# APPENDIX 16.3 Phase IA/IB Archaeological and Architectural Investigation



David A. Paterson Governor

> Carol Ash Commissioner

#### New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189 518-237-8643 www.nysparks.com

March 31, 2009

Cece Saunders Historical Perspectives, Inc. P.O. Box 3037 Westport, Connecticut 06880-9998

Re:

DEC, SEQRA Jardim Estates East Sheldon Avenue Town of Tarrytown, Westchester County

06PR03440

Dear Ms. Saunders:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP) concerning your project's potential impact/effect upon historic and/or prehistoric cultural resources. Our staff has reviewed the documentation that you provided on your project. Preliminary comments and/or requests for additional information are noted on separate enclosures accompanying this letter. A determination of impact/effect will be provided only after ALL documentation requirements noted on any enclosures have been met. Any questions concerning our preliminary comments and/or requests for additional information should be directed to the appropriate staff person identified on each enclosure.

In cases where a state agency is involved in this undertaking, it is appropriate for that agency to determine whether consultation should take place with OPRHP under Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law. In addition, if there is any federal agency involvement, Advisory Council on Historic Preservation's regulations, "Protection of Historic and Cultural Properties" 36 CFR 800 requires that agency to initiate Section 106 consultation with the State Historic Preservation Officer (SHPO).

When responding, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Ruth &. Ruport Ruth L. Pierpont

Director

Enclosure

### BUILDINGS/STRUCTURES/DISTRICTS EVALUATION COMMENTS

#### PROJECT NUMBER 06PR03440

( Jardim Estates East/Sheldon Avenue/V/TARRYTOWN )

<b>!</b>	Based upon a review of the information submitted and the scope of the project described, the NYS Office of Parks, Recreation and Historic Preservation has no concerns regarding historic buildings/structures/ districts within your project area.
	The following State/National Registers of Historic Places listed/eligible property/district is located within or adjacent to your project area. However, given the scope of the project, the NYS Office of Parks, Recreation and Historic Preservation has no concerns regarding historic buildings/structures/districts within your project area.
Arcl	naeology comments will be provided in a separate attachment.

If you have any questions concerning this information, please call Peter Shaver at 518-237-8643. ext 3264

PLEASE BE SURE TO REFER TO THE PROJECT NUMBER NOTED ABOVE WHEN RESPONDING TO THIS REQUEST



### REQUEST FOR ADDITIONAL INFORMATION ARCHEOLOGY

#### **PROJECT NUMBER 06PR03440**

( Jardim Estates East/Sheldon Avenue/V/TARRYTOWN )

In order fo idditional in	r us to complete our evaluation of the Archaeological sensitivity of your project will need the following formation			
	Full project description showing area of potential effect.			
П	Clear, original photographs of the project area from all directions, keyed to a site plan.			
	Brief history of property.			
	Clear, original photographs of the following:			
E)	Other:			
<b>1</b> p	The OPRHP recommends Phase II site examination for the sites identified, if avoidance is not feasible. Avoidance Plans will need to be submitted for review. Our office will continue our revionce the Phase II or Avoidance Plans are submitted.			
	Other:			
	Complete Set of Engineering Plans			
r	The boundaries of the project area should be clearly delineated on a United States Geological Survey (USGS) Quadrangle, or New York State Department of Transportation (DOT) 7.5-minute (scale 1=24,000) map. Original scale should be used if photocopying and a label providing map title should be included. There are several "on-line" resources for these maps. Some examples include: terraserver. com and topozone.com.			
· •	the selection of the selection should show for archaeological review. If you have any			

Please provide only the additional information checked above, for archaeological review, if you have any questions concerning this request for additional information, please call Cynthia Blakemore at 5182378643, ext 3288

PLEASE BE SURE TO REFER TO THE PROJECT NUMBER NOTED ABOVE WHEN RESPONDING TO THIS REQUEST

## HISTORICAL PERSPECTIVES INC.



February 12, 2009

Cynthia Blakemore New York State Office of Parks, Recreation and Historic Preservation Field Services Bureau, Peebles Island P. O. Box 189 Waterford, New York 12188-0189

RE: Phase 1A/1B Archaeological and Architectural Report

Jardim East, Village of Tarrytown, Westchester County, New York

Dear Ms. Blakemore,

Please find enclosed Historical Perspectives' Phase 1A/1B Archaeological and Architectural Investigation for the Jardim East project in Westchester County, New York. The documentary research conducted for the project identified areas of potential sensitivity for both precontact and historical resources. The subsequent field investigation included the excavation of 201 shovel tests within the project Area of Potential Effect (APE). One Native American site and three historical sites were identified during the field investigation. Site inventory forms were completed for these resources and are included in the enclosed bound technical report.

Please call if you have any questions about the project.

Sincerely,

Sara F. Mascia De Sorr

G. Martini, Saccardi & Schiff

M. Inglis, w/o encl.

# HISTORICAL PERSPECTIVES INC.



Phase IA/IB Archaeological and Architectural Investigation
Jardim Estates East
Sheldon Avenue, Village of Tarrytown
Westchester County, New York

### Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East Sheldon Avenue, Village of Tarrytown Westchester County, New York

#### Prepared For:

Saccardi & Schiff, Inc. 445 Hamilton Avenue, Suite 404 White Plains, NY 10601

Prepared By:

Historical Perspectives, Inc. P.O. Box 3037 Westport, CT 06880

Authors: Julie Abell Horn, M.A., R.P.A. Sara Mascia, Ph.D., R.P.A.

February 2009

#### MANAGEMENT SUMMARY

SHPO Project Review Number (if available): N/A

Involved State and Federal Agencies: NYSDEC

Phase of Survey: Phase IA/IB Archaeological and Architectural Investigation

#### Location Information

Location: South of Sheldon Avenue, north and west of Tarrytown village line. Includes tax lots P6, P7, P8, P8A, P9, P9B, P9E, P9F, P12, P18, and P20 on Section 3, Sheet 27, Tarrytown.

Minor Civil Division: I1950, Tarrytown

County: Westchester

#### Survey Area

Length: varies, irregularly shaped parcel Width: varies, irregularly shaped parcel

Number of Acres Surveyed: 46.62 acres - total property; 12.5 acres - testable locations in APE

#### USGS 7.5 Minute Quadrangle Map: White Plains

#### Archaeological Survey Overview

Number & Interval of Shovel Tests: 201; 15 meter

Number & Size of Units: N/A Width of Plowed Strips: N/A

Surface Survey Transect Interval: N/A

#### Results of Archaeological Survey

Number & name of precontact sites identified: One,

Number & name of historic sites identified: Three, Sheldon Avenue Historic Site, Schneider Historic Site, Gracemere Historic Site

Number & name of sites recommended for Phase II/Avoidance: Three, Gracemere Precontact Site, Sheldon Avenue Historic Site, Schneider Historic Site

#### Results of Architectural Survey

Number of buildings/structures/cemeteries within project area: 5 residences, 1 outbuilding (ice house) Number of buildings/structures/cemeteries adjacent to project area: numerous; residential area Number of previously determined NRHP listed or eligible buildings/structures/cemeteries/districts: None Number of identified eligible buildings/structures/cemeteries/districts: 1 NRHP potentially eligible structure (Gracemere Hall) within project site boundaries and 1 NRHP potentially eligible district (Gracemere estate complex) within project site boundaries

Report Authors(s): Julie Abell Horn, M.A., R.P.A., and Sara Mascia, Ph.D., R.P.A., Historical Perspectives, Inc.

Date of Report: February 2009

#### TABLE OF CONTENTS

MANAGEMENT SUMMARY					
TABLE OF CO	NTENTS	ii			
Ĭ.	INTRODUCTION	1			
11.	PHASE IA METHODOLOGY				
III.	PHASE IA BACKGROUND RESEARCH				
111.	A. CURRENT CONDITIONS				
	B. TOPOGRAPHY AND HYDROLOGY	5			
	C. GEOLOGY	6			
	D SOILS.	6			
	E. ARCHAEOLOGICAL AND HISTORIC SITES WITHIN A ONE MILE RADIUS	6			
	F. HISTORY OF THE PROJECT SITE	7			
	G. ARCHITECTURAL RESOURCES	10			
IV.	PHASE IA SENSITIVITY ASSESSMENT	11			
	A. PRECONTACT SENSITIVITY AND DISTURBANCE RECORD	11			
	B. HISTORICAL PERIOD SENSITIVITY AND DISTURBANCE RECORD	11			
	C. ARCHITECTURAL RESOURCES				
V.	TESTING RECOMMENDATIONS	12			
VI.	PHASE IB FIELD INVESTIGATIONS	12			
VII.	PHASE IB FIELD METHODS	12			
VIII.	RESULTS OF PHASE IB SUBSURFACE INVESTIGATIONS	13			
IX.	RESULTS OF LABORATORY ANALYSIS/INTERPRETATION	I 5			
X.	PHASE IB CONCLUSIONS AND RECOMMENDATIONS				
XI.	REFERENCES	18			
FIGURES					
PHOTOGRAPH	S				
APPENDIX A:	ARTICLE FROM TOWN AND COUNTRY (1904)				
APPENDIX B:	PHASE IB SHOVEL TESTS (STs) LOGS				
APPENDIX C:	PHASE IB HISTORIC ARTIFACT CATALOG				
APPENDIX D:	PHASE IB PRECONTACT ARTIFACT CATALOG				
APPENDIX E:	ARCHAEOLOGICAL SITE FORMS				

#### **FIGURES**

- 1. Project site on White Plains, New York 7.5 Minute Quadrangle (U.S.G.S. 1979).
- 2. Project site and photograph locations on modern survey map (Cronin Engineering and Historical Perspectives 2008).
- 3a. Proposed project development (conventional layout) on modern survey map (Cronin Engineering 2008).
- 3b. Proposed project development (cluster layout) on modern survey map (Cronin Engineering 2009).
- 4. Project site and standing structures on tax map (Village of Tarrytown n.d.).
- 5. Project site on web soil survey map (U.S.D.A. 2008).
- 6. Map of Westchester County, New York (Sidney and Neff 1851).
- 7. Atlas of New York and Vicinity (Beers 1867).
- 8. Atlas of New York and Vicinity (Beers 1868).
- 9. Map of Tarrytown, New York (Carpenter 1880).
- 10. Atlas of Westchester County, Village of Tarrytown (Bromley 1881).
- 11. Atlas of Westchester County (Beers 1891).
- 12. Map of the Village of Tarrytown, New York (Wulff 1900).
- 13. Atlas of Westchester County, New York (Bromley 1901).
- 14. Atlas of Westchester County and Vicinity (Bromley 1914).
- 15. Atlas of Westchester County, New York (Hopkins 1936).
- 16. Map of Proposed Subdivision of a Portion of the H.K. Browning Estate (Losee 1936).
- 17. Insurance Maps of Greenburgh, New York: Tarrytown (Sanborn 1950).
- 18. Computer-generated map showing approximate areas of project site with 0-12 percent slopes and archaeological sensitivity (Cronin Engineering 2008).
- 19. Location of Site Area Divisions and Shovel Tests.
- 20. Typical Soil Profiles for Areas A-E.
- 21. Typical Soil Profiles for Areas F-J.

#### **PHOTOGRAPHS**

#### (Locations and orientations shown on Figure 2)

- 1. Southwest corner of project site, showing steep slopes leading to large stone reservoir on hilltop. View looking southwest from roadway.
- Stone reservoir on top of hill at southwest corner of project site. View looking north from edge of reservoir.
- 3. Square pumping chamber on east side of stone reservoir at southwest corner of project site. View looking northeast from edge of reservoir.
- 4. Eastern (front) façade of "Gracemere Lodge" at western end of project site. View looking west from roadway.
- 5. Southern (side) façade of "Gracemere Lodge" at western end of project site. View looking northeast from roadway.
- 6. Western (rear) façade of "Gracemere Lodge" at western end of project site. View looking northeast from rear of house.
- 7. North (side) façade of "Gracemere Lodge" at western end of project site. View looking south from side yard of house.
- 8. Vacant area behind "Gracemere Lodge" shown in photographs 4-7. View looking west from rear yard.
- 9. North (front) façade of "Gate House" just north of "Gracemere Lodge" shown in photographs 4-7. View looking south from roadway.
- 10. North (front) and east (side) façades of "Gate House" just north of "Gracemere Lodge" shown in photographs 4-7. View looking southwest from roadway.
- 11. "Gracemere Lake" and landscaped area surrounding it. Houses in background are off the project site. View looking southeast from Gracemere Lane.
- 12. Landscaped and graded area on south side of "Gracemere Lake," with Gracemere Lane on right. View looking southeast from Gracemere Lane.
- 13. Stone semicircular basin set into ground and channeling water from drainage towards "Gracemere Lake." View looking southeast from near southeastern edge of lake.
- 14. Southeastern edge of "Gracemere Lake" showing two water channels running down the hill into the lake. House in right background is off the project site. View looking southeast from near southeastern edge of lake.
- Small stone arched walkway or "bridge," which may overlay one of the pipes leading to "Gracemere Lake." View looking northwest from near southeastern edge of lake.
- 16. Small, rectangular shaped brick chamber, possibly a dry well, located northeast of stone arch shown in previous photograph. View looking northwest from near southeastern edge of lake.
- 17. Concrete lined channel running along the east side of the lake to a large oval-shaped fieldstone and concrete lined feature, in left background. View looking northeast from near southeastern edge of lake

- 18. Large oval-shaped fieldstone and concrete lined feature, which appears to have drained into the lake. Concrete channel shown in previous photograph is in the foreground. View looking northeast from near southeastern edge of lake.
- 19. View of large oval-shaped fieldstone and concrete lined feature in previous photograph, showing relationship to lake. View looking northwest from area east of the lake.
- 20. Area east of oval feature shown in previous photographs with ground moderately sloped and likely disturbed from grading or other construction. Houses in background are off project site. View looking northeast.
- Area east of oval feature shown in previous photographs with ground moderately sloped and likely disturbed from grading or other construction. View looking southeast.
- 22. Northwest (front) façade of "Gracemere Hall," the original French Second-Empire style mansion house built on the project site. View looking southeast.
- 23. Northeast (side) façade of "Gracemere Hall." View looking southwest.
- 24. Southeast and southwest (side and rear) façades of "Gracemere Hall," with landscaped grounds in foreground. Note tower on building's southern corner. View looking north.
- 25. Rear yard of "Gracemere Hall" showing extensive landscaping, and remnants of greenhouses surrounding children's play equipment. View looking south.
- 26. Circular garden feature located on northeast side of "Gracemere Hall," with woods in background. View looking northeast.
- 27. Former location of Browning mansion, demolished in 2005. Note extensive disturbance to entire area. View looking northeast.
- 28. Land southwest of Gracemere Lane eontaining a channelized trough containing the drainage that feeds "Gracemere Lake" bordering the roadway. Note wetland on right. View looking southwest from Gracemere Lane.
- 29. Second view of channelized trough containing the drainage that feeds "Gracemere Lake." "Gracemere Court" is in far background. View looking southeast.
- 30. Culvert carrying channelized trough under Gracemere Lane to the lake. View looking northwest.
- 31. Wet areas southwest of Gracemere Lane. "Gracemere Court" is visible in right background. View looking south.
- 32. Stone foundation remains of a greenhouse, located near southern edge of project site. View looking west.
- 33. Furrows in the ground that probably represent old planting beds, located east of the greenhouse remains shown in the previous photograph. View looking southwest.
- 34. Northwestern façades of the western of the two buildings that comprise "Gracemere Court." View looking south from Gracemere Lane.
- 35. Northeastern façades of the western of the two buildings that comprise "Gracemere Court." View looking southwest from Gracemere Lane.
- 36. North (rear) façade of ice house, located east of "Gracemere Court," and cut into the side of a hill. View looking southeast from Gracemere Lane.

- 37. South (front) façade of ice house. View looking northeast.
- 38. Knoll containing stone and concrete lined reservoir at top. View looking east.
- Interior of stone and concrete lined reservoir shown in previous photograph. View looking east from edge of structure.
- 40. Exposed bedrock and quarried stone in the southeastern section of the project site.
- 41. Example of rolling hills covered by medium density woods on southeastern end of project site. View looking east.
- 42. Perennial tributary of Sheldon Brook running through eastern side of project site. View looking east.
- 43. Concrete dain at northern end of "Turtle Pond." View looking northeast.
- 44. Stone channel leading north from "Turtle Pond" dam. View looking northeast.
- 45. Small concrete foundation remnant (surrounded by a high chain link fence) on the east side of the stream. View looking east.
- 46. Remnant of a former private driveway that led to a twentieth-century residence at the southeastern end of the project site. View looking south.
- 47. Concrete foundation of former twentieth-century house at southeastern end of project site. View looking west.
- 48. Remains of the former Schneider residence, located on knoll near Sheldon Avenue. View looking south.
- 49. Outbuilding of former Schneider residence, located south of the main house. View looking south.
- 50. Steeply sloped area of project site located on south side of Sheldon Avenue. View looking west.
- 51. Unmortared fieldstone foundation from a former house located south of Sheldon Avenue and just west of driveway marking eastern edge of project site. View looking west.
- 52. Mansion house on Tax Lot P9C, formerly part of the Gracemere estate, but which is not part of the project site. View looking northeast from Gracemere Lane.
- Mansion house on Tax Lot P9D, formerly part of the Gracemere estate, but which is not part of the project site. View looking south from Gracemere Lane.
- 54. Second residence located southeast of the mansion shown on previous photograph, which also may have been associated with the Gracemere estate. View looking southwest.
- 55. Modern dumping along Sheldon Avenue in Test Area A.
- 56. ST 13 excavated within historic foundation (Feature A) in Test Area A.
- 57. Modern dumping in Test Area B.
- 58. Architectural debris identified in ST 67, Area B.
- 59. Location of Positive Precontact STs in Area E.
- 60. ST 168 excavated in Area I.



the

David A. Paterson Governor

> Carol Ash Commissioner

#### New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189 518-237-8643

www.nysparks.com

March 31, 2009

Cece Saunders
Historical Perspectives, Inc.
P.O. Box 3037
Westport, Connecticut 06880-9998

Re:

DEC, SEQRA
Jardim Estates East

Sheldon Avenue

Town of Tarrytown, Westchester County

06PR03440

Dear Ms. Saunders:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP) concerning your project's potential impact/effect upon historic and/or prehistoric cultural resources. Our staff has reviewed the documentation that you provided on your project. Preliminary comments and/or requests for additional information are noted on separate enclosures accompanying this letter. A determination of impact/effect will be provided only after ALL documentation requirements noted on any enclosures have been met. Any questions concerning our preliminary comments and/or requests for additional information should be directed to the appropriate staff person identified on each enclosure.

In cases where a state agency is involved in this undertaking, it is appropriate for that agency to determine whether consultation should take place with OPRHP under Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law. In addition, if there is any federal agency involvement, Advisory Council on Historic Preservation's regulations, "Protection of Historic and Cultural Properties" 36 CFR 800 requires that agency to initiate Section 106 consultation with the State Historic Preservation Officer (SHPO).

When responding, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Ruth L. Pierpont

Buth H. Rupont

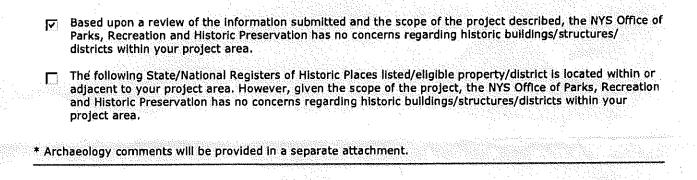
Director

Enclosure

#### BUILDINGS/STRUCTURES/DISTRICTS EVALUATION COMMENTS

#### PROJECT NUMBER 06PR03440

( Jardim Estates East/Sheldon Avenue/V/TARRYTOWN )



If you have any questions concerning this information, please call Peter Shaver at 518-237-8643. ext 3264

PLEASE BE SURE TO REFER TO THE PROJECT NUMBER NOTED ABOVE WHEN RESPONDING TO THIS REQUEST



### REQUEST FOR ADDITIONAL INFORMATION ARCHEOLOGY

#### PROJECT NUMBER 06PR03440

( Jardim Estates East/Sheldon Avenue/V/TARRYTOWN )

In order for additional in	us to complete our evaluation of the Archaeological sensitivity of your project will need the following formation
	Full project description showing area of potential effect.
	Clear, original photographs of the project area from all directions, keyed to a site plan.
	Brief history of property.
J.	Clear, original photographs of the following:
V	Other:
	The OPRHP recommends Phase II site examination for the sites identified, if avoidance is not feasible. Avoidance Plans will need to be submitted for review. Our office will continue our review once the Phase II or Avoidance Plans are submitted.
П	Other:
<b>—</b>	Complete Set of Engineering Plans
Γ	The boundaries of the project area should be clearly delineated on a United States Geological Survey (USGS) Quadrangle, or New York State Department of Transportation (DOT) 7.5-minute (scale 1=24,000) map. Original scale should be used if photocopying and a label providing map title should be included. There are several "on-line" resources for these maps. Some examples include: terraserver. com and topozone.com.

questions concerning this request for additional information, please call Cynthia Blakemore at 5182378643. ext 3288

Please provide only the additional information checked above, for archaeological review. If you have any

PLEASE BE SURE TO REFER TO THE PROJECT NUMBER NOTED ABOVE WHEN RESPONDING TO THIS REQUEST

## HISTORICAL PERSPECTIVES INC.



February 12, 2009

Cynthia Blakemore New York State Office of Parks, Recreation and Historic Preservation Field Services Bureau, Peebles Island P. O. Box 189 Waterford, New York 12188-0189

RE: Phase 1A/1B Archaeological and Architectural Report

Jardim East, Village of Tarrytown, Westchester County, New York

Dear Ms. Blakemore,

Please find enclosed Historical Perspectives' Phase 1A/1B Archaeological and Architectural Investigation for the Jardim East project in Westchester County, New York. The documentary research conducted for the project identified areas of potential sensitivity for both precontact and historical resources. The subsequent field investigation included the excavation of 201 shovel tests within the project Area of Potential Effect (APE). One Native American site and three historical sites were identified during the field investigation. Site inventory forms were completed for these resources and are included in the enclosed bound technical report.

Please call if you have any questions about the project.

Sincerely,

Sara F. Mascia TX 3000

G. Martini, Saccardi & Schiff

M. Inglis, w/o encl.

## HISTORICAL PERSPECTIVES INC.



Phase IA/IB Archaeological and Architectural Investigation
Jardim Estates East
Sheldon Avenue, Village of Tarrytown
Westchester County, New York

### Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East Sheldon Avenue, Village of Tarrytown Westchester County, New York

#### Prepared For:

Saccardi & Schiff, Inc. 445 Hamilton Avenue, Suite 404 White Plains, NY 10601

Prepared By:

Historical Perspectives, Inc. P.O. Box 3037 Westport, CT 06880

Authors: Julie Abell Horn, M.A., R.P.A. Sara Mascia, Ph.D., R.P.A.

February 2009

#### MANAGEMENT SUMMARY

SHPO Project Review Number (if available): N/A

Involved State and Federal Agencies: NYSDEC

Phase of Survey: Phase IA/IB Archaeological and Architectural Investigation

#### **Location Information**

Location: South of Sheldon Avenne, north and west of Tarrytown village line. Includes tax lots P6, P7, P8, P8A, P9, P9B, P9E, P9F, P12, P18, and P20 on Section 3, Sheet 27, Tarrytown.

Minor Civil Division: 11950, Tarrytown

County: Westchester

#### Survey Area

Length: varies, irregularly shaped parcel Width: varies, irregularly shaped parcel

Number of Acres Surveyed: 46.62 acres – total property; 12.5 acres - testable locations in APE

USGS 7.5 Minute Quadrangle Map: White Plains

#### Archaeological Survey Overview

Number & Interval of Shovel Tests: 201; 15 meter

Number & Size of Units: N/A Width of Plowed Strips: N/A

Surface Survey Transect Interval: N/A

#### Results of Archaeological Survey

Number & name of precontact sites identified: One,

Number & name of historic sites identified: Three, Sheldon Avenue Historic Site, Schneider Historic Site, Gracemere Historic Site

Number & name of sites recommended for Phase II/Avoidance: Three, Gracemere Precontact Site, Sheldon Avenue Historic Site, Schneider Historic Site

#### Results of Architectural Survey

Number of buildings/structures/cemeteries within project area: 5 residences, 1 ontbnilding (ice house)
Number of buildings/structures/cemeteries adjacent to project area: numerous; residential area
Number of previously determined NRHP listed or eligible buildings/structures/cemeteries/districts: None
Number of identified eligible buildings/structures/cemeteries/districts: 1 NRHP potentially eligible
structure (Gracemere Hall) within project site boundaries and 1 NRHP potentially eligible district
(Gracemere estate complex) within project site boundaries

Report Authors(s): Julie Abell Horn, M.A., R.P.A., and Sara Mascia, Ph.D., R.P.A., Historical Perspectives, Inc.

Date of Report: February 2009

#### TABLE OF CONTENTS

MANAGEMENT SUMMARY					
TARLE OF COL	NTENTS	ii			
TABLE OF CO.	VIDI (10				
T.	INTRODUCTION	1			
II.	PHASE IA METHODOLOGY				
III.	PHASE IA BACKGROUND RESEARCH				
	A. CURRENT CONDITIONS				
	B. TOPOGRAPHY AND HYDROLOGY				
	C. GEOLOGY	6			
	D. SOILS				
	E. ARCHAEOLOGICAL AND HISTORIC SITES WITHIN A ONE MILE RADIUS	6			
	F. HISTORY OF THE PROJECT SITE	7			
	G. ARCHITECTURAL RESOURCES				
IV.	PHASE IA SENSITIVITY ASSESSMENT				
	A. PRECONTACT SENSITIVITY AND DISTURBANCE RECORD	11			
	B. HISTORICAL PERIOD SENSITIVITY AND DISTURBANCE RECORD				
	C. ARCHITECTURAL RESOURCES				
V.	TESTING RECOMMENDATIONS	. 12			
VI.	PHASE IB FIELD INVESTIGATIONS	. 12			
VII.	PHASE IB FIELD METHODS	. 12			
VIII.	RESULTS OF PHASE IB SUBSURFACE INVESTIGATIONS	. 13			
IX.	RESULTS OF LABORATORY ANALYSIS/INTERPRETATION	. 15			
X.	PHASE IB CONCLUSIONS AND RECOMMENDATIONS	. I6			
XI.	REFERENCES	. I8			
FIGURES					
FIGURES					
PHOTOGRAPH	S				
APPENDIX A:	ARTICLE FROM TOWN AND COUNTRY (1904)				
APPENDIX B:	PHASE IB SHOVEL TESTS (STs) LOGS				
APPENDIX C:	PHASE IB HISTORIC ARTIFACT CATALOG				
APPENDIX D:	PHASE IB PRECONTACT ARTIFACT CATALOG				
APPENDIX E:	ARCHAEOLOGICAL SITE FORMS				

#### **FIGURES**

- 1. Project site on White Plains, New York 7.5 Minute Quadrangle (U.S.G.S. 1979).
- 2. Project site and photograph locations on modern survey map (Cronin Engineering and Historical Perspectives 2008).
- 3a. Proposed project development (conventional layout) on modern survey map (Cronin Engineering 2008).
- 3b. Proposed project development (cluster layout) on modern survey map (Cronin Engineering 2009).
- 4. Project site and standing structures on tax map (Village of Tarrytown n.d.).
- 5. Project site on web soil survey map (U.S.D.A. 2008).
- 6. Map of Westchester County, New York (Sidney and Neff 1851).
- 7. Atlas of New York and Vicinity (Beers 1867).
- 8. Atlas of New York and Vicinity (Beers 1868).
- 9. Map of Tarrytown, New York (Carpenter 1880).
- 10. Atlas of Westchester County, Village of Tarrytown (Bromley 1881).
- 11. Atlas of Westchester County (Beers 1891).
- 12. Map of the Village of Tarrytown, New York (Wulff 1900).
- 13. Atlas of Westchester County, New York (Bromley 1901).
- 14. Atlas of Westchester County and Vicinity (Bromley 1914).
- 15. Atlas of Westchester County, New York (Hopkins 1936).
- 16. Map of Proposed Subdivision of a Portion of the H.K. Browning Estate (Losee 1936).
- 17. Insurance Maps of Greenburgh, New York: Tarrytown (Sanborn 1950).
- 18. Computer-generated map showing approximate areas of project site with 0-12 percent slopes and archaeological sensitivity (Cronin Engineering 2008).
- 19. Location of Site Area Divisions and Shovel Tests.
- Typical Soil Profiles for Areas A-E.
- 21. Typical Soil Profiles for Areas F-J.

#### **PHOTOGRAPHS**

#### (Locations and orientations shown on Figure 2)

- 1. Southwest corner of project site, showing steep slopes leading to large stone reservoir on hilltop. View looking southwest from roadway.
- Stone reservoir on top of hill at southwest corner of project site. View looking north from edge of reservoir.
- 3. Square pumping chamber on east side of stone reservoir at southwest corner of project site. View looking northeast from edge of reservoir.
- 4. Eastern (front) façade of "Gracemere Lodge" at western end of project site. View looking west from roadway.
- 5. Southern (side) façade of "Gracemere Lodge" at western end of project site. View looking northeast from roadway.
- 6. Western (rear) façade of "Gracemere Lodge" at western end of project site. View looking northeast from rear of house.
- 7. North (side) façade of "Gracemere Lodge" at western end of project site. View looking south from side yard of house.
- 8. Vacant area behind "Gracemere Lodge" shown in photographs 4-7. View looking west from rear yard.
- 9. North (front) façade of "Gate House" just north of "Gracemere Lodge" shown in photographs 4-7. View looking south from roadway.
- 10. North (front) and east (side) façades of "Gate House" just north of "Gracemere Lodge" shown in photographs 4-7. View looking southwest from roadway.
- 11. "Gracemere Lake" and landscaped area surrounding it. Houses in background are off the project site. View looking southeast from Gracemere Lane.
- 12. Landscaped and graded area on south side of "Gracemere Lake," with Gracemere Lane on right. View looking southeast from Gracemere Lane.
- 13. Stone semicircular basin set into ground and channeling water from drainage towards "Gracemere Lake." View looking southeast from near southeastern edge of lake.
- 14. Southeastern edge of "Gracemere Lake" showing two water channels running down the hill into the lake. House in right background is off the project site. View looking southeast from near southeastern edge of lake.
- 15. Small stone arched walkway or "bridge," which may overlay one of the pipes leading to "Gracemere Lake." View looking northwest from near southeastern edge of lake.
- 16. Small, rectangular shaped brick chamber, possibly a dry well, located northeast of stone arch shown in previous photograph. View looking northwest from near southeastern edge of lake.
- 17. Concrete lined channel running along the east side of the lake to a large oval-shaped fieldstone and concrete lined feature, in left background. View looking northeast from near southeastern edge of lake.

- 18. Large oval-shaped fieldstone and concrete lined feature, which appears to have drained into the lake. Concrete channel shown in previous photograph is in the foreground. View looking northeast from near southeastern edge of lake.
- 19. View of large oval-shaped fieldstone and concrete lined feature in previous photograph, showing relationship to lake. View looking northwest from area east of the lake.
- 20. Area east of oval feature shown in previous photographs with ground moderately sloped and likely disturbed from grading or other construction. Houses in background are off project site. View looking northeast.
- 21. Area east of oval feature shown in previous photographs with ground moderately sloped and likely disturbed from grading or other construction. View looking southeast.
- 22. Northwest (front) façade of "Gracemere Hall," the original French Second-Empire style mansion house built on the project site. View looking southeast.
- 23. Northeast (side) façade of "Gracemere Hall." View looking southwest.
- 24. Southeast and southwest (side and rear) façades of "Gracemere Hall," with landscaped grounds in foreground. Note tower on building's southern corner. View looking north.
- 25. Rear yard of "Gracemere Hall" showing extensive landscaping, and remnants of greenhouses surrounding children's play equipment. View looking south.
- 26. Circular garden feature located on northeast side of "Gracemere Hall," with woods in background. View looking northeast.
- 27. Former location of Browning mansion, demolished in 2005. Note extensive disturbance to entire area. View looking northeast.
- 28. Land southwest of Gracemere Lane containing a channelized trough containing the drainage that feeds "Gracemere Lake" bordering the roadway. Note wetland on right. View looking southwest from Gracemere Lane.
- 29. Second view of channelized trough containing the drainage that feeds "Gracemere Lake." "Gracemere Court" is in far background. View looking southeast.
- 30. Culvert carrying channelized trough under Gracemere Lane to the lake. View looking northwest.
- 31. Wet areas southwest of Gracemere Lane. "Gracemere Court" is visible in right background. View looking south.
- 32. Stone foundation remains of a greenhouse, located near southern edge of project site. View looking west.
- Furrows in the ground that probably represent old planting beds, located east of the greenhouse remains shown in the previous photograph. View looking southwest.
- 34. Northwestern façades of the western of the two buildings that comprise "Gracemere Court." View looking south from Gracemere Lane.
- 35. Northeastern façades of the western of the two buildings that comprise "Gracemere Court." View looking southwest from Gracemere Lane.
- 36. North (rear) façade of ice house, located east of "Gracemere Court," and cut into the side of a hill. View looking southeast from Gracemere Lane.

- 37. South (front) façade of ice house. View looking northeast.
- 38. Knoll containing stone and concrete lined reservoir at top. View looking east.
- Interior of stone and concrete lined reservoir shown in previous photograph. View looking east from edge of structure.
- 40. Exposed bedrock and quarried stone in the southeastern section of the project site.
- 41. Example of rolling hills covered by medium density woods on southeastern end of project site. View looking east.
- 42. Perennial tributary of Sheldon Brook running through eastern side of project site. View looking east.
- 43. Concrete dam at northern end of "Turtle Pond." View looking northeast.
- 44. Stone channel leading north from "Turtle Pond" dam. View looking northeast.
- 45. Small concrete foundation remnant (surrounded by a high chain link fence) on the east side of the stream. View looking east.
- 46. Remnant of a former private driveway that led to a twentieth-century residence at the southeastern end of the project site. View looking south.
- 47. Concrete foundation of former twentieth-century house at southeastern end of project site. View looking west.
- 48. Remains of the former Schneider residence, located on knoll near Sheldon Avenue. View looking south.
- 49. Outbuilding of former Schneider residence, located south of the main house. View looking south.
- 50. Steeply sloped area of project site located on south side of Sheldon Avenue. View looking west.
- 51. Unmortared fieldstone foundation from a former house located south of Sheldon Avenue and just west of driveway marking eastern edge of project site. View looking west.
- 52. Mansion house on Tax Lot P9C, formerly part of the Gracemere estate, but which is not part of the project site. View looking northeast from Gracemere Lane.
- 53. Mansion house on Tax Lot P9D, formerly part of the Gracemere estate, but which is not part of the project site. View looking south from Gracemere Lane.
- 54. Second residence located southeast of the mansion shown on previous photograph, which also may have been associated with the Gracemere estate. View looking southwest.
- 55. Modern dumping along Sheldon Avenue in Test Area A.
- 56. ST 13 excavated within historic foundation (Feature A) in Test Area A.
- 57. Modern dumping in Test Area B.
- 58. Architectural debris identified in ST 67, Area B.
- 59. Location of Positive Precontact STs in Area E.
- 60. ST 168 excavated in Area I.

#### I. INTRODUCTION

The Holy Spirit Association for the Unification of World Christianity proposes subdivision of a ca. 46 acre site located south of Sheldon Avenue in Tarrytown, Westchester County, New York (Figures 1-3). The site would be divided into 15 lots, two of which would contain existing uses and the remaining would be developed for singlefamily residences. The proposed lots would be clustered, as allowed by the Tarrytown Zoning Code, to preserve open space and existing significant vegetation. The project calls for 28.32 acres to be developed and 18.3 acres to remain undeveloped. The project site, known as Jardim Estates East, is bounded on the south by the Tarrytown village line, on the east by the village line and a right-of-way, on the north by Sheldon Avenue and by private property, and on the west by the Jardim Estates property. The project site includes tax lots P6, P7, P8, P8A, P9, P9B, P9E, P9F, P12, P18, and P20 on tax map Section 3, Sheet 27, Tarrytown. Within and adjacent to the project site, there are several parcels which are owned privately and will not be affected by project plans. These include tax lots P9A, P9C, P9D, P9G, P9H, P9J, and P9K (Figure 4). There currently are seven extant structures and a number of former structures (in ruins) on the project site, dating from the ca. 1850s through the 1940s, the majority of which are associated with the former use of the property as a country estate. There are also two man-made lakes or ponds and several drainages or wetlands within the project site. As part of the proposed project, one of the extant houses (the "Gate House," described in more detail below) will be demolished but the remaining extant houses will be preserved.

At the request of Saccardi & Schiff, Inc., Historical Perspectives, Inc. (HPI) has undertaken a Phase IA/IB Archaeological and Architectural Investigation of the project site in order to: 1) identify any potential archaeological resources that might have been present on the site, 2) examine the construction history of the study site in order to estimate the probability that any such potential resources might have survived and remain on the site undisturbed; 3) to identify potentially significant architectural resources on the project site; and 4) to conduct Phase IB field investigations within those areas designated archaeologically sensitive by the Phase IA study. For this investigation, the archaeological and architectural Area of Potential Effect (APE) is the entire proposed development site.

This Phase IA/IB Archaeological and Architectural Investigation was prepared to satisfy the requirements of New York State's environmental review process and Section 106 of the National Historic Preservation Act, and complies with the standards of the New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP) (New York Archaeological Council 1994; NYSOPRHP 2005). The HPI project team consisted of Julie Abell Horn, M.A., R.P.A., who conducted the Phase IA research, the Phase IA site walkover and wrote the Phase IA sections of the report; Sara Mascia, Ph.D., R.P.A., who assisted with the Phase IA research, the Phase IA site walkover, supervised the Phase IB field investigations, and wrote the Phase IB sections of the report; and Cece Saunders, M.A., R.P.A. who managed the project and provided editorial and interpretive assistance. Andrew S. Dolkart, the James Marston Fitch Professor of Historic Preservation at Columbia University, aided with the architectural evaluation of the site's standing structures.

#### II. PHASE IA METHODOLOGY

The present study entailed review of various resources.

- Historic maps were reviewed at the Westchester County Historical Society, the Tarrytown Historical Society, the Map Division of the New York Public Library, and using various online websites. These maps provided an overview of the topography and a chronology of land usage for the study site and surrounding area.
- Primary and secondary sources concerning the project site and the history of the area were reviewed at the
  Westchester County Historical Society, the Westchester County Archives, the Tarrytown Historical
  Society, and using online resources. These included selected deeds and wills for owners and occupants of
  the project site, on file at the Westchester County Land Records office and accessible at the Westchester
  County Archives.
- Saccardi & Schiff, Inc. provided site maps and wetlands information for the property.
- Archaeological sites within one mile of the project site were documented using data available from the New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP).
- Last, an initial site visit was conducted on March 7, 2008 by Julie Abell Horn and Sara Mascia of Historical Perspectives, Inc. to assess any obvious or unrecorded subsurface disturbance related to potential

archaeological resources and to document the site's architectural resources (Photographs 1-54). The location and orientation of the photographs are shown on Figure 2.

#### III. PHASE IA BACKGROUND RESEARCH

#### A. CURRENT CONDITIONS

The project site consists of 46.62 acres of land spread over a number of individual tax lots, and containing a variety of conditions. The majority of the project site consists of the former Gracemere estate, which includes a number of standing and former structures, a man-made lake and pond, and paved roads. The remainder of the project site was not part of the Gracemere estate, but was owned by others, and is currently undeveloped. Prior to the onset of the field investigations, the project site was arbitrarily divided into ten test Areas (Areas A-J; see Figures 4 and 19). For ease of understanding, the project site current conditions are presented moving generally from west to east using both Tax Lot and Field Testing Area designations where applicable.

#### Southwestern Gracemere property (part of Tax Lot P9)

The entrance to the project site from Broadway on the west is from a paved road running through the Jardim West property. There are stone columns on either side of the roadway marking the boundary of the property from this entrance. The southwestern corner of the project site contains a very steep hillside (with slopes in excess of 25 percent) with a medium density of forest cover. At the top of this hillside, just within the project site boundaries, is a large in-ground reservoir, which once provided water for the Gracemere estate buildings (Photographs 1 and 2). The reservoir is roughly square shaped, with a concrete lining over a stone foundation. There appeared to be at least several feet of standing water in the bottom of the reservoir at the time of the field survey, making it difficult to gauge the depth of the feature, but casual observation suggests that it is more than 10 feet deep. A single stone pillar is located in the center of the reservoir, rising from the bottom of the feature to perhaps 5 feet above the rim of the foundation. The pillar has a rectangular shaped notch on its east and west sides, indicative of former beams that would have attached in these locatious. Historic maps consistently indicate a "tower" or "observation tower" in this location, suggesting in its original state, this structure was significantly higher than it is now. A small stone and concrete pump box is located on the east side of the reservoir, set partially above and partially below grade (Photograph 3). No other pipes or other conduits were visible surrounding the reservoir feature, indicating either that they were above ground and are no longer extant, or that they are located below ground but cannot be seen on the modern landscape.

#### Northwestern Gracemere property (Tax Lot P9E/Area F)

To the north of the parcel containing the steep hillside and the reservoir is a lot containing two residences. The larger residence, known as "Gracemere Lodge," is a Colonial Revival style building which dates to the 1910s. It is an L-shaped, fieldstone-faced building, measuring 2 ½ to 3 stories with a basement (Photographs 4-7). The front façade of the building faces east, toward the lake, and the rear façade, which includes a courtyard area, is on the west. The building has been extensively renovated, including replacing the original windows (many of which had arches on top and are now covered with wood), adding dormers along the roofline, replacing the roof, and relining the exterior of the chimneys. The house originally was built for Gracemere owner Henry K. Browning's daughter Catherine and her husband, Alfred Thurber, but by the mid-twentieth century the house had been converted into apartments. The grounds surrounding this building consist of a landscaped front lawn (see Photograph 4), and an overgrown area on the west (Photograph 8). There is an above ground fuel tank at the northwest corner of the building.

The second residence on this lot is a 2-story (with basement) vernacular frame building known as the "Gate House" with an address of 19 Gracemere Lane (Photographs 9 and 10). It faces the second entry to the project site, a road off Sheldon Avenue known as Gracemere Lane, which also has stone pillars marking the property boundary. It appears to date to the nineteenth century, and may in fact be the original ca. 1850s-1860s house built by Robert Graves shortly after he purchased the property in 1856. However, the house has been extensively renovated, including replacement of windows, and the addition of an enclosure on the east side of the front porch. Historic maps show a structure with a square footprint in this general location by the 1860s, but this specific building footprint (with a rear addition) does not appear on maps until the 1890s. For a time during the twentieth century,

maps show a garage or other outbuilding on either the southwest or northeast of the house, although this building is no longer extant. The building is bounded by a paved driveway on the west, and an undeveloped and overgrown area further west, bordering the project site's western limit.

#### Lake parcel (part of Tax Lot P9)

To the east of the parcel containing the Gracemere Lodge and the Gate House is an area containing a man-made lake or large pond, measuring 1.65 acres, and known as "Gracemere Lake" (Photograph 11). The lake was constructed by damming an existing stream that feeds into Sheldon Brook, to the north of Sheldon Avenue. Construction of the lake appears to date to the 1870s, and was probably contemporary with construction of Gracemere Hall (see below). Historic maps clearly show the lake by the 1880s. The lake is lined with concrete, and is currently in a state of moderate disrepair. The grounds surrounding the lake appear to be significantly landscaped and/or graded (Photograph 12).

There are a number of in-ground features located to the east of the lake. Water feeding the lake enters the parcel on the southeast, through a metal conduit encased in a small stone semicircular basin (Photograph 13). The water pipe is then split in two, to form two feeds to the lake (Photograph 14). Although partially obscured by leaf fall, the field survey also revealed several brick, stone, and concrete features on the east of the lake. These include a small stone arched walkway or "bridge" which may overlay one of the pipes leading to the lake (Photograph 15), a small, rectangular shaped brick chamber, possibly a dry well (Photograph 16) northeast of the "bridge," and a concrete lined channel (Photograph 17) running along the east side of the lake to a large oval-shaped fieldstone and concrete lined feature, which appears to have drained into the lake (Photographs 18 and 19). This oval shaped feature appears on historic maps by 1900 (e.g. Wulff 1900), and on a number of the maps is shown to be filled with water. It appears to date to the Graef occupancy of the property, from 1890-1907, and might have been an ice skating rink, a large fishpond, of the foundation of the aviary described in the 1939 appraisal of the property. The area east of this feature is moderately sloped and may be disturbed from grading or other construction associated with nearby features (Photographs 20 and 21). The southeast corner of the lake parcel contains a modern residence that is not part of the project APE, which sits on Tax Lot P9K.

#### Gracemere Hall parcel (part of Tax Lot P9/Area E)

Immediately east of the lake parcel is the parcel containing "Gracemere Hall," the original French Second-Empire style mansion house built on the project site (Photographs 22 and 23). It was constructed by owner Robert Graves, probably in the late 1860s or early 1870s. Historic maps do not depict the building in 1867 and 1868, but do show it by 1875 (Beers 1867, 1868; Carpenter 1875). The building is three stories high, faced with fieldstone, and has a prominent mansard roof. The main façade faces northwest, toward the lake. A large square tower was built off the structure's southern corner during the Graef occupancy, between 1890-1904 (Photograph 24) (*Town and Country* 1904). Like the other residences on the project site, this house also has been extensively renovated. The changes include the removal of the wraparound porch (which itself may have been a later addition), the removal of the main entryway features, the removal of decorative brackets below the roofline (see Appendix A), the replacement and boarding up of windows, and additions were constructed on the west and north, and south facades. Like the Gracemere Lodge, the interior of this building was converted into apartments by the mid-twentieth century.

The area surrounding Gracemere Hall is extensively landscaped, with rolling lawns. The southeast (or rear) yard of the house, which is mostly level, formerly contained greenhouses; remnants of these buildings can still be seen in the yard area, which now contains children's play equipment (Photograph 25). Other parts of the lawn contain circular garden features (Photographs 24 and 26). The Gracemere Hall parcel is bounded on the east, west, and south by paved roadways and on the north by woods (Photograph 26). The southwest corner of the parcel contains a modern residence on Tax Lot P9J that is not part of the project APE.

#### Tax Lot 9B

North of the Gracemere Hall parcel is a property formerly part of the Gracemere holdings that until ca. 2005 contained another mansion house, dating to the 1910s. It was built for Gracemere owner Henry K. Browning's daughter Adelaide and her husband Stuart Green. The rectangular-shaped house was built in the Colonial Revival style, and had a gambrel roof with pedimented dormers (Yasinac 2000). The field inspection revealed that the

demolition process in ca. 2005 has rendered the former location of this house, as well as the remainder of this parcel, extensively disturbed (Photograph 27). No evidence of any intact portion of the former house foundation was visible or observed. Instead, large fragments of stone and bricks were noted in churned up piles. Only a portion of a former addition or outbuilding was still present. The extensive surface examination of this location found that the ground surface within the entire parcel was completely disturbed by the large-scale demolition of the structures by heavy machinery.

#### Tax Lot P9 (south section/Areas C and D)

South of the Gracemere Hall parcel is a thin strip of land bounded on the north by a paved roadway and on the south by the Tarrytown village line (Photograph 28). The stream that feeds the lake originally ran within this parcel; today it has been moved and altered to such a degree that it is only visible in spots, including in a channelized trough along the southern side of the roadway, and wet areas south of the trough (Photographs 28-31). The western side of this parcel is vacant land once used for gardening. It contains stone foundation remains of a greenhouse, as well as furrows in the ground that probably represent old planting beds (Photographs 32 and 33).

There are two one-story L-shaped stucco residences on the eastern side of this parcel, both probably dating to the 1940s and now in considerable disrepair (Photographs 34 and 35). Collectively, they are known as "Gracemere Court," although they seemingly post-date the Gracemere estate period of occupation. They appear in their present location on the 1950 Sanborn map. Prior to their construction, historic maps indicate this area contained a garage associated with the Gracemere complex.

The last structure on this parcel is what appears to be an ice house, located east of "Gracemere Court," and cut into the side of a hill (Photographs 36 and 37). The structure is one story with a loft. It is constructed of fieldstone on the main story, and wood on the loft, with a metal roof. The main entry to the ice house faces south, toward the stream that feeds the lake, suggesting that some ice harvesting may have occurred here. The building may be contemporary with the Gracemere Hall construction in the 1860s or 1870s. The 1950 Sanborn map notes this building as a "power" house, indicating it could have been adapted for another use after its original function had ended. There is a very large oil tank inside the structure and a small vent pipe at the northeast corner of the roof.

#### Tax Lot P9F/Areas H, I, and J

East of the strip of land described above is a large undeveloped area also part of Tax Lot P9F, which is bounded on the east and south by the Tarrytown village line. It was formerly part of the Gracemere estate holdings, although appears to have been primarily woodland during that period. There are several former structures located within this area. Along the southern edge of this area, there is another stone and concrete limed reservoir located at the top of a knoll and cut into the hill (Photographs 38 and 39). This reservoir is roughly semi-circular shaped. There is a square concrete pillar in the approximate center of the basin, which may have been truncated. No pipes or other conduits were visible emanating from this reservoir. A tree growing in the middle of the basin suggests that it has been abandoned for many years. Throughout the entire southeastern section of the overall site the exposed bedrock shows evidence of quarrying activities (Photograph 40). Quarrying was done on the property during both the nineteenth and twentieth centuries for the construction of the stone buildings.

The remainder of this area is essentially undeveloped, with rolling hills covered by medium density woods (Photograph 41). There are a number of knoll tops or ridges in this area. Running approximately north-south through this parcel is a perennial tributary that once fed into Sheldon Brook to the north, but today is channelized and dammed in a number of places (Photograph 42). The largest pond along this drainage is off the project site to the northeast, and was historically used for ice harvesting. Within the project site, there is a small pond, known as Turtle Pond, near the southeast corner of the property that has a concrete dam (Photograph 43). Historic maps do not show this pond until the 1910s, suggesting it dates to the Browning occupancy of the property.

There are a number of additional concrete features along the east side of the drainage, some of which presumably were related to channeling the stream. These include a possible pump house (with pipes still visible) near Turtle Pond, a stone channel (Photograph 44) and a series of spigots along the stream. A small concrete foundation remnant (surrounded by a high chain link fence) is located on the east side of the stream as well (Photograph 45). This structure does not appear on any historic maps, and its function is unclear.

The third entry to the project site is along a right-of-way running south from Sheldon Avenue on the east side of the project site. At the end of this roadway, there is a remnant of a former private driveway that led to a twentieth-century residence (Photograph 46). The former house appears on the 1950 Sanborn map, and was attributed to "Hyman." Only the concrete foundation is visible today, and a large tree in the center attests to decades of abandonment (Photograph 47).

#### Tax Lot P11

A large parcel along the eastern side of the project site was not formerly part of the Gracemere estate holdings, but rather belonged to John Schneider from the 1860s through the c.1910. The majority of this parcel is undeveloped woodland, with a spring located near its southern end that creates another fork to the drainage discnssed above. The terrain is generally steep, with only a few ridgetops exhibiting slopes less than 12 percent.

Near the Sheldon Avenue end of the parcel are remains of the former Schneider residence (Photograph 48). The foundation, of fieldstone, is located along the side of a ridge. Remains of outbuildings were also visible (Photograph 49). The 1900 Federal Census indicates that John Schneider lived there with his wife Caroline and three sons. The family moved to Ridgefield, Connecticut by 1910. The buildings were probably demolished sometime during the 1930s; the last historic map that shows them is the 1931 Hopkins map. Artifacts littering the ground surface near these former buildings at the time of the field survey dated from the late nineteenth and early twentieth century.

#### Tax Lot P6

The final area surveyed within the project site is a narrow strip of land lying along the south side of Sheldon Avenue. This parcel also was not part of the former Gracemere estate holdings, but belonged to Henry Sheldon (for which the road is named) during much of the nineteenth century and later, like much of the adjacent land surrounding Sheldon Brook, was owned by financier Jay Gould. This parcel is steeply sloped (most areas are mapped as having greater than 12 percent slopes) (Photograph 50), and the central portion is wet. It appears, though, that the wetland areas are recently created, probably when I-287 was built to the north, as historic maps show structures along this strip of land during the nineteenth century (e.g. Beers 1867, 1868).

Near the northeastern edge of the project site, one unmortared fieldstone foundation from a former house is still visible (Photograph 51). It is rectangular-shaped, and measures approximately 20 feet by 12 feet. Although the field inspection did not reveal additional house foundations along the south side of Sheldon Avenue, the fact that these buildings were shown on historic maps suggests that remains of the structures (or their use) could still be present here. A stone wall marks the boundary of this parcel with the adjoining lot to the south (which is not part of the project site). Several large rock outcrops are also visible along this area.

#### B. TOPOGRAPHY AND HYDROLOGY

As noted above, the project site exhibits a number of different topographic conditions, depending on location. Generally, though, the project site contains rolling to steeply sloped hills in undeveloped areas, and flatter areas where there has been development over time. The lowest part of the project site is along Sheldon Avenue, where elevations range from about 170-200 feet above mean sea level. Elevations rise to the south; elevations reach over 300 feet above mean sea level near the southern boundary of the project site. The southwestern corner of the project site has the highest elevation, at about 375 feet above mean sea level. Areas surrounding the historic development on the project site, including the vicinity of the houses, the lake, and the roadways clearly have been altered through grading and filling from the original landform. Other wooded areas may be reasonably untouched by earthmoving.

There are two main drainages that course through the project site, both of which have been altered over time through damming and channelizing. The drainages empty into Sheldon Brook to the north, which in turn feeds into the Hudson River to the west. The first drainage runs in a roughly north-south alignment along the eastern side of the project site, and exits the property under the right of way to feed into the large pond just off the project site. A fork of this drainage is located further north, within the project site boundaries. The second drainage enters the project site along the southern boundary and through a series of channels and pipes empties into the man-made lake on the property. The dam for the lake is at its northwestern end; the drainage continues through another series of pipes in a

northwest direction (and off the project site) until reaching Sheldon Brook. As noted above, there is a third wetland area on the project site, along Sheldon Avenue, although this appears to be a recently created wet area, perhaps due to construction of nearby I-287. Historic maps consistently show this area as dry land.

#### C. GEOLOGY

The project site lies in the Hudson Valley region, which is described in geological terms as lying in the New England Upland Physiographic Province, a northern extension of the Great Appalachian Valley (Schuberth 1968:74). Metamorphic rocks of the Hudson Highlands form the mountains and hills of southeastern New York. Bedrock beneath Westchester County is part of the Manhattan Prong, a rolling lowland area composed of metamorphic rocks of Early Paleozoic age (Isachsen et al. 1991:46). These rocks include Lowerre Quartzite and Manhattan Schist beneath hills, and Inwood Marble, which is easily eroded, in the valleys. Much of the bedrock is covered by Atlantic Coastal Plain deposits.

#### D. SOILS

Five soil types are mapped for the project site, as shown on Figure 5 (U.S.D.A. 2008). These soils are described in the table below.

Name	Soil Horizon Depth	Texture,	Slope	Drainage	Landform
	cm(in)	Inclusions	%	-	
Charlton	0-8 in	Lo	2-8	Well	Hills, ridges
loam (ChB)	8-24 in	SaLo			and till plains
	24-60 in	SaLo			
Charlton	0-8 in	Lo	8-15	Well	Hills, ridges
loam (ChC)	8-24 in	SaLo			and till plains
	24-60 in	SaLo		***************************************	
Charlton	0-8 in	Lo	35-45	Well	Hills, ridges
loam, very	8-24 in	SaLo			and till plains
stony (CiF)	24-60 in	SaLo			
Charlton-	0-8 in	Lo	2-15	Well	Hills, ridges
Chatfield	8-24 in	SaLo	Ì		and till plains
complex,	24-60 in	SaLo			
rolling, very					
rocky (CrC)					
Chatfield-	0-8 in	Lo	15-35	Well	Hills, ridges
Charlton	8-24 in	SaLo			
complex,	24-60 in	SaLo			
hilly, very					
rocky (CsD)					

Key: Soils: Lo-Loam, Sa-Sand

As of this time, no soil borings have been completed for the project site.

#### E. ARCHAEOLOGICAL AND HISTORIC SITES WITHIN A ONE-MILE RADIUS

A site file search at the NYSM and the NYSOPRHP identified eight precontact sites within a one mile radius of the project site. Below is a list of these sites and their descriptions.

NYSOPRHP Site #	NYSM Site #	Distance from APE	Time Period	Site Type
	NYSM 5186	Ca. 0.4 mile northwest	Unknown precontact	Village, middens
	NYSM 5190	Ca. 0.5 mile southeast	Unknown precontact	Village
	NYSM 5234	Ca. 0.4 mile northwest	Unknown precontact	Traces of occupation

NYSOPRHP Site#	NYSM Site #	Distance from APE	Time Period	Site Type
	NYSM 6870	Ca. 0.5 mile northwest	Unknown precontact	Alipkonk Village
	NYSM 7828	Ca. 0.5 mile northwest	Unknown precontact	Aliponeck/Alipconk, Village at Tarrytown
A11904.000015		0.9 mile southeast	Unknown precontact	Shells and charcoal
A11904.000016		0.9 mile southeast	Unknown precontact	Projectile point, shells and charcoal
A11904.000159		0.8 mile east	Middle to Late Woodland	Projectile point

Of the NYSM sites, three were identified by Arthur C. Parker, an early twentieth century researcher, and the final two were identified as sites pertaining to the village of Alipkonk. The exact size and date of the village of Alipkonk (NYSM #s 6870 and 7828) is unknown, and so is the extent of site 5234, which is simply described as "traces of occupation" (Parker 1920:714).

Additionally, one historic period archaeological site has been recorded on a property west of the project site, on the west side of Route 9. This is the Requa tenant farmhouse, dating to the eighteenth and nineteenth centuries. The site was excavated by a group of local professional and avocational archaeologists from 1977-1984, although the site data is not on file with the NYSOPRHP.

The closest archaeological survey identified in the project area was the Jardim Estates property, located immediately west of the present project site, where Phase I and II investigations were undertaken. The project revealed several nineteenth and twentieth century estate features, but no precontact resources (Mascia 2002, 2003).

Last, the NYSOPRHP GIS database notes that the majority of the project site is identified as archaeologically sensitive based on proximity to previously documented archaeological sites.

#### F. HISTORY OF THE PROJECT SITE

The project site is located within the former colonial lands of Philipsburg Manor. Frederick Philipse came to New Amsterdam with Peter Stuyvesant and quickly set about making his fortune. Well-known as a trader in wampum and other goods, Philipse was rumored to have dealt with the infamous Captain Kidd while amassing an immense fortune. After making an advantageous marriage to a wealthy widow in 1662, Philipse began to acquire land along the Hudson River in 1681. Shortly after that date, he built a mill and manor house near the Hudson River and proceeded to purchase approximately 22 miles of land, or 90,000 acres along the east bank of the river. Governor Benjamin Fletcher granted Philipse manorial rights over his land in 1693. This was quickly ratified by King William and Queen Mary of England (Scharf 1886:174). During his lifetime, Philipse had become one of the richest men in the colony.

Adolph Philipse took over the manor following his father's death in 1702, and his son Frederick, who became the third Lord of the Manor of Philipsburg, subsequently inherited the parcel. During Adolph's tenure, the New York Provincial Legislature passed a bill which ordered the construction of a highway following a well-known Indian path from the Bronx to Albany (Canning and Buxton 1975: 34). The road, initially called Queens Road, was later known as the Albany Post Road (Route 9).

By the 1750s over a thousand people were living in the Manor, farming the land and clearing forests to support the demand for lumber. Most of these residents were tenant farmers who leased land-use rights from the Philipse family. The residents of the manor who established small hamlets throughout the Philipse estate ran civil affairs. In these hamlets, meeting houses, taverns, mills and industries were constructed. Among these early tenants in the project area were the families of Paulding, Requa, and Van Wart (French 1860:700).

Philipsburg, which had remained intact for over eighty years, was finally dissolved following the American Revolution when the Philipse family, who sided with the British, lost their land rights. The former tenant farmers quickly subdivided and purchased their holdings (Couzins 1785-1893). The southern part of the project site fell within a 100-acre parcel given to the Dutch Church as a glebe or farm land. This parcel was long and narrow, with

its width a mere 600 feet but its length over a mile and a half. The northern part of the project site fell within a 240-acre parcel purchased by John Van Wart, and from which the Pennybridge district was later carved (Scharf 1886:231). There is no evidence that the project site was used for any purpose other than farm land or grazing land during the colonial period.

In 1849 the Hudson River Raihoad had been laid out through Tarrytown along the Hudson River, nearly one mile west of the project site. While the introduction of the train enabled the residents to use this transportation method to commute to work in New York, it also brought new residents to the area. A number of these new residents were wealthy businessmen, moving here to establish country residences. Substantial parcels of former farmland were purchased to create large and sometimes extravagant estates.

During the 1850s, new roads began to be built in the project site vicinity, which likely spurred settlement and development of the area. A map made in 1851 shows that the project site still was completely undeveloped and inaccessible by any roadways (Sidney Neff 1851; Figure 6), but by 1858 Sheldon Avenue had been laid out, which borders the project site on the north, and from which the two right-of-ways enter the property (Merry 1858). In 1856, Merchant Robert Graves of Brooklyn purchased a 69-acre parcel (including two right-of-ways) from New York City Merchant Ambrose Kingsland, who in turn had acquired the land the year before from local landowner James Campbell (Liber 313, 1855:282; Liber 342, 1856:7). The 69 acres included the southern portion of the project site (the boundary line runs just north of the lake). Graves appears to have made the first documented improvements on the project site. By 1860, the federal census lists Merchant Robert Graves (who had been born in Ireland) living in Greenburgh and heading a household including four children, two servants and a coachman. Maps made by Beers in 1867 and 1868 (Figures 7 and 8) indicate that Graves had built one, and possibly two structures along the western side of the project site, roughly corresponding to the location of the present day "Gate House." There was also another structure attributed to "F. Turner" at the eastern end of the project site, although comparison with later maps (see Figure 10) suggests that in fact this building was off the project site.

The 1867 and 1868 Beers maps, albeit slightly different, both also show several structures located along the southern side of Sheldon Avenue, within the project site. The strip of land bordering Sheldon Avenue was owned during this period by Henry Sheldon (for whom the roadway was named), and the structures along this strip appear to have been tenant houses for local workers in the area. The 1870 federal census lists a number of laborers and farmers living with their families along Sheldon Avenue, with some names corresponding to those shown on the two Beers maps. The field walkover noted remains of one of these houses near the northeastern edge of the project site, at the eastern end of this strip of land.

The last portion of the project site, along the northeast side of the property, an approximately 11-acre parcel, was sold by Charles and Sarah Harriman of Greenburgh to Farmer John Schneider of Greenburgh in 1865 (Liber 558, 1865:371). Schneider constructed a house on the property soon afterwards; a building is noted with his name on both the 1867 and 1868 maps and he and his family appear in the 1870 and 1880 federal census listings for the Sheldon Avenue area. The field walkover also revealed the remains of the Schneider house, which appeared intermittently on historic maps through the 1920s. The Schneiders appear to have lived in the house for a number of decades, a relative sold the property in 1918 and it is likely that the house was razed some time in the 1930s (Liber 2169, 1918:316).

The most significant change to the project site, however, occurred in the late 1860s or early 1870s, when Robert Graves set about to convert his farmland into a country estate, which he called "Rockview." During this period, Graves constructed what is now known as Gracemere Hall, using locally quarried fieldstone from the property. The mansion house first appears on a local survey map by 1875 (Carpenter 1875). He also had the lake built, by damming the existing stream that runs through the property. The stone reservoir (and former tower) at the southwest corner of the project site and the ice house along the southern edge of the property may also date to this period. Two historic maps made in 1880 and 1881 (Figures 9 and 10) show the extent of construction on the project site. The 1880 map, made by local surveyor Ward Carpenter, shows the mansion house, an outbuilding to the east of it, the lake, and the tower. The 1881 Bromley map shows that in addition to the structures from the earlier map, there was now a large greenhouse, another windmill and tower (which may correspond to the second reservoir at the southeast end of the project site), and a structure that may represent the extant ice house. A structure is also shown in the approximate location of the extant "Gate House."

Robert Graves died in 1886, and in 1890 his Tarrytown estate, which now included an additional 9 acres along the north-central part of the project site, was sold at public auction to businessman Charles Graef of New York City (Carpenter 1890; Liber 1199, 1890:158). Graef renamed the estate "Gracemere" and utilized it as a summer home. The 1891 Bromley map (Figure 11) clearly shows the Graef ownership of the property and its new name. Graef died at Gracemere on September 20, 1902. An article about the Gracemere estate, published in *Town and Country* magazine in 1904 (see Appendix A) notes that Graef's son Harry Campbell Graef had inherited the property. In addition to the mansion house, which the article describes in detail – the massive tower on the southeast corner had been added during the Graef occupancy – the story notes the presence of large greenhouses and stables on the estate. The 1900 Wulff map (Figure 12) shows the extent of these bnildings, which were located east of the mansion house. This map also shows, for the first time, the oval shaped feature seen during the field inspection to the east of the lake. The 1901 Bromley map (Figure 13) illustrates additional details of the buildings. The Gracemere estate was home to not only the Graef family, but a large number of estate workers and their families. The 1900 federal census notes that in addition to the Graef family (consisting of Charles Graef, Harry Campbell Graef, and his wife Emily Graef) there were eight servants in the main house, as well as separate households led by the head butler, two gardeners, a coachman and several stablemen.

In 1907, Harry Campbell Graef's wife Emily sold the Gracemere estate to New York City Merchant Henry K. Browning (Liber 1823, 1907:314). Browning was the owner of The Browning-King Company, a successful chain of men's clothing stores in Manhattan and the maker of uniforms for the American armed forces during World War I (Moore 1978). Browning and his wife had four daughters; as each one grew up and got married, Browning had a mansion house built for each newlywed couple on the Gracemere property. The 1910 federal census shows that at this time the Browning daughters were still teenagers and living in their father's household. By issuance of the 1920 federal census, however, all four of the daughters had been married, and two of them — Adelaide Green and Katherine Thurber — were living in separate households on the estate with their husbands and families (the remaining two were still living in Gracemere Hall with their husbands). The Green house was the one located north of Gracemere Hall and which was recently demolished. The Thurber house is the building now known as Gracemere Lodge. In addition to the Browning, Green, and Thurber households, the Gracemere estate also was home to numerous estate staff and their families. The 1914 Bromley map (Figure 14) suggests that the Green and Thurber houses had yet to be built by this time, although the general locations of these houses appear to have been penciled in at a later date by an unknown annotator.

By 1930, when the last available federal census was published, the Gracemere estate was teeming with residents. In addition to the Browning household in Gracemere Hall, each daughter and her family lived in a mansion house on the estate (two of these are outside the project site, on Tax Lots P9C and P9D). The census notes households for a butler, a "cow man," and a chauffeur, as well as numerous servants in each of the mansion houses. Last, there was a camp for children located on the Gracemere property (although exactly where is unclear) and the census taker recorded 16 boys, aged 9-17, at the camp, as well as the head of the camp, his wife, and a Chinese servant. Curiously, although local residents remembered the camp as operating during the summer for underprivileged city boys (Moore 1978), the 1930 census recorded the camp in operation in early April.

By the late 1930s, the heyday of the Gracemere estate had waned. Henry King Browning died in October 1936, and it appears that his death as well as the hard financial times of the Great Depression contributed to the downfall of the property. Two maps survive from 1936, the year of his death. The 1936 Hopkins map (Figure 15) indicates that the property now belonged to Mary S. Browning, Henry's widow. However, before his death Henry Browning appears to have conveyed at least three of the four mansion parcels within the larger estate to his sons-in-law, as shown on a survey map made soon after his death (Losee 1936; Figure 16). The two maps also show slightly different buildings on the estate: the Hopkins map does not show the Green mansion house, although it was still standing (it is attributed to "Harmon" on the Losee map), and the configuration of outbuildings along the southern edge of the property is different on the two maps.

Henry King Browning's will and probate papers are on file at the Westchester County Archives. In 1939, an appraiser detailed Browning's Gracemere estate holdings, which he divided into four parcels:

Harry Campbell Graef also appears as Henry Campbell Graef in the documentary record.

- 1. The "Reservoir parcel" measuring 2.86 acres on which the stone reservoir was located (said to provide water to all the buildings on the estate).
- 2. The "Garage parcel" measuring 2.92 acres and containing a one-story frame and stucco eight-car garage with four rooms for servants (this building was noted as in poor condition and today is no longer standing) and a small greenhouse of frame and glass construction, also in disrepair.
- 3. The "House and Squash Court parcel" measuring 5.22 acres. It contained the main house, three stories high, of gray stone, with 21 rooms; a squash court house, a frame and stucco building one and a half stories high with four rooms; and a tennis cottage, a frame house one and half stories high with seven rooms and used as a summer house. At the time, the main house was supplied with heat from a hot water system, water from the reservoir, and was hooked up to municipal sewers. The main house was said to be approximately 100 years old (which was clearly an overestimation of its age) and in fair condition. The squash court building had been used recently for storage and was in extremely poor condition. The tennis house was noted as in fair condition.
- 4. The "Lake parcel" measuring 5.83 acres and containing the lake (the surface of which was 1.5 acres), a lake house, a small boat house and aviary.

After Henry King Browning's death, his widow moved in with her daughter Adelaide Green to the more modern house north of Gracemere Hall (now demolished) and lived there until her death in 1951. Much of the remaining Gracemere estate property was sold to a Swiss watch manufacturer named Kocher (Moore 1978). The 1950 Sanborn map (Figure 17) affords a last picture of the former Gracemere estate property, after most of it had been sold from the Browning family. By this time, the two one-story frame residences along the southern side of the project site had been built, as had a house attributed to "Hyman" on the extreme southeastern side of the project site (remains of which were observed during the field walkover). The two mansion houses within the project site (Gracemere Hall and Gracemere Lodge) had both been divided into apartments.

During the 1970s, the Holy Spirit Association for the Unification of World Christianity (the current owner of the property) began buying parcels of land from the Kocher family and others, to create the project site that exists today (e.g. Liber 07285, 1975:00375; Liber 07307, 1976:00694). Since that time, a number of the original Gracemere buildings have been razed (most notably the Green mansion, as well as a number of outbuildings), but there appears to have been no new construction on the project site since the 1950s. As noted in the Current Conditions section, all of the older estate buildings appear to have been renovated to some degree over the years. Today, the buildings are used primarily as housing for church members.

#### G. ARCHITECTURAL RESOURCES

As noted in the Current Conditions section, there are a number of standing structures within the project site. These include (from oldest to most recently built):

- 1. The "Gate House," a vernacular residence that might be the original ca. 1850s-1860s Robert Graves house shown on the 1867 and 1868 Beers maps (Photographs 9, 10). It is the only building on the project site with a numbered address: 19 Gracemere Lane. Additional inspection and research would be needed to confirm its original construction date. The house has been renovated several times, with the addition of stucco to the exterior (probably in the early twentieth century), construction of the rear addition, enclosure of a part of the porch, and replacement of windows and other elements.
- 2. "Gracemere Hall," the French Second-Empire style mansion house built by Robert Graves, probably in the late 1860s or early 1870s (Photographs 22-26). The building was added to by its second owner, Charles Graef, including construction of the stone tower on the southeast side, and possibly the former wraparound porch shown in Appendix A. There have been a number of changes to the building over time, including removal of the wraparound porch and main entryway features, the decorative brackets below the roofline, replacement and boarding up of windows, and additions on the west and north, and south facades. The interior of this building was converted to apartments during the twentieth century.
- 3. A large ice or power house, located along the southern edge of the project site, constructed of fieldstone on the lower level and wood on the second level (Photographs 36, 37). The main entrance faces a drainage to the south. This building may be contemporary in date with Gracemere Hall.
- 4. "Gracemere Lodge," the Colonial Revival style L-shaped mansion house built for Henry K. Browning's daughter Katherine Thurber and her husband during the 1910s (Photographs 4-8). The building has been

- extensively renovated, including replacing the original windows (many of which had arches on top and are now covered with wood), adding dormers along the roofline, replacing the roof, and relining the exterior of the chimneys. The interior of the building has been converted into apartments.
- 5. Two ca. 1940s era one-story stucco residences, located along the southern edge of the project site, just east of the ice house (Photographs 29, 31, 34, 35). Collectively, they are known as "Gracemere Court." These buildings post-date the Gracemere estate occupancy of the property, and are unremarkable.

In addition to these buildings, there are two remaining Gracemere estate mansion houses that are extant on adjacent tax lots not part of the project site. These include the mansion house on Tax Lot P9C, built for Henry K. Browning's daughter Natalie and her husband, Grant Small (Photograph 52); and the mansion house on Tax Lot P9D, built for Browning's daughter Marjorie and her husband, George Dickinson (Photograph 53). There is also a second residence adjacent to the Dickinson mansion (on Tax Lot P9G) that may have been associated with the Gracemere estate (Photograph 54).

Of these buildings, all but the two ca. 1940s era residences would be considered part of the overall Gracemere estate complex of buildings, which collectively span the period from ca. 1856-1936.

#### IV. PHASE IA SENSITIVITY ASSESSMENT

#### A. PRECONTACT SENSITIVITY AND DISTURBANCE RECORD

From what is known of precontact period settlement patterns in Westchester County, most habitation and processing sites are found in sheltered, elevated sites close to wetland features, major waterways, and with nearby sources of fresh water. In its natural state, some of the flatter portions of the project site would have met many of these characteristics, as soils across the property are well drained and there are two natural drainages within the property. However, construction of the estate buildings, the man-made lake, and the other features on the modern landscape has rendered the majority of the project site too disturbed from earthmoving to retain any precontact archaeological sensitivity. Additionally, there are only discrete areas of the project site that contain slopes from 0-12 percent. Figure 18 illustrates the approximate locations of these areas, although it should be cautioned that because this map was computer-generated based on a limited number of available elevations, some discontinuous areas shown as within the 0-12 percent slope range likely are due to computer error.

Figure 18 illustrates those areas of the project site that retain precontact archaeological sensitivity, based on a probable lack of disturbance to the natural landform, and the presence of landforms (such as ridgelines and terraces) that have 0-12 percent slopes.

#### B. HISTORICAL PERIOD SENSITIVITY AND DISTURBANCE RECORD

The project site contains four areas that appear to be sensitive for historic period archaeological resources, defined as areas where maps and other documents noted nineteenth century occupation and use, and where the landform does not appear to be so disturbed as to have destroyed potential resources. These four areas are described below and shown on Figure 18.

- 1. The first area is at the northwestern corner of the project site, in proximity to the "Gate House," where historic maps indicate the original dwelling belonging to Robert Graves was located, dating from ca. 1856.
- 2. The second area is the location surrounding "Gracemere Hall," which was built in the late 1860s or early 1870s. Although the house was supplied with water from a reservoir on the property (therefore negating the need for wells or cisterns), residents likely still would have relied on privies or cesspools during the nineteenth century prior to the introduction of municipal sewers. Privies, which are often filled with contemporary refuse related to the dwellings and their occupants, can provide important stratified cultural deposits for the archaeologist and frequently provide the best remains recovered on sites. Portions of these shaft features are often encountered because their deeper and therefore earlier layers remain undisturbed by subsequent construction, and in fact, construction often preserves the lower sections of the features by sealing them beneath structures and fill layers. Other commonly occurring but more fragile backyard remains include fence lines, paths, traces of landscaping and sheet midden scatter. Included in this area is the portion of the project site along the southern boundary, where garden features and the ice house were observed.

- 3. The third area is the location of the former Schneider residence, located on a knoll top overlooking Sheldon Avenue. Remains of this house are still clearly visible on the landscape, and numerous historic artifacts dating to the late nineteenth and early twentieth century were observed on the ground surface surrounding this foundation. Since this house was occupied by the 1860s, it is possible that earlier features and artifacts could be present here as well.
- 4. The fourth and last area is the area south of Sheldon Avenue, where historic maps indicate a series of workers houses during the nineteenth century, and where a stone foundation was observed during the field inspection. Although portions of this area are now mapped as wetland, it appears that during the nineteenth century this area was dry enough to support houses.

### C. ARCHITECTURAL RESOURCES

Preliminary review of the architectural resources within and adjacent to the project site suggests that one of the extant buildings may be individually potentially eligible for the National Register of Historic Places and a number of the remaining structures as well as some of the archaeological features may be potentially eligible for the National Register of Historic Places as a historic district. The structure that may be individually potentially eligible is Gracemere Hall, which appears to be a significant example of a nineteenth-century country estate building, despite the renovations and alterations that have occurred both inside and outside the structure. Additional inspection and research would be necessary to formally evaluate the building, however. The remaining Gracemere estate buildings, including the Gate House, Gracemere Lodge, the ice house, as well as the three former estate buildings that are now privately owned and not part of the project site (all collectively dating from ca. 1856-1936) may also be eligible for the National Register of Historic Places as a historic district. Again, this conclusion should be considered tentative, and would need to be revisited based on further field inspection and research.

#### V. TESTING RECOMMENDATIONS

Based on the conclusions onlined above, HPI recommended Phase IB field testing in areas of the project site identified as sensitive for precontact and historic period archaeological resources, as shown on Figure 18. This included a systematic shovel testing program in all areas of the APE that were not obviously disturbed, as well as investigations of any historical period features found.

## VI. PHASE IB FIELD INVESTIGATIONS

Although the project site comprises c. 46 acres, the actual number of archaeologically testable acres within the Area of Potential Effect (APE) – which is defined as any portion of the project site that will experience subsurface disturbance as a result of the proposed action – was roughly 12 acres when the Phase 1B study was conducted. The project site is large and varied in both terrain and vegetation. For evaluation management purposes, the total testable acreage within the project APE was arbitrarily divided into 10 excavation Test Areas (Areas A-J). See Figure 19 for a depiction of these Areas. Currently, woodlands, wetlands, patches of dense vegetation, overgrown vines, and modern disturbance characterize the setting for the project site.

### VII. PHASE IB FIELD METHODS

Testing was not conducted in locations of excessive slope, where known disturbance had occurred, where bedrock outcrops were present, or where terrain was dominated by poorly drained waterlogged soils (Figure 18). However, rock outcrops were inspected, and those that had the potential to serve as rockshelters were subjected to extensive field testing. In addition, areas that will be left in protected easements — and will remain undisturbed by development in perpetuity — were also precluded from testing. Prior to the onset of the field investigations, the project site was arbitrarily divided into ten test Areas (Areas A-J). These Area divisions were devised using natural topographic or man-made boundaries such as hillocks, wetlands, and existing paths (see Figure 2). In some locations dense ground cover necessitated time-consuming clearing in order to ensure that each Area could be tested thoroughly. Since large-scale machinery would have disturbed potentially sensitive strata, all clearing was done by hand. Most of the dense multiflora brush was cleared using hand-held machetes.

The New York Archaeological Council (NYAC) guidelines (1994) were consulted when creating the testing plan for the project APE. The resulting plan employed a 15-meter (49 feet) testing interval on parallel transects in order to

ensure coverage of the site. Furthermore, there were a few areas where parallel transects were not feasible due to topography and/or bedrock outcrops. Judgmentally placed STs were employed in these locations instead.

Where precontact material was recovered during field testing, eight test arrays were investigated at 1 and 3 meters in the cardinal directions around the positive test. HPI planned approximately 186 STs for the investigation of the c.12 testable acres within the proposed project APE. However, some additional STs were also completed in a few locations. The excavation of 193 (50 cm x 50 cm) STs and 8 Array STs were completed by the archaeologists during April 2008.

Each soil stratum encountered during field testing was explored and documented and the cultural materials in each level were noted in order to determine their context and integrity as well as to further ascertain whether or not any potential *in situ* cultural resources or features were extant. During testing, all of the STs were hand excavated and soil was sifted through ¼-inch screen. Recovered modern material was noted on the field forms, but not all modern material was collected. All precontact material and the historical artifacts found in association with a historical domestic compound were collected and bagged in the field. The precontact and historical assemblages were cataloged in the laboratory (see Appendices C and D). Further, appropriate field notations, drawings, and photographs were made during field testing and the results of each ST was documented.

### VIII. RESULTS OF PHASE IB SUBSURFACE INVESTIGATIONS

To achieve the Phase 1B project goals the site was divided into ten (A-J) distinct and tightly bounded study Areas (see Figure 19). The table below provides data on the Shovel Tests (STs) investigated during the field examination and a brief summary description of the field results is presented below. A brief analysis of the artifacts recovered is also presented below.

Phase 1B Shovel Tests, Jardim East APE.

Area	Total Number of	Total Number of Actual STs	Judgmental STs	Total Number of STs on	Positive Historic	Positive Precontact
	Planned STs			Arrays	Material	Material
A	41	45	4		7	1
В	19	22	3		3	1
С	2	2				
D	15	15				
Е	40	48		8	9	4
F	6	6				
G	12	12				
Н	15	15				
1	16	16				
J	20	20			1	
TOTAL	186	201	7	8	20	6

Within the ten study Areas, a total of 201 STs were investigated during the course of the field project (Appendix B). The typical stratigraphy for each of the ten Areas is presented in Figures 20 (A-E) and 21 (F-J). The testing phase of the project found that much of the site had been altered during the twentieth century. Only four areas contained positive STs for precontact and/or historical deposits (Areas A, B, E, and J; see Appendices B, C, and D).

Area A: This location was adjacent to Sheldon Avenue (Figure 19). Because of the quiet and remote location in the Village of Tarrytown this area has been used for dumping trash and by local teens for impromptu parties. Modern rubbish and disturbance was found throughout most of this location (Photograph 55). A small stone foundation/cellar hole was discovered near the edge of Arca A and identified as Feature 1 (see Photograph 51). The foundation was 12 x 20 feet (3.65 x 6.1 meters) in size with the walls being approximately 1.5-1.65 feet thick (45-50 centimeters). The STs investigated in this location were placed on transects at 7.5-meter intervals in the area immediately surrounding the former building, with one ST located immediately inside the west wall of the foundation (Figure 19; Photograph 56). Remnants of a stone wall were identified to the south of the small house foundation (Feature 2). Test pits were excavated to depths where sterile soils, large rocks (bedrock), or extensive

roots were encountered (see Appendix B). The STs investigated ranged in average depth between about 36 to 101 centimeters below grade (1.2 to 3.3 feet). Almost all of the STs contained compact and poorly drained soils. In the majority of the test units, three distinct soil layers (Horizons A-C) were encountered. Level 1 was typically a dark grayish brown (10YR 3/2) to very dark brown (10YR 4/3) silty loam, Level 2 was, in most cases, a dark yellowish brown (10YR 4/6 or 5/6) silty sand; and Level 3 was a yellowish brown (10YR 6/6 or 6/8) silty sand to sand (subsoil). No additional below ground features were identified within Area A during the Phase 1B field investigation.

A single precoutact artifact was recovered from a Judgmental ST in Area A. ST 43 produced a quartz secondary flake from the A horizon from between 0 and 22 centimeters below surface (cmbs). No additional array STs were completed in this area due to the presence of rock outcrops and the limited area available for testing around the positive ST. This isolated find likely represents a limited quartz tool reduction episode.

Area B: Area B was located on top of the hillside above Sheldon Avenue and Area A (Figure 19). The eastern edge of Area B borders an unnamed road at the edge of the project site. Similar to Area A, this location had been used for the deposition of trash (Photograph 57). The remains of a second house foundation were identified (Feature 3) in Area B (Photograph 58). Significant portions of the foundation had been removed during demolition preventing the archaeologists from determining the exact size of the former structure. Identified on historic maps as the Schneider House, STs were placed around the remains of the remaining foundation at 7.5-meter intervals (see Figures 6-12 and Photographs 48 and 49). Three distinct soil layers were present in the location of the historic house (see Appendix B). Level 1 was typically a brown to grayish brown (10YR 3/2 to 5/2) silty loam. Level 2 was, in most cases, a yellowish brown (10YR 5/4 to 5/6) fine silty sand and Level 3 was a brownish yellow (10YR 6/6) medium sand (subsoil). Test locations were excavated to depths where sterile soils, features, or extensive roots were encountered (see Appendix B). Test pits ranged in depth between about 34 to 70 centineters (1.5 to 3 feet). Although remnants of the superstructures of outbuildings were noted on the surface, no intact below ground features were discovered during the field examination of Area B.

A single piece of quartz shatter was found in the B horizon of ST 47 in Area B, between 15 and 34 cmbs (5.9 and 13.4 inbs). No additional flakes or quartz debitage was found in this or surrounding STs. No additional array STs were completed in this area due to the proximity of the stone foundation. Again, the quartz shatter appears to represent an isolated find and there is no evidence of more extensive quartz reduction.

Area E: Field testing was conducted in the yard areas surrounding the standing structure (Gracemere Hall) that dates to the 1860s-1870s (Figure 19). Again, three distinct soil layers were present in the location of the historic house (see Appendix B). Level 1 was typically a brown to grayish brown (10YR 3/4 to 3/2) silty loam. Level 2 was, in most cases, a dark yellowish brown (10YR 4/4 to 4/6) silty clay loam to silty loam and Level 3 was a yellowish brown (10YR 5/4 to 5/8) medium silty sand (subsoil). Test locations were excavated to depths where sterile soils, features, or extensive roots were encountered (see Appendix B). Test pits ranged in depth between about 28 to 114 centimeters (.91 to 3.74 feet). Although limited traces of the historical occupation of the dwelling were noted, the majority of the STs were either sterile or contained modern materials, likely the result of the extensive landscaping activities around the building (Appendix C). No below ground features or a distinctive buried ground surface associated with the former dwelling were identified during the Phase 1B field investigation.

Area E produced the most number of positive STs, with four bearing precontact lithic material (Figure 19; Photograph 59). Initially, the second level of ST 111 produced one artifact, a smoky gray quartz Untyped stemmed projectile point found in the transition to a B-horizon. An array of eight additional STs placed at one and three-meter intervals in each of the cardinal directions produced three additional positive STs. ST 112 contained one quartz secondary flake in the second level; ST 118 produced a quartz bifacial scraper in the second level; and ST 116 produced a quartz core that originated from a vein outcrop, also from the second level (see Appendices B and D). None of the STs placed at three meters out from ST 111 produced additional cultural material, nor did any of the STs excavated in the immediate vicinity on the initial 15-meter grid.

Area J: Of the 20 STs investigated in Area J, only a single ST was positive for historical material (Figure 19). ST 186 was placed in the location of a historical "dump" episode. This ST contained a significant amount of bottle glass dating to the turn of the twentieth century. No associated features or standing structures were identified during the field examination.

Areas C, D, F, G, H, and I: No concentrations of historical material, features, or evidence of a distinct historical ground surface were identified in any of the STs examined in Areas C, D, F, G, H, and I (Figure 19). Two STs were examined near the location of the possible ice house in Area C. Disturbed soils were noted on both sides of the standing structure (Appendix B). Although a nearby foundation was discovered outside of the APE near Area I, the STs examined did not produce any distinct historical materials that could be attributed to the nearby foundation (Appendix C; Photograph 60).

### IX. RESULTS OF LABORATORY ANALYSIS/INTERPRETATION

#### Precontact Site

Identified in the yard adjacent to the 1860s-1870s Gracemere Hall, a small cluster of precontact artifacts were recovered from four individual STs (Appendix D). They include a smoky gray quartz Untyped stemmed projectile point that bore evidence of basal grinding, one quartz secondary flake, a quartz bifacial scraper, and a quartz core. Although the point could not definitively be assigned to a specific projectile point typology, it is similar in style and form to small stemmed points that date to the Late Archaic through Early Woodland periods, although it is somewhat longer than typical small-stemmed points (47 millimeters or 1.5 inches).

### Historical House Site (Sheldon Avenue House Site)

The Sheldon Avenue Historic Site was located in Area A, at the northeast corner of the project APE adjacent to Sheldon Avenue (Figure 19). During the initial site reconnaissance, a foundation of a small dwelling was observed (Photograph 51). Additionally, remnants of a nearby stone wall were noted during field testing. Documentary research confirmed that a historical farm/domestic compound once stood where the site was encountered (see Figures 6-7). The majority of the historical artifacts recovered from this location were found within the foundation (ST 13). Much of the assemblage appears to date from the late nineteenth through the early twentieth century (Appendix C). The majority of the recovered materials are glass fragments from bottles and/or jars. These include pharmaceutical bottles, liquor bottles, fruit jars and milk bottles. Of the milk bottles recovered, several fragments were from the "Dairymen's League Cooperative Company" and date to ca.1907. A limited number of ceramics were recovered including one fragment of a ceramic plate with the makers mark "John Maddock & Sons" that dates to the last quarter of the nineteenth century (<a href="http://www.thepotteries.org/mark/m/maddock.html">http://www.thepotteries.org/mark/m/maddock.html</a>). The assemblage also contained a small amount of food remains (bone), enameled pan fragments, and a few personal items (see Appendix C). The collection is clearly part of a larger domestic debris field that represents the time period when the former house was demolished and the interior foundation partially filled.

## Historical House Site (Schneider House)

A historical domestic site (the Schneider House) was identified in Area B and examined during the archaeological investigation of the APE (Figure 19). Although the ground surface in this location contains a scatter of modern artifacts, historical material dating from the occupation of the former dwelling was recovered from the STs (Appendix C). The assemblage at the Schneider house contains a number of glass and ceramic fragments, similar to the nearby Sheldon Avenue Historic House. One fragment of particular note is the base of a vessel with a makers mark "The Potter's Cooperative Co. East Liverpool Ohio, USA," which was used from 1882-1925. Many of the bottle fragments in the collection appear to be machine made early twentieth century embossed pieces. Among the collection was a fragment of a bisque German doll's head dating to the last quarter of the nineteenth century. In summary, the small assemblage recovered contains a variety of domestic refuse that dates from the late-nineteenth through early twentieth century

## Historical House Site (Gracemere)

As noted earlier in this report, Gracemere Hall, constructed in the late 1860s or early 1870s, is within Area E of the project site (Photographs 22 and 23). The collection of artifacts that was recovered from the STs surrounding the house was surprisingly limited in the amount recovered. In fact, no artifact concentrations or features associated with the house were found. The lack of diagnostic material dating to the nineteenth century might indicate that a

significant amount of landscaping (earth moving) activities took place around much of the surrounding yard area that impacted the "A horizon" soils.

### X. PHASE IB CONCLUSIONS AND RECOMMENDATIONS

During the field examination one precontact site and three historical sites were identified (Figure 19). These sites include the Sheldon Avenue Historic Site (Area A), the Schneider Historic Site (Area B), and the combined Gracemere Historic/Precontact sites (Area E). Throughout the entire site, modern artifacts were observed on the surface attesting to the fact that much of the site had been utilized as an unofficial dumping and hiking area during the late twentieth century.

#### Precontact Resources

Phase IB excavations at the Jardim property recovered a total of six precontact artifacts from six individual STs (Appendix D). The small clustering of lithics recovered in and around ST 111in Area E (Figure 19) may represent a more intensive use of the site, and warrants further investigation in the form of Phase II testing (see Appendix E: New York State Prehistoric Archaeological Site Inventory Form). Additional STs should be placed in a grid at a five-meter interval out from ST 111 to determine the extent and nature of the deposit. In addition, at least two EUs should be excavated in the immediate vicinity of the four positive STs, including ST 111, to further address the nature of the lithic cluster.

The extremely low frequency of artifacts found across the rest of the project site demonstrates that the remainder of the APE lacks potentially significant precontact deposits. No additional testing is warranted for any of the other Areas studied, as none of the Areas have deposits that could potentially address pertinent research issues.

If there is a change to the development plans that results in subsurface disturbance to locations outside of the APE that was established when field testing was undertaken (see Figures 3a, 3b, and 19), then additional field testing would be warranted for those locations as well.

#### Historical Resources

The ten Areas examined during the Phase 1B field investigation were characterized by a variety of topographic environments including the relatively level former yards and gardens, rocky knolls, and fringes around inundated locales. Across the site numerous remains of the twentieth century use of the site were observed mixed with the evidence of late twentieth century demolition and dumping activities. Within the APE, three distinct historical sites were identified during the field examination (see Appendix E: New YORK STATE HISTORIC ARCHAEOLOGICAL SITE INVENTORY FORMS).

### Historical House Site (Gracemere)

As noted earlier in this report, Gracemere Hall, constructed in the late 1860s or early 1870s, is within Area E of the project site (Photographs 22 and 23). Although historic maps depict the building as early as 1875, no clear evidence of a nineteenth century living surface was identified during the Phase 1B field examination. It appears that the upper strata was disturbed and modified during the twentieth century, negating the likelihood of recovering associated artifact concentrations or features. Therefore, no additional field testing is recommended for historical resources in this location.

#### Historical House Site (Sheldon Avenue House Site)

The Sheldon Avenue Historic Site was located in Area A, at the northeast corner of the project APE adjacent to Sheldon Avenue (Figure 19). During the initial site reconnaissance, a foundation of a small dwelling was observed (Photograph 51). Additionally, remnants of a nearby stone wall were noted during field testing. Documentary research confirmed that a historical farin/domestic compound once stood where the site was encountered (see Figures 6-7). The majority of the historical artifacts recovered from this location were found within the foundation of the existing cellar hole. The site was occupied from the mid-nineteenth century to the early twentieth century.

The presence of the intact foundation with associated artifacts indicates the need for Phase II field testing prior to any development of this location.

# Historical House Site (Schneider House)

Within Area B, a historical domestic site was examined during the 1B investigation (Figure 19). Research found that this portion of the APE was occupied by John Schneider from the 1860s through ca. 1910. The longevity of the Schneider occupation and the presence of the remainder of the dwelling foundation also warrants further investigation in the form of Phase II testing prior to any development of this location.

If undisturbed deposits of cultural material do still exist in the former yard areas surrounding the Sheldon Avenue and Schneider houses, they may have the potential to provide meaningful information regarding the historical use of the site, and more importantly, about the lives of the people who lived there. When recovered from their original context and in association with a specific historical occupation, historical deposits can provide a wealth of information about consumption patterns, consumer choice, economic status, and other important issues. They can begin to provide a glimpse into the lives of the former occupants of the site. Therefore, the examination of this site has the potential to provide data on domestic/agricultural life in this portion of Westchester County from the mid nineteenth through the early twentieth century.

In order to understand the behavior of past peoples, archaeologists rely on locating undisturbed resources that can be associated with a specific group or individual during a particular time period. Evaluating the significance of historical archaeological resources hinges on two factors: the integrity of the potential features, and if associations with individuals and/or specific groups can be made. It is possible that the archaeological examination of the domestic site can reveal information pertinent data about the former occupants. Because of the somewhat elusive nature of these domestic resources and the fact that only a limited number of sites from this period along the post-road are likely to have survived subsequent development, it is vital that the remaining sites where potential resources may be present are studied. The recovery of intact resources is very likely to yield new information pertaining to land use, settlement patters, socioeconomic status/class patterns, ethnic patterns (potentially), trade and commerce patterns and consumer choice issues.

Archaeologists have found that former residential sites are often sensitive for shaft features, such as privies, wells, and cisterns. In addition, yard scatter and artifact concentrations associated with the domestic population might also yield meaningful data. At the historical domestic site identified in the APE, portions of the yard area appear to have been disturbed and may not yield undisturbed yard scatter, but there is the potential for shaft features to have remained undisturbed.

If they will be impacted by project development, additional archaeological consideration, or Phase II fieldwork, is recommended for the two house sites in order to further elucidate the extent and integrity of the existing resources. Phase II testing would be carried out on the site in order to gather enough data to make a determination of eligibility for listing on the National Register of Historic Places. The Phase II investigation includes completing additional background research (e.g., deed and census information; reviewing regional museum collections) and the additional excavation of 50 x 50 centimeter STs (placed at closer intervals) in order to define horizontal boundaries of cultural deposits. Once this is complete, a series of larger 1 x 1 meter excavation units are placed in those areas with the greatest concentration of cultural resources.

#### Historic Structures

HPI also recommends that if requested by the NYSOPRHP, formal survey and/or National Register of Historic Places evaluation of the architectural resources on the project site be undertaken prior to any modifications or demolition of structures on the project site.

### X. REFERENCES

Beers, Elias Soule

1867 Atlas of New York and Vicinity. E. Beers and Company, New York.

1868 Atlas of New York and Vicinity. E. Beers and Company, New York.

1891 Atlas of Westchester County, Beers and Company, New York.

Birks, Steve, ed.

North Staffordshire Pottery Companies and Trade Marks. http://www.thepotteries.org/mark/m/maddock.html.

Bromley, George Washington

1881 Atlas of Westchester County, Village of Tarrytown. George W. and Walter S. Bromley. G.W. Bromley and Company, Philadelphia.

1901 Atlas of Westchester County, New York. George W. and Walter S. Bromley. G.W. Bromley and Company, Philadelphia.

1914 Atlas of Westchester County and Vicinity. G.W. Bromley and Co., Philadelphia.

Canning, Jeff and Wally Buxton

1975 History of the Tarrytowns. Harbor Hill Books, Harrison, New York.

Carpenter, Ward and Son

1875 Map of Tarrytown and Irving, New York.

1880 Map of Tarrytown, New York.

1890 Map of Land at Tarrytown, N.Y. Belonging to the Estate of Robert Graves, Decd. Filed in the Westchester County Register's Office.

Couzens, M.K.

1880 1785 Map of Part of the Manor of Philipsburgh in the County of Westchester, New York, Traced from an Original Map Dated 1785. Drawn and Compiled by M.K. Couzens. Repository: Westchester County Historical Society, Elmsford, New York.

French, Alvah P.

1925 History of Westchester County, New York. Two volumes. Lewis Historical Publishing Company, New York.

Hopkins, G.M. Company

1936 Atlas of Westchester County, New York. Hopkins Company, Philadelphia. Original map of 1929, updated 1936, 1937.

Isachsen, Y.W., E. Landing, J.M. Lauber, L.V. Rickard and W.B. Rogers, eds.

1991 Geology of New York: A Simplified Account. Educational Leaflet No. 28. The New York State Museum/Geological Survey, The University of the State of New York. The State Education Department, Albany, New York.

Losee, James R.

1936 Map of Proposed Subdivision of a Portion of the H.K. Browning Estate. On file at the Westchester County Land Office, White Plains.

Mascia, Sara

2002 Stage 1A Archaeological Assessment and Stage 1B Field Survey, Jardim Estates, Tarrytown, New York. Prepared by Historical Perspectives, Inc. for Saccardi & Schiff, Inc.

2003 Stage 2 Field Survey, Jardim Estates, Tarrytown, New York. Prepared by Historical Perspectives, Inc. for Saccardi & Schiff, Inc.

Merry, F. C.

1858 Map of Westchester County, New York. Published by M. Dripps, New York.

Moore, Marcia

1978 "Village notebook." Lifestyles section, *The Daily News*. February 2, 1978. On file at the Tarrytown Historical Society.

New York Archaeological Council (NYAC)

1994 Standards for Cultural Resource Investigations and the Curation of Archaeological Collections. New York Archaeological Council.

New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP)

2005 Phase I Archaeological Report Format Requirements.

North Staffordshire Pottery Companies & Trade Marks. http://www.thepotteries.org/mark/

Parker, Arthur C.

1920 "The Archaeological History of New York." New York State Museum Bulletin. Nos. 235, 236. The University of the State of New York, New York State Museum, Albany, New York. July and August, 1920.

Sanborn Insurance Company

1950 Insurance Maps of Greenburgh, New York: Tarrytown.

Scharf, Thomas J.

1886 History of Westchester County, New York. L. E. Preston & Co., Philadelphia.

Schuberth, Christopher J.

1968 The Geology of New York City and Environs. Garden City, New York: National History Press.

Sidney and Neff

1851 Map of Westchester County, New York. Published by Newell S. Brown, White Plains. On file at the Mount Kisco Public Library.

Town and Country

1904 ""Gracemere" on the Hudson. Mr. Harry Campbell Graef's Beautiful Estate at Tarrytown and Example of a Fine Old Home Successfully Modernized.' August 6, 1904.

United States Department of Agriculture (U.S.D.A.)

Web Soil Survey. Available online at <a href="http://websoilsurvey.nrcs.usda.gov/">http://websoilsurvey.nrcs.usda.gov/</a>. Accessed February 12, 2008. Natural Resources Conservation Service, United States Department of Agriculture.

United States Federal Census

1860 Greenhurgh, Westchester County, New York.

1870 Greenburgh, Westchester County, New York,

1880 Greenburgh, Westchester County, New York.

### United States Federal Census

- 1900 Greenburgh, Westchester County, New York.
- 1910 Greenburgh, Westchester County, New York.
- 1920 Greenburgh, Westchester County, New York.
- 1930 Greenburgh, Westchester County, New York.

# United States Geological Survey (U.S.G.S.)

1979 White Plains, New York 7.5 Minute Quadrangle.

### Westchester County Land Records

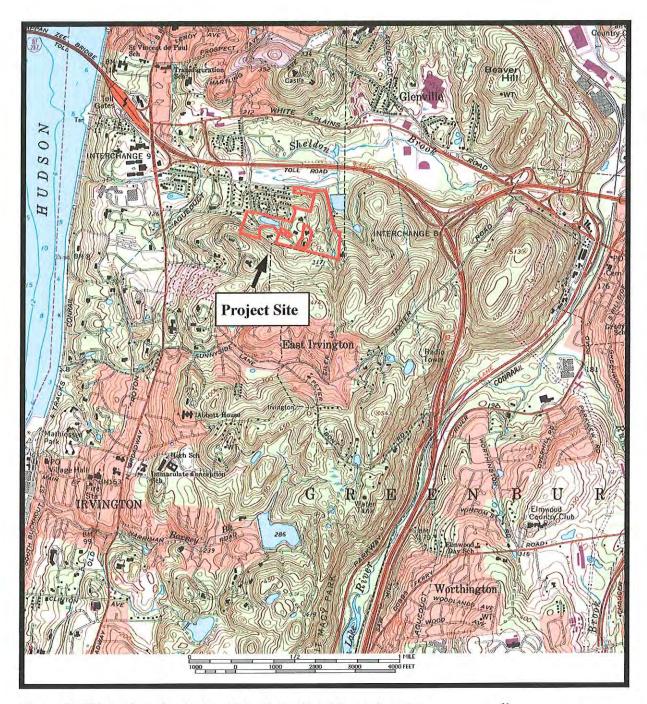
- 1855 Liber 313, page 282. Campbell to Kingsland.
- 1856 Liber 342, page 7. Kingsland to Graves.
- 1865 Liber 558, page 371. Harriman to Shnider.
- Liber 1199, page 158. Barrett (referee for Graves) to Graef.
- 1907 Liber 1823, page 314. Graef to Browning.
- 1918 Liber 2169, page 316. Schneider to Marschke.
- 1975 Liber 07285, page 00375. Kocher to Holy Spirit Association for the Unification of World Christianity.
- 1976 Liber 07307, page 00694. Kocher to Holy Spirit Association for the Unification of World Christianity.

## Wulff, Edward

1900 Map of the Village of Tarrytown, New York.

# Yasinac, Robert

2000 <a href="http://www.hudsonvalleyruins.org/yasinsac/gracemere/gracemere.html">http://www.hudsonvalleyruins.org/yasinsac/gracemere/gracemere.html</a>. Accessed April 2, 2008.



Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East Sheldon Avenue, Village of Tarrytown, Westchester County, NY





Figure 1: Project site on White Plains, New York 7.5 Minute Quadrangle (U.S.G.S. 1979).

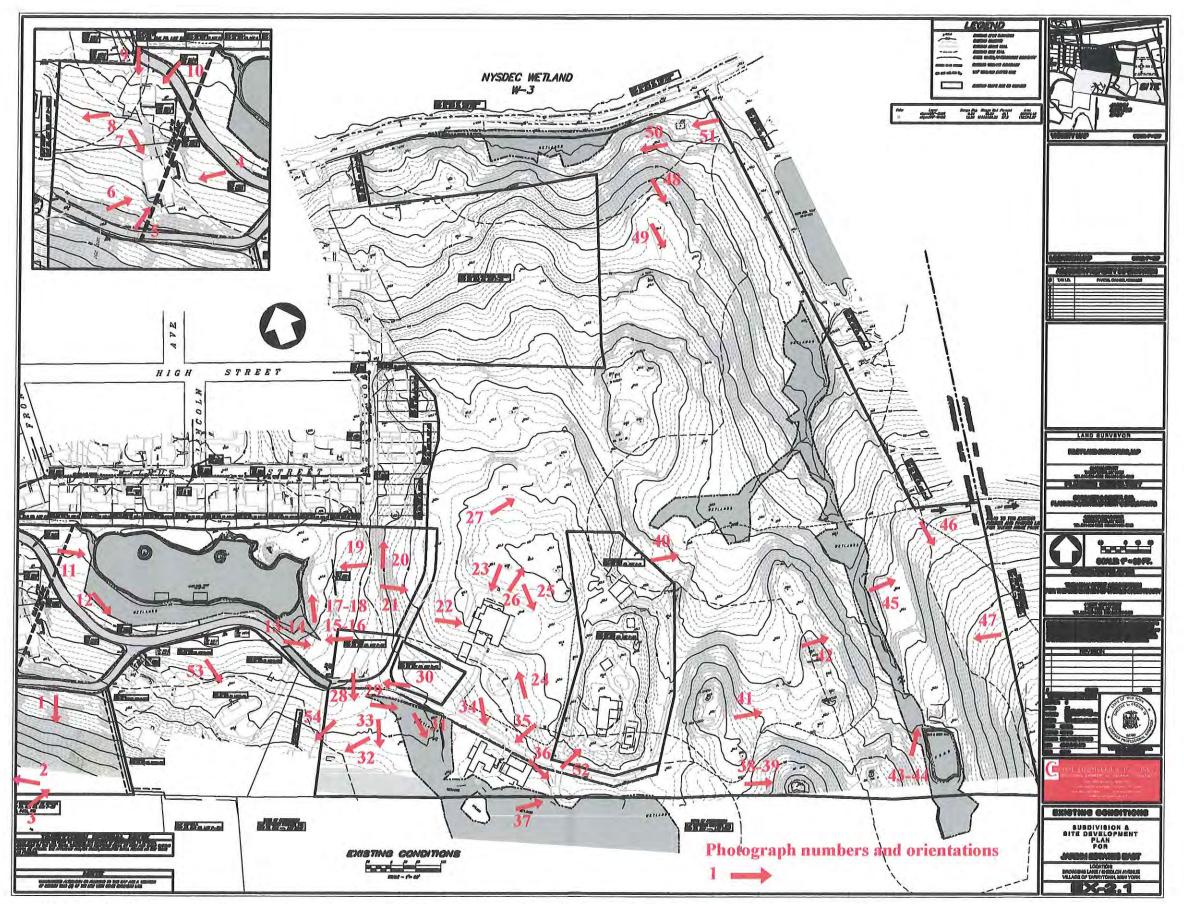


FIGURE 2: Project site and photograph locations on modern survey map (Cronin Engineering and Historical Perspectives 2008).

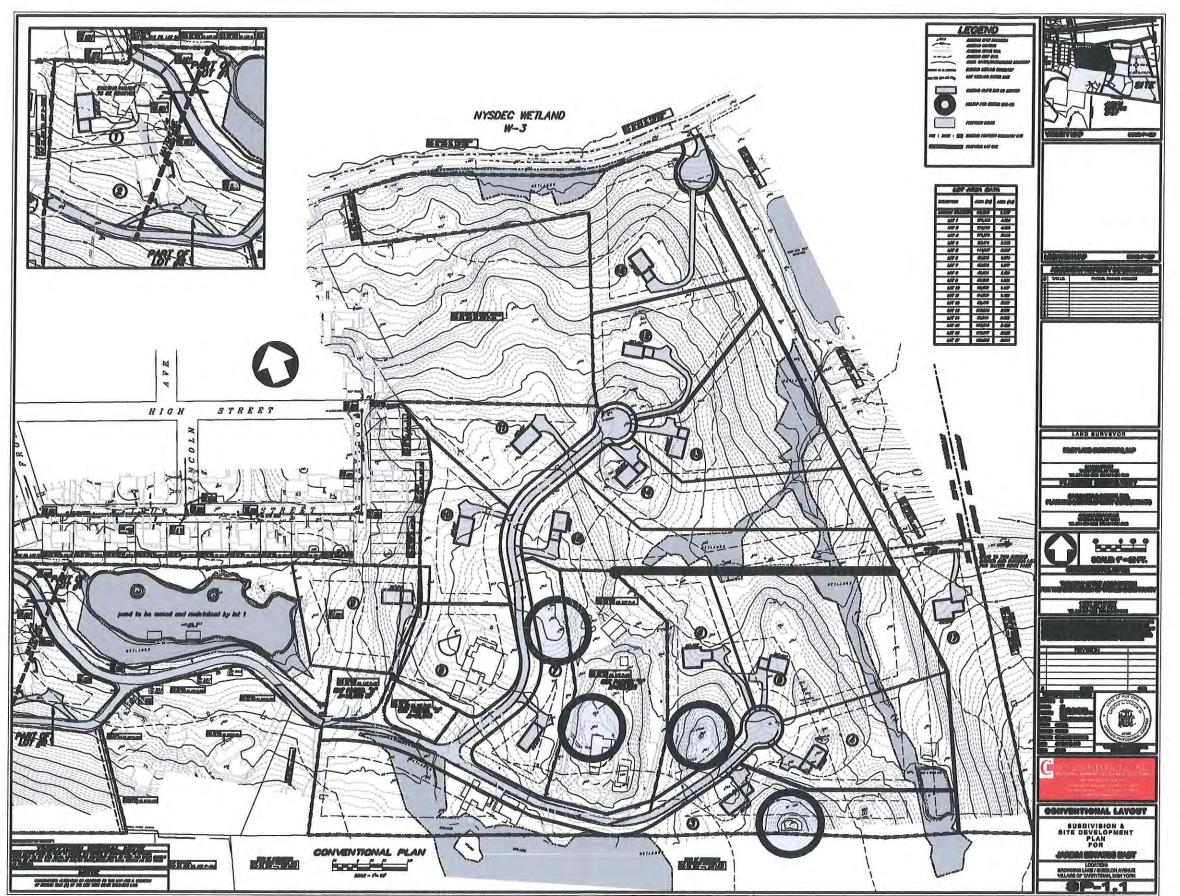


Figure 3a: Proposed project development (conventional layout) on modern survey map (Cronin Engineering 2008).

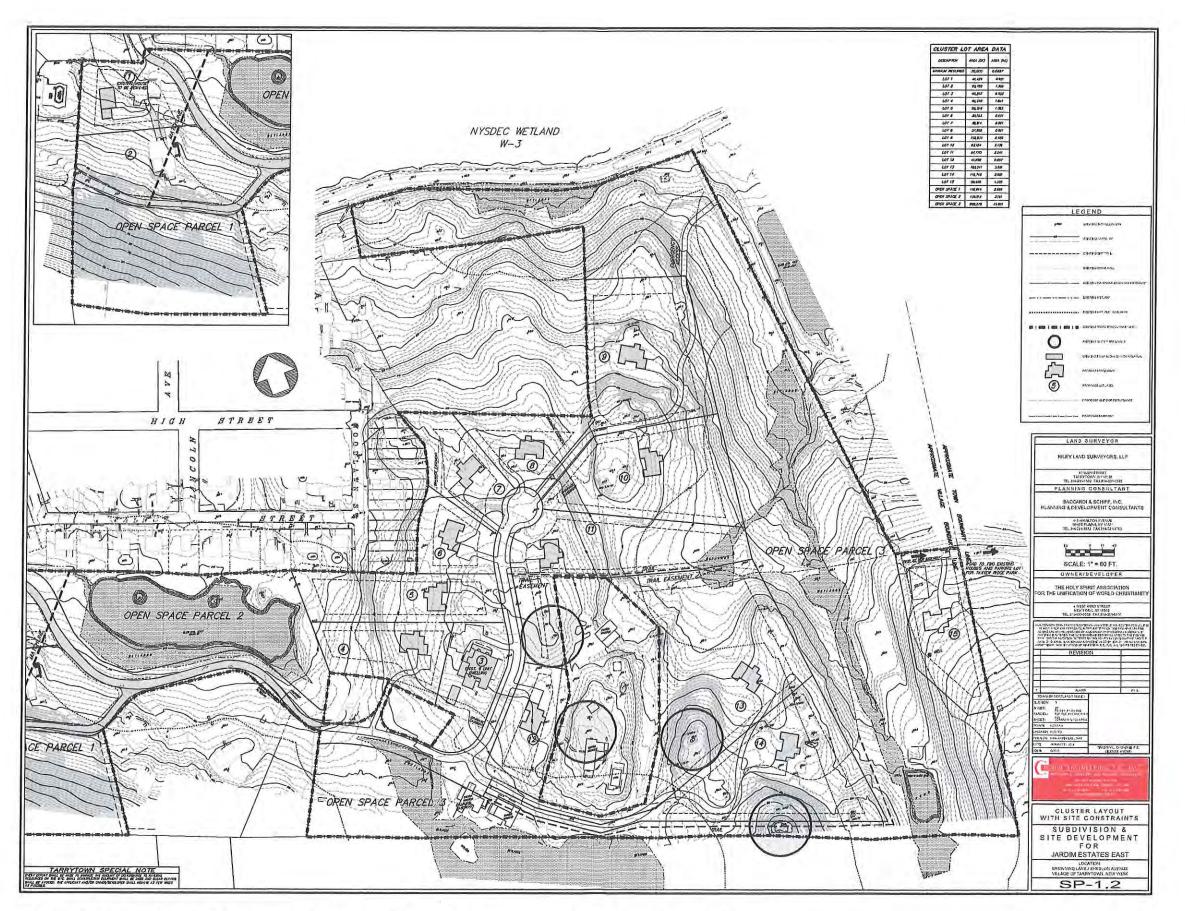
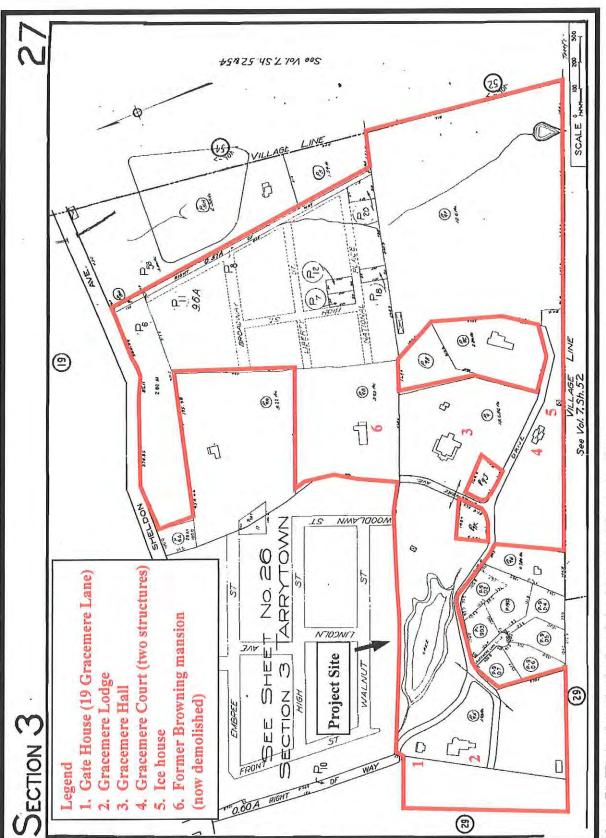


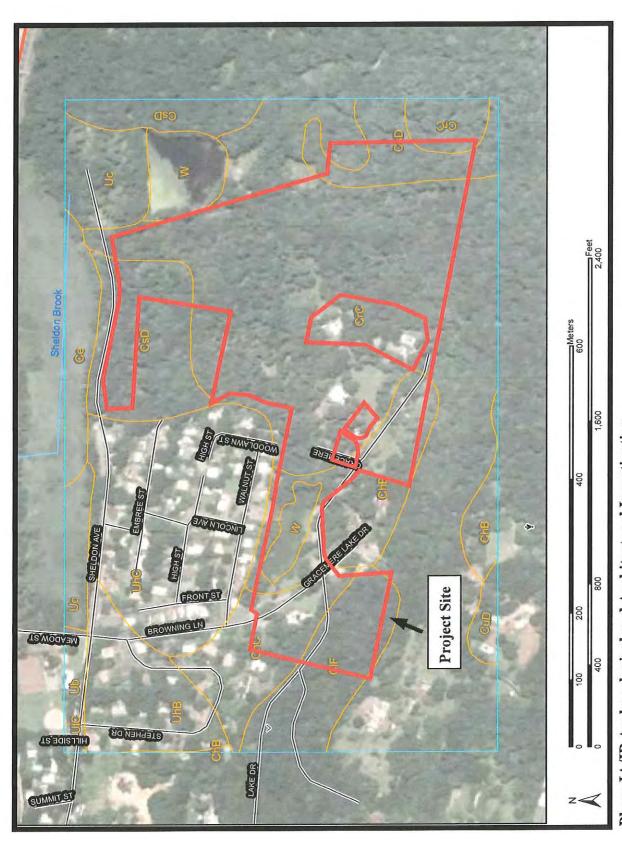
Figure 3b: Proposed project development (cluster layout) on modern survey map (Cronin Engineering 2009).



Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East Sheldon Avenue, Village of Tarrytown, Westchester County, NY



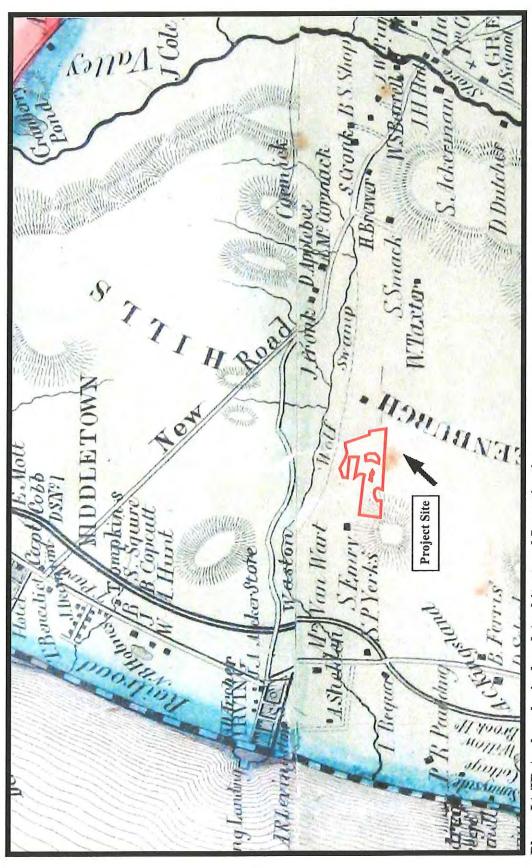
Figure 4: Project site and standing structures on tax map (Village of Tarrytown n.d.)



Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East Sheldon Avenue, Village of Tarrytown, Westchester County, NY



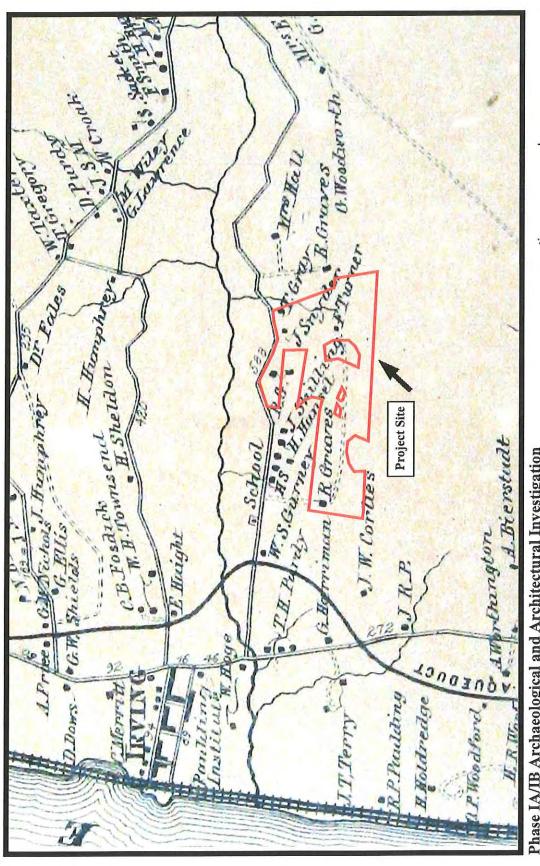
Figure 5: Project site on web soil survey map (U.S.D.A. 2008)



Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East Sheldon Avenue, Village of Tarrytown, Westchester County, NY

A A A

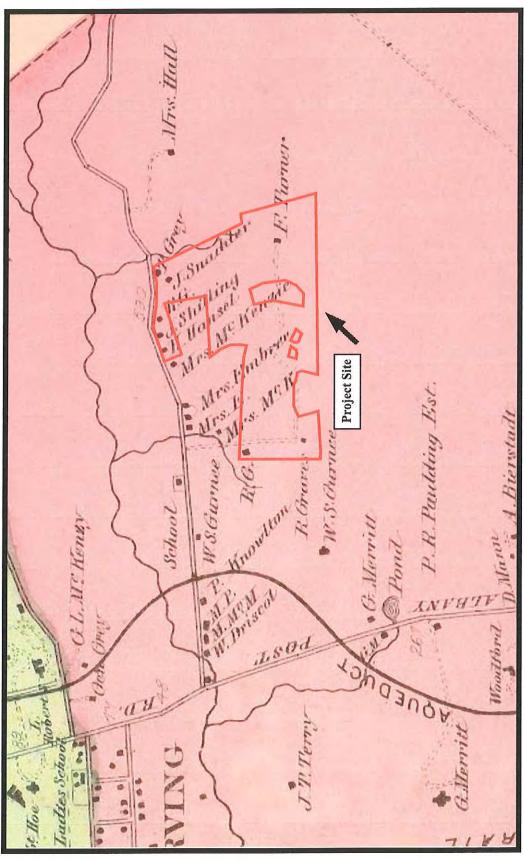
Figure 6: Map of Westchester County, New York (Sidney and Neff 1851)



Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East Sheldon Avenue, Village of Tarrytown, Westchester County, NY



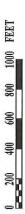
Figure 7: Atlas of New York and Vicinity (Beers 1867)

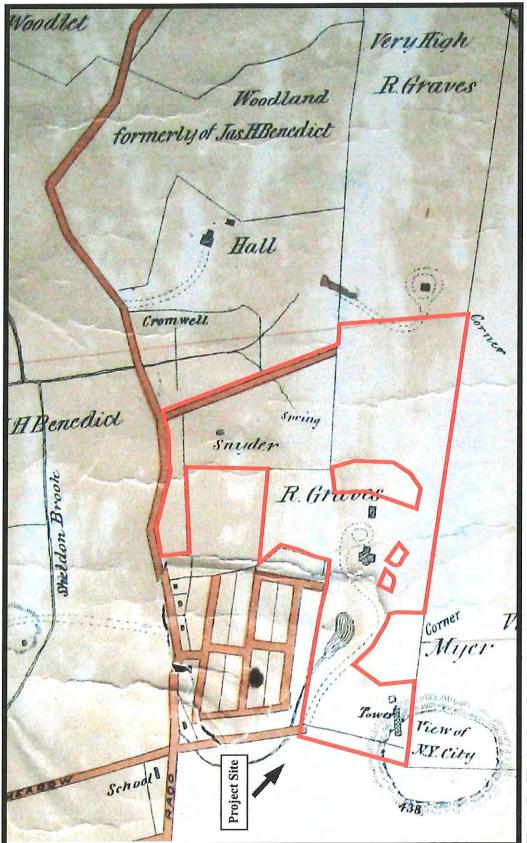


Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East Sheldon Avenue, Village of Tarrytown, Westchester County, NY

Figure 8: Atlas of New York and Vicinity (Beers 1868)



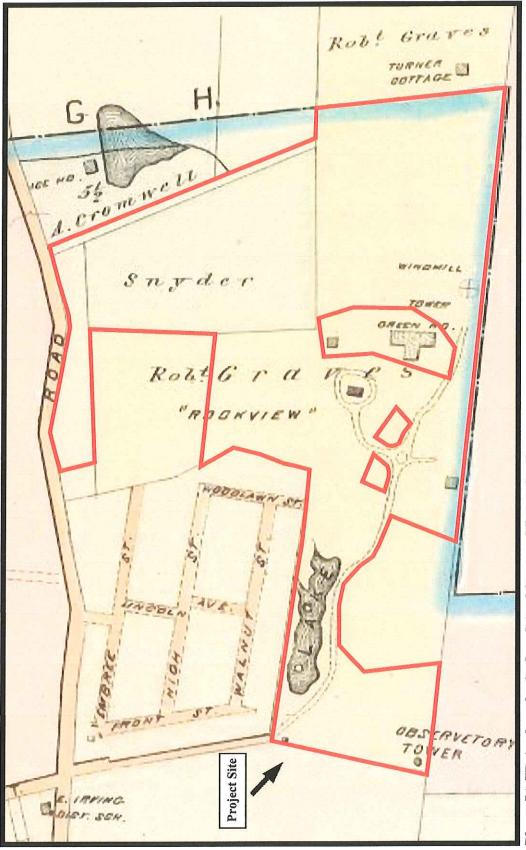




Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East Sheldon Avenue, Village of Tarrytown, Westchester County, NY

Figure 9: Map of Tarrytown, New York (Carpenter 1880)





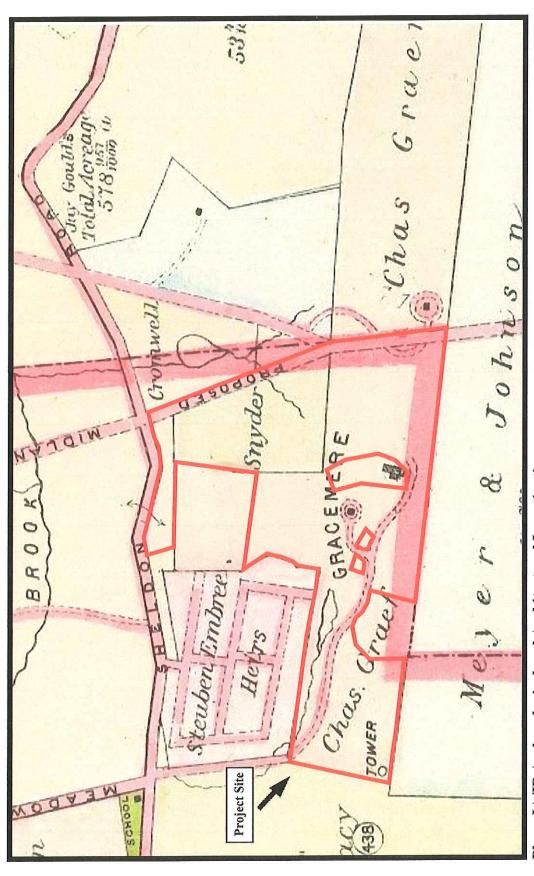
Sheldon Avenue, Village of Tarrytown, Westchester County, NY Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East

Figure 10: Atlas of Westchester County, Village of Tarrytown (Bromley 1881)







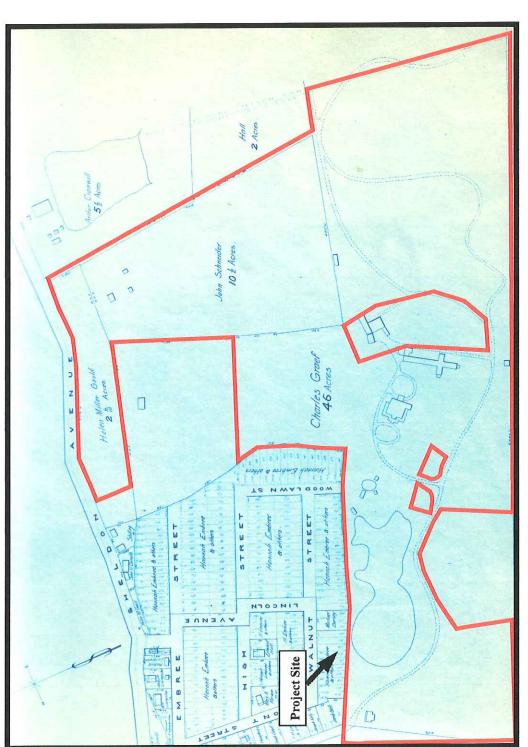


Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East Sheldon Avenue, Village of Tarrytown, Westchester County, NY



Figure 11: Atlas of Westchester County (Beers 1891)





Sheldon Avenue, Village of Tarrytown, Westchester County, NY Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East

Figure 12: Map of the Village of Tarrytown, New York (Wulff 1900)

400

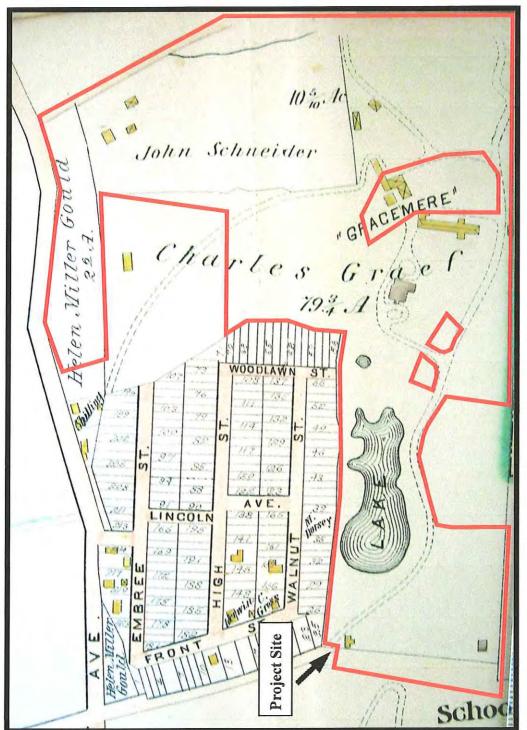
300

200

0 100







Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East Sheldon Avenue, Village of Tarrytown, Westchester County, NY

Figure 13: Atlas of Westchester County, New York (Bromley 1901)

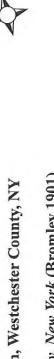
500 FEET

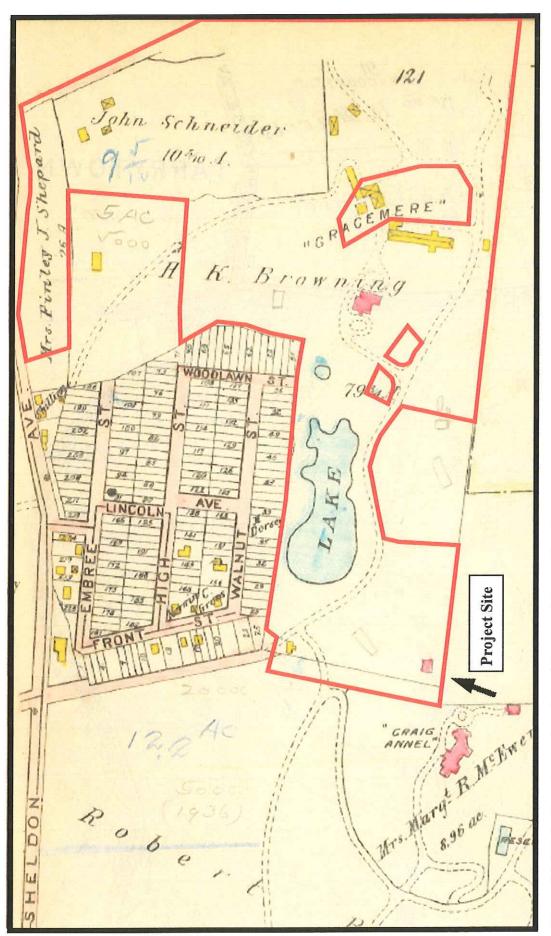
400

300

200

0 100





Sheldon Avenue, Village of Tarrytown, Westchester County, NY Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East

Figure 14: Atlas of Westchester County and Vicinity (Bromley 1914) [note: adjacent sheet to east shows no development on APE]

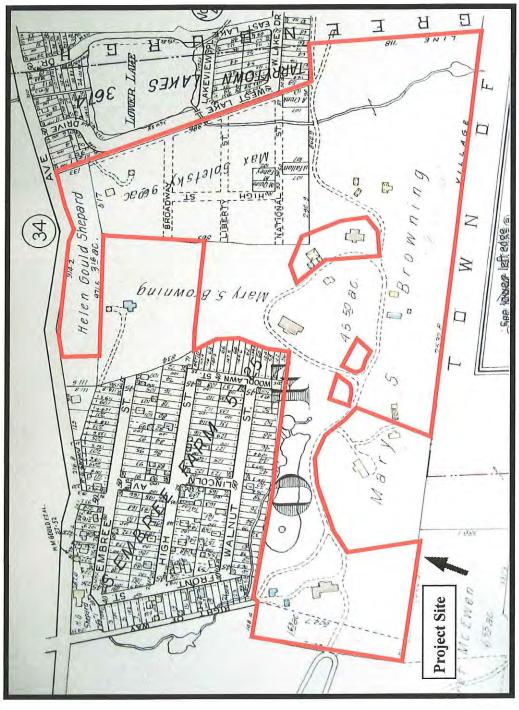
500 FEET

200

0 100





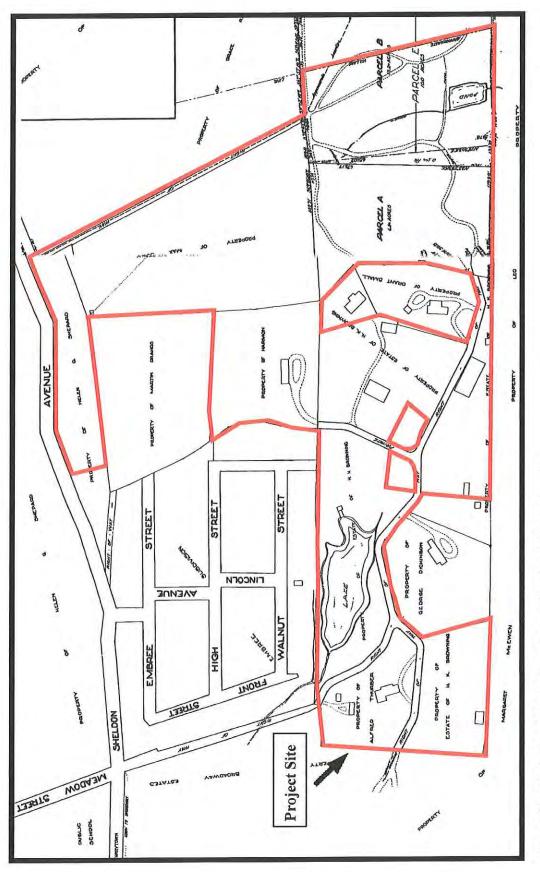


Sheldon Avenue, Village of Tarrytown, Westchester County, NY Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East



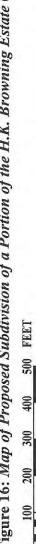


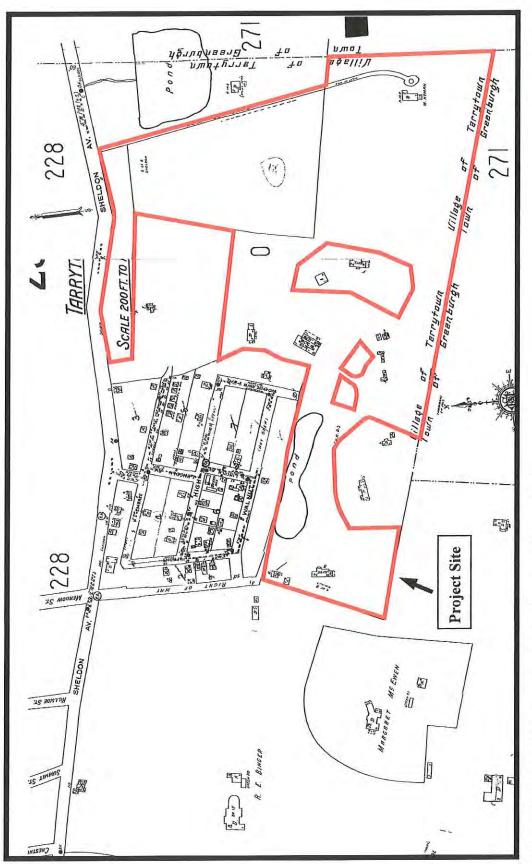
Figure 15: Atlas of Westchester County, New York (Hopkins 1936)



Sheldon Avenue, Village of Tarrytown, Westchester County, NY Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East

Figure 16: Map of Proposed Subdivision of a Portion of the H.K. Browning Estate (Losee 1936)





Sheldon Avenue, Village of Tarrytown, Westchester County, NY Phase IA/IB Archaeological and Architectural Investigation Jardim Estates East

Figure 17: Insurance Maps of Greenburgh, New York (Sanborn 1950) [note: some buildings are not precisely located]







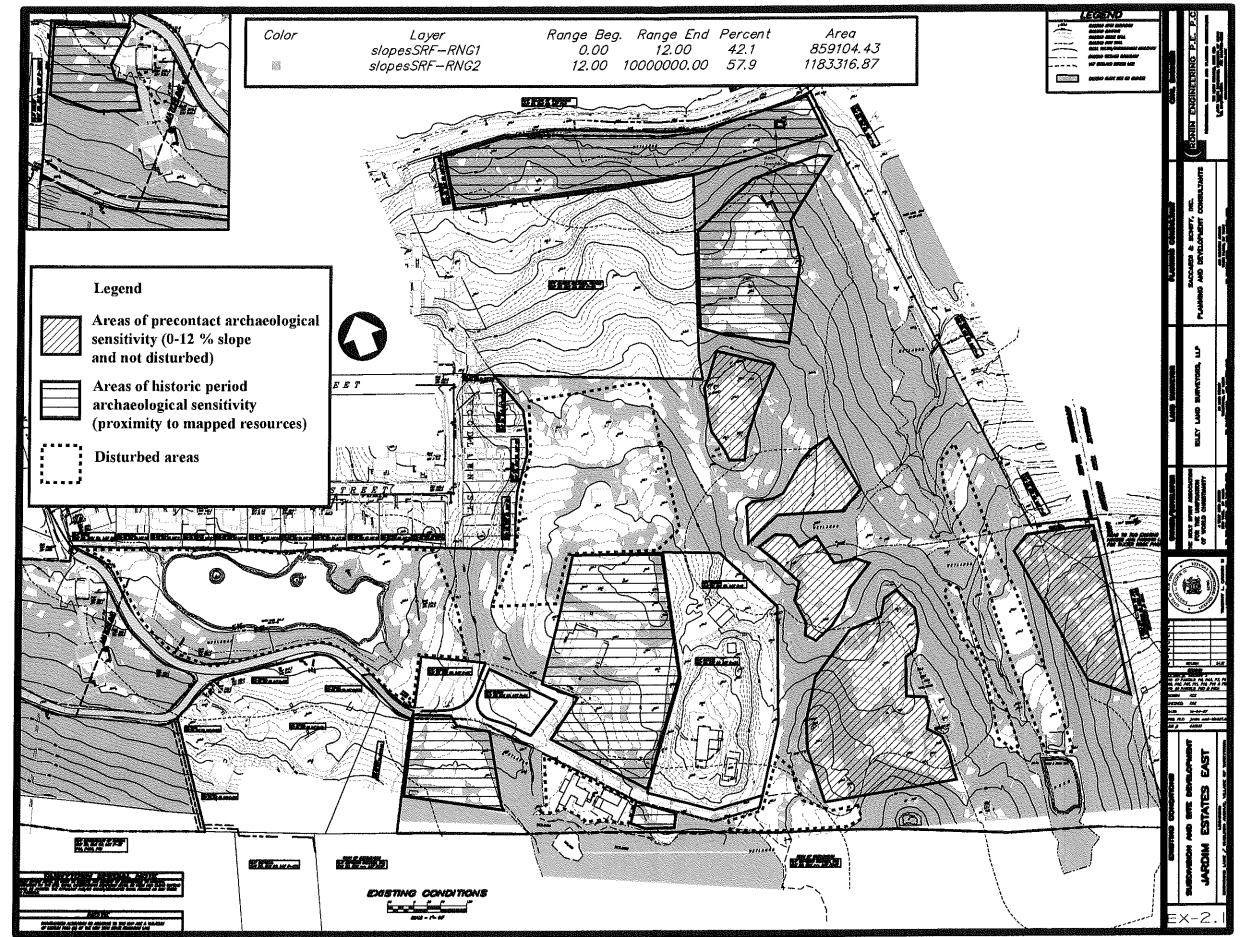
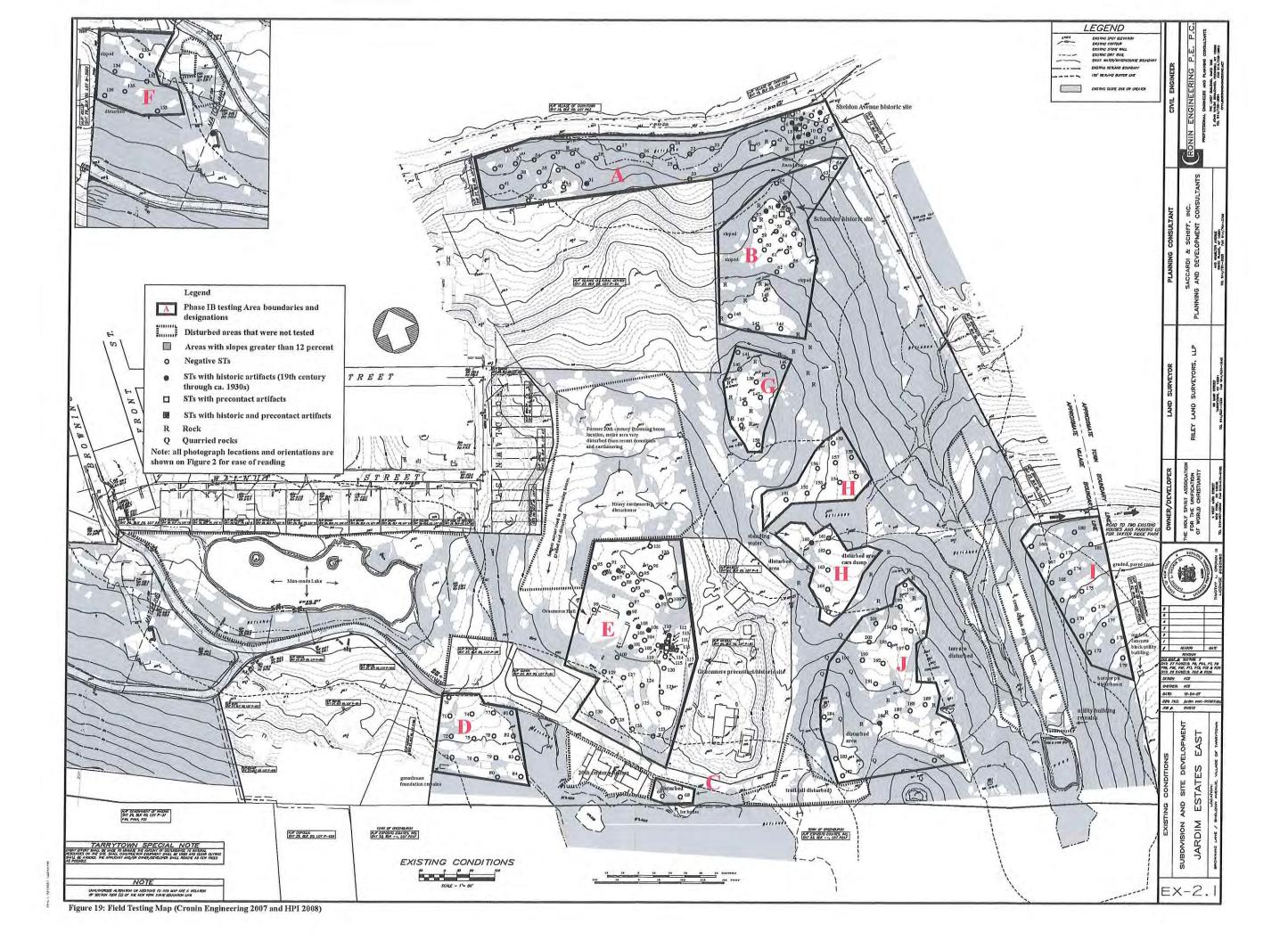
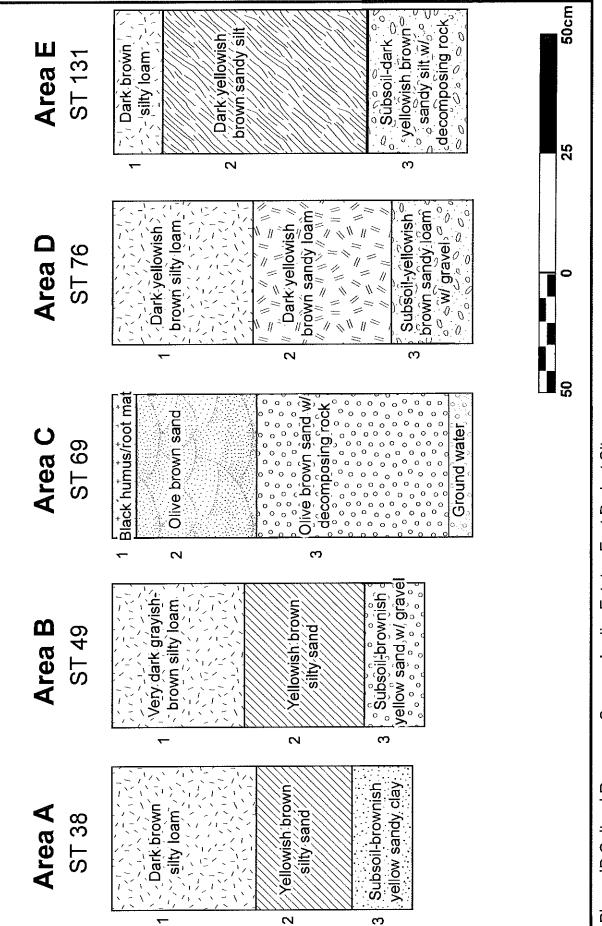


Figure 18: Computer-generated map showing approximate areas of project site with 0-12 percent slopes and archaeological sensitivity (Cronin Engineering 2007 and HPI 2008).

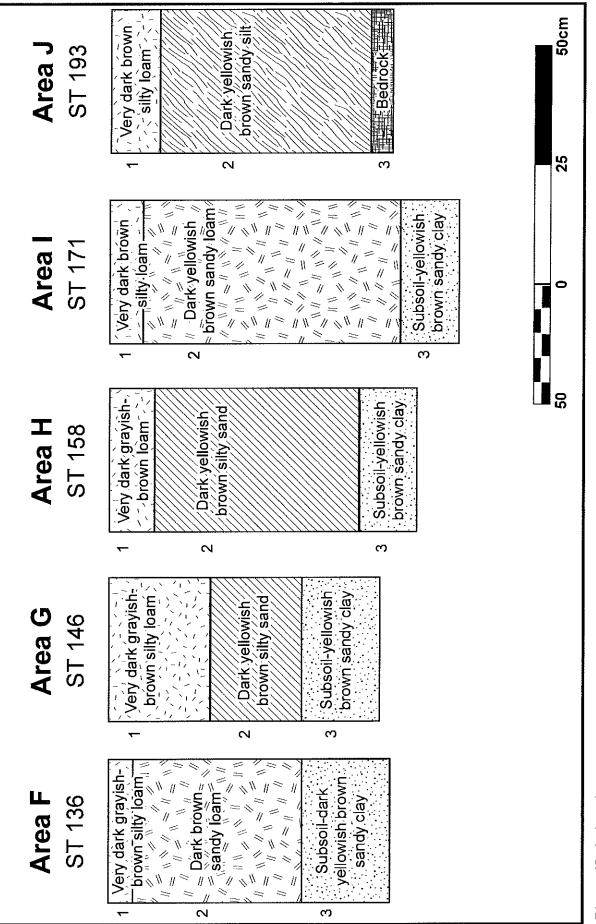




Sheldon Avenue, Village of Tarrytown, Westchester County, New York Phase IB Cultural Resource Survey, Jardim Estates East Project Site

Figure 20: Typical Soil Profiles for Areas A-E.

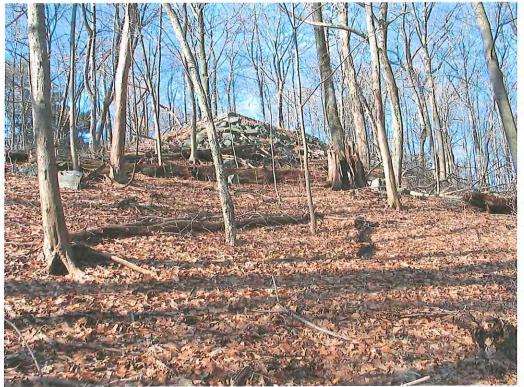




Sheldon Avenue, Village of Tarrytown, Westchester County, New York Phase IB Cultural Resource Survey, Jardim Estates East Project Site

Figure 21: Typical Soil Profiles for Areas F-J.





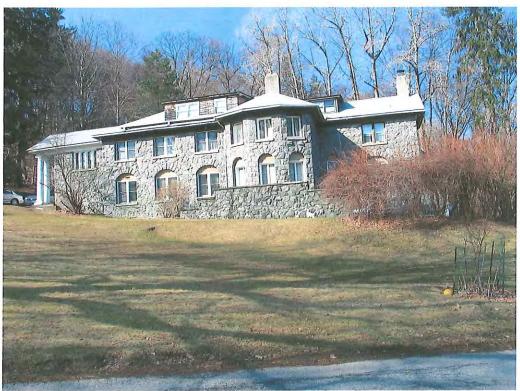
Photograph 1: Southwest corner of project site, showing steep slopes leading to large stone reservoir on hilltop. View looking southwest from roadway.



Photograph 2: Stone reservoir on top of hill at southwest corner of project site. View looking north from edge of reservoir.



Photograph 3: Square pumping chamber on east side of stone reservoir at southwest corner of project site. View looking northeast from edge of reservoir.



Photograph 4: Eastern (front) façade of "Gracemere Lodge" at western end of project site. View looking west from roadway.



Photograph 5: Southern (side) façade of "Gracemere Lodge" at western end of project site. View looking northeast from roadway.



Photograph 6: Western (rear) façade of "Gracemere Lodge" at western end of project site. View looking northeast from rear of house.



Photograph 7: North (side) façade of "Gracemere Lodge" at western end of project site. View looking south from side yard of house.



Photograph 8: Vacant area behind "Gracemere Lodge" shown in photographs 4-7. View looking west from rear yard.



Photograph 9: North (front) façade of "Gate House" just north of "Gracemere Lodge" shown in photographs 4-7. View looking south from roadway.



Photograph 10: North (front) and east (side) façades of "Gate House" just north of "Gracemere Lodge" shown in photographs 4-7. View looking southwest from roadway.



Photograph 11: "Gracemere Lake" and landscaped area surrounding it. Houses in background are off the project site. View looking southeast from Gracemere Lane.



Photograph 12: Landscaped and graded area on south side of "Gracemere Lake," with Gracemere Lane on right. View looking southeast from Gracemere Lane.



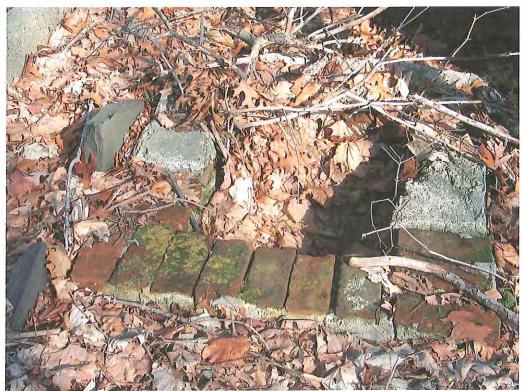
Photograph 13: Stone semicircular basin set into ground and channeling water from drainage towards "Gracemere Lake." View looking southeast from near southeastern edge of lake.



Photograph 14: Southeastern edge of "Gracemere Lake" showing two water channels running down the hill into the lake. House in right background is off the project site. View looking southeast from near southeastern edge of lake.



Photograph 15: Small stone arched walkway or "bridge," which may overlay one of the pipes leading to "Gracemere Lake." View looking northwest from near southeastern edge of lake.



Photograph 16: Small, rectangular shaped brick chamber, possibly a dry well, located northeast of stone arch shown in previous photograph. View looking northwest from near southeastern edge of lake.



Photograph 17: Concrete lined channel running along the east side of the lake to a large oval-shaped fieldstone and concrete lined feature, in left background. View looking northeast from near southeastern edge of lake.



Photograph 18: Large oval-shaped fieldstone and concrete lined feature, which appears to have drained into the lake. Concrete channel shown in previous photograph is in the foreground. View looking northeast from near southeastern edge of lake.



Photograph 19: View of large oval-shaped fieldstone and concrete lined feature in previous photograph, showing relationship to lake. View looking northwest from area east of the lake.



Photograph 20: Area east of oval feature shown in previous photographs with ground moderately sloped and likely disturbed from grading or other construction. Houses in background are off project site. View looking northeast.



Photograph 21: Area east of oval feature shown in previous photographs with ground moderately sloped and likely disturbed from grading or other construction. View looking southeast.



Photograph 22: Northwest (front) façade of "Gracemere Hall," the original French Second-Empire style mansion house built on the project site. View looking southeast.



Photograph 23: Northeast (side) façade of "Gracemere Hall." View looking southwest.



Photograph 24: Southeast and southwest (side and rear) façades of "Gracemere Hall," with landscaped grounds in foreground. Note tower on building's southern corner. View looking north.



Photograph 25: Rear yard of "Gracemere Hall" showing extensive landscaping, and remnants of greenhouses surrounding children's play equipment. View looking south.



Photograph 26: Circular garden feature located on northeast side of "Gracemere Hall," with woods in background. View looking northeast.



Photograph 27: Former location of Browning mansion, demolished in 2005. Note extensive disturbance to entire area. View looking northeast.



Photograph 28: Land southwest of Gracemere Lane containing a channelized trough containing the drainage that feeds "Gracemere Lake" bordering the roadway. Note wetland on right. View looking southwest from Gracemere Lane.



Photograph 29: Second view of channelized trough containing the drainage that feeds "Gracemere Lake." "Gracemere Court" is in far background. View looking southeast.



Photograph 30: Culvert carrying channelized trough under Gracemere Lane to the lake. View looking northwest.



Photograph 31: Wet areas southwest of Gracemere Lane. "Gracemere Court" is visible in right background. View looking south.



Photograph 32: Stone foundation remains of a greenhouse, located near southern edge of project site. View looking west.



Photograph 33: Furrows in the ground that probably represent old planting beds, located east of the greenhouse remains shown in the previous photograph. View looking southwest.



Photograph 34: Northwestern façades of the western of the two buildings that comprise "Gracemere Court." View looking south from Gracemere Lane.



Photograph 35: Northeastern façades of the western of the two buildings that comprise "Gracemere Court." View looking southwest from Gracemere Lane.



Photograph 36: North (rear) façade of ice house, located east of "Gracemere Court," and cut into the side of a hill. View looking southeast from Gracemere Lane.



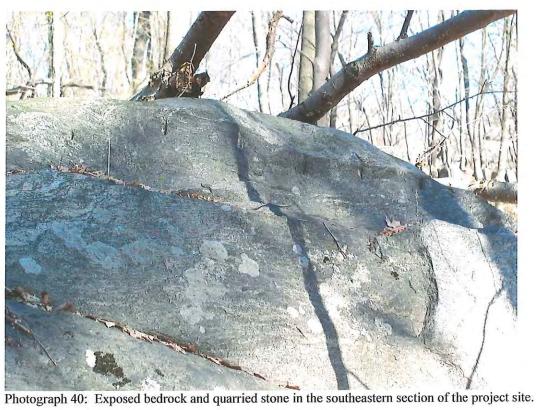
Photograph 37: South (front) façade of ice house. View looking northeast.



Photograph 38: Knoll containing stone and concrete lined reservoir at top. View looking east.



Photograph 39: Interior of stone and concrete lined reservoir shown in previous photograph. View looking east from edge of structure.





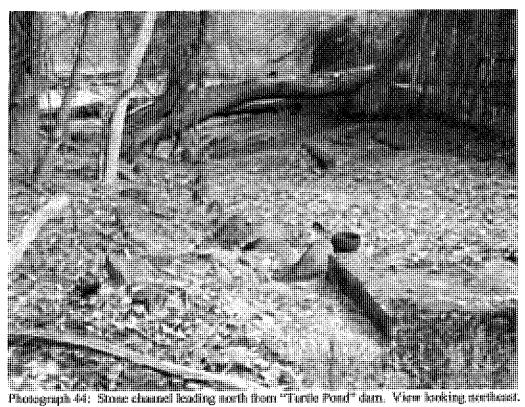
Photograph 41: Example of rolling hills covered by medium density woods on southeastern end of project site. View looking east.



Photograph 42: Perennial tributary of Sheldon Brook running through eastern side of project site. View looking east.



Photograph 63: Concerts dam at northern and of "Tueste Paud." View leading northerst





Photograph 45: Small concrete foundation remnant (surrounded by a high chain link fence) on the east side of the stream. View looking east.



Photograph 46: Remnant of a former private driveway that led to a twentieth-century residence at the southeastern end of the project site. View looking south.



Photograph 47: Concrete foundation of former twentieth-century house at southeastern end of project site. View looking west.



Photograph 48: Remains of the former Schneider residence, located on knoll near Sheldon Avenue. View looking south.



Photograph 49: Outbuilding of former Schneider residence, located south of the main house. View looking south.



Photograph 50: Steeply sloped area of project site located on south side of Sheldon Avenue. View looking west.



Photograph 51: Unmortared fieldstone foundation from a former house located south of Sheldon Avenue and just west of driveway marking eastern edge of project site. View looking west.



Photograph 52: Mansion house on Tax Lot P9C, formerly part of the Gracemere estate, but which is not part of the project site. View looking northeast from Gracemere Lane.



Photograph 53: Mansion house on Tax Lot P9D, formerly part of the Gracemere estate, but which is not part of the project site. View looking south from Gracemere Lane.



Photograph 54: Second residence located southeast of the mansion shown on previous photograph, which also may have been associated with the Gracemere estate. View looking southwest.



Photograph 55: Modern dumping along Sheldon Avenue in Test Area A.



Photograph 56: ST 13 excavated within historic foundation (Feature A) in Test Area A.



Photograph 57: Modern dumping in Test Area B.





Photograph 59: Location of Positive Precontact STs in Area E.



Photograph 60: ST 168 excavated in Area I.

## "GRACEMERE" ON THE HUDSON

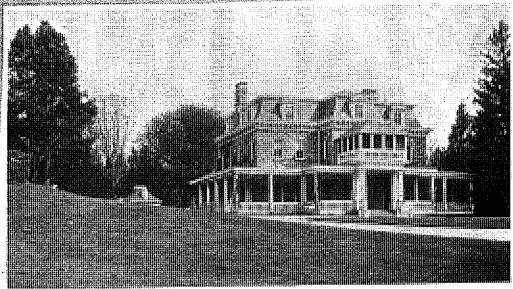
MR. HARRY CAMPBELL GRAEF'S BEAUTIFUL ESTATE AT TARRYTOWN, AN EXAMPLE OF A FINE OLD HOME SUCCESSFULLY MODERNIZED

By T. W. H.

Just off the old Albany post road, Broadway, and near the historic "Penny Bridge," between fryington and Tarrytown, is the beautiful country estate of Mr. Harry Campbell Graef. Its eighty-five acres of well-kept grounds, with rolling lawns and flower beds, a deer park containing several deer, a lake on which float an English punt and birchbark and cedar canoes, winding drives and wooded hills where large copper beeches, pine, cedar and weeping willow trees grow, overlook the Fludson River at a point about opposite Nyack, and altogether form one of the most attractively picturesque country places in America. It is in a neighborhood famous for country homes, the nearest of these being Mr. Lonis Stern's, Miss Helen Gould's, Mr. William Rockefeller's, Mr. John D. Rockefeller's.

Mr. John D. Archbold's and General Howard Carroll's.

The house, a two-storied residence with a mansard roof and porte-cochere at the back, was built about forty years ago by Mr. Robert Graves, the granite used in its construction having been quarried on the place. Its massive walls were altered after Mr. Graef acquired it by the addition of a low tower at the southeast corner, the first floor of which is used as a diningtoom, from which a beautiful view is obtained of the grounds, with the lake resting among the trees near by and the bill-backed Fludson in the distance. The main entrance on the west side admits one to the hall, on the left of which is the drawing-room. With a background of green satin paper on the walls and green silk langings one sees here such art works as the

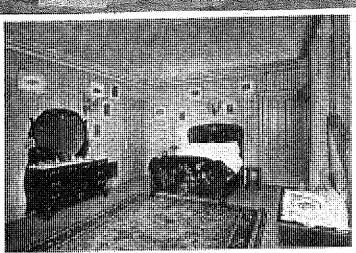


Photograph by C. J. Ross

THE WEST FRONT OF "GRACEMERE" Solidly built of granite quaried from its grounds

bronze "Gloria Victis," representing an angel carrying a wounded soldier from the battlefield; a portrait of Mrs. Graef's sister, Mrs. Treat, by Lenbach, the painter of Bismarck's portrait; Bonnat's "Sampson and the Lion," and Bridgeman's "Horse Fair."

From the drawing-room one enters the nutsic-room



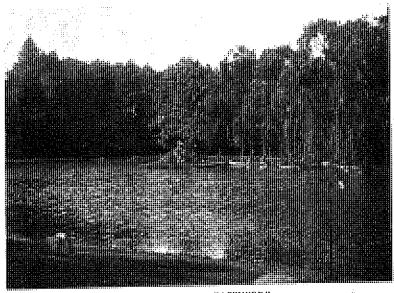
Photograph by C. J. Ress

MRS, GRAEF'S BEDROOM

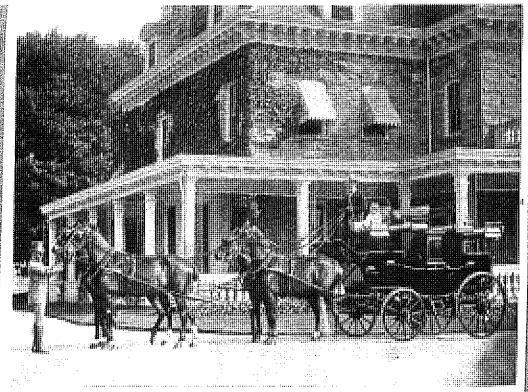
on the east, with its sounding dome, its woodwork of cream white and gold and piano to match, and its hangings of green silk. Both Mr. Graef and his wife, who was Miss Emily Lewis Caldwell, the daughter of Senator Caldwell, of Leavenworth, Kan., are musical, singing together and playing their own accompaniments.

On the right of the hall is a Turkish room, leading into the billiard-room on the east, which in turn leads into the breakfast-room, adjoining the tower diningroom beyond. The dining-room is finished in dark English oak. On warm days the windows on two sides and the porch door on the third side of this room are opened to admit a circulation of refreshing air from the cool shade of the trees. On the second floor are six bedrooms and a dressing-room which connects with Mrs. Graef's bedroom, while on the third floor are the same number, all being entered from a great central hall.

It is, of course, in the life out-of-doors that Mr. Graef and his family, with whom must be mumbered their fittle girl, Olyve, five years of age, find their greatest enjoyment. The recreations here are numerous. Mr. Graef "goes in for" high class horses and makes a hobby of riding and driving, particularly the driving of four-in-hand, landem and unicorn. He has polo ponies, too, and although he does not pretend to be a polo man, he exercises the m considerably. His knowledge of horses has enabled him to possess large stables, which are a model for the country gentleman. They contain a variety of light carriages for ones for the city, but there are no automobiles. There were formerly fox terrier kennels also, which were turned into a pheasantry and then abandoned for this use as well. Two Great Danes are kept on the place.



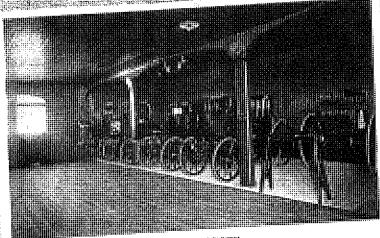
THE LAKE AT "GRACEMERE"



MR. GRAEF AND HIS FOUR-IN-HAND ON "GRACEMERE'S" DRIVEWAY Beside him is his five-year-old daughter, Olyve



THE BEAUTIFUL VIEW LOOKING WESTWARD FROM "GRACEMERE"



тив соленькой



THE STANDING STALLS IN THE "GRACEMERE" STABLES

however, one of them weighing one hundred and fiffy-seven pounds; also a French posdle and an English bulldog. Another form of recreation, besides riding, driving, golf and tennis, of which they play a great deal, is the shooting of clay pigeons. Live birds are kept on the place, but it is against the law to shoot them.

Thus, with wholesome recreation amid the beauties of nature, where clipped lawns and handsome old trees, which the early owner collected from many climes, are pruned in perfect trim, this active young business man, the son of Mr. Charles H. Graef, enjoys the restful beauties of a noble country estate to which time has added some of its chief charons. The grounds are a veritable garden spot, as one may well imagine by a glance at the illustrations here shown. There are not only many varieties of stately trees in perfect condition, but also rare plants and flowers in abundance. Extensive, old-fashioned greenhouses care for there plants in the winter time. The life of "Gracemere." as with the other large estates in this neighborhood, is like that of the great country estate of England, a real home life, with interest in local affairs.

Area	ST Map Number	STP Field	Level	Depth (cm)	Horizon	Texture	Soil Color	Cultural Material	Other comments
A	1	<b>-</b>	1	0-14cm	А	silty loam	10YR 4/3	syringe	
∢	ν	τ-	2	14-47cm	В	sandy loam	10YR 4/6	NOM	
٨	-	-	3	47-54cm	၁	sand	10YR 6/4	NCM	wet, sterile subsoil, water
4	2	7	1	0-8cm	А	silty loam	10YR 4/3	glass	large lumps of coal
∢	2	7	2	8-47cm	В	silty sand	10YR 4/6	NCM	root obstruction
∢	3	ဗ	τ-	0-15cm	A	silty loam	10YR 4/3	glass	
∢	က	ღ	2	15-37cm	В	silty sand	10YR 4/6	NCM	root obstruction
∢	4	4	1	0-26cm	A	silty sand	10YR 3/4	NCM	
A	4	4	2	26-34cm	В	sand	10YR 6/6	NCM	
∢	4	4	3	34-36cm	ပ	sand gravel	10YR 3/2	NCM	sterile subsoil
∢	9	5	1	0-34cm	A	sandy silt	10YR 4/3	L	
Α	5	2	2	34-80cm	m	sandy clay	10YR 6/6	NCM	
A	5	9	3	80-90cm	O	clay sand	10YR 7/6	NCM	sterile subsoil
٧	9	9	1	0-22cm	A	silty sand	10YR 3/4	ceramic	
A	ဖ	ဖ	7	22-47cm	В	sand	10YR 6/6	NCM	
∢	9	9	е	47-57cm	ပ	sand gravel	10YR 3/2 w/8/2	NCM	sterile subsoil
∢	7	7	-	0-32cm	A	silty sand	10YR 3/4	ceramic	
∢	7	7	2	32-78cm	മ	sand	10YR 6/6	NCM	
∢ .	_	7	က	78-85cm	ပ	clay sand	10YR 7/6	NCM	sterile subsoil
∢	8	ω	-	0-16cm	A	silty loam	10YR 4/3	glass, ceramic	
4	8	ω,	2	16-54cm	В	silty sand	10 YR 4/6	NCM	
4	80	ω	က	54-64cm	O	clay sand	10 YR 6/6	NCM	sterile subsoil
∢	6	o	-	0-55cm	A	silty sand	10YR 6/4	metal, ceramic	
А	တ	ග ූ	Ø	55-101cm	∢	sand	10YR 7/4	glass, metal	could not remove anymore dirt
¥	10	10	<b>-</b>	0-28cm	A	silty loam	10YR 4/3	ceramic, plastic	
¥	10	10	2	28-65cm	В	silty sand	10YR 4/6	NCM	
A	5	9	၈	65-78cm	ပ	sand	10YR 6/6	NCM	sterile subsoil
4	11	11	-	0-7cm	¥	silty loam	10YR 4/3	NCM	
∢	11	71	2	7-27cm	മ	silty sand	10YR 4/6	NCM	
¥	11	7.	က	27-43cm	O	sand	10YR 6/6	NCM	sterile subsoil
A	12	12	_	0-9cm	A	silt	10YR 3/2	ceramic, brick, glass	
4	12	12	7	9-50cm	A/B	sifty sand	10YR 5/6	ceramic, brick, glass	
∢	12	12	m	50-69cm	O	silty sand	10YR 7/6	NCM	sterile subsoil
<	<u>რ</u>	<u>რ</u>	_	0-147cm	∢	silty sand w/gravel	10YR 3/2	mixed historic, domestic	feature 1 dimensions: 360cm
									west wall, 610 cm south wall, 50cm thick 147 cm below the
									surface w/in feature 1-house
									foundation-has a thick layer of
									fill mixed w/artifacts, lots of
									rocks in level-did not reach the

Other comments			staria ambao			starile eliberil			degrading rock sterile subsoil		root obstruction		sterile subsoil			sterile subsoil		water table, water @ 30 cm			sterile subsoil			wet lands, water table, water @ 57cm		root obstruction			sterile subsoil			sterile subsoil			water table @ 34cm		water table @ 19cm	)		sterile subsoil		root obstruction	rock outcrop
Cultural Material	diass ceramic metal	WCN	NCM	MCN	MON	NCN	MON	WCN	NCM	N N N N	NON	MON	NCM	NCM	NCM	NCM	NCM	NCM	NCM	NCM	NOM	NCM	NCM	NCM	NCN	NON	NCM	NCM	NCM	NCM	NCM	NCM	NCM	NOM	NCM	NC N	NCM	MON	MON	MON	NCM	NCM	NCM
Soil Color	10YR 3/2	10YR 5/2	10YR 6/2	10YR 4/6	10YR 6/8	10YR 6/8	10YR 3/3	10YR 4/6	10YR 6/8	10VB 3/2	10YR 3/3	10YR 4/6	10YR 6/8	10YR 3/3	10YR 5/4	10YR 6/4	10YR 2/2	10YR 4/3	10YR 3/3	10YR 5/4	10YR 5/6	10YR 3/3	10YR 6/6	7.5YR 6/2	10YR 3/3	10YR 5/6	10YR 3/3	10YR 5/4	10YR 8/2 w 8/6	10YR 3/3	10YR 5/4	10YR 5/6	10YR 3/3	10YR 5/4	10YR 8/2 w 8/6	10YR 3/3	10YR 5/4	10YR 3/3	10YR 5/6	10YR 6/6	10YR 3/3	10YR 5/6	10YR 3/3
Texture	silty loam	silty sand	sand	silt	silty sand	sand	silty loam	silty sand	sand	#  #	silty loam	silty sand	sand	silty loam	silty sand	sand/gravel	silty loam	sandy clay	silty loam	silty sand	clay sand	silty loam	silty clay	clay	silty loam	silty sand	silty loam	silty sand	clay	silty loam	silty sand	clay sand	silty loam	silty sand	clay	silty loam	sandy clay	silty loam	silty sand	sandy clay	silty loam	silty sand	silty loam
Horizon	A	В	ပ	A	В	ပ	A	മ	ပ	A	A	В	၁	A	മ	O	A	<b>a</b>	A	മ	O	A	m	ပ	A	Ф	A	മ	ပ	A	മ	O.	<b>4</b>	B	၁	A	В	4	æ	ပ	A	8	A
Depth (cm)	0-25cm	25-47cm	47-68cm	0-37cm	37-66cm	66-78cm	0-24cm	24-59cm	59-69cm	0-30cm	0-27cm	27-59cm	59-73cm	0-16cm	16-34cm	34-46cm	0-22cm	22-31	0-20cm	20-39cm	39-58cm	0-32cm	32-49cm	49-5/cm	0-21cm	21-26cm	0-21cm	21-37cm	37-50cm	0-18cm	18-50cm	20-70cm	0-17cm	17-29cm	29-47cm	0-16cm	16-28cm	0-29cm	29-56cm	56-67cm	0-27cm	27-40cm	0-19cm
Level	-	2	ღ	-	2	က	<b>-</b>	2	9	<b></b> -	Ţ	2	ဗ	-	7		_	2	-	2	m	-	2	n	1	2	-	7	က		7	η,	- (	7	ო	<b>-</b>	2	1	2	က	<b>-</b> -	2	-
STP Field	14	14	14	15	15	15	16	16	16	17	18	18	18	13	13	13	8	202	21	21	21	22	22	77	23	23	24	77	24	52	25	2 2	97 52	97	56	27	27	28	28	28	59	53	30
S I Map Number	14	14	14	15	15	15	16	16	16	17	18	18	18	61 61 7	2	2 6	3 8	2	21	17	77	22	278	77	23	23	24	24	24	25	2012	67	0 6	26	97	27	27	28	78	28	53	23	30
Area	∢	∢	4	٧	∢	4	4	∢	٧	٧	A	4	₹	₹	∢ <	< <	<	∢ .	∢.	∢ .	∢ .	∢,	₫	(	∢	A	∢	∢	4	∢.	∢ .	4	<b>√</b>	∢ .	∢	∢	∢	A	4	4	∢.	∀,	4

Other comments			starile enhacil	rock obstruction	TORON BORO NO.		sterile subsoil			sterile subsoil			sterile subsoil			sterile subsoil			Sterile subsoil			sterile subsoil	20000	root obstruction			sterile subsoil			sterile subsoil		sterile subsoil			sterile subsoil			sterile subsoil		root obstruction		ash lens		rock obstruction
Cultural Material	glass peramic metal	NON N	MCM	NO.	0000	NOM	NOM	NOM	NOM	NCM	ceramic	NCM	NCM	NCM	NCM	NCM	NCM	NCM	NOM	NCM	NOM	NCM	NO.	NCM	NCM	NCM	NCM	glass	NCM	NC.		NON	quartz	quartz	quartz	NCM	NCM	NCM	NCM	NCM	NCM	ceramic, glass, metal	ceramic, glass, metal	NCM
Sail Color	10YR 3/3	10YR 5/6	10YR 6/6	10YR 3/3	10YR 3/3	10YR 5/6	10YR 6/6	10YR 3/3	10YR 5/6	10YR 6/6	10YR 3/3	10YR 5/6	10YR 6/6	10YR 3/3	10YR 5/6	10YR 6/6	10YR 3/3	10YR 5/6	10YR 6/6	10YR 3/3	10YR 5/6	10YR 6/6	10YR 3/3	10YR 5/6	10YR 3/3	10YR 5/6	10YR 6/6	10YR 3/3	10YR 5/6	10YR 6/6	10YR 5/4	10YR 6/8	10YR 3/3	10YR 5/4	10YR 5/6	10YR 3/3	10YR 5/6	10YR 6/6	10YR 3/3	10YR 5/6	10YR 2/1	10YR 4/6 w/8/1	10YR 4/4	10YR 5/8
Texture	silty loam	silty sand	sandy clay	silty loam	silty loam	silty sand	sandy clay	silty loam	silty sand	sandy clay	silty loam	silty sand	sandy clay	silty loam	silty sand	sandy clay	silty loam	silty sand	sandy clay	silty loam	silty sand	sandy clay	silty loam	silty sand	silty loam	silty sand	sandy clay	silty toam	silty sand	sandy clay	silty sand	sand w/degrading rock	silty loam	silty sand	clay sand	silty loam	silty sand	sand	silty loam	silty sand	loam	silty clay w/ash	silty sand	silty sand
HOLIZON	A	В	O	A	A	8	ပ	A	В	O	A	മ	O	Æ	В	၁	А	В	ပ	∢	В	၁	A	В	A	В	J,	<b>4</b>	מוכ	)	B	ပ	A	В	O	A	8	ن.	۷,	В	humic	A1	A2	A3
(cm)	0-32cm	Н	Н	П			7	0-32cm	1	$\dashv$	1	24-53cm	+	1	$\dashv$	$\dot{\parallel}$			3 46-61cm	0-29cm	29-48cm	H			+	24-46cm	╅	0-53cm	$\dagger$	$^{+}$	17-45cm			22-50cm	+	T	+	+	0-24cm	-	+	十	36-60cm	
Field	31 1	31 2	31 3	32 1		33 2	1	+	34			35 2		1	4	36 3	_	37 2		38	.38	38 3		39 2	$\dashv$	40 2	+	+	1 7 7	1	<del> </del>	J1 3	$\dashv$	J2 2	+	+	33	2	1	24,		1 2		7
Number	31	31	31	32	33	33	33	34	34	34	35	35	32	99	36	36	37	37	37	38	38	38	39	39	04	40	040	1 2	+   <del>-</del>	42	42	42	43	43	43	44	444	# ;	45	45	46	46	96	46
Č	∢	∢	4	4	4	4	∢ .	∢.	∀.	4	4	₹	∢.	Α.	∢	<	∢	∢	<	∢	٧	∢	4	∢.	∢.	∢.	∢ <	( <		4	⋖	٨	∢	∢.	∢.	∢.	∢ <	1	∢ <	∢ (	ממ	20 (	ממ	n

Other comments		rock obstruction	TOTO DE SECTION DE LA COLONIA		starile subsoil					sterile subsoil		root obstruction			sterile subsoil			sterile subsoil	discarded modern glass		sterile subsoil			sterile subsoil, degrading rock			sterile subsoil	discarded modern place	0	sterile subsoil			sterile subsoil												
Cultural Material	NON	Ollort7	MON	MON	NON	Olass	NCM	NCM	NON	MON	glass, ceramic, metal	NCM	glass, ceramic	NCM	NOM	ceramic	NCM	NOM	NCM	NCM	NCM	NCM	NCM	NCM	NCM	NCM	NCM	NCM	NCM	NCM	NCM	NCM	NCM	NOM	NCM	NCM	ceramic	NCM	NCM	NOZ	NCM	NCM	ceramic, glass, metal	NCM	NCM
Soil Color	10YR 3/2	10YR 5/4	10YR 3/2	10YR 5/4	10YR 6/8	10YR 3/2	10YR 5/4	10YR 6/6	10YR 3/2	10YR 5/4	10YR 3/2	10YR 5/4	10YR 3/2	10YR 5/4	10YR 6/6	10YR 3/2	10YR 5/4	10YR 6/6	10YR 3/2	10YR 5/4	10YR 6/6	10YR 3/2	10YR 5/4	10YR 6/6	10YR 3/2	10YR 5/4	10YR 6/6	10YR 3/2	10YR 5/4	10YR 6/6	10YR 3/2	10YR 5/4	10YR 6/6	10YR 3/2	10YR 5/4	10YR 6/6	10YR 3/2	10YR 5/4	10YR 6/6	10YR 3/2	10YR 5/4	10YR 6/6	10YR 3/2	10YR 5/4	10YR 6/6
Texture	silty loam	silty sand	silty loam	silty sand	sand	silty loam	silty sand	sand w/gravel	silty loam	silty sand	silty loam	silty sand	silty loam	sifty sand	sand w/gravei	silty loam	silty sand	sand w/gravel	silty loam	silty sand	sand w/gravel	silty loam	silty sand	sand w/gravel	silty loam	silty sand	sand w/gravel	silty loam	silty sand	sand w/gravel	silfy loam	silty sand	sand w/gravel	silty loam	silty sand	sand w/gravel	sifty loam	silty sand	sand w/gravel	sifty loam	sifty sand	sand w/gravel	silty loam	silty sand	sand w/gravel
Horizon	A	æ	∢	8	O	∢	മ	ပ	A	മ	A	8	A	ස	O	∢	മ	O	A	80	၂	A	m	ပ	A	М	O	A	m	O	٧	B	O	¥	В	O	A	. В	ပ	А	82	O	A	В	O
Levei Depth (cm)		2 15-34cm	1 0-21cm		3 44-59cm	Н	2 27-52cm		1 0-29cm	2 29-46cm	1 0-14cm	2 14-39cm	$\dashv$	2 19-48cm	-	+	+	+	+	2 15-54cm	$\dagger$	+	2 9-60cm	+	7	1	3 56-69cm	7	2 26-55cm	1	†	2 14-46cm	7	$\dashv$	2 16-42cm		Н		3 56-68cm		2 24-47cm	Н	H	2 22-57cm	
SIP Le		_	3 ,				4		2		မ	9	-			_	ω ,	+	+	+	+	1	+	+	1	+		1	12	1			1	14	1	<del></del>			15		_				17
Number 1	47	47	48	48	48	49	49	49	20	50	51	51	52	52	52	53	23	23	40	8 2	40	S	ន្តដ	22	ရှင်	26	92	57	57	57	28	58	58	29	59	ი ი	09	09	99	61	61	61	62	62	62
Ţ.	В	В	В	m m	М	œ	<u>Ф</u>	m	œ	മ	В	m	m	m		_ 	m (	ומ	ממ		ם		20 0	ממ	ממ	ם מ		ומ			ام		20		0	<b>a</b>	В	<u>-</u>	<u>П</u>	ω	8	<u>m</u>	മ	В	<u>В</u>

Appendix B-4

Other comments			eterile erbenil	200000		otorilo otinocil	Stellie subsoll	Decinos		licadia olivata	photo taken	stone foundation		soil light yellowish brown	gray & black ash	light olive brown, rock		soil olive brown sand	wet water @75cm			Sterile subsoil			sterile subsoil		sterile subsoil		bedrock			sterile subsoil		bedrock			sterile subsoil			sterile subsoil		
Cultural Material O	NCM	NON	MON	SCN.	NCM	NON	ceramic class metal	NOM	MON	MCM	MON N				NOM.	metal ligh	NCM				NCM	NCM	NCM	NCM	NCM	NCM	NCM	whiteware, glass	NCM	NCM	NCM	NCM	glass	NCM	whiteware	NCM	NCM	glass, brick, coal	NCM	NCM	0 088	NOM
Soil Color	10YR 3/3	10YR 5/4	10YR 6/4	10YR 3/3	10YR 5/4	10YR 6/4	10YR 2/1	10YR 3/2	10YR 5/4	10YR 6/6	10YR 2/1	10YR 4/6	10YR 2/1	2.5YR 6/4		2.5YR 5/4	10YR 2/1	2.5YR 4/4	2.5YR 4/4	7.5YR 3/1	10YR 3/2	10YR 4/3	10YR 2/2	10YR 3/3	10YR 5/4	10YR 3/4	10YR 4/6	10YR 3/4	10YR 4/6	10YR 3/4	10YR 4/6	10YR 5/3	10YR 3/4	10YR 4/6	10YR 3/4	10YR 4/6	10YR 54	10YR 3/2	10YR 3/3	10YR 4/3	10YR 3/3	10YR 3/3, 10YR 5/8
Texture	silty loam	silty sand	clay w/gravel	silty loam	silty sand	clav w/gravei	silty loam	silty loam	silty sand	sand w/aravel	loam	silty sand	silty loam	sandy fiil	sandy ash	sandy fiil	loam	sand	decomposing rock	silty loam	sandy loam	sandy clay	silty loam	sandy loam	sandy clay	silty loam	sandy loam	silty loam	sandy loam	silty loam	sandy clay	sandy clay	silty loam	sandy loam	silty loam	sandy loam	sandy loam w/gravel	silty loam	clay loam	silty clay	loam	mottled
Horizon	А	8	O	∢	В	O	¥	¥	<u> </u>	O	Æ	В	root mat		ash/coal layer	Z <b>=</b>	humic	A1	A2	A	В	C	A	മ	ပ	A	В	A	В	A	മ	ပ	A	<b>B</b>	¥	В	ပ	A	В	ပ	Ш	III.
Depth (cm)	0-16cm	16-39cm	39-49cm	0-16cm	16-36cm	36-61cm	0-30cm	0-27cm	27-51cm	51-69cm	0-10cm	10-60cm	0-14cm	14-24cm	24-29cm	78-78cm	0-5cm	5-30cm	30-72cm	0-20cm	20-50cm	50-67cm	0-15cm	15-54cm	54-70cm	0-25cm	25-72cm	0-26cm	26-57cm	0-36cm	36-80cm	80-102cm	0-25cm	25-58cm	0-30cm	30-58cm	58-75cm	0-13cm	13-74cm	74-85cm	0-20cm	20-30cm
Level	1	7	3	-	7	ဗ	1	-	2	က	-	7	-	7	,0	4	-	2	က	-	2	6	-	7	က		7		2		2	8	, ,	2	,	7	6	-	2	က	-	2
STP	18	18	18	9	19	19	J1	72	72	72	J3	<sub>5</sub>			_ ,		7	2	2	<u>-</u>		-	7	7	2	က	က	4	4	ري ا	2	Ω,	9	(Q)				∞	ω	ω	တ	ი
ST Map Number	63	63	63	8	64	64	65	99	99	99	29	67	88	8 8	8 8	8	89	69	69	۶	2	2	7	-	71	7.5	72	13	23	4/	4/	4/	0 1	2	9	9/	9	77	22	77	78	28
Area	В	Ω	В	a	മ	В	മ	В	В	മ	В	В	ပ	٥	ي ر	ر	O	ပ	ပ	۵	Δ			ام	ام	ے	۵	ام	اد	ماد	ם	ء د	۵ د	ء د	ماد		ماد		Δ	Δ	۵	

Other comments	icadio elizato	See lie supsoil			eferile ellocoil	100000 DE 1010	sterile embedil	ilosops alloss		water table	water table	water table		sterile subsoil	offset 50cm to NF		sterile subsoil			sterile subsoil		rock obstruction			Chi.	transitioning to clay, sterile	HOSODS			Sterile Subsoil	100000		compact, sterile subsoil			compact, sterile subsoil	offset 1m south		starilo olineto	orgine ontogon	year rook	eterile subsoil	offset 1m west & 1m south
Cultural Material	leco	hrick coal alses	brick coal glass	MON	NCM	diass, porcelain	MON	MCN	MON	NOM	NOM	NOM	glass	NCM	NOM	NCM	NOM	glass	NON	NCM	glass, metal	NCM	nail	NOM	coal, iron	NOM	oeramin alses	nail glass	MCN	NOM	coal nail	NOM	NOM	glass. coal	NCM	NCM	glass, redware	NCM		000/0	MON	MCN	glass, metai
Soil Color	10YR 5/6	10YR 3/3	10YR 4/4 10YR 6/4		10YR 6/4	10YR 4/3	10YR 5/6	10YR 3/2	10YR 4/4	10YR 3/1	7.5YR 3/1 w/3/4	7.5YR 3/1 w/3/4	10YR 4/3	10YR 6/6	10YR 3/2	10YR 4/6	10YR 4/6	10YR 3/2	10YR 4/6	10YR 5/6	10YR 3/2	10YR 4/6	10YR 3/2	10YR 4/6	10YR 3/3	10YR 4/4	10YR 3/2	10YR 3/3	10YR 4/6	10YR 5/6	10YR 3/2	10YR 4/6	10YR 5/6	10YR 2/1	10YR 4/6	10YR 4/6	10YR 3/3	10YR 4/6	10YR 5/8	10VB 3/3	10YR 4/6	10YR 4/6	10YR 3/3
Texture	loam	loam	loam mixed w/clay	clay loam	clay	clay loam	sandy clay loam	silty loam	sandy loam	sandy clay	sandy loam	sandy loam	clay loam	clay loam	silty loam	silty sand	clay silt	sifty loam	silty sand	clay silt	silty loam	silty sand	silty loam	sandy silt	silty sand	silty sand	silty loam	silty sand	medium silty sand	compact silty sand	silty loam	medium silty sand	compact silty sand	silty loam	silty sand	gravel sand	silty loam	sifty sand	course silty sand	silty loam	silty sand	clay sand	silty loam
Horizon	В	<b>=</b>	fill	¥	m	A	В	A	В	ပ	¥	A	A	മ	A	æ	O	A	æ	O	A	മ	A1	A2	A3	B/C	A1	A2	മ	၁	A	m	ပ	A	മ	ပ	Ķ	B	O	A	m	U	A
Cm)	60-82cm	0-30cm	30-39cm	39-70cm	70-81cm	0-24cm	24-50cm	0-22cm	22-70cm	70-92cm	0-48cm	0-60cm	0-24cm	24-54cm	0-12cm	12-48cm	48-60cm	0-23cm	23-55cm	55-66cm	0-16cm	16-72cm	0-18cm	18-42cm	42-65cm	65-92cm	0-14cm	14-34cm	34-55cm	55-65cm	0-11cm	11-54cm	54-62cm	0-10cm	10-25cm	25-43cm	0-12cm	12-52cm	52-68cm	0-14cm	14-51cm	51-63cm	0-12cm
revel	4	1	2	က	4	<b></b>	7	<b>,</b> -	2	3	<b>-</b>	-	-	7	-	2	·Ω	-	7	<sub>20</sub>	-	7	-	2	က	4	1	2	3	4	-	7	2	-	7	က	<del>,</del>	7	3	-	2	3	-
Field	6	10	10	10	9	11		12	12	12	13	4.	15	15				2	7	7	<u>س</u>	e	4	4	4	4	3	2	ις:	ည	9	9	و	_	_		∞	æ	80	6	თ	ത	9
Number	78	79	79	79	29	8	80	ώ	8	8	85	83	20 6	48		S	ည္ဆ	တ္ဆ ဗ	98	98 5	8/	87	88	88	88 8	χ χ	88	88	68	88	06	8	8	တ်	91	6	Z8	92	92	93	93	83	92
Alea	۵	۵	۵	۵	م					ام	ام	ا د	ماد	الد	<b></b>	Щ	ш	u i	IJ	ш.	11	u)		Ш	шι	П	ш	Ш	ш	Ш	Ш	ш	<b>u</b>	Ш	Ц	Щ	ш	Ε	Ш	ш	Е	ш	Ш

Appendix B-6

Other comments		degrading rock, sterile subsoil				sterile subsoil, no disturbance			degrading rock, sterile subsoil			sterile subsoil			Soc			sterile subsoil			sterile subsoil		rock & root obstruction	discarded	discarded	discarded		nock obstruction			coal lens @69cm				Starile subsoil	offset 5m to the north	sterile subsoil	
Cultural Material	NCM	NCM	nails, glass	NCM	NCM	NCM	NCM	NCM	NCM	NCM	copper wire, nails, flowerpot	NCM	NCM	nails, whiteware, glass, slate roof file	NCM	NCM	NCM	NCM	NCM	NCM	metal	NCM	ceramic	coal	NCM	coal, brick	MCIW (1007)	NCM	coal, coal ash, redware,	nails, coal	NCM	nail, glass, redware	NCM	NCM	NOM	redware, coal, brick	NCM	NCM
Soil Color	10YR 4/6	10YR 4/6	10YR 2/1	10YR 3/2	10YR 4/6	10YR 5/8	10YR 3/2	10YR 4/4	10YR 4/6	10YR 3/2	10YR 4/4	10YR 4/6	10YR 2/1	2.5YR 4/1	10YR 3/1	10YR 3/2	10YR 4/6	10YR 5/6	10YR 4/2	10YR 4/3	10YR 4/6	10YR 3/2	10YR 4/6		10YR 4/3 w/ 2.5y 5/2	10YR 4/3	10VR 3/4	10YR 4/6	10YR 4/3	10YR 4/6 w/10YR 3/4	10YR 4/4	10YR 4/3	10YR 4/6 w/ 10YR 4/3	10YR 3/4	10YR 4/6	10YR 3/4	10YR 4/6	10YR 2/2
Texture	silty sand	clay sand	loam	silty loam	silty sand	coarse silty sand	silty loam	fine silty sand	coarse silty sand	loam	clay sifty sand	coarse sand w/degrading rock	loam	sand w/gravel	sand w/gravel & cobbles	silty loam	silty sand	sandy clay	loam	loam gravel	clay loam	silty loam	sandy loam	loam	loam	loam	loam	clay foam	clay loam	clay loam	clay ioam	clay loam	loam	loam	clay loam	loam	loam	silty loam
Horizon	В	O	root mat	A	В	ပ	A	В	ပ	A1	A2	ပ	¥	fill?	fill?	٨	В	O	E)	E)	В	¥.	ш		IIII	∢ 0	٥	æ	III.	ĘĮĮ.	A		fill	A	മ	Ą	Ф	А
Depth (cm)	12-62cm	62-84cm	0-5cm	5-15cm	15-46cm	46-62cm	0-10cm	10-50cm	50-56cm	0-14cm	14~34cm	34-47cm	0-13cm	13-20cm	20-28cm	0-15cm	15-36cm	36-50cm	0-10cm	10-20cm	20-45cm	0-26cm	26-57cm	0-17cm	17-40CM	74 84cm	0-56cm	56-71cm	0-59cm	59-68cm	68-80cm	0-34cm	34-50cm	50-70cm	70-82cm	0-58cm	58-83cm	0-22cm
Level	2	က	-	2	က	4	+	2	ო	-	2	က	1	2	Э	-	2	က		2	က		7	_[	۷,	٠ ا		2	-	2	၁	~	2	3	4	7	2	
STP	10	10	11	11	1	<del>-</del>	12	12	12	13	13	13	14	14	14	15	15	15	16	9	16	1,		2 0	٥٥	٥	00	19	20	20	20	21	21	21	21	22	22	23
STMap Number	94	94	95	95	95	92	96	96	96	97	97	97	98	98	98	66	99	66	9	100	100	101	101	102	75	102	103	103	104	104	104	105	105	105	105	106	106	107
Area	Ш	ш	Ξ	ш	ш	ш	ш	Ш	Ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	w	ш	шı	u ı	u u		Пп	<u> </u>	Е	Ш	ш	Ш	ш	Н	ш	ш	ш	ш	Ш

Other comments		inodico olivoto	SETTE SUDSOIL	storilo embodil	100000	eterile emenil	Stelles support		storile entecnil	100000000000000000000000000000000000000				bedrock	100000		root obstruction				sterile subsoil			rock obstruction			rock obstruction		mixed A&B horizon		انحصانت كانعضان	oreille subsoll		rock obstruction		mixed A&B horizon	rock obstruction			rock obstruction			sterile subsoil	
Cultural Material	NCM	MCM	glass	NC N	NCM	MCN	redware dass coal	NCM	MCN	NCM	NCM	pottery, quartz point	NCM	NCM	NCM	nail, possible quartz flake	NCM	NCM	coal dass	NCM	NCM	NCM	liau	NCM	NCM	NCM	NCM	NCM	quartz core, nails,	redware, coal	MON	MON	brick. redware. coal	1	NCM	quartz scraper, ceramic	NCM	nail	NCM	NCM	NCM	pottery	NCM	NCM
Soil Color	10YR 4/6	10YR 4/4	10YR 3/3	10YR 4/6	10YR 3/4	10YR 4/6	10YR 3/4	10YR 4/4	10YR 4/4	10YR 3/3	10YR 5/6	10YR 3/3	10YR 5/2	10YR 5/4	10YR 3/3	'R 4/6	╌	10YR 3/3	10YR 3/3 w/10YR 4/6	10YR 4/6	10YR 4/2	10YR 3/3	10YR 3/3 w/10YR 4/6	10YR 4/6	10YR 3/3	10YR 4/6	10YR 4/6	10YR 3/3	10YR 3/3 w/10YR 4/6	40VD 4/R	10YR 4/4 w/10YR 2/1	10YR 3/3	10YR 4/3 w/10YR 6/2	10YR 6/2	10YR 3/3	10YR 3/3 w/10YR 4/6	10YR 4/6	10YR 3/3	10YR 3/3 w/10YR 4/6	10YR 4/6	10YR 3/3	10YR 5/6	10YR 5/3	10YR 3/3
lexture	sandy loam	loamy sand	clay loam	clay loam	loam	clay loam	loam	clay loam	sand	silty loam	sandy loam	sandy loam	sandy loam	sandy loam	loam	silty clay toam	silty clay loam	loam	clay loam	clay loam	sand	Joam	clay loam	clay loam	ioam	silty clay loam	clay loam	loam	clay loam	silty clay loam	clav w/pockets of sand	loam	clay loam	clay loam	loam	clay loam	silty clay loam	loam	clay loam	clay loam	silty loam	sandy loam	sandy loam	sifty loam
Horizon	В	O	A	В	A	В	A	<u>a</u>	O	A1	A2	A3	В	၁	٨	- IIIJ	В	A	ĮĮĮ	Ю	၁	A	ĮIII	В	A	<b>a</b>	O	A	=		O	٨	В	၁	A	В	U	A	В	၁	A	a	O	A
(cm)	22-67cm	67-75cm	0-28cm	28-80cm	0-31cm	31-65cm	0-19cm	19-24cm	24-37cm	0-13cm	13-17cm	17-25cm	25-30cm	30-57cm	0-16cm	16-75cm	75-80cm	0-18cm	18-58cm	58-97cm	97-103cm	0-10cm	10-66cm	66-106cm	0-49cm	49-109cm	109-114cm	0-13cm	13-73cm	73-95cm	95-112cm	0-13cm	13-40cm	40-73cm	0-10cm	10-74cm	74-94cm	0-20cm	20-70cm	70-85cm	0-26cm	26-55cm	55-72cm	0-16cm
	2		1	2	-	2	1	2	3		7	1	$\dashv$	1	$\dashv$	1 2	رن ن	-			3 4	_	1 2	-	-	3		$\dashv$		$\perp$	4		3 2	-	$\dashv$	4	4			3		2	1	
Field	23	23	24	24	25	25	26	26	56	27	27	27	27	27	27N1	27N	27N1	27N3	27N	27N	27N	27S	2781	278	27S	27S	2783	27E1	27E	27E	27E	27E3	27E	27E	27W1	27W	27W1	27W3	27W3	27W3	28	78	78	1 29
Number	107	107	108	108	139	109	110	110	110	111	1,	1	7		112	112	112	113	113	113	113	114	114	114	115	115	115	116	116	116	116	117	117	117	118	118	118	119	119	119	120	120	120	121
2	ш	ш	ш	ш	ш	ш	ш	ш	ᆈ	ш	ш	ш	ш	шþ	ш	ш	ш	ш	ш	ᆈ	ш	ш	ш	ш	w	w	ш	ш	Ш	ш	ш	ш	ш	ш	ш	ш	الس	шþ	ш	ш	ш	ш	ш	╜

Other comments	bedrock root	1001 300 000		sterile subsoil	2000	bedrock	100.00		sterile subsoil			sterile subsoil			sterile subsoil			sterile subsoil		rock obstruction			sterile subsoil			sterile subsoil			bedrock	bedrock			sterile subsoil			sterile subsoil			sterile subsoil			sterile subsoil			sterile subsoil
Cultural Material	MON	MON	NOM	NOM	NOM	NCM	MOM	NOM	MON	NCM	NOM	NCM	NCM	NCM	NCM	NOM	NCM	NCM	NCM	NCM	NCM	NOM	NOM	NOM	NCM	NOM	NOM	NCM	NCM	NOM	NCM	NCM	NOM	nail	NCM	NCM	NCM	NCM	NCW	glass	NCM	NOM	MOM	NOM	NCW
Soil Color	10YR 4/6	10YR 3/2	10YR 4/6	10YR 5/4	10YR 3/3	10YR 4/6	10YR 3/3	10YR 4/6	10YR 5/6	10YR 3/3	10YR 5/6	10YR 6/6	10YR 3/3	10YR 5/6	10YR 6/6	10YR 3/2	10YR 4/6	10YR 5/4	10YR 3/2	10YR 4/6	10YR 3/2	10YR 4/6	10YR 5/4	10YR 3/2	10YR 4/6	10YR 5/4	10YR 3/3	10YR 4/6	10YR 5/4	10YR 3/3	10YR 3/3	10YR 3/3	10YR 5/4	10YR 3/2	10YR 4/6	10 Y K 5/4	10YR 3/2	10YR 4/6	101R 5/4	10YR 3/2	10YR 4/6	10YR 5/4	10YR 3/3	10YR 4/6	7.5YR 4/6
lexture	sandy clay	silty loam	silty sand	sandy clay	silty loam	sandy loam	silty loam	sandy loam	sandy loam	silty loam	silty sand	sandy clay	silty loam	silty sandy	sandy clay	silty loam	silty sand	sandy clay	sitty loam	silty sand	sifty loam	silty sand	sandy clay	silty loam	silty sand	sandy clay	silty loam	sandy loam	loamy sand	silty loam	silty loam	sandy loam	loamy sand	silty loam	Silty sand	sariuy clay	Slity loam	Sility sand	saliuy clay	loam	Silty sand	sandy clay	silty loam	sandy loam	saridy clay
Dorizon	O	A	Ф	၁	A	В	A	В	၁	A	m	O	A	മ	ပ	A	В	O	A	æ	A	മ	ပ	A	æ	O	A	89	O	Α,	∀ ľ	n	י ר	χ.	ماد	> <	( 0	۵ د		( 0		)  -	¥ C	מ	) <
(cm)	56-60cm	0-17cm	17-37cm	37-50cm	0-16cm	16-60cm	0-12cm	12-43cm	43-56cm	0-15cm	15-46cm	46-63cm	0-14cm	14-43cm	43-59cm	0-22cm	22-52cm	52-60cm	0-13cm	13-21cm	0-22cm	22-42cm	42-54cm	0-12cm	12-50cm	50-57cm	0-5cm	5-58cm	58-63cm	0-13cm	U-16cm	16-48cm	48-59CM	17 //CIII	44-52cm	120m	12 50cm	50-50cm	18cm	18 47cm	10-4/011	47-55cm	n-pcm	29 52cm	0.45cm
19 AG	က	-	2	က	-	2	-	7	က	-	7	က		7	က	-	7	က	-	7	-	7	က	-	7	6	-	7	e .	- -	- 0	7 (	٦ ر	-	16	,	-   ~	4 (*	, -	- (	4	7	-	7 6	7
Field	9	<b>,</b> -	7-	-	2	2	8	က	ဗ	4	4	4	2	5	2	9	9	9	7	_	ω	80	80	တ	တ	o !	9	2	2	- 5	7,	7 5	7	-	-	- (	40	10	1 %	۳ (	,		4	1 4	r 4
Number	138	139	139	139	140	140	141	141	141	142	142	142	143	143	143	144	144	144	145	145	146	146	146	147	147	147	148	148	148	149	150	00.7	120	15.	151	152	15.2	152	153	153	200	133	154	154	722
3	ш	တ	O	ပ	ပ	U	σ	<sub>O</sub>	တ	O	O	O	တ	9	9	<b>9</b>	၅	တ	ပ	တ	တ	၅	ပ	တ	၁	9	9	יש	9	ي اد	9 (	ם פ	בור		=	-	=	Ī	1	I			c 3		= =

Appendix B-10

(cm)					Other comments
	В	sandy loam	10YR 3/4	NCM	
1	O	sandy loam	10YR 4/6	NCM	sterile subsoil
ı	A	silty loam	10YR 3/4	nails	
	m <	loamy sand	10YR 4/6	NCM	bedrock
	<b>4</b> m	slity loam	10YR 3/3	NCM	1; = = -1; = -1; = -1
	4	loam	10YR 3/2	NOW	liosons aliais
İ	В	silty sand	10YR 4/6	NCM	
	O	sandy clay	10YR 5/4	NOM	sterile subsoil
	A	loam	10YR 3/2	glass	
	B	silty sand	10YR 4/6	NCM	
١	ပ	sandy clay	10YR 5/4	NCM	sterile subsoil
	∢.	loam	10YR 3/2 w/ash	nails, glass, ceramic	rock obstruction
	<b>∀</b> (	silty loam	10YR 2/2	NCM	
	B.	sandy clay	10YR 5/6	NOM	bedrock
	A I	silty loam	10YR 3/2	metal, glass, ceramic	
	8	silty sand	10YR 4/6	NCM	
	ان	sandy clay	10YR 5/4	NCM	sterile subsoil
	_	silty loam	10YR 3/3	NCM	
		sandy loam	10YR 4/6	NCM	
		sandy clay	10YR 4/4	NCM	sterile subsoil
∢		clay loam	10YR 3/2 w/ash	glass, nails, coal, furnace scale	ash lens, sterile subsoil
¥		silty loam	10YR 3/4	NCM	
Ω		loamy sand	10YR 4/6	NCM	
O		loamy sand	10YR 4/3	NOM	sterile subsoil
1	_	silty loam	10YR 4/2	utility pipe	
	à	silty sand	10YR 6/6	NOM	
	ပ	sandy clay	10YR 6/8	NCM	sterile subsoil
	A	silty loam	10YR 3/3	NOM	
	മ	sandy loam	10YR 5/6	NCM	bedrock
	٧	silty loam	10YR 3/3	NCM	
	ا ص	sandy loam	10YR 4/6	NCM	
	O.	loamy sand w/gravel	10YR 4/6 w/10YR 5/6	NCM	sterile subsoil photo taken
2	root mat	silty loam	10YR 3/3	NCM	
	A	sandy loam	10YR 4/3	NCM	
	В	sandy loam	7.5YR 4/6	NOM	
	O	sandy clay	10YR 5/3	NCM	sterile subsoil
5	root mat	sitty loam	10YR 2/2	NCM	
	A	sandy loam	10YR 5/4	NOM	
	В	sandy loam	10YR 5/6	NCM	
	ပ	sandy loam	10YR 5/3	NCM	sterile subsoil
	A	silty loam	10YR 2/2	NCM	
	മ	sandy loam	10YR 4/6	NCM	
	. اد	sandy clay	10YR 5/6	NCM	sterile subsoil
	4	Silty loam	10YR 3/3	MCZ	

er Field (cm)
В
8 1 0-13cm
8 2 13-33cm
173 8 3 33-50cm C sandy clay
9 0-20cm
1 0-13cm A
10 3 30-50cm
11 1 0-28cm
11 2 28-46cm
12 1 0-24cm
12 2 24-44cm B
12 3 44-58cm C
13 1 0-20cm A
13 2 20-43cm B
13 3 43-61cm C
14 1 0-17cm A
14 2 17-45cm B
15 1 0-15cm A
35 2 15-43cm
15 3 43-50cm
16 1 0-14cm
2 14-35cm
16 3 35-52cm
1 1 0-20cm
1 2 20-50cm
1 3 50-67cm
1 0-18cm
2 2 18-62cm
3 1 0-6cm
4 1 0-17cm
2 17-27cm
5
186 5 2 10-50cm A
186 5 3 50-61cm B clay loam
5 4 61-69cm
0 - 0-/cm
187 6 2 7-46cm B sandy loam
6 3 46-62cm
1 0-15cm

Appendix B-12

	T		T	T	Ι	T		Ī	Ī		I		T				T	T			Γ	Γ						T				T			T
Other comments		sterile subsoil			Sterile Subsoil		bedrock	100.00		sterile subsoil			sterile subsoil	1000000	hedrock	100	hedrock		bedrock		bedrock			sterile subsoil			sterile subsoil			Sterile subsoil			Sterile Subsoil		bedrock
Cultural Material	MON	MON	MON	MOM	NCM	NCM	MON	glass (discarded)	NCM	NCM	NCM	NON	MON	NO.	MON	MON	MON	NCM	NCM	NCM	NCM	NOM	NCM	NOM	MON	NOM	NCM	NCM	olass	NON	NON	MON	NCM	NCM	NOM
Soil Color	10YR 4/4	10YR 4/6	10YR 3/3	10YR 4/6	10YR 5/8	10YR 3/3	10YR 4/6	10YR 2/1	10YR 3/4	10YR 5/8	10YR 3/3	10YR 4/6	10YR 5/4	10YR 2/2	10YR 4/6	10YR 3/3	10YR 4/6	10YR 3/3	10YR 4/6	10YR 3/3	10YR 4/6	10YR 3/2	10YR 4/6	10YR 5/4	10YR 3/2	10YR 4/6	10YR 5/4	10YR 3/2	10YR 4/4	10YR 4/6	10YR 3/3	10YR 4/6	10YR 5/4	10YR 3/4	10YR 4/6
Texture	sandy loam	sandy loam	silty loam	silty sand	sand w/gravel	silty loam	sandy clay	loam	silty sand	course silty sand	loam	ciay loam	silty clay loam	silt loam	sandy clay	silty loam	sandy loam	sitty loam	sandy loam	silty loam	sandy loam	silty loam	silty sand	sandy clay	silty loam	silty sand	sandy clay	silty loam	silty sand	course silty sand	loam	clay loam	sandy clay loam	silty loam	sandy loam
Horizon	۵	O	¥	В	၁	А	В	root mat	А	മ	A	В	ပ	۷	ш	4	æ	A	В	A	മ	A	æ	O	∢	ഫ	၁	А	. В	ပ	٧	В	ပ	A	В
Depth (cm)	15-58cm	58-70cm	0-14cm	14-30cm	30-62cm	0-11cm	11-43cm	0-3cm	3-58cm	58-79cm	0-14cm	14-54cm	54-69cm	0-17cm	17-51cm	0-11cm	11-62cm	0-15cm	15-48cm	0-11cm	11-40cm	0-11cm	11-39cm	39-63cm	0-17cm	17-56cm	56-72cm	0-12cm	12-49cm	49-59cm	0-27cm	27-50cm	50-60cm	0-9cm	9-45cm
Level	2	3	1	2	က	-	2	-	2	က	-	2	က	1	2	1	2	-	2	-	2	-	2	က		7	၉	-	2	က	1	2	ო	_	2
STP Field	7	7	œ	æ	8	တ	6	9	9	9	=	Ξ	7	12	12	13	13	4	4	5	15	16	9	16	17	17	12	18	9	38	19	19	19	20	8
a ST Map Number	188	188	189	189	189	190	190	191	191	191	192	192	192	193	193	194	194	195	195	196	196	197	197	197	198	198	198	199	199	199	200	200	200	201	201
Area	٦	ᄀ	기	ᅱ	7	기	기	7	기	기	기	기	ᆌ	7	っ	ᄀ	기	기	7	٦	7	기	7	기	기	7	7		٦	기	기	기	기	기	기

			Т-	_	1	_	1	F	т-	<u> </u>		1	Τ-	T	T	1	1	<del>1 -</del>	т		Τ	T	Τ	Τ	ī	<del></del>	_	<u> </u>	-	1						ŗ	$\Box$
	Description	for horses							fluted									black		blue line around rim			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					19th c.; large crock or	של אות איום. בייים אים ביים אים ואים ומלים	exterior			for a door		bottom rim	bottom rim	The state of the s
	Part	complete	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	complete	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment		4.00	ıragment	complete	complete	complete	fragment	fragment	fragment	fragment
	Object	svringe	window	bottle	bottle	vessel	vessel	window	tumbler	vessel	alobe	window	nail	nail	vessel	window	nail	qmoo	vessel	vessel	window	bottle	vessel	flower pot	window	bottle	vessel		000	VESSE	nail	bolt w/cuff	lock	insulator	bottle	jar	jar
	Туре		flat	machine made	machine made	soft paste	whiteware	flat	machine made	ironstone	machine made	flat	machine cut	machine cut	whiteware	flat	machine cut	hard rubber	whiteware	hard paste	flat	mold made	whiteware	redware	flat	machine made	whiteware		4 4 4	bull body	maculue cut	machine made	machine made		machine made	machine made	machine made
	Material		colorless	colorless	colorless	porcelain	earthenware	colorless	colorless	earthenware	colorless	coloriess	iron	iron	earthenware	colorless	iron		earthenware	porcelain	coloriess	green	earthenware	earthenware	colorless	tinted	earthenware		. 010100000	SIGNAIG	101	Iron	iron	porcelain	green	coloriess	colorless
	Class	er er	glass	glass	glass	ceramic	ceramic	glass	glass	ceramic	glass	glass	metal	metal	ceramic	glass	metal	other	ceramic	ceramic	glass	glass	ceramic	ceramic	glass	glass	ceramic		oragio	celalille motol	ובומו	metal	metal	ceramic	glass	glass	glass
	Functional Group	labor	architectural	food related	food related	unaffiliated	food related	architectural	food related	food related	lighting	architectural	architectural	architectural	food related	architectural	architectural	personal	food related	food related	architectural	food related	food related	personal	architectural	food related	food related		food related	loou leigied	al Cillectulai	architectural	architectural	electric	food related	food related	food related
	##	τ-	4	2	2	1	1	10	2	4	က	Ψ.	2	7	œ	2	က	-	က	-	-	<b>,</b>	4	~	1	-	2		•	- (	آ	-	-	3	-	τ-	2
	Level	,	,	-	1	1	1	1	1	τ-	-	<b>-</b>	-	_	~	2	2	-	ζ		-	-	-	_	2	2	2		c	7	_ ,		_	-	-	_	7
Map	S.	1	2	2	က	5	9	ထ	ω	æ	8	თ	တ	0	0	တ	တ	9	10	5	12	12	12	12	12	12	12		5	1,4	2 (	73	13	13	13	13	13
Area/	Field	A/1	A/2	A/2	A/3	A/5	A/6	A/8	A/8	A/8	A/8	A/9	A/9	A/9	A/9	A/9	A/9	A/10	A/10	A/10	W12	A/12	A/12	A/12	A12	A12	A/12		0/12	1/42/		A13	A/13	A13	A/13	A/13	A/13

	2		69			<u>.</u>	 					use d	for a			920s-		ipe						Še	ern		Itally	Ţ	
	Description		green sponged	patiern	1	Drown & wnite	pharmaceutical "A.D. Ric. PAIN"					three holes, use unidentified	possibly used for sliding shelf			Jeep gas cap, 1920s- 1930s		hexagon shape						complete base	stippled patt	T Y	ribbed horizontally	hitcharad	
	Part	fragment	framont	ומחוובווו	fragment	Iragment	fragment	fragment			complete	fragment	fragment	fragment	fragment	complete	fragment	complete	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	
	Object	vessel	0000/	VC33CI	Can IId	VGSSGI	pottle	belt buckle	shoe bottom	alobe	wrench	iron strap	bar	door stopper	unidentified fragment	gas cap	nail	tile	can	vessel lid	vessel	vessel	bottle	bottle	jar top	jar	vesse	COW	
	Type	machine made	ironetone	moobing mode	inacilile Illade	פוספוס	machine made			machine made	machine made	machine made	machine made			machine made	machine cut		machine made	whiteware		whiteware	machine made	machine made	machine made	machine made	machine made	mammal	T
	Material	coloriess	parthenware		anthonware	Calificativale	colorless			colorless	iron	iron	iron		iron	steel	iron	stone	iron	earthenware	porcelain	earthenware	green	colorless	colorless	colorless	colorless	pone	
	Class	glass	ceramic	metal	Geramic	2	glass	metal/leath er	rubber	glass	metal	metal	metal	rubber	metal	metal	metal	other	metal	ceramic	ceramic	ceramic	glass	glass	glass	glass	glass	organic	
	Functional Group	food related	food related	food related	food related	5	personal	personal	personal	lighting	labor	labor	labor	labor	unaffiliated	unaffiliated	architectural	architectural	food related	food related	food related	rood related	food related		food related	food related	food related	food remains	
	#	1	2	-	-		-	~	2	1	1	-	1	-	7	-	3	1	4	4	- ,		-	-	1	3	3	-	
	Level	1		,	-		_	<b>.</b>		1	_	-	_	_	1	-	_	_	<b>,</b>		_	-	-	-	_	-	_	-	
MAGN	ST	13	13	13	2		13	13	13	13	13	13	13	13	13	13	33	13	13	2	<u>.</u>	5 5	5	13	13	13	13	13	
Aroni	Field	A13	A/13	A/13	A13		A/13	A/13	A/13	A/13	A13	A/13	A/13	A/13	A/13	A/13	A13	A/13	A/13	A713	A/13	25	A713	A/13	A/13	A13	A/13	A/13	

Description	- ממט			shotaun	,			,			folded						"BORDEN'S", "1/2	pt", 6 on the bottom; early 20th c.	"ASSOCIAT	REGISTERED", CN	on the bottom	"C" with a 6 inside of	the C	string rim	"Trade M,	Royal, Semi. Po John	Maddock &, E, ND";	+006	pink ilorai pattern w/ gold filigree	floral pattern on edge of rim
Part	complete	fragment	complete	fragment	froamont	+rogmon+	गव्युगादा ।	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment		complete		4	fragment	1121118511	fragment	fragment			fracmont	ומאווטוור	fragment	fraament
Object	button	flower pot	cow bell	bullet casing	strap with	100	5	spark plug	unidentified	ij	strap	unidentified	nail	bolt	fry pan	sauce pan		miik/cream jar		17 c d : 0:	hottle		jar bottom	bottle neck			lessey.	0000	vesse	Pil
Туре		redware			machine made	machine made							machine cut														whitewore		whiteware	whiteware
Material		earthenware	copper	copper	iron	ion		iron		iron	iron	iron	iron	steel	aluminum	aluminum	-	colorless			tinted		tinted	colorless		•	parthonware		earthenware	earthenware
Class	metal/leath er	ceramic	metal	metal	metal	metal	metal/	porcelain	rubber	metal	metal	metal	metal	metal	metal	metal		glass	-	0 0 0	glass		glass	glass			ceramic		ceramic	ceramic
Functional Group	personal	personal	iabor	labor	labor	unaffiliated		unaffiliated	unaffiliated	unaffiliated	unaffiliated	unaffiliated	architectural	architectural	food related	food related		food related		footate	food related		food related	food related			food related		food related	food related
#	τ-	2	1	4	· ~-	-		7	-	-	<b>.</b>	7	2	-	-	-		-		Ç	1		1	-					2	-
Level	~	1	1	-				-	-	_	_	-	_		_	-		-		·	_		-	_			*		-	<del>-</del>
Map	13	13	13	13	<u>ნ</u>	13		23	13	13	13	13	13	13	33	5		13		<u>ر</u>	13		13	13			<u>5</u>		13	13
Area/ Field	A/13	A/13	A/13	A/13	A/13	A/13		A13	A/13	A/13	A/13	A/13	A/13	A/13	A/13	A/13		A/13		Δ/13	A/13		A/13	A/13			A/13		A/13	A/13

_		· · · · ·		_	<del></del>			<del></del>		<del></del>	·····			-			_		1	· T · · ·	·	_			т	·	т			7	T	
	Description		green w/blue sponge				- A	Porodottid	na iona	7	pharmaceutical, contains a pink liquid;	DOC ON			fluted				**************************************					181	"M H 34-K-338"	,,OO,,		"Dairyle, deposit"	Cooperative Co		"STRO"	pressed glass
	Part	fragment	fracment	fragment	fragment	Complete	fragment	fragment	fragment	fragment	3	fragment	fradment	complete			fragment	fragment	complete	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment
	Object	vessel	- lassay	boffle	, ci	bottle ton	Tes S	WOO.	button	belt buckle	d: #00	flower pot	door stopper fragment	twist top	lantern globe	unidentified	unidentified	window	hook	hook	plate	hinge	bottle top	jar bottom	jar bottom	jar	jar	milk bottle	milk bottle	jar	pottle	Vessel
	Туре	whiteware	whiteware					mammal				redware						flat														
	Material	earthenware	earthenware	tinted	milk alass	iron	shell	bone	brass	brass	ว กลุ่ม	earthenware			coloriess	porcelain		coloriess	iron	iron	iron	iron	iron	colorless	colorless	colorless	colorless	colorless	colorless	colorless	colorless	colorless
	Class	ceramic	ceramic	glass	glass	metal	organic	organic	metal	metal	0 88 88	ceramic	rubber	rubber	glass	ceramic	rubber	glass	metal	metal	metal	metal	metal	glass	glass	glass	glass	glass	glass	glass	glass	glass
	Functional Group	food related	food related	food related	food related	food related	food remains	food remains	personal	personal	personal	personal	labor	labor	lighting	unaffiliated	unaffiliated	architectural	architectural	architectural	architectural	architectural	food related	food related	food related	food related	food related	food related	food related	food related	food related	food related
	#	-	4	-	-	-	-	4	4	1	-	2	1	-	-	1	7	2	-	<b>-</b>	-	-	-	-	Ψ-	7	12	2	2	~	-	1
	Level	-	-		-	1	_	1	-	1	<b>-</b>	1	<b>.</b>	-	7	1	γ-	-	-	-	-	-	-		_	-	-	-	_	_	_	1
Map	ST	5	5	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Area/	Field	A/13	A/13	A/13	A/13	A/13	A/13	A/13	A/13	A/13	A/13	A/13	A/13	A/13	A/13	A/13	A/13	A/13	A13	A13	A13	A13	A13	A/13	A/13	A/13	A/13	A13	A/13	A13	A/13	A/13

			<u> </u>	T		Ţ	T				T				ase,				T							19"					<u>в</u> ;		Total Control of the
	Description		"U DO:-N PATD"	"Gentine"	hirtchered	Poloto C	9017					,		bottle; "B 8"	embossed on base,	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2					pink		string rim		"RO ONE HAL",	"012, 267, 48, 419"					crown top attached to the bottle neck		
	Part	fragment	fragment	fragment	fragment	complete	fragment	fragment	complete	fragment	fragment	complete	fragment		fracment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fracmont	fragment	5	complete	fragment	fragment	fragment	0
	Object	bottle	ī	iar lid	, COW	bufton	flower pot	bulb casing	dear	conductor	unidentified	nail	nail		bottle	Vesse	flower pot	bottle	window	hook	vessel	vessel	bottle	bottle	bottle	hottle	bottle		tack	unidentified	bottle top	bottle top	
	Type				mammal		redware					machine cut	machine cut		machine made	whiteware	redware	machine made	flat		whiteware	whiteware	machine made	machine made	machine made	machine made	machine made				machine made	machine made	
	Material	coloriess	red	milk glass	pone		earthenware		iron	coloriess	iron	iron	iron		colorless	earthenware	earthenware	tinted	coloriess	iron	earthenware	earthenware	colorless	coloriess	amber	amber	amber			Iron	iron	ion	
	Class	glass	glass	glass	organic	rubber	ceramic	copper	metal	glass	metal	metal	metal		glass	ceramic	ceramic	glass	glass	metal	ceramic	ceramic	glass	glass	glass	gese	glass	metal/	ceramic	metal	glass/metal	glass/metal	
	Functional Group	food related	food related	food related	food remains	personal	personal	lighting	unaffiliated	unaffiliated	unaffiliated	architectural	architectural		food related	food related	personal	food related	architectural	architectural	food related	food related	food related	food related	unaffiliated	unaffiliated	unaffiliated		unamiliated	unamiliated	food related	food related	
	##	-	ო	-	9	F	2	-	_	1	29	-	_		7	2	1	1	5	-	-	ဖ	_	9	-	·	19		- -		-	_	
	Level	_	•	1	_	-	_	-	-	1	1	_			_	1	1	-	1	1		-	-	-	-	τ-	-	*	- -	_	-	<del></del>	
Мар	ST	5	13	13	13	13	13	13	13	13	13	14	44		4	14	14	14	31	31	34	31	3	31	31	25	31		0 6	20	33	33	
Area/	Field	A13	A/13	A/13	A/13	A/13	A/13	A/13	A/13	A/13	A/13	A/14	A/14		A14	A/14	A/14	A14	A/31	A/31	A/31	A/31	A/31	A/31	A/31	A/31	A/31	40, <	200	25	A/33	A/33	

	άΛα	#	Functional Group	200	Racenter	ř		1	
╀	-	2	1 744	glass	colorless	machine made	Object Potfile	fragment	Description
46	2	_	architectural	metal	iron	machine cut	nail	complete	
	2	2	architectural	metal	iron	machine cut	lieu	fragment	
46	2	-	food related	glass	coloriess	machine made	Vessel	fragment	ribbed horizontaliv
46	2	3	food related	glass	tinted	machine made	bottle	fragment	מונים וכיוונים הספיוו
								<u> </u>	traces of green &
	7	0	food related	ceramic	porcelain	atsea flow	<u> </u>	fracmont	orange marbled
$\vdash$	2	-	food related	ceramic	earthenware	whiteware	Vessel	fracment	מפסטומוס
								5000	19th c. German; facial
	7	<b></b>	personal	ceramic	porcelain	e in sid	במק קר במק	fragment	part, eye area with
46	3	မ	architectural	metal	iron	machine cut	nail	complete	לבווונכת כאב ומפוומפ
	က	2	architectural	metal	iron	machine cut	nail	fragment	
46	3	7	architectural	glass	coloriess	flat	window	fragment	
$\dashv$	က	-	food related	ceramic	earthenware	whiteware	vessel	fragment	blue transfer print
$\dashv$	3	-	food related	glass	tinted	machine made	vessel	fragment	
+	3	7	food related	glass	colorless	machine made	vessel	fragment	
46	ю	<b>~</b>	food related	ceramic	earthenware	whiteware	vesse	fragment	blue shell edged, molded
									Cooperative Co. East
									Liverpool Ohio, USA,
 4	cr.	^	food related	orani	C C C C C C C C C C C C C C C C C C C	() () () () () () () () () () () () () (	4	ų	semious"; 1882-
46	3	-	food related	Ceramic	earthenware		plate	frogmont.	0781
	-	·	architectural	glass	colorless		Window	fragment	
51	~	3	architectural	metal	iron	wire	nail	complete	
51	~	2	architectural	metal	iron	machine cut	nail	fragment	
51	-	13	food related	glass	tinted	machine made	vessel	fragment	melted pieces
51	-	က	food related	glass	tinted	machine made	vessel	fragment	
51	_	ည	food related	glass	colorless	machine made	Vesse	fragment	ribbed horizontally
51	-	-	food related	glass	coloriess	machine made	bottle	fragment	
51	-	œ	food related	glass	coloriess	machine made	vessel	fragment	melted pieces
-	_	9	personal	ceramic	earthenware		flower pot	fragment	
_	-	-	food related	glass	colorless	machine made	vessel	fragment	
52	~	1	food related	ceramic	earthenware	whiteware	vessel	fragment	
	-	2	food related	ceramic	earthenware	whiteware	vessel	fragment	

Appendix C-6

		_,_		_													_						<del>,</del>			·			_		_		
19 22	Describuou					round; poss. washer	molded, cream and	bluish green, handle	and body fragment		one small and one	qi	complete rim top and	body fragment with "A	ARUMEN" and partial	oño!				possibly for shutters			with sea green paint	concretions		for a cream jar or	Doco						pavement
1	Lair	fragment	fragment	fragment	fragment	fragment			fragment	fragment	complete	fragment			frommont	fragment	fragment	fragment	fragment	complete	fragment	fragment	fragment	fragment	fragment	frocment	fragment	fragment	fragment	fragment	fragment	fragment	fragment
Object	Vessel	window	Vessel	Vessel	bottle	unidentified			tankard	vessel	nail	pones			d <del>f</del> lo	window	bottle	window	nail	hinge	unidentified	bottle	mirror	unidentified	bottle	<u> </u>	window	bottle	Vessel	window	brick	window	macadam
Tvne	ironstone	flat	machine made	machine made	machine made				putt body	whiteware	wire	mammal			0000	flat	machine made	flat	wire	machine made	machine made	machine made	fi at	machine made	machine made	abem enithaem	flat	machine made	whiteware	flat		flat	
Material	earthenware	colorless	colorless	colorless	colorless	iron		1	earthenware	earthenware	ion				tinted	colorless	green	colorless	iron	iron	iron	colorless	colorless	iron	tinted	ssep Alim	colorless	green	earthenware	coloriess		colorless	
Class	ceramic	glass	glass	glass	glass	metal		1	ceramic	ceramic	metal	bone			ges	glass	glass	glass	metal	metal	metal	glass	glass	metal	glass	glass	glass	glass	ceramic	glass	clay	glass	
Functional Group	1 755		food related	food related	food related	unaffiliated		7 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	rood related	rood related	architectural	food remains			food related	architectural	food related	architectural	architectural	architectural	unaffiliated	food related	personal	unaffiliated	food related	unaffilated	architectural	food related	food related	architectural	architectural	architectural	unaffiliated
*	-	က	_	_	1	-	•	c	7 (	າ	~	-			<u>რ</u>	-	-	1	2	-	-	7	20	7	<del>-</del>		-	-	τ-	7	2	-	ω
Level	-	-	ļ	1	1	_		*		-	<b>-</b>	1				_	_	1/2 fill	1/2 fill	1/2 fill	1/2 fill	1/2 [[[]	1/2 個	1/2 fill	-		_	_	~	-	-	-	
Map ST	09	62	62	62	62	62		n n	000	8	65	65			65	65	65	68	68	98	99	69	69	69	73	73	75	75	9/	77	77	78	78
Area/ Field	B/15	B/17	B/17	B/17	B/17	B/17		<u>,</u>	200	2/0	B/J1	B/J1			B/J1	B/J1	B/J1	C/	C/1	Ç	Ş	C/2	C/2	C/2	D/4	D/4	9/0	9/0	2/Q	D/8	D/8	6/0	D/0

	Т	Ţ	Τ	Τ	Τ	Τ	Т	T	Т	Ţ	T	Τ	Τ	Τ	Т	75	Ι	Τ	1	Γ	<u> </u>	Τ	<u> </u>	Τ	Γ	<u> </u>	Γ		Γ	Π	Τ	Τ	Τ	1	Γ		<u> </u>
	Tesonbiron.	***************************************														small plate; molded					poss. nails				concretion				concretion								
Trong C	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	complete	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment
PaidO	Coa	pottle	flower pot	coa	coal	window	brick	mortar	bottle	slag	brick	bottle	coal	bottle	bottle	plate	window	window	bottle	window	unidentified	nail	window	coal	unidentified	window	vessel	vessel	unidentified	nail	nail	coal	window	coal	window	vessel	window
au Y	anthracite	machine made	redware	anthracite	anthracite	flat			machine made			machine made	anthracite	machine made	machine made	soft paste	flat	flat	machine made	flat		unidentified	flat	anthracite		flat	whiteware	redware		machine cut	machine cut	anthracite	flat	anthracite	flat	redware	flat
Material		coloriess	earthenware			colorless			tinted			tinted		colorless	plue	porcelain	colorless	colorless	amber	colorless	iron	iron	coloriess		iron	coloriess	earthenware	earthenware	iron	iron	iron		coloriess	-	colorless	earthenware	colorless
Class	other	glass	ceramic	other	other	glass	clay	mortar	glass	slag	clay	glass	other	glass	glass	ceramic	glass	glass	glass	glass	metal	metal	glass	other	metal	glass	ceramic	ceramic	metal	metal	metal	other	glass	other	glass	ceramic	glass
Functional Group		food related	personal	unaffiliated	unaffiliated	architectural	architectural	architectural	food related	unaffiliated	architectural	food related	unaffiliated	food related		food related	architectural		food related	architectural	unaffiliated	unaffiliated	architectural	unaffiliated	unaffiliated	architectural		food related	unaffiliated	architectural	architectural	unaffiliated	architectural	unaffiliated		food related	architectural
#	-	2	3	9	~	-	3	3	-	8	-	~	က	2	-	-	-	က	-	4	က	-	-	-	-	۱,		2	-	-	-	က	6	-	2		-
Level	1	3	3	3	4	_	-	-	1	-	2	2	2	_	_	_	_	-	_			-	က	က	8	- -		-	-	2	-	-	-	-	-	_	-
Map ST	78	82	78	78	78	79	79	79	79	79	20	79	79	80	80	80	8	98	8	87	87	8	88	8	88	88	88	86	83	83	06	8	91	91	92	92	83
Area/ Field	6/0	6/Q	6/Q	6/0	D/9	0/10	D/10	D/10	D/10	D/10	٥/10	0/19	D/10	041	0/11	0/11	0/15	E/2	E/2	E/3	Ε/3	E/4	E/4	E/4	E/4	را در آ	115	E/3	E/5	E/5	E/6	E/6	E/7	E/7	E/8	Е/8 1	E/9

Appendix C-9

_		1	1	Т	1	1		<u> </u>	_	1	1	1	I		1	<u> </u>	Т	1	1	1	1	Ť	T	T	Т	T	<del>T-</del>	T	<del>-</del>	т-	т-	T	I	т	T	Т
	Description			7744									traces of slip	מנוסו										poss, ends of a	5000						twist top	CFOWN			thin	
	Part	fragment	fragment	fragment	fragment	fragment	fragment	eus	fragment	fragment	eds	fragment	fracment	fragment	fragment	fragment	Spall	fragment	fragment	complete	fragment	fragment	fragment	fracment	fragment	fragment	complete	fragment	fragment	fragment	complete	complete	fragment	fragment	fragment	fragment
	Object	Vessel	charcoal	Vessel	nail	window	nail	Vesse	nail	coal	flower pot	coal	Vessel	nail	vesse	bottle	Vesse	flower pot	window	nail	flower pot	nail	nail	button	window	coal	nail	window	mortar	lid ring	bottle top	bottle top	bottle	bottle	unidentified	wrapper
	Туре	redware		redware	machine cut	flat	machine cut	redware	unidentified	anthracite	redware	anthracite	redware		redware	machine made		redware	flat	machine cut	redware	machine cut	machine cut		flat	anthracite	machine cut	flat		machine made						
	Material	earthenware	роом	earthenware	iron	colorless	iron	earthenware	iron		earthenware		earthenware	iron	earthenware	colorless	yellow	earthenware	colorless	iron	earthenware	iron	iron		colorless		iron	colorless		iron	aluminum	iron	coloriess	tinted	coloriess	colorless
	Class	ceramic	organic	ceramic	metal	glass	metal	ceramic	metal	other	ceramic	other	ceramic	metal	ceramic	glass	glass	ceramic	glass	metal	ceramic	metal	metal	bakelite	glass	other	metal	glass	mortar	metal	metal	metal	glass	glass	plastic	cellophane
		food related	unaffiliated	food related	architectural	architectural	architectural	food related	architectural	unaffiliated	personal	unaffiliated	food related	unaffiliated	food related	food related	food related	personal	architectural	architectural	personal	architectural	architectural	personal	architectural	unaffiliated	architectural	architectural	architectural	food related	unaffiliated	unaffiliated				
	#	7	-	5	-	-	1	7	2	<b>,</b>	9	2	~	7	1	1	4	4	3	<b>,-</b> -	80	-	7	7	,-	τ-	-	7	-	~	~	-	-	4	9	4
	Level	_	-	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	-	_	-	2	-	<del></del>	1	1	2	-	-	_	-	_	_	-	-	_
Map	ST	110	110	111	112	113	114	116	116	116	117	117	118	119	120	122	122	122	123	123	123	124	128	129	130	130	130	134	134	134	134	134	134	134	134	134
Area/	Field	E/26	E/26	E/27	E/27N1	E/27N3	E/27S1	E/27E1	E/27E1	E/27E1	E/27E3	E/27E3	E/27W1	E/27W3	E/28	E/30	E/30	E/30	E/31	E/31	E/34	E/32	E/39	E/37	E/38	E/38	E/38	F/2	F/2	F/2	F/2	F/2	F/2	F/2	F/2	F/2

Appendix C-10

Area/	Мар									
Field	ST	Level	#	Functional Group	Class	Material	Tvpe	Object	Part	Decription
F/2	134	-	2	unaffiliated	aluminum		machine made	foil wranner	fragment	Describeo.
F/2	134	1	3	unaffiliated	styrofoam			stvrofoam	fragment	
F/2	134	τ-	_	unaffiliated	plastic	colorless	machine made	ring	fragmont	
F/2	134	-	-	unaffiliated	metal	iron	machine made	unidentified	fragmont	
F/2	134	_	4	unaffiliated				macadam	fragment	110000 1000
F/3	135	_	7	architectural	clay			hrick	fragmont	रहा ५ आखा
F/3	135	τ-	2	food related	glass	milk class	machine made		fragmont	
F/3	135	_	<b>-</b>	unaffiliated	other		anthracite	leoo	fragment	
F/3	135	-	3	unaffiliated	cellophane	colorless	machine made	Wranner	fragment	
E E	151	1	1	architectural	metal	iron	unidentified	lieu	fragment	
E/3	153	~	2	architectural	glass	colorless	flat	window	fragment	
9/H	156	+	က	architectural	metal	iron	unidentified	nail	fragment	
H/10	160	~	15	architectural	metal	iron	unidentified	nail	fragment	heavy concretions
1/10	160	~	9	architectural	glass	colorless	flat	window	fragment	
H/10	160	_	-	food related	ceramic	earthenware	whiteware	Vessel	fragment	blue transfermint
149 149	160	~	1	food related	glass	colorless	machine made	<u>ra</u>	fragment	nart of rim
H/10	160	<b>-</b>	1	unaffiliated	metal	iron		unidentified	fragment	stran
H/12	162	<u>_</u>	_	architectural	clay			brick	fragment	
H/12	162	<b>-</b>	5	architectural	glass	colorless	flat	window	fragment	
H/12	162	_	20	architectural	metal	iron	unidentified	nail	fragment	
H/12	162	_	~	architectural	metal	iron	machine cut	nail	complete	
H/12	162	~	τ-	architectural	metal	iron	wire	nail	complete	
H/12	162	~	1	architectural	ceramic	porcelain		tile	complete	white hexagonal
H/12	162	~	۳-	architectural	ceramic	porcelain		ţi e	fragment	white
H/12	162		44	food related	glass	coloriess	machine made	bottle	fragment	
H/12	162	٢	2	food related	glass	colorless	machine made	bottle	fragment	stingled pattern
H/12	162	~	5	food related	glass	coloriess	machine made	bottle	fragment	ribbed pattern
H/12	162		-	food related	glass	green	machine made	bottle	fragment	
H/12	162		•	food related	000	7 (4		1		embossed "BADGE"
!	3	-	-		91gg	niilea	machine made	pottle	fragment	"COM" "OST"
H/12	162	~		food related	glass	amber	machine made	hottle	fragment	small base; embossed "U.S.A."
H/12	162	1	5	food related	glass	amper	machine made	bottle	fragment	
					Participant of the Participant o					

Г			_	<u> </u>	1			Т	<u> </u>	Τ.	Т	_	_	Т	1	Т	Т	Т	Ι <del></del>	1	1	Τ.	1	Τ:	_	Т	Т	Τ	T	1	Γ''	1	Τ
	Description	traces of etched	large vessel	traces of oil+	nolychrome floral	decoration (yellow,	blue pink)	Carlot Space									Coke		"PAT" and "AUG 21	000000000000000000000000000000000000000				mottled vessel, mint	100	undecorated	unglazed flower pot				some regular thickness others are		unidentifiable pieces of corroded metal
	Part	fradmont	fragment	fragment	וומאוופווו		fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fracmont	fracment	fragment	fragment	fragment	fracmont	fragment	fragment	fragment	fragment	fragment	fragment	fragment	complete	fragment
	Object	fumbler	howd	ABSAV	0000		vessel	can	unidentified	pipe	coal	window	nail	mortar	coal	pipe	bottle	tumbler	flask	unidentified	bottle	bottle	window	מממע	dot	Vessel	Vessel	coal	shell	pone	nail	top	unidentified
	Type	machine made		hard paste	3		whiteware		leather		anthracite	flat	unidentified		anthracite		machine made	pressed	pressed	melted	machine cut	machine cut	flat	fiesta ware	machine cut	whiteware	redware	anthracite		mammal	machine cut	machine cut	
	Material	colorless	colorless	porcelain			earthenware	alloy		iron		colorless	iron			stoneware	tinted	coloriess	tinted	finted	amper	colorless	colorless	earthenware	milk glass	earthenware	earthenware			poue	iron	tin	
,	Class	glass	glass	ceramic			ceramic	metal	organic	metal	other	glass	metal	other	other	ceramic	glass	glass	diass	glass	glass	glass	glass	ceramic	glass	ceramic	ceramic	other	oyster	organic	metal	metal	metal
	Functional Group	food related	food related	food related			food related	food related	personal	unaffiliated	unaffiliated	architectural	architectural	architectural	unaffiliated	architectural	food related	food related	food related	unaffiliated	unaffiliated	food related	architectural	food related	personal	food related	personal	unaffiliated	food remains	food remains	unaffiliated	unaffiliated	unaffiliated
	#	7	9	2		(	က	19	τ-	1	2	ო	4	2	-	7	Ψ-	2	_	-	9	-	33	<b>*</b>	1	8	-	2	2	17	27	-	19
-	Level	~	1	Ψ-		,	-	_	1	-	-	<b>.</b>	-	_	_	<b>,</b>	<b>.</b>	2	. 0	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Мар	ō	162	162	162		ç	162	162	162	162	162	164	164	164	164	166	185	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186
Area/	Dieid	H/12	H/12	H/12		3	1/12	H/12	H/12	H/12	H/12	H/14	H/14	H/14	H/14	<u> </u>	J/4	3/5	3/5	J/5	J/5	3/5	3/5	3/5	3/5	J/5	J/5	3/5	3/5	3/5	3/5	3/5	3/5

	<u> </u>	top, case			o with	Ö	رة <del>إ</del>	top,	case		Bell Cue		<u> </u>						s of	7	<u>s</u>		ieces	hetal	an L	esign		
	Description	crown bottle top, rounded base/case	pottle		near top stamp with markings	"CURTIGES"	"ROCHESTER" "PRESERS"	crown bottle top,	rounded base/case	emod late	IIIetal cap allached	90 0004	pase of plate folded	ם מו					various types of	Indeporated	too corroded to	identify	unidentifiable pieces	of corroded metal	parts of a can	etched floral design		
	Part		complete	complete			fragment			fragment fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment	fragment		fragment		complete	,	fragment	fragment	complete	complete	fragment
	Object	- <del>-   17</del> - 4	ejinog	allion			pottle		1	jar	i t	of stellar	olate of at	window	bottle	bottle	unidentified	bottle	000	Vessel		nail		unidentified	can	pottle	spike	vesse
	Type	÷	machine cut				machine cut		400000000000000000000000000000000000000	machine cut	machine cut	pressed	pressed	ţiat	machine cut	machine cut	pressed	machine cut	emmem	whiteware								whiteware
	Material	toto!	dark ambar	מושש			colorless		finte	Colorless	milk alass	colorless	colorless	colorless	amber	tinted	coloriess	colorless	9100	earthenware		Lon	U. T	unidentified	UII	green	lron	earthenware
	Class	8 <u>6</u> 5	Spig	555			glass		Solo	glass	glass	glass	glass	glass	glass	glass	glass	glass	organic	ceramic		meral		metal 1	Liela Liela	glass	metal	ceramic
	Functional Group	food related	medical related	500			food related		food related	food related	personal	food related	food related	architectural	unaffiliated	food related	food related	food related	food remains	food related	4004	alcillectural	L 0401134001	unallillated	מוומוווומונים לייולים		architectural	rood related
	#	•					8		0	-	-	-	-	ω	3	2	9	20	ო	2	7	2	ď	2 "	2 4		- 0	7
	Level	2	2				2		2	2	2	2	2	2	2	2	2	2	7	2	C	7	c	1,0	4 0	1		-
Map	ST	186	186				186		186	186	186	186	186	186	186	186	186	188	186	186	200	3	98	3 8	200	2 5	287	200
Area/	Field	J/5	3/5				3/5		1/5	3//5	3/5	3/5	3/5	1/5	3/5	3/5	3/ر	3/5	J/5	3/5	ñ	3	ñ	7/2	3/2	25	0/70	0 2

Area	Map	Field	Array	Level	Depth	Area Map Field Array Level Denth Horizon	Ş	tv Material	Weight	I enoth x	Weight   I ength v   Description	Notes
	ST.	ST No. No.	, S		(cmbs)				(grams) Width	Width		
¥	43	43 J-2		-		А	Ψ.	Quartz	∞	34mm x	34mm x secondary flake	
										18mm		
മ	47 2	2		2	15-34	В	-	Quartz	က	31mm x shatter	shatter	77 77000000
										26mm		
Ш	11127	27		2			~	Smokey Gray	7	47mm	Untyped Stemmed,	basal grinding
								Quartz		x16mm	possible Late Archaic	
Ш	112 27	27	N	2			-	Quartz	2	19mm x	19mm x secondary flake	platform and flake scar
										18mm		
ш	118 27	27	×	7			_	Quartz	ß	36mm x	36mm x bifacial scraper	111111111111111111111111111111111111111
										16mm		
Ш	11627	27	口	2			1	1 Quartz	928	181mm x core	core	vein quartz
										79mm		

## CONFIDENTIAL

NEW YORK STATE PREHI	STORIC ARCHAEOLOGICAL SITE	E INVENTORY FORM
For Office Use Only -	Site Identifier	
Project Identifier <u>Ja</u>	rdim Estates East, Tarryto	own Date <u>1/21/09</u>
Your Name Sara Mascia Address Historical P P.O. Box 303 Westport, CT		
Organization (if any)	Historical Perspectives, 1	Inc.
	Gracemere Precontact/HistOne of the following: Counship	City
	Incorporated Village Tar	rytown
	Village or Hamlet	
	Holy Spirit Association fo	or the Unification
of World Christianity		
Address 4 West 43 <sup>rd</sup>		
New York, 1	NY 10036	
4. Site Description (	check all appropriate cate	egories):
Site		
Stray find	Cave/Rockshelter	Workshop
Pictograph	Quarry	Mound
Burial	Shell midden	Village
Surface evidence	Camp	Material
		in plow zone
Material below	<u>X</u> Buried evidence	Intact
plow zone		occupation floor
Single component	Evidence of features Multicomponent	Stratified
Location		
X_Under cultivation	Never cultivated	Previously
(Landscaped)		cultivated
Pastureland	$\_$ _Woodland	Floodplain
<u>X_</u> Upland		Sustaining erosion
Soil Drainage: excellen	ıt good <u>X</u> fair p	oor
Slope: flat gentle	<u>X</u> moderate steep_	
	er from site (approx.) $30$	0 feet
Elevation <u>290 feet abov</u>	<u>re sea level</u>	
	(append additional sheets	, if necessary):
Surfacedate(s) <u>A</u>	pril 2008	

Site Map (Submit with form*)Collection Subsurfacedate(s) April 2008 Testing: shovelX coring other unit size no. of units(Submit plan of units with
form*)  Excavation: unit size no. of units  (Submit plan of units with form*)
*Submission should be 8 $1/2$ " x 11", if feasible
Investigator Sara Mascia, Ph.D., R.P.A.
Manuscript or published report(s) (reference fully): Historical Perspectives, Inc., 2009, Phase IA/IB Archaeological ar Architectural Investigation, Jardim Estates East, Sheldon Avenue Village of Tarrytown, Westchester County, New York.
Present repository of materials <u>Historical Perspectives</u> , <u>Inc.</u>
<pre>6. Component(s) (cultural affiliation/dates):</pre>
One stemmed projectile point appears to date to the Late Archaic through Early Woodland Period, although is untyped.
7. List of material remains (be as specific as possible in identifying object and material): Four precontact artifacts found: one Late Archaic/Early Woodland untyped stemmed, quartz projectile point, one quartz bifacial scraper, one quartz core, one quartz secondary flake.
If historic materials are evident, check here and fill out historic site form. $\underline{X}$
8. Map references: Map or maps showing exact location and extent of site must accompany his form and must be identified by source and date. Keep this submission to 8 1/2" x 11", if possible.
USGS 71/2 Minute Series Quad. Name White Plains
For Office Use Only - UTM Coordinates
9. Photography (optional for environmental impact survey): Please submit a 5" x 7" black and white print(s) showing th current state of the site. Provide a label for the print(s

on a separate sheet.

Page 1 of 3

FOR OFFICE USE ONLY Site Identifier:	Date:
Project Identifier: Jardim Estates East, Tarrytown	
Your Name: Sara Mascia Phone: (203) 226-	·7654
Address: P.O. Box 3037, Westport, CT	<del></del>
Zip: 06880	
Organization (if any): Historical Perspectives, Inc.	
organization (if any). Instorted to objectives, inc.	
1. Site Identifier(s): Gracemere Precontact/Historic Site	
2 County: Westchester One of the Following: City:	
2. County: Westchester One of the Following: City:	Townshin
	Incorporated Village: <u>Tarrytown</u>
	or Hamlet:
3. Present Owner: The Holy Spirit Association for the Unificat	ion of World Christianity
Address:	
Zip:	
2×p	
4. Site Description: (Check all appropriate categories):	
Structure/Site:	
Superstructure: X complete partial collar	osed not evident
Foundation:above _X_ below (ground level) _	
structural subdivisions apparent	
buried traces detected	only buriace access vibroic
List construction materials (be as specific as possible):	•
to an approved the processor).	
The Gracemere Hall building, which is still standing, dates to the high, faced with fieldstone, and has a prominent mansard roof. structure's southern corner between 1890-1904.	
Community in the contract of t	
Grounds:	
under cultivationsustaining erosion	
never cultivated previously cultivated	
Soil Drainage:excellent _X goodfa	
Slope:flat X gentlemoderate	
Distance to nearest water from structure (approx.	):
Elevation: <u>290 feet above sea level</u>	
The area surrounding Gracemere Hall, where archaeological ma	topiala vyapa pagayapad ia aytanaiyaly
landscaped, with rolling lawns.	terials were recovered, is extensively
landscaped, with forming lawns.	
5. Site Investigation (append additional sheets, if necessary):	
Surface—date(s): <u>April 2008</u>	
Site Map (Submit with form*)	
Collection	
Subgurface data(a). April 2008	
Subsurface—date(s): <u>April 2008</u> Testing: <u>X</u> shovelcoringother:	rmit
	unit
size:No. of units: (Submit plan of units wi	th form*)
TYO, OLUMBA, GAUDINI DIZIK OLUMBS WI	LILL TOTAL J

Page 2 of 3

Excavation: unit size: no. o	of units:
(Submit plan of units with form*)	
* Submission should be 8½"x 11", if feasible.	
Investigator: Sara Mascia, Ph.D., R.P.A.	
Manuscript or published report(s) (reference fully):	Historical Perspectives, Inc., 2009, Phase IA/IB
Archaeological and Architectural Investigation, Jardim Estat	
Westchester County, New York.	
•	
Present repository of materials: Historical Perspectives,	Inc.
6. Site Inventory:	
a. Date constructed or occupation period: ca. 1860s-	-late 1930s
b. Previous owners, if known: Robert Graves, 1856-	
Browning, 1907-1930s.	·
c. Modifications, if known (append additional sheets	, if necessary):
There have been a number of changes to Gracemere Hall over	m time including removal of the wronground noveh
and main entryway features, the decorative brackets below the	
windows, and additions on the west and north, and south face	
to apartments during the twentieth century.	ades. The interior of this building was converted
to apartments during the twentieth contary.	
7. Site Documentation (append additional sheets, if necessar	v)·
a. Historic map references: Numerous maps: see Pha	
1) Name:	set report (111 1 2007).
Present location of original if known:	ate: source: source:
2) Name:	ite: source:
Present location of original, if known:	
Troom to or originary it also will	
b. Representation in existing photography: See Phase	e I report (HPI 2009)
1) Photo date: where located	:
2) Photo date: where located	:
c. Primary and secondary source documentation (refe	erence fully): See Phase I report (HPI 2009)
d. Persons with memory of site: See Phase I report (I	HPI 2009)
1) Name:	date:
1) Name:	date: date:
8. List of material remains other than those used in construct object and material):	ion (be as specific as possible in identifying
Field testing was conducted in the yard areas surrounding the	
historical occupation of the house were noted, the majority of	
modern materials, likely the result of extensive landscaping a	ctivities around the building. No below ground

If prehistoric materials are evident, check here and fill out **PREHISTORIC SITE FORM.**  $\underline{X}$ 

field investigation.

features or a buried ground surface associated with the former dwelling were identified during the Phase 1B

Page 3 of 3

9. Map References: Map or maps showing exact location and extent of site must accompany this form and must be identified by source and date. Keep this submission to 8½"x 11", if feasible.

USGS 71/2 Minute Series Quad. Name: White Plains

FOR OFFICE USE ONLY - UTM coordinates:

10. Photography (optional for environmental impact survey):

Please submit a 5"x7" black and white print(s) showing the current state of the site. Provide a label for the print(s) on a separate sheet.

	Page 1 of 3
FOR OFFICE USE ONLY Site Identifier:	Date:
Project Identifier: <u>Jardim Estates East, Tarrytown</u> Your Name: <u>Sara Mascia</u> Phone: <u>(203) 226-76</u>	554
Address: P.O. Box 3037, Westport, CT	<del>554</del>
Zip: 06880	
Organization (if any): <u>Historical Perspectives, Inc.</u>	
1. Site Identifier(s): Sheldon Avenue Historic Site	
2. County: Westchester One of the Following: City:	
	Township:
	Incorporated Village: <u>Tarrytown</u> or Hamlet:
3. Present Owner: The Holy Spirit Association for the Unification	
Address: 4 West 43 <sup>rd</sup> Street, New York NY	in or it original and original
Zip: 10036	
•	
4. Site Description: (Check all appropriate categories):	
Structure/Site:	<b>X</b>
Superstructure:completepartialcollapsed	
Foundation:above _X _below (ground level)structural subdivisions apparentor	
buried traces detected	ny surface traces visiole
List construction materials (be as specific as possible):	
Unmortared fieldstone foundation from a former house. It is recta	angular-shaped, and measures approximately
20 feet by 12 feet.	
Grounds:	
under cultivationsustaining erosion _X_	woodland X upland
never cultivated previously cultivated	
Soil Drainage: excellent X good fair	
Slope:flatgentle _X moderates	
Distance to nearest water from structure (approx.):	<u>300 feet</u>
Elevation: <u>170-180 feet above sea level</u>	
Site is located at the base of a steep slope, adjacent to Sheldon Av	venue
Site is foodied at the base of a steep stope, adjacont to Site don't iv	·
5. Site Investigation (append additional sheets, if necessary):	
Surface—date(s): April 2008	
Site Map (Submit with form*)	
Collection	
Subsurface—date(s): April 2008	mit
Testing: X shovel coring other:	unit unit
No. of units: (Submit plan of units with	n form*)
(Sacrific Plant of William of Wil	· · /

		Page 2 of 3
Excavation: unit size: n	o. of units:	•
(Submit plan of units with form*)	********	
* Submission should be 8½"x 11", if feasible.		
Investigator: Sara Mascia, Ph.D., R.P.A.		
Manuscript or published report(s) (reference fully	y): Historica	l Perspectives, Inc., 2009, Phase IA/IB
Archaeological and Architectural Investigation, Jardim E	•	<del>.</del>
Westchester County, New York.	,	, ,
•		
Present repository of materials: Historical Perspective	es, Inc.	
6. Site Inventory:		
a. Date constructed or occupation period: ca. 186		
b. Previous owners, if known: Henry Sheldon, Ja	•	
c. Modifications, if known (append additional sho	eets, if necess	sary):
7 CL 7	`	
7. Site Documentation (append additional sheets, if neces		( (JIN 2000)
a. Historic map references: Numerous maps: see		
1) Name:  Present location of original, if known:	_ date:	source:
Present location of original, if known:	•	
2) Name:  Present location of original, if known:	_ date:	source:
Present location of original, if known: _		
h. Demonstration in existing whate supplier, many	len avva	
b. Representation in existing photography: none		
1) Photo date: where local	iteu:	
2) Photo date: where loca	ແຮດ:	

8. List of material remains other than those used in construction (be as specific as possible in identifying object and material):

The majority of the historical artifacts recovered from this location were found within the foundation. Much of the assemblage appears to date from the late nineteenth through the early twentieth century. No below ground features associated with the former dwelling were identified during the Phase 1B field investigation.

c. Primary and secondary source documentation (reference fully): See Phase I report (HPI 2009)

d. Persons with memory of site:

1) Name: date: date: date:

If prehistoric materials are evident, check here and fill out PREHISTORIC SITE FORM.

Page 3 of 3

9. Map References: Map or maps showing exact location and extent of site must accompany this form and must be identified by source and date. Keep this submission to 8½"x 11", if feasible.

USGS 7½ Minute Series Quad. Name: White Plains

FOR OFFICE USE ONLY - UTM coordinates:

10. Photography (optional for environmental impact survey):

Please submit a 5"x7" black and white print(s) showing the current state of the site. Provide a label for the print(s) on a separate sheet.

	Page 1 of 3
For Office Use Only Site Identifier:	Date:
Project Identifier: <u>Jardim Estates East, Tarrytown</u>	
Your Name: <u>Sara Mascia</u> Phone: (203) 226-7654	
Address: P.O. Box 3037, Westport, CT	
Zip: <u>06880</u> Organization (if any): <u>Historical Perspectives, Inc.</u>	
organization (if any). Instorted reispectives, inc.	
1. Site Identifier(s): Schneider Historic Site	
2. County: Westchester One of the Following: City:	
To	ownship:
	corporated Village: <u>Tarrytown</u>
	Hamlet:
3. Present Owner: <u>The Holy Spirit Association for the Unification of</u> Address: 4 West 43 <sup>rd</sup> Street, New York NY	world Christianity
Zip: 10036	
Z.ip. 10030	
4. Site Description: (Check all appropriate categories):	
Structure/Site:	
Superstructure:completepartialcollapsed2	
Foundation:above _X_below (ground level) not	
structural subdivisions apparent only s	urface traces visible
buried traces detected	
List construction materials (be as specific as possible):	
The former Schneider house foundation, of fieldstone, is located along outbuildings were also visible. These buildings were probably demoli that shows them is the 1931 Hopkins map. Artifacts littering the grout the time of the field survey dated to the late nineteenth and early twent	shed in the 1930s; the last historic map nd surface near these former buildings at
Grounds:	
under cultivation sustaining erosion $X$ wo	odland <u>X</u> upland
never cultivatedpreviously cultivatedflo	od plainpastureland
Soil Drainage:excellent _X_goodfair	_poor
Slope:flatgentle _X _moderatesteep	\ F4
Distance to nearest water from structure (approx.): 150 Elevation: 220-230 feet above sea level	<u>) reet</u>
Elevation. <u>220-230 feet above sea level</u>	
Site is located on a ridgetop, with steep slopes surrounding the former	house site.
5. Site Investigation (append additional sheets, if necessary):	
Surface-date(s): _April 2008_	
Site Map (Submit with form*)	
Collection	
Subsurface—date(s): <u>April 2008</u> Testing: X shovelcoringother:	unit
size:No. of units: (Submit plan of units with for	m*)

Page 2 of 3

Excavation: unit size: no. of units:
(Submit plan of units with form*)
* Submission should be 8½"x 11", if feasible.
Investigator: Sara Mascia, Ph.D., R.P.A.
Manuscript or published report(s) (reference fully): Historical Perspectives, Inc., 2009, Phase IA/IB
Archaeological and Architectural Investigation, Jardim Estates East, Sheldon Avenue, Village of Tarrytown,
Westchester County, New York.
westchester County, New York.
Present repository of materials: <u>Historical Perspectives</u> , <u>Inc.</u>
Tresent repository of materials. <u>Thistorical refspectives, the.</u>
6. Site Inventory:
a. Date constructed or occupation period: ca. 1860s-1930s
b. Previous owners, if known: John Schneider, 1865-1918
c. Modifications, if known (append additional sheets, if necessary):
c. Woutheattons, if known (append additional sheets, if necessary).
Hayaa waa damaliahad in tha 1020a
House was demolished in the 1930s.
7. Site Documentation (append additional sheets, if necessary):
a. Historic map references: Numerous maps: see Phase I report (HPI 2009).
a. This offernation references. Numerous maps, see Thase Treport (1111 2009).
1) Name: date: source:
Present location of original, if known:
2) Name: date: source:
1) Name: date: source:  Present location of original, if known:  2) Name: date: source:  Present location of original, if known:
h. Donnacoutation in aviating whatagementry, nanalynavyn
b. Representation in existing photography: none known
1) Photo date: where located:
2) Photo date: where located:
D' 1 1 1 (C C11) C D1 - I
c. Primary and secondary source documentation (reference fully): See Phase I report (HPI 2009)
d. Persons with memory of site:
1) Name: date:
2) Name: date:
8. List of material remains other than those used in construction (be as specific as possible in identifying
object and material):
Although much of the assemblage collected from this location contains modern artifacts, a significant amount
of historical material dating from the occupation of the former dwelling was also recovered. No associated
features were noted during the field examination.

If prehistoric materials are evident, check here and fill out **PREHISTORIC SITE FORM**.

Page 3 of 3

9. Map References: Map or maps showing exact location and extent of site must accompany this form and must be identified by source and date. Keep this submission to 8½"x 11", if feasible.

USGS 7½ Minute Series Quad. Name: White Plains

FOR OFFICE USE ONLY – UTM coordinates:

10. Photography (optional for environmental impact survey):

Please submit a 5"x7" black and white print(s) showing the current state of the site. Provide a label for the print(s) on a separate sheet.

Maria Salaharan Barana Bar

and the second of the second o

The second of the Alexander Profession