	Coffin Wood	Fragment		1	518.87	sample
						Total Count= 91	Total Weight= 531.18	
FS 20	BLOCK 4	Unit 01	N 1800	E 1824.5	Feature 001	Level 3	2.32 to 2.75 FTBD	VAULT
HISTORICS	Architecture	Metal	Machine Cut Nail, Common	2-4"		1	1815-1890	
	Architecture	Metal	Machine Cut Nail, Common	Fragment		3	1815-1890	
						Total Count= 4	Total Weight=	
FS 65	BLOCK 4	Unit 01	N 1800	E 1824.5	Feature 001	Level 3	2 to 2.75 FTBD	VAULT
HISTORICS	Architecture	Metal	Machine Cut Nail, Common	2-4"		1	1815-1890	
	Architecture	Metal	Unidentified	Nail		1		
						Total Count= 2	Total Weight=	
FS 5020	BLOCK 4	Unit 01	N 1800	E 1824.5	Feature 001	Level 3	2 to 2.75 FTBD	VAULT; WOOD SAMPLE
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	995.55	sample
						Total Count= 1	Total Weight= 995.55	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 75	BLOCK 4	Unit 01	N 1800	E 1824.5	Feature 001	Level 4	2.7 to 2.9 FTBD	VAULT
FAUNAL	Aves, Medium	Gallus	gallus	Longbone		8	4	1 femur, 1 humerus, 1 ulna, 2 coracoid, 1 carpometacarpus
	Aves, Medium	Gallus	gallus	Synsacrum		2	2.8	
HISTORICS	Architecture	Metal	Construction Hardware	Screw, General		1		
	Architecture	Metal	Machine Cut Nail, Common	Fragment		13		1815-1890
	Architecture	Metal	Unidentified	Nail		12		
	Architecture	Metal	Unidentified	Nail		1		
	Architecture	Metal	Wire Nail, Common	Fragment		6		POST 1890
						Total Count= 43	Total Weight= 6.8	
FS 10020	BLOCK 4	Unit 01	N 1800	E 1824.5	Feature 001	Level 4	2.75 to 2.9 FTBD	VAULT; SOIL
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Pelvis		1	0.01	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		4	0.01	
	Aves, Medium	Gallus	gallus	Humerus		1	2.4	
	Aves, Medium	Gallus	gallus	Scapula		1	0.3	
	Aves, Medium	Unidentified	unidentified	Carpometacarpus		1	0.4	
	Aves, Medium	Unidentified	unidentified	Ulna		1	1.3	
	Aves, Medium	Unidentified	unidentified	Vertebra		6	2.3	
	Mammal, Large	Homo	sapian	Longbone		5	2	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
----------	-------	-------	------	----------	------	-------	------------	----------

HOFFMAN III 44AX183

FAUNAL	Mammal, Very Small	Microtus	sp.	Mandible		1	0.01	
	vertebrate	Unidentified	unidentified	Unidentified		50	5.2	
HISTORICS	Architecture	Metal	Construction Hardware	Screw, General		2		
	Kitchen	Ceramic	Whiteware	Undecorated		1		indeterminate form, 1820-PRESENT
	Miscellaneous	Metal	Unidentified Object	Iron/Steel		2		
	Mortuary	Biological	Coffin Wood	Fragment		1	624.64	sample
	Mortuary	Metal	Coffin Nail	Cut		9		1815-1890
	Mortuary	Metal	Coffin Nail	Unidentified		43		
	Mortuary	Metal	Coffin Nail	Wrought		1		1600-1815

Total Count= 130 Total Weight= 638.57

FS 196	BLOCK 4	Unit 01	N 1800	E 1824.5	Feature 001	Level 5	2.9 to 3 FTBD	VAULT
--------	---------	---------	--------	----------	-------------	---------	---------------	-------

HISTORICS	Architecture	Metal	Handwrought Rosehead	2-4"		13		1600-1815
	Architecture	Metal	Handwrought Rosehead	Fragment		4		1600-1815
	Architecture	Metal	Machine Cut Nail, Common	Fragment		6		1815-1890

Total Count= 23 Total Weight=

FS 5028	BLOCK 4	Unit 01	N 1800	E 1824.5	Feature 001	Level 5	2.9 to 3 FTBD	VAULT; WOOD SAMPLE
---------	---------	---------	--------	----------	-------------	---------	---------------	--------------------

HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	1001	sample; poss. coffin wood
-----------	----------	------------	-------------	----------	--	---	------	---------------------------

Total Count= 1 Total Weight= 1001.

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 10026	BLOCK 4	Unit 01	N 1800	E 1824.5	Feature 001	Level 5	2.9 to 3 FTBD	SOIL FROM VAULT
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Longbone		3	0.1	2 longbones 1)PELVIS
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		2	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		1	0.1	
	Aves, Large	Unidentified	unidentified	Coracoid		1	0.3	
	Aves, Large	Unidentified	unidentified	Vertebra		2	0.6	
	Aves, Medium	Anas	sp.	Carpometacarpus		1	0.8	
	Aves, Medium	Anas	sp.	Phalanx		1	0.1	
	Aves, Medium	Anas	sp.	Ulna		1	1	
	Aves, Medium	Unidentified	unidentified	Cuneiform		1	0.1	
	Aves, Medium	Unidentified	unidentified	Occipital		1	0.1	
	Aves, Medium	Unidentified	unidentified	Radius		1	0.6	
	Aves, Medium	Unidentified	unidentified	Tibiotarsus		1	0.2	
	Aves, Medium	Unidentified	unidentified	Vertebra		2	0.8	
	Mammal, Large	Homo	sapian	Unidentified		12	0.3	
	Mammal, Large	Homo	sapian	Unidentified		6	0.2	
	Mammal, Large	Homo	sapian	Unidentified		70	5.1	
	Mammal, Small	Unidentified	unidentified	Longbone		6	0.1	
	Mammal, Small	Unidentified	unidentified	Rib		5	0.6	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments	
HOFFMAN III 44AX183									
HISTORICS	Kitchen	Biological	Kitchen Use	Nut/Seed/Pit		1			
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		5		pieces cross mend with bottle; ca. 1850-1880	
	Miscellaneous	Stone	Miscellaneous Stone	Coal Slag		1			
	Mortuary	Biological	Coffin Wood	Fragment		1	735.9	sample	
	Mortuary	Metal	Coffin Nail	Cut		16		1815-1890	
	Mortuary	Metal	Coffin Nail	Unidentified		30		small fragments	
						Total Count=	171	Total Weight=	747.1
FS 205	BLOCK 4	Unit 01	N 1800	E 1824.5	Feature 001	Level 6	3 to 3.3 FTBD	VAULT	
HISTORICS	Architecture	Metal	Unidentified	Cut/Wrought Nail		8			
						Total Count=	8	Total Weight=	
FS 10029	BLOCK 4	Unit 01	N 1800	E 1824.5	Feature 001	Level 6	3 to 3.3 FTBD	VAULT; SOIL	
HISTORICS	Architecture	Metal	Construction Hardware	Tack		2			
	Mortuary	Biological	Coffin Wood	Fragment		1	511.1	sample	
	Mortuary	Metal	Coffin Nail	Cut		24		poss. coffin nails, 1815-1890	
	Mortuary	Metal	Coffin Nail	Unidentified		17		poss. coffin nails	
						Total Count=	44	Total Weight=	511.1
FS 10033	BLOCK 4	Unit 01	N 1800	E 1824.5	Feature 001	Level 7	3.3 to 3.6 FTBD	VAULT; SOIL	
FAUNAL	Mammal, Large	Homo	sapian	Unidentified		2	0.1		

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
HISTORICS	Architecture	Glass	Architectural Element	Window Glass		1		
	Architecture	Metal	Unidentified	Cut/Wrought Nail		2		
	Architecture	Metal	Unidentified	Nail		1		poss. nail fragment
	Mortuary	Biological	Coffin Wood	Fragment		1	8	sample; poss. coffin wood
						Total Count= 7	Total Weight= 8.1	
FS 10018	BLOCK 4	Unit 01	N 1800	E 1825.5	Feature 001	Level 3	2.4 to 2.5 FTBD	VAULT; SOIL
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Longbone		4	0.01	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		1	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		4	0.1	
	Aves, Very Small	Unidentified	unidentified	Humerus		1	0.1	
	Aves, Very Small	Unidentified	unidentified	Longbone		2	0.1	1) humerus 1 Ulna
	Mammal, Large	Homo	sapian	Unidentified		21	3.4	
	Mammal, Medium	Unidentified	unidentified	Femur		1	0.2	
	Reptile, Small	Unidentified	unidentified	Rib		1	0.01	
	Reptile, Small	Unidentified	unidentified	Unidentified		1	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		1	0.1	
HISTORICS	Kitchen	Ceramic	Later Porcelain Type	Undecorated Porcelain, Hard		1		hollowware
	Kitchen	Ceramic	Redware	Dark Brown/Black Glaze		1		hollowware
	Kitchen	Ceramic	Whiteware	Undecorated		1		indeterminate form, 1820-PRESENT

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments	
HOFFMAN III 44AX183									
HISTORICS	Miscellaneous	Biological	Wood	Unmodified Wood		8			
	Miscellaneous	Metal	Unidentified Object	Slag		2			
	Mortuary	Biological	Coffin Wood	Fragment		1	67.87	sample	
						Total Count=	51	Total Weight=	72.09
FS 5032	BLOCK 4	Unit 01	N 1800	E 1825.5	Feature 001	Level 6	3 to 3 FTBD	VAULT; WOOD SAMPLE	
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	444.5	sample; poss. coffin wood	
						Total Count=	1	Total Weight=	444.5
FS 107	BLOCK 4	Unit 01	N 1800.35	E 1825.45	Feature 001	Level 3	2.65 to 2.65 FTBD	VAULT	
HISTORICS	Transportation	Metal	Stable Item	Horseshoe		1			
						Total Count=	1	Total Weight=	
FS 64	BLOCK 4	Unit 01	N 1803.2	E 1926.2	Feature 001	Level 3	2.45 to 2.55 FTBD	VAULT; HUMAN REMAINS; BOYD'S ANALYSIS	
FAUNAL	Mammal, Very Large	Bos	taurus	Tibia, Sheared		1	257.6		
						Total Count=	1	Total Weight=	257.6

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 10025	BLOCK 4	Unit 01- 03		Feature 001				VAULT CLEAN- UP
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Longbone		4	0.2	
	Amphibian, Very Small	Unidentified	unidentified	Pelvis		2	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Scapula		2	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		2	0.1	
	Aves, Medium	Unidentified	unidentified	Vertebra		1	0.1	
	Mammal, Large	Homo	sapian	Unidentified		34	1.1	
	Mammal, Very Small	Unidentified	unidentified	Pelvis		1	0.1	
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	12.5	sample
						Total Count= 47	Total Weight= 14.3	
FS 239	BLOCK 4	Unit 02	N 1798.8 E 1826.1	Feature 001	Level 6	3 to 3.3 FTBD		VAULT; HUMAN REMAINS; BOYD'S ANALYSIS
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	8.12	sample; poss. coffin wood
						Total Count= 1	Total Weight= 8.12	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 119	BLOCK 4	Unit 02	N 1799.4	E 1828.3	Feature 001	Level 3	2.5 to 2.5 FTBD	VAULT
HISTORICS	Architecture	Metal	Unidentified	Nail		1		
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		1		cross-mended bottle; ca. 1850-1880
						Total Count= 2	Total Weight=	
FS 227	BLOCK 4	Unit 02	N 1799.5	E 1827.8	Feature 001	Level 6	3.2 to 3.2 FTBD	VAULT
HISTORICS	Mortuary	Metal	Coffin Handle	Bail Type		1		complete ferrous alloy coffin handle
						Total Count= 1	Total Weight=	
FS 120	BLOCK 4	Unit 02	N 1799.65	E 1828.6	Feature 001	Level 4	2.75 to 2.75 FTBD	VAULT
FAUNAL	Reptile, Small	Unidentified	unidentified	Carapace		1	0.3	
	vertebrate	Unidentified	unidentified	Unidentified		1	0.1	
	vertebrate	Unidentified	unidentified	Unidentified		1	0.2	
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		2		poss. coffin wood
						Total Count= 5	Total Weight= .6	
FS 89	BLOCK 4	Unit 02	N 1799.9	E 1825.9	Feature 001	Level 4	2.8 to 2.8 FTBD	VAULT
HISTORICS	Architecture	Metal	Handwrought Rosehead	2-4"		1		1600-1815
						Total Count= 1	Total Weight=	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 199	BLOCK 4	Unit 02	N 1800	E 1824.5	Feature 001	Level 4	2.5 to 2.9 FTBD	VAULT
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Longbone		3	0.01	
						Total Count= 3	Total Weight= .01	
FS 16	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 1	0.8 to 1.57 FTBD	VAULT; HUMAN REMAINS; BOYD'S ANALYSIS
HISTORICS	Architecture	Glass	Architectural Element	Window Glass		27		
	Architecture	Manufactured	Brick	Fragment		3		
	Architecture	Manufactured	Brick	Whole		1	9"x4"x2 1/2"	
	Architecture	Manufactured	Brick	Whole		1	9"x4 1/2"x2 7/8"	
	Architecture	Manufactured	Brick	Whole		1	8 1/4"x4"x2"	
	Architecture	Manufactured	Brick	Whole		1	8 3/4"x3 1/2"x2 5/8"	
	Architecture	Manufactured	Miscellaneous Building Material	Mortar		8		
						Total Count= 42	Total Weight=	
FS 8003	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 1	0.8 to 1.57 FTBD	VAULT; 2 LITER FLOTATION SAMPLE
HISTORICS	Architecture	Glass	Architectural Element	Window Glass		5	heavy fraction	
	Kitchen	Biological	Shell	Land Snail		1	heavy fraction	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
HISTORICS	Kitchen	Ceramic	Whiteware	Annular		1		heavy fraction; hollowware; small fragment; probably annular, 1820-1860
	Kitchen	Glass	Machine Made Bottle	Light Green		8		heavy fraction, 1898-PRESENT
						Total Count= 15	Total Weight=	
FS 10007	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 1	0.8 to 1.57 FTBD	VAULT
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Crainial Element		7	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Longbone		13	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Pelvis		1	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Pelvis		1	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		8	0.2	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		2	0.1	
	Aves, Medium	Unidentified	unidentified	Longbone		2	0.1	
	Aves, Very Small	Unidentified	unidentified	Coracoid		1	0.1	
	Aves, Very Small	Unidentified	unidentified	Longbone		4	0.1	
	Aves, Very Small	Unidentified	unidentified	Vertebra		5	0.1	
	Aves, Very Small	Unidentified	unidentified	Vertebra		8	0.1	
	Mammal, Large	Homo	sapian	Unidentified		50	6.9	
	Mammal, Large	Homo	sapian	Unidentified		2	0.1	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FAUNAL	Mammal, Large	Homo	sapian	Unidentified		60	3.1	
	Mammal, Large	Homo	sapian	Unidentified		370	32.8	
	Mammal, Medium	Unidentified	unidentified	Longbone		5	0.3	
	Mammal, Very Small	Unidentified	unidentified	Crainial Element		2	0.1	
	Mammal, Very Small	Unidentified	unidentified	Mandible		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Mandible		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Pelvis		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Phalanx		1	0.01	
	Mammal, Very Small	Unidentified	unidentified	Rib		20	0.1	
	Mammal, Very Small	Unidentified	unidentified	Unidentified		2	0.1	
	Mammal, Very Small	Unidentified	unidentified	Unidentified		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Vertebra		4	0.1	
	Reptile, Small	Unidentified	unidentified	Rib		28	0.8	
	Reptile, Small	Unidentified	unidentified	Rib		30	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		13	2.6	
	Reptile, Small	Unidentified	unidentified	Vertebra		10	1.4	
	Reptile, Small	Unidentified	unidentified	Vertebra		12	2.7	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FAUNAL	Reptile, Small	Unidentified	unidentified	Vertebra		10	2.2	
	vertebrate	Unidentified	unidentified	Longbone		40	0.1	
	vertebrate	Unidentified	unidentified	Unidentified		20	0.1	
HISTORICS	Architecture	Glass	Architectural Element	Window Glass		16		
	Kitchen	Biological	Kitchen Use	Nut/Seed/Pit		1		
	Kitchen	Ceramic	Whiteware	Undecorated		2		indeterminate form, 1820- PRESENT
	Kitchen	Glass	Machine Made Bottle	Light Green		36		1898-PRESENT
	Kitchen	Glass	Melted Glass	Unidentified		1		
	Kitchen	Glass	Unidentified Fragment	Unidentified		1		
	Mortuary	Biological	Coffin Wood	Fragment		1	1.77	sample
	Mortuary	Metal	Coffin Nail	Unidentified		6		
						Total Count= 799	Total Weight= 56.98	

FS 18	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 2	1.57 to 2.4 FTBD	VAULT
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Longbone		8	1.6	1) Urostyle 1) Ilium 6) LONGBONES
	Aves, Very Small	Unidentified	unidentified	Longbone		4	0.1	2 ULNAS, 1 FEMUR, 1 TIBOTARSUS
	Mammal, Medium	Procyon	lotor	Humerus		1	1.9	
	Reptile, Small	Unidentified	unidentified	Rib		1	0.1	
	vertebrate	Unidentified	unidentified	Unidentified		4	0.1	
HISTORICS	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		1		cross-mended bottle; ca. 1850-1880

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1		poss. coffin wood
LITHICS	Debitage	Quartz	Secondary	Early/Late Stage Core Reduction Flake, Unmodified		1	0.33	
						Total Count= 21	Total Weight= 4.13	
FS 5017	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 2	1.89 to 2.4 FTBD	VAULT; WOOD SAMPLE
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	103.81	sample' poss. coffin wood
						Total Count= 1	Total Weight= 103.81	
FS 10014	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 2	1.57 to 2 FTBD	VAULT; SOIL
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Longbone		4	0.01	
	Amphibian, Very Small	Unidentified	unidentified	Longbone		3	0.01	
	Amphibian, Very Small	Unidentified	unidentified	Longbone		5	0.3	
	Amphibian, Very Small	Unidentified	unidentified	Maxilla		1	0.01	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		1	0.01	
	Aves, Very Small	Unidentified	unidentified	Carpometacarpus		2	0.1	
	Aves, Very Small	Unidentified	unidentified	Humerus		1	0.01	
	Aves, Very Small	Unidentified	unidentified	Humerus		1	0.1	
	Aves, Very Small	Unidentified	unidentified	Humerus		1	0.1	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FAUNAL	Aves, Very Small	Unidentified	unidentified	Longbone		6	0.1	
	Aves, Very Small	Unidentified	unidentified	Synsacrum		1	0.1	
	Aves, Very Small	Unidentified	unidentified	Ulna		1	0.1	
	Mammal, Large	Homo	sapian	Unidentified		27	7.9	
	Mammal, Large	Homo	sapian	Unidentified		124	30.1	
	Mammal, Large	Homo	sapian	Unidentified		13	2.9	
	Mammal, Very Small	Unidentified	unidentified	Femur		1	0.01	
	Mammal, Very Small	Unidentified	unidentified	Incisor		1	0.01	
	Mammal, Very Small	Unidentified	unidentified	Pelvis		1	0.01	
	Mammal, Very Small	Unidentified	unidentified	Unidentified		5	0.4	
	Reptile, Small	Unidentified	unidentified	Rib		1	0.1	
	Reptile, Small	Unidentified	unidentified	Rib		7	0.3	
	Reptile, Small	Unidentified	unidentified	Vertebra		2	0.2	
	Reptile, Small	Unidentified	unidentified	Vertebra		1	0.01	
	Reptile, Small	Unidentified	unidentified	Vertebra		2	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		1	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		4	1.2	
	vertebrate	Unidentified	unidentified	Unidentified		25	0.01	
	vertebrate	Unidentified	unidentified	Unidentified		16	1.4	
	vertebrate	Unidentified	unidentified	Unidentified		4	0.1	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments	
HOFFMAN III 44AX183									
						Total Count=	262	Total Weight=	45.8
FS 21	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 3	2.4 to 2.5 FTBD	VAULT	
HISTORICS	Architecture	Metal	Unidentified	Cut/Wrought Nail		2			
	Architecture	Metal	Unidentified	Nail		1			
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		2		cross-mended bottle; ca. 1850-1880	
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		1		raised, molded lettering, "...OMA...CHN..."; cross-mended bottle; ca. 1850-1880	
						Total Count=	6	Total Weight=	
FS 73	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 3	2.4 to 2.5 FTBD	VAULT	
HISTORICS	Architecture	Manufactured	Brick	Glazed		1		3 7/8"x3"	
	Architecture	Manufactured	Brick	Glazed		1			
	Architecture	Manufactured	Brick	Partial		3			
	Architecture	Manufactured	Brick	Whole		1		2 3/8"x3 7/8"x2 1/2"	
	Architecture	Manufactured	Brick	Whole		1		8.5"x3.25"x2.5"	
	Architecture	Manufactured	Brick	Whole		5		mortar attached	
	Architecture	Manufactured	Brick	Whole		1		8.5"x3.5"x3"	
	Architecture	Manufactured	Brick	Whole		1		whole brick; canine paw print; 8.25"x4"x2.25"	
	Architecture	Manufactured	Brick	Whole		1		8.25"x3.5"x2.75"	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
HISTORICS	Architecture	Manufactured	Brick	Whole		2		two canine paw prints; mend; 8.75"x4.25"x2.25"
	Architecture	Manufactured	Miscellaneous Building Material	Mortar		1		
	Architecture	Manufactured	Miscellaneous Building Material	Mortar		1	4.5"x2.75"	
						Total Count=	19	Total Weight=
FS 10017	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 3	2.4 to 2.5 FTBD	VAULT; SOIL
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Longbone		2	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Longbone		2	0.01	
	Aves, Very Small	Unidentified	unidentified	Coracoid		1	0.1	
	Mammal, Large	Homo	sapian	Unidentified		50	18.3	
	Mammal	Unidentified	unidentified	Unidentified		40	5.6	
	Reptile, Small	Unidentified	unidentified	Carapace		1	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		8	0.8	
	Reptile, Small	Unidentified	unidentified	Vertebra		1	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		2	0.2	
	vertebrate	Unidentified	unidentified	Unidentified		6	0.2	
	vertebrate	Unidentified	unidentified	Unidentified		10	0.7	
HISTORICS	Architecture	Glass	Architectural Element	Window Glass		2		
	Architecture	Metal	Construction Hardware	Screw, General		1		

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
HISTORICS	Kitchen	Ceramic	Creamware	Lighter Yellow		2		indeterminate form, 1762-1820
	Kitchen	Ceramic	Pearlware	Undecorated		1		indeterminate form, 1779-1830
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		1		base; cross mended bottle; ca. 1850-1880
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		1		embossed, "...OLPH..."; cross-mended bottle; ca. 1850-1880
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		14		pieces cross-mend with bottle; ca. 1850-1880
	Kitchen	Glass	Tooled Lip	Dark Green		2		mend; down-tooled lip with down-tooled string rim; cross-mended bottle, c.1820-c.1920
	Miscellaneous	Metal	Unidentified Object	Sheet Metal		1		ferrous
	Miscellaneous	Synthetic	Miscellaneous	Plastic/Other		1		white
	Mortuary	Biological	Coffin Wood	Fragment		1	137.54	sample
	Mortuary	Metal	Coffin Nail	Cut		13		1815-1890
	Mortuary	Metal	Coffin Nail	Unidentified		12		
						Total Count= 175	Total Weight= 163.75	
FS 74	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 4	2.5 to 2.9 FTBD	VAULT
FAUNAL	Mammal, Large	Homo	sapian	Unidentified		1	0.1	
						Total Count= 1	Total Weight= .1	
FS 180	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 4	2.5 to 2.9 FTBD	VAULT
HISTORICS	Architecture	Metal	Construction Hardware	Screw, General		1		

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
HISTORICS	Architecture	Metal	Machine Cut Nail, Common	2-4"		2	1815-1890	
	Architecture	Metal	Machine Cut Nail, Common	Fragment		5	1815-1890	
						Total Count= 8	Total Weight=	
FS 270	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 4	2.5 to 2.9 FTBD	VAULT
FAUNAL	Mammal, Small	Sus	scrofa	Mandible		1	2	
	Mammal, Small	Unidentified	unidentified	Calcaneus		2	1.3	
	Mammal, Small	Unidentified	unidentified	Crainial Element		9	4.3	
	Mammal, Small	Unidentified	unidentified	Crainial Element		1	1.3	
	Mammal, Small	Unidentified	unidentified	Longbone		13	3.6	
	Mammal, Small	Unidentified	unidentified	Pelvis		3	1.1	
	Mammal, Small	Unidentified	unidentified	Vertebra		1	0.5	
	Mammal, Very Small	Unidentified	unidentified	Rib		10	0.9	
	Mammal	Unidentified	unidentified	Unidentified		24	3.9	
HISTORICS	Architecture	Metal	Unidentified	Nail		2		
	Miscellaneous	Metal	Unidentified Object	Iron/Steel		1		poss. ferrous alloy strap/band
	Miscellaneous	Metal	Unidentified Object	Non-Ferrous Metal		2		lead alloy sheet fragments
						Total Count= 69	Total Weight= 18.9	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 10022	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 4	2.5 to 2.9 FTBD	VAULT; ANIMAL BONES
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Crainial Element		1	0.01	
	Amphibian, Very Small	Unidentified	unidentified	Longbone		2	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Longbone		3	0.03	
	Amphibian, Very Small	Unidentified	unidentified	Parasphenoid		3	0.01	
	Amphibian, Very Small	Unidentified	unidentified	Pelvis		3	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Pelvis		2	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Pelvis		3	0.02	
	Amphibian, Very Small	Unidentified	unidentified	Scapula		1	0.01	
	Amphibian, Very Small	Unidentified	unidentified	Scapula		1	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		5	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		3	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		16	0.1	
	Aves, Medium	Unidentified	unidentified	Vertebra		1	0.1	
	Aves, Very Small	Unidentified	unidentified	beak		2	2.1	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
----------	-------	-------	------	----------	------	-------	------------	----------

HOFFMAN III 44AX183

FAUNAL	Aves, Very Small	Unidentified	unidentified	Cuneiform		1	0.1	
	Aves, Very Small	Unidentified	unidentified	phalanx 4		2	0.1	
	Aves, Very Small	Unidentified	unidentified	Sternum		1	0.1	
	Aves, Very Small	Unidentified	unidentified	Ulna		1	0.01	
	Mammal, Large	Homo	sapian	Unidentified		280	51.9	
	Mammal, Large	Homo	sapian	Unidentified		180	38.6	
	Mammal, Large	Homo	sapian	Unidentified		60	15.5	
	Mammal, Large	Unidentified	unidentified	Rib		22	2.5	
	Mammal, Medium	Unidentified	unidentified	Canine		1	0.02	
	Mammal, Small	Sus	scrofa	Tooth		1	0.1	
	Mammal, Small	Unidentified	unidentified	Auditory Bulla		1	0.3	
	Mammal, Small	Unidentified	unidentified	Carpal		7	0.1	
	Mammal, Small	Unidentified	unidentified	Longbone		19	3	
	Mammal, Small	Unidentified	unidentified	Vertebra		33	2.1	
	Mammal, Small	Unidentified	unidentified	Vertebra		2	0.1	
	Mammal, Very Small	Microtus	sp.	Longbone		4	2.7	
	Mammal, Very Small	Microtus	sp.	Tooth		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Longbone		4	0.1	
	Mammal, Very Small	Unidentified	unidentified	Longbone		2	0.01	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FAUNAL	Mammal, Very Small	Unidentified	unidentified	Longbone		3	0.6	
	Mammal, Very Small	Unidentified	unidentified	mandible		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Maxilla		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Rib		10	0.1	
	Mammal, Very Small	Unidentified	unidentified	Scapula		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Ulna		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Ulna		1	0.01	
	Mammal, Very Small	Unidentified	unidentified	Unidentified		2	0.1	
	Mammal, Very Small	Unidentified	unidentified	Vertebra		2	0.1	
	Mammal, Very Small	Unidentified	unidentified	Vertebra		5	0.1	
	Mammal, Very Small	Unidentified	unidentified	Zygomatic		1	0.1	
	Reptile, Small	Unidentified	unidentified	Carapace		8	1.3	
	Reptile, Small	Unidentified	unidentified	Carapace		12	3.7	
	Reptile, Small	Unidentified	unidentified	Longbone		1	0.2	
	Reptile, Small	Unidentified	unidentified	Mandible		1	0.05	
	Reptile, Small	Unidentified	unidentified	Rib		2	0.1	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FAUNAL	vertebrate	Unidentified	unidentified	Unidentified		16	0.8	
HISTORICS	Architecture	Metal	Construction Hardware	Screw, General		2		
	Architecture	Metal	Construction Hardware	Tack		1		
	Architecture	Metal	Construction Hardware	Tack		1		
	Architecture	Metal	Construction Hardware	Tack		1		coffin wood attached
	Clothing	Biological	Bone/Leather Clothing	Bone Button		1		back of two part button; four holed
	Kitchen	Biological	Kitchen Use	Nut/Seed/Pit		1		
	Kitchen	Glass	Machine Made Bottle	Aqua		1		1898-PRESENT
	Kitchen	Glass	Machine Made Bottle	Clear		1		1898-PRESENT
	Kitchen	Glass	Machine Made Bottle	Light Green		3		1898-PRESENT
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		1		embossed, "...AP..."; cross-mended bottle; ca. 1850-1880
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		23		pieces cross mend with bottle; ca. 1850-1880
	Miscellaneous	Metal	Unidentified Object	Iron/Steel		7		one with oyster shell attached
	Mortuary	Biological	Coffin Wood	Fragment		1	414.07	sample
	Mortuary	Metal	Coffin Nail	Cut		10		1815-1890
Mortuary	Metal	Coffin Nail	Unidentified		50			
						Total Count= 840	Total Weight= 542.15	

FS 194 BLOCK 4 Unit 02 N 1800 E 1826 Feature 001 Level 5 2.9 to 3 FTBD VAULT

HISTORICS Architecture Metal Construction Hardware Screw, General 2

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
HISTORICS	Architecture	Metal	Machine Cut Nail, Common	2-4"		2	1815-1890	
	Architecture	Metal	Unidentified	Nail		3		
	Architecture	Metal	Unidentified	Nail		4		
						Total Count=	11	Total Weight=
FS 10027	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 5	2.9 to 3 FTBD	VAULT; SOIL
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Longbone		30	0.7	
	Amphibian, Very Small	Unidentified	unidentified	Pelvis		7	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		5	0.1	
	Mammal, Large	Homo	sapian	Unidentified		21	1.8	
	Mammal, Large	Homo	sapian	Unidentified		10	0.7	
	Mammal, Large	Homo	sapian	Unidentified		160	38.8	
	Mammal, Small	Unidentified	unidentified	Astragalus		1	0.1	
	Mammal, Small	Unidentified	unidentified	Rib		2	0.1	
	Mammal, Small	Unidentified	unidentified	Ulna		1	0.3	
	Mammal, Very Small	Microtus	sp.	Humerus		1	0.1	
	Mammal, Very Small	Sciurus	sp.	Mandible		1	0.1	
	Mammal, Very Small	Sciurus	sp.	Maxilla		1	0.1	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FAUNAL	Mammal, Very Small	Unidentified	unidentified	Longbone		2	0.1	1 TIBIA, 1 CALCAINIUS
	Mammal, Very Small	Unidentified	unidentified	pelvis		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Unidentified		4	0.1	
HISTORICS	Kitchen	Glass	Machine Made Bottle	Dark Green		4		1898-PRESENT
	Miscellaneous	Metal	Unidentified Object	Non-Ferrous Metal		3		
	Mortuary	Biological	Coffin Wood	Fragment		1	94.6	sample
	Mortuary	Metal	Coffin Nail	Cut		9		1815-1890
	Mortuary	Metal	Coffin Nail	Unidentified		20		
						Total Count= 284	Total Weight= 137.9	
FS 233	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 6	3 to 3.3 FTBD	VAULT
HISTORICS	Architecture	Metal	Unidentified	Nail		3		
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		1		raised, molded letters, "...WOLF..."; cross-mended bottle; ca. 1850-1880
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		3		cross-mended bottle; ca. 1850-1880
						Total Count= 7	Total Weight=	
FS 238	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 6	3 to 3.3 FTBD	VAULT
HISTORICS	Architecture	Metal	Handwrought Rosehead	2-4"		1		1600-1815

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
HISTORICS	Architecture	Metal	Unidentified	Cut/Wrought Nail		3		
	Mortuary	Biological	Coffin Wood	Fragment		2		poss. coffin wood
						Total Count= 6	Total Weight=	
FS 240	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 6	3 to 3.3 FTBD	VAULT
HISTORICS	Architecture	Metal	Unidentified	Nail		4		
						Total Count= 4	Total Weight=	
FS 5036	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 6	3 to 3.3 FTBD	VAULT; WOOD SAMPLE
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	90.5	sample' poss. coffin wood
						Total Count= 1	Total Weight= 90.5	
FS 10030	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 6	3 to 3.3 FTBD	VAULT; SOIL
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Longbone		5	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Longbone		2	0.2	
	Amphibian, Very Small	Unidentified	unidentified	Pelvis		1	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		2	0.1	
	Aves, Medium	Unidentified	unidentified	Carpometacarpus		1	0.1	
	Aves, Medium	Unidentified	unidentified	Phalanx 2		1	0.2	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FAUNAL	Aves, Small	Unidentified	unidentified	Eggshell		1	0.1	
	Mammal, Large	Homo	sapian	Unidentified		300	73.9	
	Mammal, Large	Homo	sapian	Unidentified		65	9.5	
	Mammal, Large	Homo	sapian	Unidentified		100	12.9	
	Mammal, Large	Homo	sapian	Unidentified		240	48.4	
	Mammal, Large	Unidentified	unidentified	Unidentified		100	8.2	
	Mammal, Medium	Unidentified	unidentified	Phalanx		1	0.1	
	Mammal, Small	Sus	scrofa	Molar		1	0.3	
	Mammal, Small	Sus	scrofa	Tooth		8	0.7	
	Mammal, Small	Unidentified	unidentified	Cranial Element		4	0.7	
	Mammal, Small	Unidentified	unidentified	Longbone		1	0.1	
	Mammal, Small	Unidentified	unidentified	Longbone		3	0.6	
	Mammal, Small	Unidentified	unidentified	Scapula		2	0.4	
	Mammal, Small	Unidentified	unidentified	Vertebra		2	0.01	
	Mammal, Small	Unidentified	unidentified	Vertebra		2	0.1	
	Mammal, Very Small	Microtus	sp.	Humerus		1	0.1	
	Mammal, Very Small	Microtus	sp.	Ulna		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Pelvis		1	0.2	
	Mammal, Very Small	Unidentified	unidentified	Pelvis		2	0.1	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FAUNAL	Mammal, Very Small	Unidentified	unidentified	Rib		2	0.1	1) rib 1)vert
	Mammal, Very Small	Unidentified	unidentified	Tibia		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Vertebra		1	0.1	
	Reptile, Small	Unidentified	unidentified	Carapace		2	0.1	
	Reptile, Small	Unidentified	unidentified	Carapace		3	1.4	
	Reptile, Small	Unidentified	unidentified	Carpace		6	1.8	
	Reptile, Small	Unidentified	unidentified	Rib		2	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		1	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		4	0.6	
HISTORICS	Architecture	Metal	Unidentified	Cut/Wrought Nail		106		
	Furniture	Metal	Miscellaneous Hardware	Brass Tack		1		coffin wood attached
	Furniture	Metal	Miscellaneous Hardware	Brass Tack		4		
	Kitchen	Biological	Kitchen Use	Nut/Seed/Pit		6		
	Kitchen	Ceramic	Whiteware	Undecorated		1		indeterminate form, 1820-PRESENT
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		18		pieces cross mend with bottle; ca. 1850-1880
	Miscellaneous	Metal	Unidentified Object	Iron/Steel		6		
	Mortuary	Biological	Coffin Wood	Fragment		1	1523	sample; poss. coffin wood
						Total Count= 1012	Total Weight= 1684.71	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 10034	BLOCK 4	Unit 02	N 1800	E 1826	Feature 001	Level 7	3.3 to 3.6 FTBD	VAULT; SOIL
HISTORICS	Architecture	Metal	Unidentified	Cut/Wrought Nail		3		
	Architecture	Metal	Unidentified	Nail		2		poss. nail fragments
	Architecture	Metal	Wire Nail, Finish	< 2"		1		POST 1890
	Furniture	Metal	Miscellaneous Hardware	Brass Tack		1		
	Mortuary	Biological	Coffin Wood	Fragment		1	22.73	sample; poss. coffin wood
						Total Count= 8	Total Weight= 22.73	
FS 113	BLOCK 4	Unit 02	N 1800.25	E 1826.45	Feature 001	Level 4	2.8 to 2.8 FTBD	VAULT
HISTORICS	Architecture	Metal	Machine Cut Nail, Common	Fragment		1		1815-1890
						Total Count= 1	Total Weight=	
FS 90	BLOCK 4	Unit 02	N 1800.8	E 1826	Feature 001	Level 4	2.8 to 2.8 FTBD	VAULT
HISTORICS	Architecture	Metal	Handwrought Rosehead	Fragment		1		1600-1815
	Architecture	Metal	Unidentified	Nail		1		
						Total Count= 2	Total Weight=	
FS 115	BLOCK 4	Unit 02	N 1800.9	E 1826.6	Feature 001	Level 3	2.5 to 2.5 FTBD	VAULT
HISTORICS	Architecture	Metal	Unidentified	Nail		2		
						Total Count= 2	Total Weight=	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 175	BLOCK 4	Unit 02	N 1801	E 1827.4	Feature 001	Level 3	2.6 to 2.7 FTBD	VAULT
HISTORICS	Miscellaneous	Metal	Unidentified Object	Iron/Steel		1	334.3	sample; metal plate fragments in soil
						Total Count= 1	Total Weight= 334.3	
FS 108	BLOCK 4	Unit 02	N 1801.15	E 1826.3	Feature 001	Level 3	2.35 to 2.35 FTBD	VAULT
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		2		poss. coffin wood
						Total Count= 2	Total Weight=	
FS 66	BLOCK 4	Unit 02	N 1801.3	E 1829.4	Feature 001	Level 3	2.4 to 2.4 FTBD	VAULT; HUMAN REMAINS; BOYD'S ANALYSIS
FAUNAL	Mammal, Small	Unidentified	unidentified	Ulna		1	0.4	
	Mammal, Very Small	Unidentified	unidentified	Rib		5	0.7	
	Mammal, Very Small	Unidentified	unidentified	Vertebra		10	0.9	
						Total Count= 16	Total Weight= 2.	
FS 92	BLOCK 4	Unit 02	N 1803	E 1825.75	Feature 001	Level 4	2.8 to 2.8 FTBD	VAULT
HISTORICS	Architecture	Metal	Unidentified	Nail		2		
						Total Count= 2	Total Weight=	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 232	BLOCK 4	Unit 03	N 1798.9 E 1831.3	Feature 001	Level 6	3 to 3.3	FTBD	VAULT
HISTORICS	Mortuary	Metal	Coffin Handle	Bail Type		1		complete handle
						Total Count= 1	Total Weight=	
FS 100	BLOCK 4	Unit 03	N 1799.65 E 1830.6	Feature 001	Level 4	2.6 to 2.6	FTBD	VAULT; HUMAN REMAINS
FAUNAL	Mammal, Large	Homo	sapian	Unidentified		1	1.7	
						Total Count= 1	Total Weight= 1.7	
FS 5013	BLOCK 4	Unit 03	N 1800 E 1828.9	Feature 001	Level 1	1.1 to 1.7	FTBD	VAULT; FLOTATION SAMPLE
FAUNAL	Mammal, Large	Homo	sapian	Unidentified		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Femur		1	0.1	
	Reptile, Small	Unidentified	unidentified	Rib		2	0.1	
						Total Count= 4	Total Weight= .3	
FS 8005	BLOCK 4	Unit 03	N 1800 E 1828.9	Feature 001	Level 1	1.1 to 1.7	FTBD	VAULT; 2 LITER FLOTATION SAMPLE
HISTORICS	Miscellaneous	Metal	Unidentified Object	Non-Ferrous Metal		1		heavy fraction; copper alloy
	Mortuary	Biological	Coffin Wood	Fragment		5	2.55	heavy fraction

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
HISTORICS	Mortuary	Metal	Coffin Nail	Unidentified		1		heavy fraction
						Total Count= 7	Total Weight= 2.55	
FS 10009	BLOCK 4	Unit 03	N 1800	E 1828.9	Feature 001	Level 1	1.1 to 1.7 FTBD	VAULT; SOIL
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Crainial Element		4	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Longbone		2	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Longbone		4	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Longbone		6	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Scapula		1	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		1	0.01	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		2	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		1	0.1	
	Aves, Very Small	Unidentified	unidentified	Humerus		1	0.1	
	Aves, Very Small	Unidentified	unidentified	Vertebra		1	0.1	
	Mammal, Large	Homo	sapian	Unidentified		10	0.7	
	Mammal, Large	Homo	sapian	Unidentified		2	0.3	
	Mammal, Large	Homo	sapian	Unidentified		10	1.4	
	Mammal, Large	Homo	sapian	Unidentified		10	1.4	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FAUNAL	Mammal, Large	Homo	sapian	Unidentified		4	1	
	Mammal, Medium	Unidentified	unidentified	Longbone		9	0.5	
	Mammal, Small	Unidentified	unidentified	Phalanx		1	0.01	
	Mammal, Very Large	Bos	taurus	Molar		1	4.4	
	Mammal, Very Small	Blarina	bravacada	Mandible		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Humerus		1	0.01	
	Mammal, Very Small	Unidentified	unidentified	Maxilla		1	0.1	
	Reptile, Small	Unidentified	unidentified	Rib		4	0.1	
	Reptile, Small	Unidentified	unidentified	Rib		2	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		5	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		2	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		2	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		9	1.8	
	Reptile, Small	Unidentified	unidentified	Vertebra		2	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		1	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		2	0.1	
	vertebrate	Unidentified	unidentified	Unidentified		6	0.9	
	vertebrate	Unidentified	unidentified	Unidentified		21	0.3	
HISTORICS	Architecture	Glass	Architectural Element	Window Glass		17		
	Architecture	Metal	Construction Hardware	Tack		1		

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
HISTORICS	Kitchen	Ceramic	Pearlware	Undecorated		1		indeterminate form, 1779-1830
	Kitchen	Glass	Machine Made Bottle	Light Green		8		1898-PRESENT
	Miscellaneous	Metal	Unidentified Object	Iron/Steel		2		
	Miscellaneous	Metal	Unidentified Object	Slag		1		
	Miscellaneous	Stone	Miscellaneous Stone	Coal		2		
	Mortuary	Biological	Coffin Wood	Fragment		1	9.18	sample
	Mortuary	Metal	Coffin Nail	Cut		2		1815-1890
	Mortuary	Metal	Coffin Nail	Unidentified		8		
						Total Count= 172	Total Weight= 23.81	

FS	BLOCK 4	Unit 03	N 1800	E 1828.9	Feature	Level 2	1.7 to 2.4 FTBD	VAULT; SOIL
10015					001			
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Unidentified		7	0.3	varrious bones
	Mammal, Large	Homo	sapian	Unidentified		22	2.6	
	Mammal, Large	Homo	sapian	Unidentified		7	6.4	
	Mammal, Very Small	Unidentified	unidentified	Mandible		1	0.01	
	Osteichthyes, Small	Unidentified	unidentified	Vertebra	Y	1	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		2	0.1	
HISTORICS	Clothing	Metal	Miscellaneous	Straight Pin		1		
	Kitchen	Biological	Kitchen Use	Nut/Seed/Pit		1		
	Kitchen	Ceramic	Pearlware	Undecorated		1		indeterminate form, 1779-1830
	Kitchen	Ceramic	Redware	Brown Glaze		1		hollowware

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
----------	-------	-------	------	----------	------	-------	------------	----------

HOFFMAN III 44AX183

HISTORICS	Kitchen	Ceramic	Unidentified Ceramic	Unidentified Earthenware		1		indeterminate form
	Kitchen	Ceramic	Whiteware	Undecorated		2		indeterminate form, 1820-PRESENT
	Kitchen	Ceramic	Whiteware	Undecorated		1		indeterminate form, 1820-PRESENT
	Kitchen	Glass	Machine Made Bottle	Clear		5		1898-PRESENT
	Kitchen	Glass	Machine Made Bottle	Light Green		1		1898-PRESENT
	Kitchen	Glass	Non Machine Made Bottle	Dark Green		1		
	Kitchen	Glass	Unidentified Fragment	Clear		1		
	Miscellaneous	Biological	Wood	Charcoal		15		
	Miscellaneous	Metal	Unidentified Object	Iron/Steel		3		
	Miscellaneous	Stone	Miscellaneous Stone	Coal Slag		1		
	Miscellaneous	Synthetic	Miscellaneous	Plastic/Other		1		
	Mortuary	Biological	Coffin Wood	Fragment		1	69.45	sample
	Mortuary	Metal	Coffin Nail	Unidentified		4		

Total Count= 81 Total Weight= 78.96

FS 22	BLOCK 4	Unit 03	N 1800	E 1828.9	Feature 001	Level 3	2.4 to 2.5 FTBD	VAULT
-------	---------	---------	--------	----------	-------------	---------	-----------------	-------

FAUNAL	Mammal, Small	Unidentified	unidentified	Longbone		3	2.3	1 tibia, 1 humerus, 1 femur
	Mammal, Small	Unidentified	unidentified	Rib		1	0.1	
	Mammal, Small	Unidentified	unidentified	Scapula		1	0.1	
	Mammal, Small	Unidentified	unidentified	Unidentified		4	0.6	1 calcainues
	Mammal, Small	Unidentified	unidentified	Vertebra		1	0.1	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FAUNAL	Mammal	Unidentified	unidentified	Vertebra		1	0.1	
	Reptile, Small	Unidentified	unidentified	Carapace		2	0.1	
HISTORICS	Architecture	Metal	Machine Cut Nail, Common	Fragment		4		1815-1890
	Architecture	Metal	Unidentified	Nail		2		
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		1		molded letter, "S..."; cross-mended bottle; ca. 1850-1880
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		1		cross-mended bottle; ca. 1850-1880
						Total Count= 21	Total Weight= 3.4	
FS 140	BLOCK 4	Unit 03	N 1800	E 1828.9	Feature 001	Level 3	2.5 to 2.7 FTBD	VAULT
HISTORICS	Architecture	Metal	Construction Hardware	Screw, General		1		
	Architecture	Metal	Handwrought Rosehead	2-4"		5		1600-1815
	Architecture	Metal	Unidentified	Cut/Wrought Nail		5		
						Total Count= 11	Total Weight=	
FS 10016	BLOCK 4	Unit 03	N 1800	E 1828.9	Feature 001	Level 3	2.4 to 2.5 FTBD	VAULT; SOIL
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Longbone		14	0.8	7 longbones, 7 vertebrae, 1 parasphynoid
	Aves, Large	Meleagris	gallopavo	Humerus		1	3.3	
	Aves	Unidentified	unidentified	Unidentified		3	0.2	1 coracoid, 1 vert and 1 crainal element
	Mammal, Large	Homo	sapian	Phalanx		2	0.2	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FAUNAL	Mammal, Large	Homo	sapian	Unidentified		43	8.6	
	Mammal, Small	Sus	scrofa	Phalanx		1	1	
	Mammal, Small	Sus	scrofa	Tooth		1	1.7	Acutal count is 15
	Mammal, Small	Sus	scrofa	Unidentified		3	27.3	count of 3 is MNI actually most of post craina is present
	Mammal, Small	Unidentified	unidentified	Crainial Element		1	0.1	
	Mammal, Small	Unidentified	unidentified	Pelvis		1	0.2	
	Mammal, Small	Unidentified	unidentified	Rib		2	0.1	
	Mammal, Very Small	Microtus	sp.	Humerus		1	0.1	
	Mammal, Very Small	Microtus	sp.	Humerus		3	0.1	2 teeth
	Mammal, Very Small	Microtus	sp.	Ulna		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Longbone		3	0.2	1) ulna (microtus) 2) femurs
	Mammal, Very Small	Unidentified	unidentified	Mandible		1	0.01	
	Mammal, Very Small	Unidentified	unidentified	Pelvis		1	0.01	
	Mammal, Very Small	Unidentified	unidentified	Tibia		1	0.01	
	Mammal, Very Small	Unidentified	unidentified	Unidentified		4	0.1	2) longbones 1) rib and 1) Incisor
	Mammal	Unidentified	unidentified	Unidentified	Y	1	0.5	
	Osteichthyes, Small	Unidentified	unidentified	Scale		3	0.01	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FAUNAL	Reptile, Small	Unidentified	unidentified	Carapace		3	1.2	
	Reptile, Small	Unidentified	unidentified	Carapace		37	8.8	1 Mandible, 2 longbones
	Reptile, Small	Unidentified	unidentified	Vertebra		3	0.5	
	Reptile, Small	Unidentified	unidentified	Vertebra		4	0.3	
	Reptile, Small	Unidentified	unidentified	Vertebra		3	0.1	
	vertebrate	Unidentified	unidentified	Longbone		10	0.01	
HISTORICS	Architecture	Glass	Architectural Element	Window Glass		1		
	Architecture	Metal	Construction Hardware	Tack		3		one with wood attached
	Clothing	Glass	Glass Clothing	Button		1		one part
	Kitchen	Biological	Food Related	Bone		2		
	Kitchen	Ceramic	Domestic Brown Stoneware	Brown Salt-Glaze, Undecorated		2		hollowware, 1750-1900
	Kitchen	Ceramic	Whiteware	Undecorated		2		indeterminate form, 1820-PRESENT
	Kitchen	Glass	Dip Mold	Dark Green		1		1680-1850
	Kitchen	Glass	Machine Made Bottle	Light Green		2		1898-PRESENT
	Kitchen	Glass	Unidentified Bottle Glass	Dark Green		6		probable non-machine made
	Mortuary	Biological	Coffin Wood	Fragment		1	147.67	sample
	Mortuary	Metal	Coffin Nail	Cut		9		1815-1890
	Mortuary	Metal	Coffin Nail	Unidentified		34		
					Total Count=	215	Total Weight=	203.22

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FS 76	BLOCK 4	Unit 03	N 1800	E 1828.9	Feature 001	Level 4	2.75 to 2.9 FTBD	VAULT
HISTORICS	Architecture	Metal	Construction Hardware	Screw, General		1		
	Architecture	Metal	Handwrought Rosehead	2-4"		3	1600-1815	
	Architecture	Metal	Unidentified	Cut/Wrought Nail		21		
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		1		cross-mended bottle; ca. 1850-1880
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		1		raised, molded letter, "...O..."; cross-mended bottle; ca. 1850-1880
						Total Count= 27	Total Weight=	
FS 8010	BLOCK 4	Unit 03	N 1800	E 1828.9	Feature 001	Level 4	2.5 to 2.9 FTBD	VAULT; FLOTATION SAMPLE: 2 LITER FLOTATION SAMPLE
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	9.44	heavy fraction; sample
						Total Count= 1	Total Weight= 9.44	
FS 10021	BLOCK 4	Unit 03	N 1800	E 1828.9	Feature 001	Level 4	2.5 to 2.9 FTBD	VAULT; FLOTATION SAMPLE
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Longbone		3	0.1	
	Aves, Very Small	Unidentified	unidentified	Phalanx		2	0.1	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
----------	-------	-------	------	----------	------	-------	------------	----------

HOFFMAN III 44AX183

FAUNAL	Mammal, Small	Sus	scrofa	carpal/tarsal		30	0.1	
	Mammal, Small	Sus	scrofa	Crainial Element		17	1.9	
	Mammal, Small	Sus	scrofa	Humerus		2	1.8	
	Mammal, Small	Sus	scrofa	Longbone		26	1.7	
	Mammal, Small	Sus	scrofa	Pelvis		3	0.4	
	Mammal, Small	Sus	scrofa	Rib		37	1.2	
	Mammal, Small	Sus	scrofa	Sternum		1	0.1	
	Mammal, Small	Sus	scrofa	Tooth		11	1.1	
	Mammal, Small	Sus	scrofa	Ulna		3	1.4	
	Mammal, Small	Sus	scrofa	Vertebra		50	3	
	Mammal, Very Small	Unidentified	unidentified	Mandible		1	0.1	
	vertebrate	Unidentified	unidentified	Unidentified		180	4.7	

Total Count= 366 Total Weight= 17.7

FS	BLOCK 4	Unit 03	N 1800	E 1828.9	Feature	Level 4	2.75 to 2.9 FTBD	SOIL FROM VAULT
10024					001			
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Longbone		11	0.2	
	Amphibian, Very Small	Unidentified	unidentified	Longbone		2	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Longbone		1	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		4	0.1	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Vertebra		1	0.1	
	Aves, Very Small	Unidentified	unidentified	Humerus		1	0.1	
	Mammal, Large	Homo	sapian	Unidentified		93	9.7	
	Mammal, Large	Homo	sapian	Unidentified		40	8.6	
	Mammal, Large	Homo	sapian	Unidentified		30	3.4	
	Mammal, Large	Homo	sapian	Unidentified		25	4.7	
	Mammal, Small	Sus	scrofa	Molar		2	0.1	
	Mammal, Small	Sus	scrofa	Tooth		2	0.3	
	Mammal, Small	Unidentified	unidentified	Various		18	2.1	
	Mammal, Very Small	Microtus	sp.	Ulna		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Pelvis		1	0.1	
	Reptile, Small	Unidentified	unidentified	Carapace		3	2.3	
	Reptile, Small	Unidentified	unidentified	Carapace		5	1.3	
	Reptile, Small	Unidentified	unidentified	Carapace		1	0.2	
	Reptile, Small	Unidentified	unidentified	Carapace		1	0.1	
	Reptile, Small	Unidentified	unidentified	Vertebra		1	0.3	
	vertebrate	Unidentified	unidentified	Unidentified		22	1.8	
HISTORICS	Kitchen	Glass	Machine Made Bottle	Dark Green		1		raised, molded lettering, "...E...", 1898-PRESENT
	Kitchen	Glass	Unidentified Fragment	Dark Green		1		
	Mortuary	Biological	Coffin Wood	Fragment		1	339.8	sample

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
HISTORICS	Mortuary	Metal	Coffin Nail	Cut		50		probable coffin nails, 1815-1890
	Mortuary	Metal	Coffin Nail	Unidentified		6		probable coffin nails
						Total Count=	324	Total Weight=
							375.6	
FS 195	BLOCK 4	Unit 03	N 1800	E 1828.9	Feature 001	Level 5	2.9 to 3 FTBD	VAULT
HISTORICS	Architecture	Metal	Handwrought Rosehead	2-4"		2		1600-1815
	Architecture	Metal	Unidentified	Cut/Wrought Nail		8		
						Total Count=	10	Total Weight=
FS 10028	BLOCK 4	Unit 03	N 1800	E 1828.9	Feature 001	Level 5	2.9 to 3 FTBD	VAULT; SOIL
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Longbone		6	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Pelvis		4	0.2	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		7	0.1	
	Mammal, Medium	Unidentified	unidentified	varrious		3	0.2	
	Mammal, Small	Sus	scrofa	Tooth		2	0.1	
	Mammal, Very Small	Microtus	sp.	Crainia		1	0.2	
	Mammal, Very Small	Microtus	sp.	Longbone		2	0.3	1 HUMERUS; IULNA
	Mammal, Very Small	Unidentified	unidentified	Femur		2	0.1	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FAUNAL	Mammal, Very Small	Unidentified	unidentified	Mandible		3	0.1	
	Mammal, Very Small	Unidentified	unidentified	Rib		1	0.1	
	Mammal, Very Small	Unidentified	unidentified	Tibia		2	0.1	
	Mammal, Very Small	Unidentified	unidentified	Vertebra		3	0.1	
	Reptile, Small	Unidentified	unidentified	Carapace		6	1.1	
	Reptile, Small	Unidentified	unidentified	Longbone		1	0.1	
	Reptile, Small	Unidentified	unidentified	Rib		3	0.1	
	vertebrate	Unidentified	unidentified	Unidentified		30	0.1	
HISTORICS	Architecture	Glass	Architectural Element	Window Glass		2		
	Architecture	Metal	Construction Hardware	Screw, General		2		
	Architecture	Metal	Unidentified	Nail		20		
	Kitchen	Biological	Shell	Eggshell		1		
	Kitchen	Ceramic	Pearlware	Undecorated		1		indeterminate form, 1779-1830
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		8		pieces cross mend with bottle; ca. 1850-1880
	Kitchen	Glass	Unidentified Fragment	Dark Green		5		
	Kitchen	Glass	Unidentified Fragment	Light Green		1		
	Miscellaneous	Metal	Unidentified Object	Iron/Steel		2		
	Mortuary	Biological	Coffin Wood	Fragment		1	348.81	sample
	Mortuary	Metal	Coffin Nail	Cut		37		1815-1890

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183					Total Count= 156		Total Weight= 351.91	
FS 234	BLOCK 4	Unit 03	N 1800	E 1828.9	Feature 001	Level 6	3 to 3.3 FTBD	VAULT
HISTORICS	Architecture	Metal	Unidentified	Cut/Wrought Nail		2		
	Architecture	Metal	Unidentified	Nail		3		
					Total Count= 5		Total Weight=	
FS 5035	BLOCK 4	Unit 03	N 1800	E 1828.9	Feature 001	Level 6	3 to 3.3 FTBD	VAULT; WOOD SAMPLE
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	435	sample' poss. coffin wood
					Total Count= 1		Total Weight= 435.	
FS 10031	BLOCK 4	Unit 03	N 1800	E 1828.9	Feature 001	Level 6	3 to 3.3 FTBD	VAULT; SOIL
FAUNAL	Amphibian, Very Small	Unidentified	unidentified	Longbone		2	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Pelvis		2	0.1	
	Amphibian, Very Small	Unidentified	unidentified	Vertebra		1	0.1	
	Aves, Very Small	Unidentified	unidentified	Femur		1	0.1	
	Aves, Very Small	Unidentified	unidentified	Sternum		1	0.1	
	Mammal, Large	Homo	sapian	Unidentified		5	0.1	
	Mammal, Large	Homo	sapian	Unidentified		140	16	
	Mammal, Large	Homo	sapian	Unidentified		1	0.2	

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
FAUNAL	Mammal, Small	Sus	scrofa	Tooth		2	0.1	
	Mammal, Small	Unidentified	unidentified	Longbone		2	0.1	
	Mammal, Small	Unidentified	unidentified	Pelvis		2	0.3	
	Mammal, Small	Unidentified	unidentified	Rib		2	0.1	
	Mammal, Small	Unidentified	unidentified	Rib		7	0.1	
	Mammal, Small	Unidentified	unidentified	Vertebra		20	1.4	
	Mammal, Very Small	Unidentified	unidentified	Longbone		3	0.1	
	Reptile, Small	Unidentified	unidentified	Carapace		7	1.3	
	Reptile, Small	Unidentified	unidentified	Rib		1	0.1	
HISTORICS	Architecture	Manufactured	Brick	Glazed		1		
	Architecture	Metal	Handwrought Rosehead	Fragment		4		1600-1815
	Architecture	Metal	Unidentified	Cut/Wrought Nail		147		
	Kitchen	Biological	Kitchen Use	Nut/Seed/Pit		2		
	Miscellaneous	Metal	Unidentified Object	Iron/Steel		6		miscellaneous ferrous alloy fragments
	Mortuary	Biological	Coffin Wood	Fragment		1	2.27	sample; poss. coffin wood
						Total Count= 360	Total Weight= 22.67	
FS 10035	BLOCK 4	Unit 03	N 1800	E 1828.9	Feature 001	Level 7	3.3 to 3.6 FTBD	VAULT; SOIL
FAUNAL	Mammal, Large	Homo	sapien	Unidentified		1	0.3	
HISTORICS	Architecture	Manufactured	Miscellaneous Building Material	Mortar		5		

Artifact Inventory

3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
HISTORICS	Architecture	Metal	Unidentified	Cut/Wrought Nail		1		
	Kitchen	Biological	Kitchen Use	Nut/Seed/Pit		1		
	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		1		possible machine made
	Mortuary	Biological	Coffin Wood	Fragment		1	2.85	sample; poss. coffin wood
						Total Count= 10	Total Weight= 3.15	
FS 224	BLOCK 4	Unit 03	N 1800	E 1831.1	Feature 001	Level 5	2.85 to 2.85 FTBD	VAULT
HISTORICS	Architecture	Metal	Unidentified	Cut/Wrought Nail		2		
						Total Count= 2	Total Weight=	
FS 220	BLOCK 4	Unit 03	N 1800.2	E 1830.9	Feature 001	Level 5	2.85 to 2.85 FTBD	VAULT; HUMAN REMAINS
HISTORICS	Architecture	Metal	Unidentified	Cut/Wrought Nail		2		
						Total Count= 2	Total Weight=	
FAUNAL	Mammal, Large	Homo	sapian	Unidentified		1	5	
						Total Count= 1	Total Weight= 5.	
FS 101	BLOCK 4	Unit 03	N 1800.35	E 1829.65	Feature 001	Level 4	2.25 to 2.25 FTBD	VAULT; HUMAN REMAINS
HISTORICS	Architecture	Metal	Unidentified	Cut/Wrought Nail		2		
						Total Count= 2	Total Weight=	
FAUNAL	Mammal, Large	Homo	sapian	Unidentified		1	0.3	
						Total Count= 1	Total Weight= .3	
FS 230	BLOCK 4	Unit 03	N 1805.5	E 1828.9	Feature 001	Level 6	3 to 3.3 FTBD	VAULT
HISTORICS	Architecture	Metal	Unidentified	Cut/Wrought Nail		2		
						Total Count= 2	Total Weight=	
HISTORICS	Clothing	Metal	Metal Clothing	Brass Button		1		one part; shank scar

Artifact Inventory

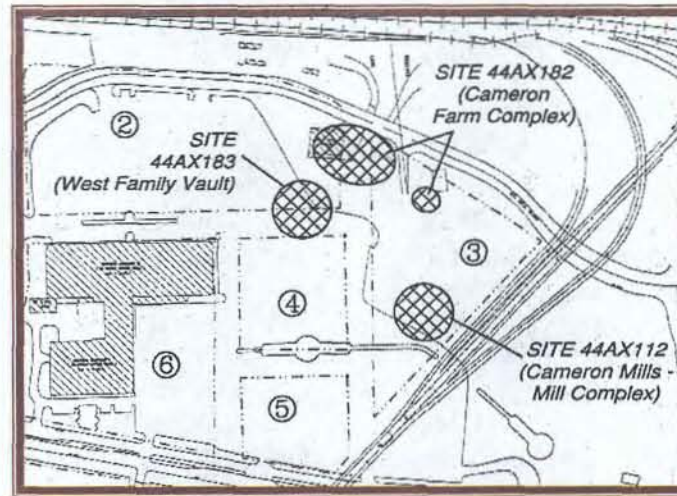
3/6/2003

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
HOFFMAN III 44AX183								
HISTORICS	Kitchen	Glass	Mouth-Blown in Mold	Dark Green		1		raised, molded letters, "...SC"; cross-mended bottle; ca. 1850-1880
						Total Count=	2	Total Weight=
FS 5031	BLOCK 4	Unit 03, N 1800 N½	E 1828.9	Feature 001	Level 6	3 to 3	FTBD	VAULT; WOOD SAMPLE
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	430	sample; poss. coffin wood
						Total Count=	1	Total Weight= 430.
FS 5030	BLOCK 4	Unit 03, N 1800 S½	E 1828.9	Feature 001	Level 6	3 to 3	FTBD	VAULT; WOOD SAMPLE
HISTORICS	Mortuary	Biological	Coffin Wood	Fragment		1	601.5	sample' poss. coffin wood
						Total Count=	1	Total Weight= 601.5

APPENDIX H

PUBLIC INTERPRETATION

EXCAVATIONS AT THE WEST FAMILY CEMETERY (44AX183)



Plan View of the three sites on the Hoffman property

Drivers sitting in the frequent traffic backups on I-95/495 can hardly avoid noticing the rapid development along Alexandria's Eisenhower Avenue corridor. The once nearly vacant Cameron Run stream valley now is crowded with dense pockets of townhouses, commercial and government office buildings, warehouses, and overnight accommodations for the traveling public. But not so long ago, the Cameron Run valley was a place of plantation houses, gristmills, agricultural fields, gardens, orchards, and—yes—even family cemeteries. The discovery and eventual excavation of the West Family Cemetery (44AX183) symbolizes vividly the overlap of those two contrasting landuses.

Project Background

Early in 1998, the Hoffman Management Company began to expand development on its property in the Eisenhower Avenue corridor. To comply with Alexandria's Archeological Protection Ordinance (1989), Hoffman retained a consulting firm to conduct archeological studies on the undeveloped blocks of its property. Working closely with Dr. Pamela

Cressey and her staff at Alexandria Archaeology, these consultants conducted several studies as Hoffman Management filed specific, block-by-block, site plans with the city. The archeological work was timed to coincide with specific development plans filed for each block of the property. The nature of development planned for the site determined both the objectives of the research and the field methods used during each stage of the study.

By 1999, archival research had documented the property's ownership history. Archeological field testing had revealed various components of buildings that once had stood on the property, including the main house, outbuildings, and secondary residences that were part of the 19th century Cameron Farm (44AX182), and sections of the headrace that once powered the Cameron Mill (44AX112).

In mid-1999, as preparation of the site of the current AMC Cineplex got under way, archeologists monitored earth-moving activities to make sure that no archeological remains were disturbed. Then, two days before Christmas 1999, as a new water line was being installed, the site monitor

observed bricks falling into the utility trench. Halting the backhoe and scraping down the sides of the trench, he exposed, for the first time in over two centuries, the burial vault of one of Alexandria's founding families.

The West Family of Alexandria

The association between the West family and the City of Alexandria began at the end of the 17th century, when John West, a Stafford County planter, bought part of an early 627-acre land grant from John Simpson. West subsequently bequeathed this parcel to one of his grandsons, John, but John died prematurely, leaving neither heirs nor will. John's brother Hugh took possession of the property, and later purchased the other half of the original 627 acre tract. These 627 acres encompassed the Hoffman property.

As City Archaeologist Dr. Pamela Cressey observed: "(t)he West family—Hugh West in particular—was a tremendously instrumental force in the establishment of Alexandria as a town." Hugh's properties housed one of Northern Virginia's first tobacco inspection warehouses at the foot of what is now Oronoco Street, a site fittingly known today as "West's Point." Hugh's public career included service as one of Alexandria's original trustees, and he was a member of Truro Parish's vestry for a decade.

In 1754, Hugh West's son John inherited "all that property on which I now live." However, Hugh's wife, Sybil (Harrison) West, continued to occupy the family home. John West continued his father's tradition of public service. As assistant surveyor for Fairfax County, he helped to lay out the town of Alexandria in 1749 (with the aid of a young George Washington), and also served as delegate to the House of Burgesses, Justice of the Peace and sheriff of Fairfax County, member of the Fairfax Committee of Safety during the Revolution, and Clerk of the Truro Parish

Vestry between 1756 and 1764. At his death in 1776, John bequeathed the 627-acre property to his eldest son, Thomas. Again, Sybil West was guaranteed the right to continue to live at the ancestral plantation.

Captain Thomas West, a Revolutionary War veteran, served during the Pennsylvania and New Jersey campaigns of 1777 and 1778. After the war, his financial position deteriorated. In the 1780s, he mortgaged some of his properties to cover his debts. He also sold property to a variety of individuals, including the milling partnership of William Bird, John Stump, and John Ricketts. Two of these land sales alluded to the presence of a "vault" on West's property. One deed specified that a proposed millrace had to be built at least twenty feet from Thomas West's "vault;" the other "reserved" a 20 x 20 ft parcel around the vault as the family cemetery.

PUBLIC SALE OF LANDS.

By virtue of a decree of the Court of the United States for the fifth circuit V. g. i. district, in the suit of Hepburn and Dundas against Thomas West, in chancery—will be sold on the premises to the highest bidder, at Public Auction, for ready money, on Monday the 20th of August next, at 12 o'clock A. M. if fair, if not, the next fair day at the same hour,

A TRACT OF LAND,

situate on Hunting Creek, in the County of Fairfax and Commonwealth of Virginia, within one mile of the town of Alexandria, and near to the Cameron Mills, whereon major Thomas West now resides, supposed to contain from fifty to eighty acres.

Also,

on the same day will be offered for sale, *The residue of said Thos. West's Land,* lying on the northwest line of the patent of Carr and Simpson, adjacent to the tract before mentioned, not disposed of by the said Thomas West at the time certain mortgages were made by him to Hepburn and Dundas.

Richard M. Scott,
F. Peyton,
Amos Alexander, } Com^{rs}

July 12, 1783

Sale notice for Thomas West's Cameron Farm

By 1805, West's debts forced the sale of his Cameron Farm property at public auction.

Over the years, the location of the Wests' vault was gradually forgotten. The site was used initially for farming, and became the site of a trailer court after World War II. Ironically, it took commercial development to bring to light once again not only the West cemetery and the individuals interred therein, but also to highlight a family that had been so critically involved in the founding and early settlement of the City of Alexandria.

Archeology at the West Family Cemetery

In April 2000, after preliminary tests had confirmed that the vault did contain human remains, the Virginia Department of Historic Resources issued a burial excavation permit for the vault and for an area surrounding it, as required by Virginia law. This permit specified how the remains were to be removed, and required skeletal analysis to determine, where possible, the age, sex, stature, pathology, and cause of death of each individual. Drs. Clifford and Donna Boyd, professors at Radford University in Virginia, were retained to perform the analysis.

Because old family cemeteries often include unmarked graves, the first task was to determine whether additional graves were present in the area near the vault. To accomplish this task, a backhoe with a smooth blade was used to remove the asphalt parking surfaces that had sealed the cemetery site for over three decades. As the machine gently removed this cover, it exposed not only the full dimensions of the vault, but also seven additional graves. Then, after carefully cleaning off the surface of the vault and each grave shaft to define their exact shape, the archeological team began to remove the modern soils that had filled in both the exterior grave shafts and the upper portions of the brick vault.

The human remains in each of the graves and in the vault had been preserved to varying degrees. The individual burials outside the vault were more severely damaged. Over two centuries of alternate wetting and drying had reduced most of the bones and the coffins to little more than powder. Grading and utilities installation for the post World War II trailer court also had removed all but approximately 1½ ft of the original grave shafts. Therefore, before these remains were removed for analysis, they were extensively photographed and drawn to scale. Of the seven burials, only four were sufficiently well preserved to permit project analysts to determine anything about their physical attributes. Those that could be analyzed included two adult males, one adult female, one small child.

The distribution of the remains in the vault created an osteological jigsaw puzzle. The same grading that had removed almost all of the graves outside the vault also had collapsed the roof of the vault, and had scattered, broken, and mixed together the pine coffins, human remains, and the bricks from the collapsed vault roof.



Gold hoop earring on remains of the coffin base

Despite the confusion, skeletal analysts were able to “match” enough of these bones and teeth to ascertain that seven individuals had been buried within: two adult males, three adult females, one child aged 5 ½ - 7 years old, and a newborn infant. All had apparently been wrapped in shrouds and buried in modest hexagonal pine coffins. One item of personal adornment--a gold hoop earring-- was recovered on the bottom of the coffin of one of the young women.

Analysis

Who were the individuals that had been buried in the West Family Cemetery? Documentary sources provided concrete answers in two cases. Obituaries in the *Alexandria Gazette* noted that both Sybil West (Hugh’s wife) and Colonel George West, one of her children, had been interred in the “family vault” outside of Alexandria. Clues to the possible identity of another adult female and the infant were found in a biography of Alexandria merchant, John Carlyle. Carlyle’s second wife, Sybil, was the daughter of Hugh and Sybil West. She died of consumption in 1769 after giving birth to a daughter, who also did not survive. The two remaining adults and the small child could represent any number of other West Family members.

The seven persons buried in the individual graves outside of the West Family vault remain unidentified, although the archeological evidence has provided some clues. First, these individuals probably were not members of the immediate West family. All of these graves lay outside of the 20 x 20 ft “reserved” perimeter designated in one of Thomas West’s land sales. Secondly, at least three individuals—a male, a female and the small child--probably were a family

group, since all of them were buried in a separate row, with the infant in the middle.

Finally, one archeological find raises the possibility that the adult male of that family group was African-American. As they excavated this burial, the archeological team



Quartz crystal recovered from adult male burial, at the West Family cemetery

discovered a small clear quartz crystal beneath the individual’s shoulder blade. Similar crystals have been found at other African-American related sites in the region—including the Carroll House in Annapolis and the slave quarters at Monticello. Perhaps this man was a trusted West family servant; we will never know for sure.

Epilogue

Soon these fourteen souls will be at rest once more. Plans now being formulated call for their reburial in the graveyard of Pohick Church, the parish church where both Hugh West and his son John once served on the vestry.

“The Parishes being of Great Extent. . .many dead Corpses cannot be conveyed to the Church to be buried so that it is customary to bury in Gardens or Orchards, where whole Families lye interred together.” --Reverend Hugh Jones (1724)

THE HOFFMAN CENTER ARCHEOLOGICAL PROJECT

PUBLIC INFORMATION PACKET

PUBLIC SALE OF LANDS.
By virtue of a decree of the Court of the United States for the fifth circuit, Virginia district, in the suit of Hepburn and Dundas against Thomas West, in chancery—will be sold on the premises to the highest bidder, at Public Auction, for ready money, on Monday the 20th of August next, at 12 o'clock A.M. if fair, if not, the next fair day at the same hour.

A TRACT OF LAND,
situate on Hunting Creek, in the County of Fairfax and Commonwealth of Virginia, within one mile of the town of Alexandria, and near to the Cameron Mills, whereon major Thomas West now resides, supposed to contain from fifty to eighty acres.

Also,
on the same day will be offered for sale, *The residue of said Thos. West's Land,* lying on the northwest line of the patent of Carr and Simpson, adjacent to the tract before mentioned, not disposed of by the said Thomas West at the time certain mortgages were made by him to Hepburn and Dundas.

Richard M. Scott, }
F. Peyton, }
Amos Alexander, }
Compt's

July 12, '84

Public Sale Notice for Thomas West's property, taken from the August 8, 1804, *Alexandria Daily Advertiser*.

Prepared by:

R. Christopher Goodwin & Associates, Inc
241 E. Fourth Street, Suite 100
Frederick, Maryland 21701

THE HOFFMAN CENTER ARCHEOLOGICAL PROJECT

Project History

In April 1998, the Hoffman Management Company initiated plans for expanding the development of its properties along Eisenhower Avenue in Alexandria, Virginia. As part of its planning activities and as required under the Alexandria Archeological Protection Ordinance of 1989, Hoffman Management retained R. Christopher Goodwin & Associates, Inc, a cultural resource management and planning firm, to conduct archeological studies for the undeveloped blocks of its property surrounding the Hoffman I and II office complex and the Holiday Inn. Since that time, Goodwin & Associates, Inc. has continued to provide archeological services for Hoffman Management, as they have filed specific, block-by-block, site plans with the city. All of the work on the Hoffman property has been coordinated closely with Dr. Pamela Cressey and her staff at Alexandria Archaeology.

Project Methods

Several different types of archeological studies, using a variety of methods and techniques, have been completed as the Hoffman project has proceeded. The archeological work has been timed to coincide with specific development plans filed for various blocks of the property. The research objectives and the methods used in the field during each stage of the study have been dictated by the nature of the planned site development and the field conditions on site. The following types of studies have been completed to date at the development site.

- *Spring, 1998: Preliminary archival study and archeological assessment.* This preliminary study evaluated documentary sources, historic maps, and the results of earlier archeological work done on and in the vicinity of the Hoffman Property to predict where and what kinds of archeological resources might be present on the as-yet undeveloped parts of the Hoffman tract. In general, the study found that:
 1. This section of Alexandria has been occupied by Euro-Americans since at least the eighteenth century.
 2. Until the mid-nineteenth century, the property functioned primarily as a farm and as the site of two gristmills known as the Cameron Mills. Cameron Farm remained an active agricultural complex until the end of World War I.

3. In 1851, one of the two mills was purchased by the newly formed Alexandria Water Company and converted into a pumping station to divert water from the mill race and pump it uphill to the reservoir on Shuter's Hill. The water company modified and continued to use this system until the 1930s. The other mill, eventually converted to steam power, continued to grind grain until the end of the nineteenth century.
 4. After World War II, modern development began on the property. On the northern edge of the property, adjacent to the Southern Railroad, several light industrial buildings were constructed. Much of the rest of the property was graded and filled to provide space for a large trailer court. The trailer court was eliminated when the present Hoffman complex and other small industrial buildings were constructed on the site. In the process, the buildings associated with the Cameron Farm complex were removed.
- *Fall 1998-Spring 1999:* Testing phase in the northern portions of Blocks 2 and 3, using a combination of mechanized backhoe trenches and manual excavation of small test units revealed portions of the main house and outbuildings from Cameron Farm, a second dwelling, and sections of the mill race.
 - *Summer 1999-Winter 1999:* Monitoring of site preparation in Block 4 (to be developed by the AMC theatre chain) and relocation of utility lines around Block 4 revealed the location of the West family burial vault and additional features associated with the main Cameron Farm dwelling house.
 - *Spring 2000:* Expanded testing phase in the northern portions of Blocks 2 and 3, again using mechanized backhoe trenches and manually excavated small test units, revealed further details and outbuildings of the Cameron Farm complex. Excavation of the West Family burial site (under a permit issued by the Virginia Department of Historic Resources) and analysis of the remains buried there is the final stage of this round of excavations.

When the present phase of archeological testing has been completed and the AMC complex has been built, Goodwin & Associates will test the site of the two gristmills and complete a final report on the entire archeological project. The excavated members of the West Family will be reinterred at an as-yet-undetermined location elsewhere on the Hoffman property.

THE WEST FAMILY PERIOD

(1678 – 1805)

HISTORY

The Fairfax family first granted the tract of which the Hoffman property is a part to two individuals, Carr and Simpson, in 1678. Twenty years later, John (I) West, a planter living in Stafford County, bought half of the 627-acre Carr-Simpson grant from John Simpson. In 1716, John West bequeathed this parcel to his grandson John (III), or (in case the grandson died early leaving no heirs) to his son by a second marriage, John West (II).

John (III) indeed died early and left neither heirs nor will. However, in an apparent violation of his grandfather's wishes, the Simpson tract was acquired not by John (II), but by John (III)'s brother, Hugh West. Although John (II) challenged Hugh's acquisition of the property in court, he was never able to sustain his claim. Hugh remained in possession of the Simpson tract, and in 1738, also purchased the adjacent Carr grant. Thus, by the mid-eighteenth century, Hugh West owned the entire Carr-Simpson grant.

City Archaeologist Pamela Cressey has observed that "(t)he West family—Hugh West in particular—was a tremendously instrumental force in the establishment of Alexandria as a town." In addition to being a prominent landowner, Hugh West established the first tobacco inspection station in Northern Virginia on properties he owned at the foot of what is now Oronoco Street. Because "West's Point" was strategically located on the Potomac River, it was well situated for commercial shipping. Regionally produced tobacco crops could be conveniently exported from this site, which also was the Virginia terminus of a ferry to Maryland. Not surprisingly, West's Point formed the nucleus of the town of Alexandria when it was formally established by the Virginia Assembly in 1749.

Hugh West's will, probated in 1754, left to his son, John (IV) "all that property on which I now live"—the Carr-Simpson grant. Hugh's wife, Sybil Harrison West, continued to live in the house that she occupied with her husband, presumably together with her son and his family. When John (IV) passed away in 1776, he bequeathed the 627-acre property to his eldest son, Thomas West, but specified that his grandmother could continue to live on the ancestral plantation. Sybil West, who outlived both her husband and two sons, died in 1787 at the age of 83. Two obituaries in the *Alexandria Gazette* from this period note the interment of Sybil West and Colonel George West, one of her children, in the "family vault" outside of Alexandria.

Thomas West, a Revolutionary War veteran who inherited the Carr-Simpson tract, apparently suffered a series of financial reverses beginning in the 1780s. To cover his debts, he began to mortgage and later sell portions of this property to a variety of individuals. In 1791, he transferred an 8-acre tract to William Bird for the purpose of erecting thereon a grist mill; significantly, this deed specified that Bird could construct a mill race through West's property, but that it could not come any closer than twenty feet to Thomas West's "vault." Two years later, Thomas sold an additional 22 acres to the milling firm of Stump and Ricketts (partners with William Bird).

By 1805 (the year before he died), Thomas West apparently was so strapped financially that the remainder of the Carr-Simpson grant was sold at public auction to satisfy his debts. The purchasers of these remaining lands were, predictably, the partners Stump and Ricketts, owners of the Cameron Mills. Today, Thomas West's "vault" and the individuals interred within and

around it are all that remains of the important family that once controlled this tract and contributed so much to the history of the City of Alexandria.

ARCHEOLOGY

The location of the West family burial vault first was noted in December 1999, during the excavation of a new utility line trench. The find was reported to Alexandria Archaeology and to the Hoffman Company, and strategies for investigating the vault and its contents were discussed. In April 2000, the Virginia Department of Historic Resources issued a burial excavation permit for the vault and for a large area surrounding it. The permit specified how the remains were to be removed, and also required that a physical anthropologist with expertise in skeletal analysis be retained to analyze any human remains to determine, where possible, the age, sex, stature, pathology, and cause of death of each individual.

Drs. Clifford and Donna Boyd, professors at Radford University in Virginia, were retained to perform the analysis. Because of the fragmentary nature of the remains, which had been damaged by nearly two centuries of repeated moistening and drying and had been further impacted by the grading and utilities installation for the 1950s-era trailer court, analysis of the remains was carried out in the field. Preliminary analysis indicates that at least two adult males and one adult female were interred within the vault itself. The documentary sources suggest that one male probably is George West, and that the female is Sybil West. The identity of the other individual is unknown, although it may be Hugh West, Sybil's husband. Most recently, the discovery of several other bones has suggested that a fourth individual, possibly an adolescent, also was buried in the vault.

The seven graves outside of the brick vault contain the remains of six adults and one child, possibly between one and five years of age. Two of the adults were middle-aged or older. Only three of these skeletons are sufficiently intact to warrant tentative designation of their sex; again, there appear to be two males and one female.

CAMERON MILLS, CAMERON FARM, AND THE ALEXANDRIA WATER COMPANY

Between 1804 and 1834, the mill complex was under the joint ownership of Stump and Ricketts; from 1834 to 1848, Richard Windsor held title to the property. In 1848, Richard Windsor sold that 146-ac parcel of land called "Cameron," including the mills, to Reuben and Robert F. Roberts, Quaker brothers from New Jersey. The Roberts family, in partnership with Edmund Hunt, continued to operate at least one of the mills until 1894. In 1851, they sold the eastern mill building to the newly formed Alexandria Water Company.

In addition to the mill, the "Cameron" property was an active agricultural complex. The 1850 Federal census indicated that three families occupied adjacent houses on the property: Reuben Roberts, the miller; Joseph Allen, a male [*sic*] driver; and Robert Roberts, whose occupation was designated as "farmer" (United States Census, Population Schedule for Fairfax County 1850). An undated survey plat, found in the files at Alexandria Archaeology, showed that the Manassas Gap Railroad right of way traversed the Roberts property along approximately the same route as the current Eisenhower Avenue. This map depicted the mill, a "cow house" and a "barn" immediately south of the millrace, two dwelling houses, and some "frame houses" around Roberts Lane as landmarks for the survey. Maps of the Civil War era and the early twentieth century all depicted a variety of additional buildings within the Cameron Farm complex, although these features vary in their alignments. Most of these structures clustered along Mill Road.

A 1945 letter written by James Roberts, grandson of Robert Roberts indicated that Hunt and Roberts' business included both the mill and an associated feed supply outlet. Two accompanying sketches documented the relative locations of other buildings on the property and the layout of the principal Roberts family residence. In addition to the mill, the water company pumping station, and the main house, Cameron Farm once housed several other buildings, including a brick mill stable (burnt 1917); a frame school house (destroyed ca. 1908); a mill residence; a cow barn and shed; a horse stable (burnt ca. 1914) with various shed additions to house farm equipment and a blacksmith and carpenter shop; a sheep pen; a below-ground silo; a greenhouse and storeroom; a smoke house; an ice house; and additional service buildings. These structures all clustered along Roberts Lane and the farm/mill entrance road that entered the property from Telegraph Road south of the millrace. The remaining portions of consisted of farm fields and pastures. Roberts' description and extant photographs demonstrate that the Cameron Farm remained essentially undeveloped until the end of World War II, when the last of the Roberts family sold the property.

The Alexandria Water Company, founded in 1851 to ensure an adequate supply of potable water for Alexandria's expanding population, used the water from the Cameron Mill millrace to provide city water. An agreement between the Roberts brothers and the directors of the company stipulated that the Roberts' would construct a dam upstream across Cameron Run and would "repair and improve and put into complete order the present mill race belonging to the [sd] Cameron Mills." The company's first two annual reports indicated that the water company made substantial changes in the mill itself, including the replacement of the old mill wheel with a new iron one, the construction of a "solid foundation" to support the new wheel, widening the mill races, and "several other improvements." Repairs to the water company's physical properties continued throughout the 1860s and 1870s, as freshets, heavy rains, and animals damaged appurtenant structures, including the millrace. Improvements included the installation of a "dam and watergates just east of Occoquan Road (presently, Telegraph Road), repair and straightening of the mill race, construction of a

"tumbling dam" at the head gate, and apparently a new race. After the demolition of the adjoining gristmill in 1928, the Water Company added to and modified the original mill structure.

ARCHEOLOGY

The archeological investigations of the Cameron Farm, conducted in several stages by Goodwin & Associates, Inc. between the fall of 1998 and the spring of 2000, identified structural remains and landscape features associated with the Cameron Farm complex. The remains of the buildings in this complex were registered with the state of Virginia as Site 44AX182.

Excavations in the northern portion of Block 2 uncovered the foundations of the multi-part Cameron Farm house, its adjacent greenhouse and its smokehouse. Some sources believe that the central brick portion of the main Cameron farmhouse was originally built as a tavern during the middle of the eighteenth century; however, analysis of the patterns of the brick seem to indicate that, in reality, it was constructed near the turn of the nineteenth century. The basement beneath the original brick part of the main house was found to have a curious ramped bulkhead entrance, thought to have been installed to facilitate storage of bulky items in the basement. Beneath the two-story frame addition built by the Roberts family in the 1850s, archeological excavations showed that a coal-fired furnace had been installed, probably during the early twentieth century. Testing of other portions of Block 2 revealed that many of the outbuildings adjacent to the main farm dwelling had been destroyed during grading or filling during construction of two separate industrial warehouse buildings that stood in this location until early this year.

At the northern end of Block 3, similar testing documented a nineteenth century domestic structure with a porch, a set of brick steps that led into a shallow basement, and an H-shaped hearth.

Finally, a series of four mechanically excavated trenches around the perimeter of the farmyard revealed the remains of the old millrace, which had been filled in with modern debris.

Metropolitan

THURSDAY, JUNE 15, 2000

The Washington Times

SECTION C

VIRGINIA

Alexandria graves provide clues about founding family

By Derek Simonsen
THE WASHINGTON TIMES

Edith Estes traces her roots to one of the founding families of Alexandria, so she took more than a passing interest when seven graves from the late 1700s were found north of Eisenhower Avenue.

Archaeologists excavating in the city had discovered a cemetery vault and the seven graves, which, it turns out, belong to Mrs. Estes' ancestors. She is a descendent of Thomas Owsley, who married Ann West, a sister of one of the persons whose body was found in the vault.

"I'm excited about this because the West family [history] has been sadly neglected by the city of Alexandria," said Mrs. Estes, who also is the vice president of the Association for the Preservation of Virginia Antiquities. "This will bring them back to the forefront."

Archaeologists found four bodies in the vault, two of which they were able to identify from old obituaries in the Alexandria Gazette. Those remains belong to Sybil West and her son, George West, according to David Soldo, field director for the project.

One of the other bodies likely belongs to Mrs. West's husband, Hugh. Another body, that of a child under 10 years old, has not been identified, Mr. Soldo said.

The site is owned by the Hoffman Management Company, which is planning to develop several empty lots into a new AMC movie theater.

City law requires an investigation before any work can begin, and early research revealed that there were several historic sites on the property. The company hired R. Christopher Goodwin & Associates to conduct the dig, and the project has been monitored by the



Photo by Liz O. Baylen/The Washington Times

Crew chief Kristen Bastis (left) of Frederick, Md., and Darlene Hassler of Harpers Ferry W.Va. excavate the vault in Alexandria.

staff at Alexandria Archaeology since the fall of 1998.

The vault was a surprise find, as only two documents—a deed from 1791 and a rough map drawn in 1945—made any mention of a burial site. After working to unearth a

water line in December 1999, the team found the vault and began the full excavation in April. Discovering the vault helped lead diggers to several other graves nearby.

see GRAVES, page C3

GRAVES

From page C1

"It was common not only to inter individuals in the vault, but in the surrounding area as well," Mr. Soldo said.

Seven bodies were discovered in graves next to the vault. They were

facing east, likely in preparation for the Second Coming of Jesus Christ, according to Christian Davenport, an archaeologist who specializes in separating human bones from those of frogs, snakes and rats—common finds in old grave sites.

"Figuring out who the others are will require a little detective work," said Martha Williams, the

project manager.

After analysis has been completed on the bones to determine the age, sex and cause of death, the bodies will be reburied on the Hoffman property, he said.

The plan is to match analysis from the lab with the genealogical record to make an educated guess about the identity of those outside the vault.

ALEXANDRIA

Gazette Packet

25 cents

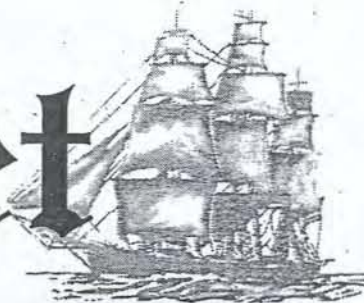
ADDRESS SERVICE REQUESTED TO: 1610 KING ST., ALEXANDRIA, VA 22314

Vol. CCXVII, No. 25

Serving Alexandria for over 200 years • A Connection Newspaper

June 22, 2000

PRSRT STD
U.S. Postage
PAID
Alexandria, VA
Permit #482
Attention
Postmaster:
Time-sensitive
material.
Requested in
home 6/23/00



Archaeologists Continue Work On 200-Year-Old Grave Site

By ESTHER M. AARON
Gazette Writer

It was two days before Christmas last year when the bulldozer, which was clearing land for a future AMC Theater just north of the Eisenhower Metro, came across ancient history.

David Soldo, an archaeologist with R. Christopher Goodwin & Associates, Inc., had been monitoring the construction work, looking for just such an incident. "All of a sudden the scoop brought up a bunch of bricks," said Soldo. "So I told them to stop and I got down in the vault and I saw what we had."

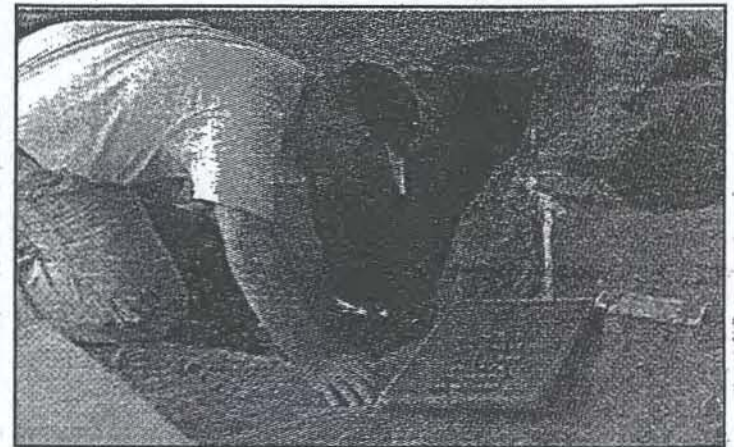
Unearthed was a family burial vault belonging to the West family, one of the found-

ing families of Alexandria. According to city archaeologist Pamela Cressey, the discovery is the "most significant 18th-century archaeological site found to date in Alexandria."

The excavation of the vault and nearby grave sites is almost completed and the remains will be sent to Radford University for analysis. After the vault project has been completed, Goodwin & Associates will test the site of two gristmills and a house nearby.

Archaeologists who were present at the discovery had been working for the property's owner — Hoffman Management — for more than two years on this project. They knew that

Staff photo/Esther Aaron
An archaeologist examines the human remains of one of the 200-year-old grave sites just outside the West Family vault discovered by Hoffman Management near the Eisenhower Metro.



See DIG page 11

Archaeological Dig Almost Finished At AMC Site

Continued from page 1

there was the possibility of the discovery from a 1791 deed that mentioned a family vault in connection with the construction of a mill, part of the 18th century Cameron Mills, also located on Hoffman property. "Nobody really knew the precise location of the vault," said Soldo. "So it was kind of good fortune that the water pipe had to be relocated here."

Good Condition

What made the find even more valuable was the condition of the items in the interior of the 8-by-10

foot vault. A drain had been put in to keep it dry and although it had collapsed on itself sometime during the last century, the human bones are fairly well preserved, which will give researchers a glimpse of what life was like in the 1700s. "When we finish doing excavation and remove all the bones," said Soldo, "We send them out for skeletal analysis which will give us a detailed information on stature, diet, things like that, and then they'll be re-interred somewhere else on the Hoffman property."

According to documents and a 1787 obituary from the Alexandria Gazette, the identity of the indi-

"Nobody really knew the precise location of the vault."

—David Soldo

viduals seem to be George West, Sybil West and perhaps Hugh West, Sybil's husband. There are seven graves outside of the brick vault, which contain the remains of six adults and one child, aged 4-6.

Edith Estes Bradbury, a descendant of the Thomas West family and an Alexandria resident, was on hand at a press

conference last week when the vault and grave sites were shown to the media. She said she was "ecstatic" when she first learned of the discovery at a historical society meeting and then later, through a letter sent to her from Hoffman Management. "I'm so excited about all this because the West family has been sadly neglected in the city of Alexandria," said Bradbury. "They were founders and surveyors and prominent in the vestries. This will bring forth more history and more education... this is history, coming out [after] 250 years."

Sections of at least two homes, several outbuildings and parts of the mill complex have been unearthed earlier, studied, and now lie under a paved parking lot.

APPENDIX I

**RESUMES OF KEY
PROJECT PERSONNEL**

CHRISTOPHER R. POLGLASE, M.A., ABD
VICE PRESIDENT- ARCHEOLOGICAL SERVICE

Mr. Christopher Polglase received his baccalaureate degree from William and Mary in 1980, his M.A. from SUNY Binghamton in 1985, and he currently is A.B.D. at that institution. At SUNY Binghamton, Mr. Polglase served as a teaching, research, and graduate assistant, where he edited the multi-volume report on excavations at the Utqiagvik site in Barrow, Alaska. Mr. Polglase received considerable cultural resource experience at SUNY Binghamton, where he served as crew chief on Phase I-III projects. Mr. Polglase also served as crew chief for three seasons at Fort Christanna, an early eighteenth century frontier outpost, and as field supervisor for the survey of the proposed Roanoke River Parkway. He also has participated in large projects in Alaska and throughout Italy.

At Goodwin & Associates, Inc., Mr. Polglase has worked on numerous projects in the Middle Atlantic, Southeast, Mid-West and the Caribbean. He has directed data recovery at numerous prehistoric and historic sites in the Middle Atlantic and Phase I-II studies across the Eastern United States. Two of those projects, excavations at the Russett Center and at the Garman Site, received the Excellence in Archeology Awards from the Anne Arundel County Trust for Historic Preservation in 1991 and 1992. His projects also received awards from the Maryland Historical Trust for Education Excellence (1997) and from the Harford County Historic Preservation Commission for the Preservation Project of the Year (1999).

Mr. Polglase's experience at Goodwin & Associates, Inc. has encompassed the range of preservation planning and interpretation studies. He has directed the preparation of multi-disciplinary cultural resource planning studies for the Army Corps of Engineers, NAVFACENCOM, the Department of Energy, and the Maryland Port Administration. These projects have included numerous Cultural Resource Management Plans (ICRMP) for such diverse facilities as the U.S. Naval Academy, Aberdeen Proving Ground, and Fort Belvoir. He has overseen the design of exhibits at several DoD installations, including preparation of panels, exhibit cases, and a touch screen computer kiosk. The development of that kiosk and subsequent projects led to an interest in the digital interpretation of archeological and historical resources, including 3D modeling of archeological sites. Mr. Polglase has directed the preparation of Geographic Information System (GIS) deliverables to DoD and private sector clients in the Middle Atlantic, including: (1) complete historic and natural resource data layers for 11 U.S. Navy installations in Tidewater Virginia; and (2) archeological and historical data for 29 counties in Pennsylvania. Mr. Polglase also oversees artifact curation compliance and conservation studies for Goodwin & Associates, Inc., including NAGPRA research for the U.S. Army Corps of Engineers in 21 states.

His research interests include lithic analysis, long-distance exchange, and the development of holistic preservation planning studies. In addition to numerous technical reports, he has published papers in the *Journal of Archeological Science*, *Preistoria Alpina*, and the *Journal of Middle Atlantic Archaeology*. He has presented professional papers to the Society for American Archeology, the Middle Atlantic Archeological Conference, the Archeological Societies of Maryland and Virginia, the Eastern States Archeological Federation, the Center for Medieval and Early Renaissance Studies, and the Valle dei Cavalieri.

MARTHA R. WILLIAMS, M.A., M.ED.
PROJECT MANAGER/ARCHEOLOGIST/HISTORIAN

Martha R. Williams, M.A., M.Ed., Project Manager, holds a B.A. (1960) from Lebanon Valley College; a Master of Education, with emphasis in the Social Sciences, from the University of Pennsylvania (1965); and an M.A. in History, with emphasis in Applied History, from George Mason University (1987). She was a Coe Fellow in American Studies at SUNY Stony Brook in 1982 and 1989. While completing her internship with George Mason University, she co-authored the Heritage Resource Management Plan for Fairfax County, Virginia.

Ms. Williams has had extensive experience in cultural resource management and in historical archeology in Northern Virginia. As co-director of the Fairfax County Seminars in historical archeology for high school student (1973-1987), she directed or assisted in the investigation of fifteen archeological sites in Fairfax County, including investigations at Belvoir Manor (1973-1975). Her experience includes volunteer work on both prehistoric and historic sites with the Fairfax County Heritage Resources Branch, for the City of Alexandria, for the Virginia Division of Historic Resources, and for the National Park Service, including excavations at the Lost Colony site on Roanoke Island. Ms. Williams' archeological experience also includes a field school with Colonial Williamsburg (1972), and employment with the National Park Service as an archeological laboratory technician.

Since joining R. Christopher Goodwin & Associates, Inc., Ms. Williams has served as historian, project archeologist, project manager, and public interpretation specialist for numerous studies conducted by the firm. As historian, she has conducted research for company projects in such diverse eastern seaboard and central states as Maryland, Virginia, New York, Ohio, Pennsylvania, Maine, Massachusetts, Vermont, North Carolina, Georgia, Mississippi, Arkansas, and Louisiana, as well as in the District of Columbia and Puerto Rico. She is familiar with archival resources for both terrestrial and underwater projects. She has managed all types of archeological projects, including preparation of archeological predictive models and disturbance studies; Phase I and II archeological surveys and evaluations; Phase III archeological data recovery projects; and cultural resource planning documents for Federal agencies and local governments. Her managerial experience encompasses military, domestic, commercial, and industrial sites in both urban and rural settings. As public interpretation specialist, she has designed and executed a wide range of public information activities, including public participation programs for the Camden Yards Stadium and the Juvenile Justice projects in Baltimore; site brochures for the Drane House in Garrett County, Maryland and Icehouse Square in Gettysburg, Pennsylvania; display panels for the Main Street and Naval Academy sites in Annapolis, Maryland; permanent exhibit panels at the Army's Aberdeen (Maryland) Proving Ground; and a popular history of Fort Belvoir (Virginia). She also prepared two public information and training booklets and a training video for the Legacy Program of the Department of Defense.

Ms. Williams is actively involved with professional preservation organizations. She has served as Vice-President of the Archeological Society of Virginia (ASV), and continues to sit on the ASV Board of Directors. She has written for numerous publications, including the *Yearbook* of the Historical Society of Fairfax County, *Museum News*, *Interpretation* (NPS), the *Quarterly Bulletin* of the ASV, *American Antiquity*, and the *Journal of Mid-Atlantic Archaeology*. In 1991, the Fairfax County History Commission presented her its Distinguished Service Award for her contributions to local history and preservation. The ASV also recognized Ms. Williams as "Professional Archeologist of the Year" in 1996. On the national level, the Society for Historical Archaeology recognized her two-year service as Chair of that organization's Committee on Public Education in 1992; in January, 2001, she received that organization's prestigious Award of Merit for her contribution to archeological education.