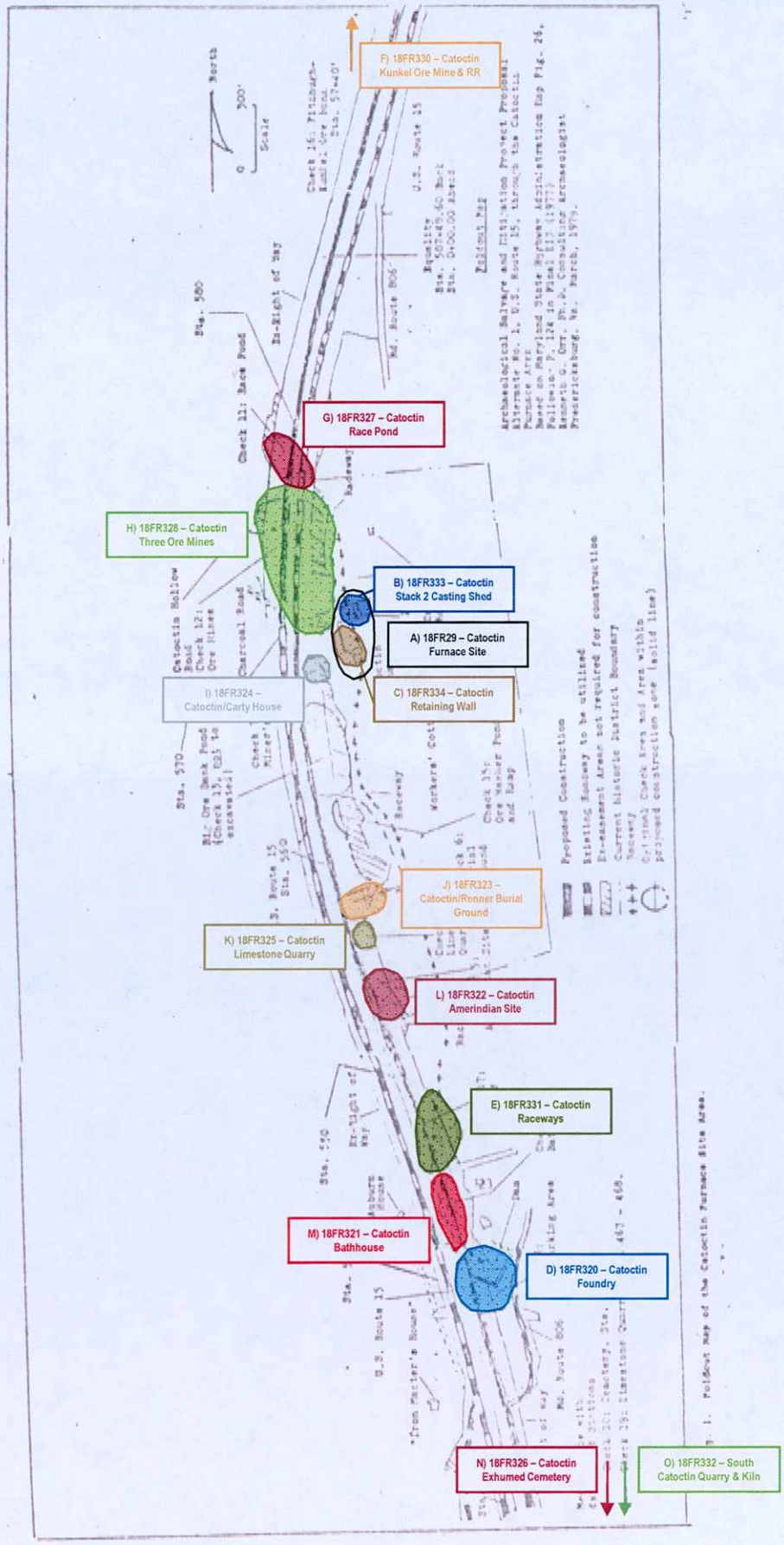
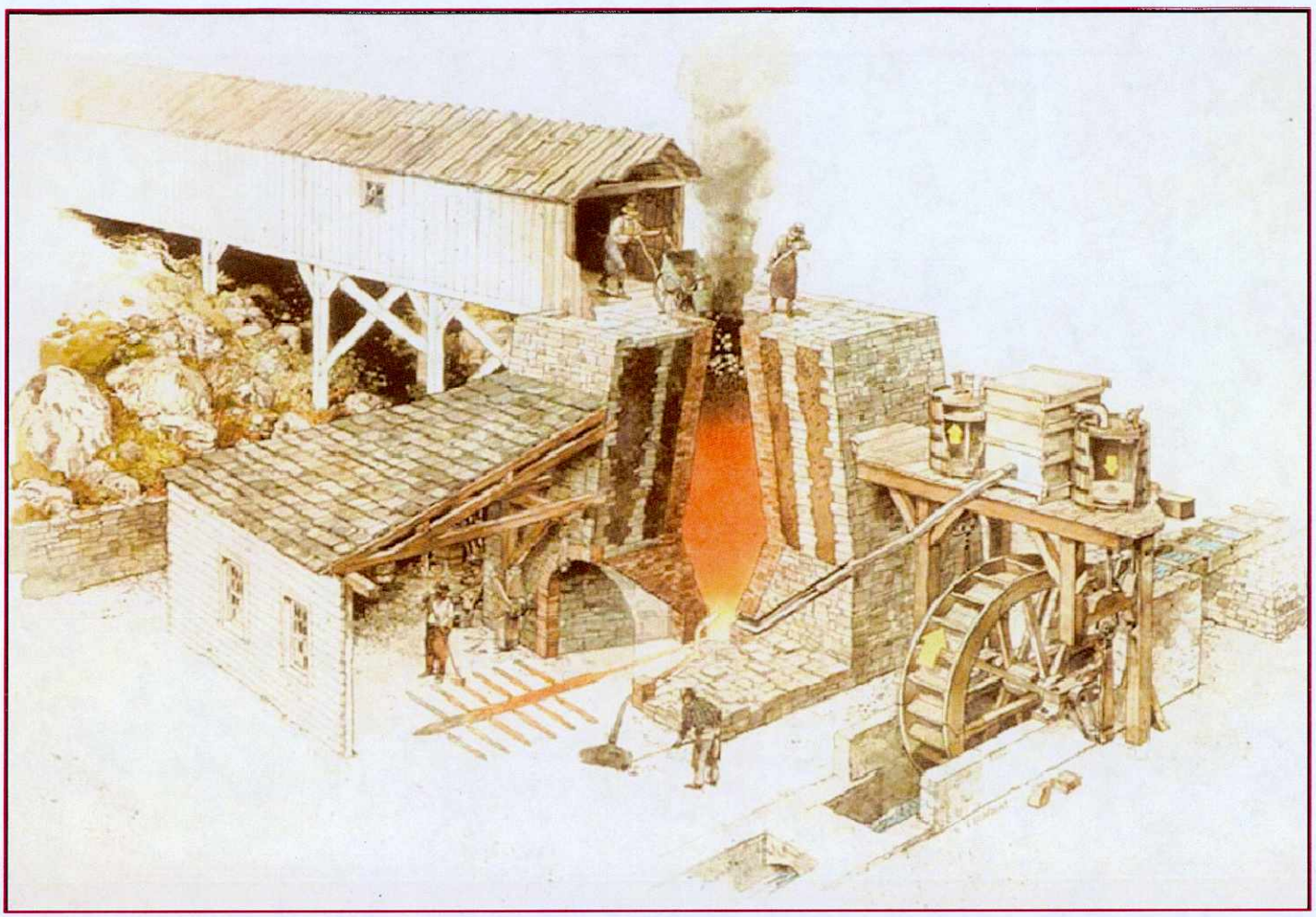
Archeological Synthesis of the US Route 15 Highway Dualization Project at Catoctin Furnace, Frederick County, MD

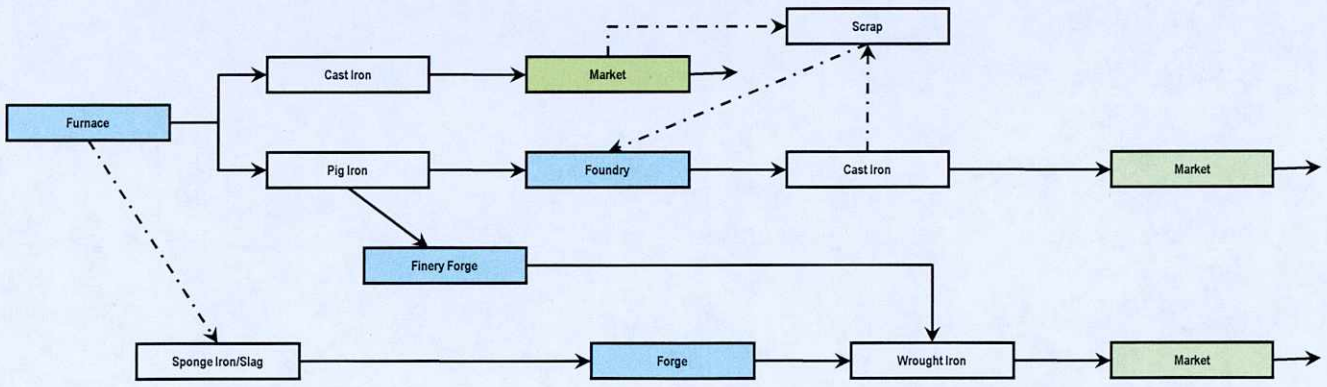
Completed as part of the Maryland Historical Trust Archeological Synthesis Project

2008


F) 18FR330 – Catoctin Kunkel Ore Mine & RR
G) 18FR327 – Catoctin Race Pond
H) 18FR328 – Catoctin Three Ore Mines
B) 18FR333 – Catoctin Stack 2 Casting Shed
A) 18FR29 – Catoctin Furnace Site
C) 18FR334 – Catoctin Retaining Wall
I) 18FR324 – Catoctin/Carty House
J) 18FR323 – Catoctin/Renner Burial Ground
K) 18FR325 – Catoctin Limestone Quarry
L) 18FR322 – Catoctin Amerindian Site
E) 18FR331 – Catoctin Raceways
M) 18FR321 – Catoctin Bathhouse
D) 18FR320 – Catoctin Foundry
N) 18FR326 – Catoctin Exhumed Cemetery
O) 18FR332 – South Catoctin Quarry & Kiln



(National Park Service, Richard Schlecht, illustrator)



MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR29 **Site Name:** Catoctin Furnace

Other name(s)

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th-early 20th century iron furnace complex

Site Location and Environmental Data:

Maryland Archeological Research Unit No. 17 SCS soil & sediment code Ma

Latitude 39.5809 Longitude -77.4346

Physiographic province Blue Ridge

Terrestrial site ☑ Underwater site ☐

Elevation 146 m Site slope

Ethnobotany profile available ☐ Maritime site ☐

Site setting

This site lies east of US 15 in Catoctin Furnace. The site includes Furnace Stack 2, the casting shed area directly in front of its opening, and a retaining wall extending to the west and south. Little Hunting Creek flows east-southeast down Catoctin Mountain, passing 240m north of the site, joining the Monocacy River around 8km southeast of the furnace area.

Topography

Floodplain	☐	High terrace	☐
Hilltop/bluff	☐	Rockshelter/ cave	☐
Interior flat	☐	Hillslope	☐
Upland flat	☐	Unknown	☐
Ridgetop	☐	Other	☐
Terrace	☐		
Low terrace	☑		

Ownership

Private	☐
Federal	☐
State of MD	☑
Regional/ county/city	☐
Unknown	☐

Nearest Surface Water

Name (if any) Little Hunting Creek

Saltwater		Freshwater	
Ocean	☐	Stream/river	☑
Estuary/tidal river	☐	Swamp	☐
Tidewater/marsh	☐	Lake or pond	☐
		Spring	☐

Minimum distance to water is 240 m

Temporal & Ethnic Contextual Data:

Paleoindian site		Woodland site		Contact period site		ca. 1820 - 1860	Y
Archaic site		MD Adena		ca. 1630 - 1675		ca. 1860 - 1900	Y
Early archaic		Early woodland		ca. 1675 - 1720		ca. 1900 - 1930	Y
Middle archaic		Mid. woodland		ca. 1720 - 1780		Post 1930	
Late archaic		Late woodland		ca. 1780 - 1820	Y		

Unknown historic context

nknown prehistoric context

Unknown context

Ethnic Associations (historic only)

Native American		Asian American	
African American		Unknown	Y
Anglo-American		Other	
Hispanic			

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

Multi-component	☐	Misc. ceremonial	☐
Village	☐	Rock art	☐
Hamlet	☐	Shell midden	☐
Base camp	☐	STU/lithic scatter	☐
Rockshelter/cave	☐	Quarry/extraction	☐
Earthen mound	☐	Fish weir	☐
Cairn	☐	Production area	☐
Burial area	☐	Unknown	☐

Other context ☐

Historic

Urban/Rural? Rural

Furnace/forge ☑ Other ☑ iron furnace

Domestic	☐	Transportation	☐	Military	☐	Post-in-ground	☐
Homestead	☐	Canal-related	☐	Battlefield	☐	Frame-built	☐
Farmstead	☐	Road/railroad	☐	Fortification	☐	Masonry	☑
Mansion	☐	Wharf/landing	☐	Encampment	☐	Other structure	☐
Plantation	☐	Maritime-related	☐	Townsite	☐	Slave related	☐
Row/townhome	☐	Bridge	☐	Religious	☐	Non-domestic agri	☐
Cellar	☐	Ford	☐	Church/mtg house	☐	Recreational	☐
Privy	☐	Educational	☐	Ch support bldg	☐	Midden/dump	☐
Industrial	☑	Commercial	☐	Burial area	☐	Artifact scatter	☐
Mining-related	☐	Trading post	☐	Cemetery	☐	Spring or well	☐
Quarry-related	☐	Store	☐	Sepulchre	☐	Unknown	☐
Mill	☐	Tavern/inn	☐	Isolated burial	☐	Other context	☐
Black/metalsmith	☐			Bldg or foundation	☑		
				Possible Structure	☐		

Interpretive Sampling Data:

Prehistoric context samples			
Soil samples taken		Flotation samples taken	
Other samples taken			

Historic context samples			
Soil samples taken	N	Flotation samples taken	N
Other samples taken			

A

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR29 **Site Name:** Catoctin Furnace

Other name(s)

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th-early 20th century iron furnace complex

Diagnostic Artifact Data:

Projectile Point Types

Clovis		Koens-Crispin	
Hardaway-Dalton		Perkiomen	
Palmer		Susquehana	
Kirk (notch)		Vernon	
Kirk (stem)		Piscataway	
Le Croy		Calvert	
Morrow Mntn		Selby Bay	
Guilford		Jacks Rf (notch)	
Brewerton		Jacks Rf (pent)	
Otter Creek		Madison/Potomac	
		Levanna	

All quantities exact or estimated minimal counts

Prehistoric Sherd Types

Marcey Creek		Popes Creek		Shepard		Keyser	
Dames Qtr		Coulbourn		Townsend		Yeocomico	
Selden Island		Watson		Minguannan		Monongahela	
Accokeek		Mockley		Sullivan Cove		Susquehannock	
Wolfe Neck		Clemson Island		Shenks Ferry			
Vinette		Page		Moyaone			
				Potomac Crk			

Historic Sherd Types

Earthenware		Jackfield		Porcelain		Rhenish	
Astbury		Mn Mottled		Stoneware		Wt Salt-glazed	
Borderware		North Devon		English Brown			
Buckley		Staffordshire		Eng Dry-bodie			
Cream/Pearl		Tin Glazed		Nottingham			

Other Artifact & Feature Types:

Prehistoric Artifacts

Flaked stone (all)		Other fired clay	
Ground stone		Human remain(s)	☐
S owls		Modified faunal	
Fire-cracked rock		Unmodified faunal	
Other lithics (all)		Oyster shell	☐
Ceramics (all)		Floral material	☐
Rimsherds		Uncommon Obj.	
		Other ☐	

Prehistoric Features

Mound(s)		Storage/trash pit	☐
Midden	☐	Burial(s)	☐
Shell midden	☐	Ossuary	☐
Postholes/molds	☐	Unknown	☐
House pattern(s)	☐	Other	☐
Palisade(s)	☐		
Hearth(s)	☐		
Lithic reduc area	☐		

Lithic Material

Fer quartzite	☐	Sil sandstone	☐		
Jasper	☐	Chalcedony	☐	European flint	☐
Chert	☐	Ironstone	☐	Basalt	☐
Rhyolite	☐	Argilite	☐	Unknown	☐
Quartz	☐	Steatite	☐	Other	☐
Quartzite	☐	Sandstone	☐		

☐ Dated features present at site

Historic Artifacts

Tobacco pipe(s)			
Pottery (all)		Activity item(s)	
Glass (all)		Human remain(s)	☐
Architectural		Faunal material	☑
Furniture		Misc kitchen item	
Arms		Floral material	☐
Clothing		Misc.	
Personal items		Other ☑	slag

Historic Features

Const feature	☐	Privy/outhouse	☐	Depression/mound	☐	Unknown	☐
Foundation	☐	Well/cistern	☐	Burial(s)	☐	Other	☑
Cellar hole/cellar	☐	Trash pit/dump	☐	Railroad bed	☑	furnaces,retaining wall	
Hearth/chimney	☐	Sheet midden	☐	Earthworks	☐		
Postholes/molds	☐	Planting feature	☐	Mill raceway	☑		
Paling ditch/fence	☐	Road/walkway	☐	Wheel pit	☐		

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1:	+/-	years BP	Reliability	Sample 2:	+/-	years BP	Reliability	Sample 3:	+/-	years BP	Reliability
Sample 4:	+/-	years BP	Reliability	Sample 5:	+/-	years BP	Reliability	Sample 6:	+/-	years BP	Reliability
Sample 7:	+/-	years BP	Reliability	Sample 8:	+/-	years BP	Reliability	Sample 9:	+/-	years BP	Reliability

☐ Additional radiocarbon results available

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR29 **Site Name:** Catoctin Furnace

Other name(s)

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th-early 20th century iron furnace complex

External Samples/Data:

Collection curated at MAC

Synopsis URL

☐ Raw data available online

Datalink 1

Datalink 2

Datalink 3

Summary Description:

Site 18FR29 is the location of the main iron furnaces in the Catoctin Furnace Historic District south of Thurmont, Maryland. The site is situated along US Route 15 in Frederick County and falls within Cunningham Falls State Park. Excavations within the area have lead to the designation of two archeological sites; 18FR333 and 18FR334. The former is the immediate vicinity surrounding the mid 19th century Isabella furnace stack and casting house; also known as "Stack 2". The latter is a 19th century retaining wall and engine house associated with the late 19th century "Deborah" stack (or "Stack 3"). This synopsis report provides background detail regarding the three (possibly 4) furnaces thought to have been situated within the confines of 18FR29. A brief technical description of iron-working technology is provided here, followed by a synopsis of what archival and oral history research in the Catoctin Furnace area has revealed. These data were obtained from numerous Phase I, II, and III archeological reports, but the archeology itself is not discussed here. For discussions of the archeological work performed within 18FR29, see the individual site reports for 18FR333 and 18FR334.

The iron blast furnaces at Catoctin provide physical evidence to support the historical record regarding the way in which hematite ore was processed into finished goods during the late 18th, 19th, and early 20th centuries. Major technological innovations were effected during the lifespan of the furnaces (most notably the transition from water-powered charcoal furnaces to steam-powered anthracite coke furnaces), yet the process involved remained rather simple. A blast furnace is primarily a facility for producing metallic iron from iron ore (hematite). Eighteenth and nineteenth century iron furnaces were pyramidal stone structures lined with firebrick to form an enclosed conical hearth. They contained an opening at the top of the pyramidal "stack" and usually two major openings near the base. The top of the stack was "charged" by dumping iron ore, charcoal, and limestone for flux in specific amounts and orders. A fire was lit at the base and the charcoal began to burn, heating up the iron ore. One of the openings near the base of the stack was used to supply air to the furnace hearth by means of water-powered bellows. This brought the temperature ever higher until the iron began to flow down to the base of the stack. The impurities te ɔ collect at the top of this iron "pool" and would be drained off via a "cinder hole" in the other base opening. Then the iron itself could be allowed to pc either into sand molds for cast iron products (such as hollowware). Cast iron products would go to ancillary structures for finishing and then to the m.

If it wasn't as pure, the iron could be poured into standard sized/shaped molds. These standardized sand molds were normally of a flat rectilinear form and the molten metal poured into the molds via a long runner and through a "gate" in the sand. The layout looked something like piglets suckling at a sow and the term "pig iron" was used for the uniform iron slabs produced. Because it was in uniform sizes and shapes, pig iron could be easily transported by wagon or other means. It would either be shipped to market or would be sent to a local foundry (for remelting into cast iron) or to a finery forge (for processing into wrought iron). A full discussion of the difference between furnaces, foundries, and forges can be found in the synopsis report for 18FR320.During the 19th century, most iron furnaces transitioned to steam power. Steam power was cheaper and allowed the furnaces to increase output. More importantly, a process for utilizing anthracite coke as a fuel source was developed, which also made it possible to increase output beyond what charcoal-fueled furnaces could produce. The innovations were first being introduced in the mid 19th century, but did not come into play at Catoctin until the latter part of the 1800s.

Archival and oral history research reveal that in the year 1774, James, Thomas, Baker, and Roger Johnson constructed the first iron furnace at Catoctin. In 1776, they began producing pig Iron under the name of James Johnson and Company. Hematite ore from the Catoctin Mountains provided the raw material for production of the iron while the Catoctin forests provided charcoal for fuel. In addition, water from the local springs and streams provided the energy to power enormous bellows blowing air into the furnace, as well as power for forge hammers, mills, and other machines. A complex system of ponds, races, ditches, dams, and aqueducts ensured that the water wheels were supplied with sufficient "drop" to maintain the power levels needed. One of the most important early products of the furnace is rumored to have been supplies (including munitions) for George Washington's Army. While pig iron continued to be produced at the furnace, other important products were machine parts, foundry rolling mills, iron car/cart wheels, cast-iron stoves, and other materials. During the Civil War, iron from the furnace was used to armor the famous iron-clad ship, the Monitor. Over the course of history a number of additional furnace stacks, support structures, quarries, casting areas, and other structures were constructed in the area. Some structures were demolished and improved facilities were built.

No issue is more contentious in the interpretation of the Catoctin Furnace area than the location of the original stack built by the Johnsons. Many researchers have argued that all of the furnaces at Catoctin were located in the same general area; that is at Site 18FR29, the main furnace area. Archival evidence clearly indicates that a hot blast charcoal furnace (called "Isabella") was built in 1856 near the site of an already extant charcoal furnace dating back to the 18th century. Much of Isabella was dismantled in 1893, but some ruins were left and the stack and casting house were eventually restored for interpretive purposes. The old 18th century stack near Isabella had been dismantled a few years prior (ca. 1890) after being deemed obsolete. The last furnace to be constructed at Catoctin was "Deborah", built in 1873. This was a steam and water operated hot blast, anthracite coke furnace encompassing the latest improvements in furnace technology. Its annual capacity for producing pig iron was 3 times that of the other two furnaces combined. It was dismantled in the early 20th century following the last blast at Catoctin and salvageable parts were shipped to iron furnaces in Pennsylvania. What is less certain historically is whether the old charcoal furnace near Isabella (see above) was the original (ca. 1774) stack, a later 18th century stack constructed on the same site as the or or a later 18th century stack constructed approximately ¾ mile north of the original (ca. 1774) furnace. The key piece of historical evidence for a fu stack outside the confines of 18FR29, is a statement by J.H. Alexander concerning information he had received directly from James Johnson, descendent of the founders of Catoctin Furnace. In 1840 Alexander wrote that, "The original furnace was built in 1774 by James Johnson & Co. within a mile of the present furnace stack, and carried on successfully until 1787, in which year the same company erected the present furnace about three-fourths of a mile further up the Little Hunting Creek and nearer the ore banks". Since Alexander's informant was a Johnson, he is probably correct and the 18th century stack standing in 1840 at 18FR29 was the second Johnson stack constructed in 1787. Oral history does suggest that some sort of iron-working facility (but typically referred to as a forge) was located south east of the Auburn Pond, just under ¾ of a mile south of 18FR29. One local informant, an 80 year-old man recalled his mother saying she used to play in the "Old Forge" house which was standing in the area without its roof when she was a child. Another man in his 70s used to boat on Auburn Pond and stated that below the lake in a ravine was "the forge". His wife played in the forge as a child also. A man in his late 60s,

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR29 **Site Name:** Catoctin Furnace

Other name(s)

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th-early 20th century iron furnace complex

the son and grandson of miners at Catoctin Furnace, said the area was known throughout the community as the "Old Forge field". When he was young, horses were put in the field to graze. He had seen the Old Forge house in the same locale indicated by the other informants and stated that it was "a pretty good size". The majority of Auburn pond was destroyed by the construction of US Route 15, but the stone-faced, earth embankment of the dam was still extant in 1977. Intensive archeological work in the last 30+ years has been unable to solve this mystery.

External Reference Codes (Library ID Numbers):

00005963, 00005972, 00005973, 00006001, 00006002, 00006046

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR333 **Site Name:** Catoctin Stack 2 Casting Shed

Other name(s)

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 19th-early 20th century iron furnace stack and casting shed

Site Location and Environmental Data:

Latitude 39.5812 Longitude -77.4344

Elevation 146 m Site slope

Site setting

This site lies east of US 15 in Catoctin Furnace. The site includes Furnace Stack 2, and the casting shed area directly in front of its opening. Little Hunting Creek flows east-southeast down Catoctin Mountain, passing 240m north of the site, joining the Monocacy River around 8km southeast of the furnace area.

Maryland Archeological Research Unit No. 17 SCS soil & sediment code Ma

Physiographic province Blue Ridge Terrestrial site ☑ Underwater site ☐

Ethnobotany profile available ☐ Maritime site ☐

Topography

Floodplain	☐	High terrace	☐
Hilltop/bluff	☐	Rockshelter/ cave	☐
Interior flat	☐	Hillslope	☐
Upland flat	☐	Unknown	☐
Ridgetop	☐	Other	☐
Terrace	☐		
Low terrace	☑		

Ownership

Private	☐
Federal	☐
State of MD	☑
Regional/ county/city	☐
Unknown	☐

Nearest Surface Water

Name (if any) Little Hunting Creek

Saltwater		Freshwater	
Ocean	☐	Stream/river	☑
Estuary/tidal river	☐	Swamp	☐
Tidewater/marsh	☐	Lake or pond	☐
		Spring	☐

Minimum distance to water is 240 m

Temporal & Ethnic Contextual Data:

Paleoindian site		Woodland site		Contact period site		ca. 1820 - 1860	
Archaic site		MD Adena		ca. 1630 - 1675		ca. 1860 - 1900	Y
Early archaic		Early woodland		ca. 1675 - 1720		ca. 1900 - 1930	Y
Middle archaic		Mid. woodland		ca. 1720 - 1780		Post 1930	
Late archaic		Late woodland		ca. 1780 - 1820			

Unknown historic context

Unknown prehistoric context

Unknown context

Ethnic Associations (historic only)

Native American		Asian American	
African American		Unknown	Y
Anglo-American		Other	
Hispanic			

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

Multi-component	☐	Misc. ceremonial	☐
Village	☐	Rock art	☐
Hamlet	☐	Shell midden	☐
Base camp	☐	STU/lithic scatter	☐
Rockshelter/cave	☐	Quarry/extraction	☐
Earthen mound	☐	Fish weir	☐
Cairn	☐	Production area	☐
Burial area	☐	Unknown	☐

Other context ☐

Historic

Urban/Rural? Rural

Domestic	☐	Transportation	☐	Furnace/forge	☑	Military	☐	Post-in-ground	☐
Homestead	☐	Canal-related	☐	Other	☑ blast furnac	Battlefield	☐	Frame-built	☐
Farmstead	☐	Road/railroad	☐			Fortification	☐	Masonry	☑
Mansion	☐	Wharf/landing	☐			Encampment	☐	Other structure	☐
Plantation	☐	Maritime-related	☐			Townsite	☐	Slave related	☐
Row/townhome	☐	Bridge	☐			Religious	☐	Non-domestic agri	☐
Cellar	☐	Ford	☐			Church/mtg house	☐	Recreational	☐
Privy	☐	Educational	☐			Ch support bldg	☐	Midden/dump	☑
Industrial	☑	Commercial	☐			Burial area	☐	Artifact scatter	☐
Mining-related	☐	Trading post	☐			Cemetery	☐	Spring or well	☐
Quarry-related	☐	Store	☐			Sepulchre	☐	Unknown	☐
Mill	☐	Tavern/inn	☐			Isolated burial	☐	Other context	☐
Black/metalsmith	☐					Bldg or foundation	☑		
						Possible Structure	☐		

Interpretive Sampling Data:

Prehistoric context samples			Historic context samples		
Soil samples taken			Soil samples taken	N	
Flotation samples taken		Other samples taken	Flotation samples taken	N	Other samples taken

B

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR333 **Site Name:** Catoctin Stack 2 Casting Shed

Other name(s)

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 19th-early 20th century iron furnace stack and casting shed

Diagnostic Artifact Data:

Projectile Point Types			
Clovis		Koens-Crispin	
Hardaway-Dalton		Perkiomen	
Palmer		Susquehana	
Kirk (notch)		Vernon	
Kirk (stem)		Piscataway	
Le Croy		Calvert	
Morrow Mntn		Selby Bay	
Guilford		Jacks Rf (notch)	
Brewerton		Jacks Rf (pent)	
Otter Creek		Madison/Potomac	
		Levanna	

All quantities exact or estimated minimal counts

Prehistoric Sherd Types					
Marcey Creek		Popes Creek		Shepard	
Dames Qtr		Coulbourn		Townsend	
Selden Island		Watson		Minguannan	
Accokeek		Mockley		Sullivan Cove	
Wolfe Neck		Clemson Island		Shenks Ferry	
Vinette		Page		Moyaone	
				Potomac Crk	

Keyser					
Yeocomico					
Monongahela					
Susquehannock					

Historic Sherd Types					
Earthenware		Jackfield		Porcelain	
Astbury		Mn Mottled		Stoneware	
Borderware		North Devon		English Brown	
Buckley		Staffordshire		Eng Dry-bodie	
Cream/Pearl		Tin Glazed	1	Nottingham	

Rhenish	
Wt Salt-glazed	

Other Artifact & Feature Types:

Prehistoric Artifacts			
Flaked stone (all)		Other fired clay	
Ground stone		Human remain(s)	☐
S owls		Modified faunal	
Fire-cracked rock		Unmodified faunal	
Other lithics (all)		Oyster shell	☐
Ceramics (all)		Floral material	☐
Rimsherds		Uncommon Obj.	
		Other ☐	

Prehistoric Features			
Mound(s)		Storage/trash pit	☐
Midden	☐	Burial(s)	☐
Shell midden	☐	Ossuary	☐
Postholes/molds	☐	Unknown	☐
House pattern(s)	☐	Other	☐
Palisade(s)	☐		
Hearth(s)	☐		
Lithic reduc area	☐		

Lithic Material					
Fer quartzite	☐	Sil sandstone	☐		
Jasper	☐	Chalcedony	☐	European flint	☐
Chert	☐	Ironstone	☐	Basalt	☐
Rhyolite	☐	Argilite	☐	Unknown	☐
Quartz	☐	Steatite	☐	Other	☐
Quartzite	☐	Sandstone	☐		

☑ Dated features present at site

Numerous features containing diagnostic historic artifacts.

Historic Artifacts			
Tobacco pipe(s)			
Pottery (all)	4	Activity item(s)	746
Glass (all)	40	Human remain(s)	☐
Architectural	284	Faunal material	☐
Furniture		Misc kitchen item	
Arms	1	Floral material	☐
Clothing		Misc.	23
Personal items	1	Other ☐	

Historic Features							
Const feature	☐	Privy/outhouse	☐	Depression/mound	☐	Unknown	☐
Foundation	☐	Well/cistern	☐	Burial(s)	☐	Other	☑
Cellar hole/cellar	☐	Trash pit/dump	☐	Railroad bed	☐	furnace stack,troughs,notches,iron stakes	
Hearth/chimney	☐	Sheet midden	☐	Earthworks	☐		
Postholes/molds	☐	Planting feature	☐	Mill raceway	☐		
Paling ditch/fence	☐	Road/walkway	☐	Wheel pit	☐		

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1: +/- years BP Reliability Sample 2: +/- years BP Reliability Sample 3: +/- years BP Reliability

Sample 4: +/- years BP Reliability Sample 5: +/- years BP Reliability Sample 6: +/- years BP Reliability

Sample 7: +/- years BP Reliability Sample 8: +/- years BP Reliability Sample 9: +/- years BP Reliability

☐ Additional radiocarbon results available

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR333 **Site Name:** Catoctin Stack 2 Casting Shed

Other name(s)

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 19th-early 20th century iron furnace stack and casting shed

External Samples/Data:

Collection curated at MAC

Synopsis URL

☐ Raw data available online

Datalink 1

Datalink 2

Datalink 3

Summary Description:

Site 18FR333 is the immediate vicinity surrounding a mid 19th century iron furnace stack known as "Isabella" and its associated casting house. The iron furnace is also known as "Stack 2", although it is likely the third blast furnace built in the Catoctin area (see synopsis report for 18FR29). The site is situated in the Catoctin Furnace Historic District along US Route 15 in Frederick County, Maryland and falls within Cunningham Falls State Park. It is also subsumed within the broader Catoctin Furnace site or 18FR29. Historical background on the site is provided in the 18FR29 synopsis report. This report deals solely with the details of archeological excavations conducted at 18FR333.

The first documented archeological fieldwork done in the area was conducted under the auspices of the Works Progress Administration (WPA) as part of depression-era relief work in 1936. The fieldwork involved excavation of a 1.2192 meter (4 ft) wide trench 3.6576 meters (12 ft) east of the Isabella stack and parallel to its face. The trench continued north to the north wall of the presumed casting house. The field crew that initially began work at the site was not trained in archeology and work had to be halted shortly after it began until a trained archeologist could be hired as a foreman to oversee the dig. No report of the excavation findings was ever published and the whereabouts of any collection is unknown. Archeological work was confined to pedestrian surveys, mostly in the early 1970s, until 1975 when formal test excavations were conducted within the confines of 18FR333.

Due to the impending dualization of US Route 15, a thorough archeological survey was conducted throughout the broader Catoctin Furnace area. Since archeological deposits of known historical value were almost certainly situated in the vicinity of the Isabella furnace stack, a decision was made to move immediately forward with Phase II testing in this area in 1975. Test excavations were designed to document the remains of the associated casting house in preparation for its reconstruction as an interpretive feature of the Cunningham Falls State Park. The researchers documented multiple sand layers and the pr[illegible]e of a subfloor drainage system. The decision was made at that time to designate it as a separate site within 18FR29; 18FR333.

O[illegible] estimated 15% of the site, or 34.8 square meters was excavated in 1975. A grid of 1.524 meter (5 ft) squares was placed over the casting shed site with a datum established 5.08 cm (2 in) north of the southeast corner of the furnace stack. Excavation was conducted in a series of 4 major trenches, with tests opened up or expanded when major features were encountered. Eighteen features, 28 major strata, and numerous artifacts and cultural materials were encountered. The finds were recognized as associated with iron manufacturing processes of the 19th century. Major finds included the furnace hearth, the cinder notch (for pouring out slag), the iron notch for releasing the molten metal, two parallel troughs or gutters running down a slope in the mouth of the furnace to the casting floor, upright stakes and gutter plates, a clay lining, and a pig iron ingot.

At the turning point of the iron notch trough a cinder basin and wharf were found for storing the slag. Trenching from the 1936 WPA excavation was apparent in this area. The troughs were filled with red sand, oxidized by the hot iron, and covered by a layer of black coal cinders. This was interpreted as being indicative of a later period of the furnace's use, when the casting sand was no longer being used. Foundry work may have been conducted here, in which molten iron would be ladled from the cinder notch rather than run through the troughs to molds. The casting house floor revealed a number of sand floors superimposed one on the other and interlaced with red sand lenses, dark sand, and cinders. These were interpreted as the casting floor with the pig iron molds and runners seen in the red and darker colored sands. While charcoal fragments were plentiful in the lower floors, coke and coal cinders came from later levels – suggesting a change in fuel for greater efficiency. The center of the casting house floor was occupied by a large basin which was interpreted as a hauling area for the removal of the pig iron ingots. A "trapeze and tongue" iron artifact was conveniently found on the basin floor and interpreted as "hauling gear". Under the basin and the sand floors was a fieldstone covered drain, believed to be for draining off the water used to cool the newly molded pig iron prior to removal. Evidence of a curved trench cutting through two sandy soil strata at the base of the excavation might have been made to install or repair the drain. The central basin was opened when the casting shed was dismantled and contained bricks, glass, machine parts, and iron artifacts used as fill in leveling the site early in the 20th century. One of the three rafter pole footings at the south side of the shed was excavated, revealing a square patch-work pedestal of field stones. The footing of the first east wall section was also excavated. The south end of the second east wall section (restored) was lacking footing. Since the planned restoration (with footing) of this second section of the east wall seems to agree with a late photograph of the shed, the east wall may have had several phases in its construction or a footing was considered unnecessary earlier on. Evidence of the WPA dig was seen in the east section of the site interior with the southeast corner of the shed possibly excavated. A low ridge at the outside of the east wall was sectioned to show six superimposed strata of sand, red and brown sand, lime, and humus. This was interpreted as a storage area for refuse from the shed floor and/or for supplies.

Artifacts recovered during the excavations include 719 activity items related to iron working, 280 architectural objects, 42 kitchen-related items, 19 miscellaneous artifacts, and a single arms-related object. The activity-related objects include 5 chunks of formed sand, 234 pieces of slag, 1 sample of slag ash, 2 cinder slag fragments, 176 vitrified conglomerate materials (including stone, slag, etc.), 2 pieces of burnt clay, 3 pieces of ochre, 47 charcoal pieces/samples, 68 fragments of coke, 2 pieces of coal, 43 fragments of iron ore, an iron pig, 65 iron objects (tools, furnace products, gates, scrap, etc.), 63 fragments of iron (mostly sheet), a metal bar, 4 pieces of metal sheet, a metal hook, a large metal tool (interpreted as a pig iron "hauler"), a pick axe collar, a piece of copper sheathing, a brass collar, and 2 lead tubes. The 280 architectural artifacts were 84 masonry-related objects (63 bricks or brick fragments, 14 pi[illegible]f firebrick, 4 pieces of mortar, 3 pieces of architectural stone), 2 fragments of window glass, a cast iron pipe, 177 hardware pieces (24 square nails, 1[illegible]cellaneous nails, 6 wire nails, 8 iron spikes, 9 iron screws, 2 nuts, and 5 screws), 16 lime fragments, and a wood plank. The kitchen-related artifacts were a un-glazed sherd, 1 piece of ironstone, 2 fragments of redware, and 38 bottle fragments. The one arms-related artifact is a cap from a shotgun shell. The miscellaneous objects recovered from the site were a fragment of red clay, 15 pieces of stone, 2 wood fragments, and a piece of chalk.

Researchers returned to the site in 1976 to conduct additional test excavations around the base of a nearby historic retaining wall system, preparatory to the installation of shoring cleats to support buttresses for the retaining wall. Their excavations revealed details of the engine house associated with the Deborah Stack (a.k.a. Stack 3). See the synopsis report for 18FR334 for more details regarding this portion of the excavation. The researchers also encountered what they interpreted to be the remains of a bellows house and waterwheel pit. Excavation in the area north of the Isabella stack suggested that this area might

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR333 **Site Name:** Catoctin Stack 2 Casting Shed

Other name(s)

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 19th-early 20th century iron furnace stack and casting shed

enclose the almost entirely buried remains of the 1787 Stack. A total of six test squares were excavated in the footprint areas of the future shoring cleats. Unit sizes were typically between 1.2192 and 1.524 meters (4 and 5 ft) wide, and were excavated to a depth of 61-91 cm (2-3 ft). Each was approximately 2.9 meters (9½ ft) out from the wall where the cleats were to be installed. Four of the test units were placed along the retaining wall to the west of Isabella (in the vicinity of the bellows and wheel pit) and two were placed along the retaining wall north of Isabella (where the 1787 Stack was possibly located).

Three of the test units to the west of Isabella revealed a slag pile over clay fill. One test revealed massive flat stones placed in close proximity to one another, but with spaces between them. They resemble (in both size and layout) stones found beneath the Isabella stack casting house which were used as a stone drain. A race course with water valve is seen directly above this feature on the top of the retaining wall. An overshot wheel is believed to be the device which was used to operate bellows providing air to draft the furnaces. The massive stones were, then, part of the drainage system for the wheel house. Large wall stones are seen in the immediate vicinity; a likely foundation in support of the waterwheel and bellows. It is believed that the waterwheel would have supplied power to both the 1787 Stack and Isabella.

Locals contend that the old charcoal stack built in 1787 by the Johnsons (the actual second stack built at Catoctin – see synopsis report for 18FR29) was located just to the north of the Isabella stack. Two test units were excavated in this area. However, researchers quickly realized that the entire area was filled with rubble caused by the breakdown of the retaining wall. The researchers contended that if the 1787 Stack was located in this area, then the old stack is essentially sealed by the rubble presenting a promising avenue for future research. At the time of the cleat installations, further excavation was deemed unnecessary.

Artifacts recovered from these tests include 27 activity items (24 pieces of slag, 2 conglomerates of vitrified material, and a piece of burnt clay), 4 architectural objects (1 brick fragment, 1 firebrick, and 2 pieces of mortar), 1 personal item (a plastic eyeglass frame), and 4 miscellaneous objects (a piece of red clay and 3 rocks).

Additional Phase I work and archeological monitoring of the site have taken place since the late 1970s, however, interpretations of the site have changed little in that time. The site's most significant component is the mid 19th century iron furnace and casting house. Data obtained during these excavations were used in the repair of the furnace and reconstruction of the casting house for interpretation. Other significant components include the waterwheel house and probable location of bellows for Isabella and the 1787 Stack. One promising avenue for future research at 18FR333 is an examination of the area just north of the Isabella stack. It is believed that the base of the 1787 Stack may be buried here beneath rubble from the old retaining wall.

External Reference Codes (Library ID Numbers):

0(1, 00006002, 00006046

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR334 **Site Name:** Catoctin Retaining Wall

Other name(s)

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: 19th century iron furnace retaining wall and engine house site

Site Location and Environmental Data:

Latitude 39.5809 Longitude -77.4347

Elevation 146 m Site slope

Site setting

This site lies east of US 15 in Catoctin Furnace. The site is located along the base of the retaining wall to the west and southwest of Furnace Stack 2. Little Hunting Creek flows east-southeast down Catoctin Mountain, passing 240m north of the site, joining the Monocacy River around 8km southeast of the furnace area.

Maryland Archeological Research Unit No. 17 SCS soil & sediment code Ma

Physiographic province Blue Ridge Terrestrial site ☑ Underwater site ☐

Ethnobotany profile available ☐ Maritime site ☐

Topography

Floodplain	☐	High terrace	☐
Hilltop/bluff	☐	Rockshelter/ cave	☐
Interior flat	☐	Hillslope	☐
Upland flat	☐	Unknown	☐
Ridgetop	☐	Other	☐
Terrace	☐		
Low terrace	☑		

Ownership

Private	☐
Federal	☐
State of MD	☑
Regional/ county/city	☐
Unknown	☐

Nearest Surface Water

Name (if any) Little Hunting Creek

Saltwater		Freshwater	
Ocean	☐	Stream/river	☑
Estuary/tidal river	☐	Swamp	☐
Tidewater/marsh	☐	Lake or pond	☐
		Spring	☐

Minimum distance to water is 240 m

Temporal & Ethnic Contextual Data:

Paleoindian site		Woodland site		Contact period site		ca. 1820 - 1860	Y
Archaic site		MD Adena		ca. 1630 - 1675		ca. 1860 - 1900	Y
Early archaic		Early woodland		ca. 1675 - 1720		ca. 1900 - 1930	
Middle archaic		Mid. woodland		ca. 1720 - 1780		Post 1930	
Late archaic		Late woodland		ca. 1780 - 1820			

Unknown historic context

nknown prehistoric context Unknown context

Ethnic Associations (historic only)

Native American		Asian American	
African American		Unknown	Y
Anglo-American		Other	
Hispanic			

Y=Confirmed, P=Possible

S... Junction Contextual Data:

Prehistoric

Multi-component	☐	Misc. ceremonial	☐
Village	☐	Rock art	☐
Hamlet	☐	Shell midden	☐
Base camp	☐	STU/lithic scatter	☐
Rockshelter/cave	☐	Quarry/extraction	☐
Earthen mound	☐	Fish weir	☐
Cairn	☐	Production area	☐
Burial area	☐	Unknown	☐

Other context ☐

Historic

Urban/Rural? Rural

Domestic	☐	Furnace/forge	☐	Military	☐	Post-in-ground	☐
Homestead	☐	Other	☐	Battlefield	☐	Frame-built	☐
Farmstead	☐	Transportation	☐	Fortification	☐	Masonry	☑
Mansion	☐	Canal-related	☐	Encampment	☐	Other structure	☐
Plantation	☐	Road/railroad	☐	Townsite	☐	Slave related	☐
Row/townhome	☐	Wharf/landing	☐	Religious	☐	Non-domestic agri	☐
Cellar	☐	Maritime-related	☐	Church/mtg house	☐	Recreational	☐
Privy	☐	Bridge	☐	Ch support bldg	☐	Midden/dump	☐
Industrial	☑	Ford	☐	Burial area	☐	Artifact scatter	☐
Mining-related	☐	Educational	☐	Cemetery	☐	Spring or well	☐
Quarry-related	☐	Commercial	☐	Sepulchre	☐	Unknown	☐
Mill	☐	Trading post	☐	Isolated burial	☐	Other context	☑
Black/metalsmith	☐	Store	☐	Bldg or foundation	☑	retaining wall,engine house site	
		Tavern/inn	☐	Possible Structure	☐		

Interpretive Sampling Data:

Prehistoric context samples			
Soil samples taken			
Flotation samples taken		Other samples taken	

Historic context samples			
Soil samples taken	N		
Flotation samples taken	N	Other samples taken	

C

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR334 **Site Name:** Catoctin Retaining Wall

Other name(s)

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: 19th century iron furnace retaining wall and engine house site

Diagnostic Artifact Data:

Projectile Point Types

Clovis		Koens-Crispin	
Hardaway-Dalton		Perkiomen	
Palmer		Susquehana	
Kirk (notch)		Vernon	
Kirk (stem)		Piscataway	
Le Croy		Calvert	
Morrow Mntn		Selby Bay	
Guilford		Jacks Rf (notch)	
Brewerton		Jacks Rf (pent)	
Otter Creek		Madison/Potomac	
		Levanna	

Prehistoric Sherd Types

Marcey Creek		Popes Creek		Shepard		Keyser	
Dames Qtr		Coulbourn		Townsend		Yeocomico	
Selden Island		Watson		Minguannan		Monongahela	
Accokeek		Mockley		Sullivan Cove		Susquehannock	
Wolfe Neck		Clemson Island		Shenks Ferry			
Vinette		Page		Moyaone			
				Potomac Crk			

Historic Sherd Types

Earthenware		Jackfield		Porcelain		Rhenish	
Astbury		Mn Mottled		Stoneware		Wt Salt-glazed	
Borderware		North Devon		English Brown			
Buckley		Staffordshire		Eng Dry-bodie			
Cream/Pearl		Tin Glazed		Nottingham			

All quantities exact or estimated minimal counts

Other Artifact & Feature Types:

Prehistoric Artifacts

Flaked stone (all)		Other fired clay	
Ground stone		Human remain(s)	☐
S owls		Modified faunal	
Fire-cracked rock		Unmodified faunal	
Other lithics (all)		Oyster shell	☐
Ceramics (all)		Floral material	☐
Rimsherds		Uncommon Obj.	
		Other ☐	

Prehistoric Features

Mound(s)		Storage/trash pit	☐
Midden	☐	Burial(s)	☐
Shell midden	☐	Ossuary	☐
Postholes/molds	☐	Unknown	☐
House pattern(s)	☐	Other	☐
Palisade(s)	☐		
Hearth(s)	☐		
Lithic reduc area	☐		

Lithic Material

Fer quartzite	☐	Sil sandstone	☐		
Jasper	☐	Chalcedony	☐	European flint	☐
Chert	☐	Ironstone	☐	Basalt	☐
Rhyolite	☐	Argilite	☐	Unknown	☐
Quartz	☐	Steatite	☐	Other	☐
Quartzite	☐	Sandstone	☐		

☑ Dated features present at site

Numerous features containing diagnostic historic artifacts.

Historic Artifacts

Pottery (all)		Tobacco pipe(s)	
Glass (all)	20	Activity item(s)	11
Architectural	50	Human remain(s)	☐
Furniture		Faunal material	☐
Arms		Misc kitchen item	
Clothing		Floral material	☐
Personal items		Misc.	
		Other ☐	

Historic Features

Const feature	☐	Privy/outhouse	☐	Depression/mound	☐	Unknown	☐
Foundation	☑	Well/cistern	☐	Burial(s)	☐	Other	☑
Cellar hole/cellar	☐	Trash pit/dump	☐	Railroad bed	☐	stone retaining wall,cleat,brick floor	
Hearth/chimney	☐	Sheet midden	☐	Earthworks	☐		
Postholes/molds	☐	Planting feature	☐	Mill raceway	☐		
Paling ditch/fence	☐	Road/walkway	☐	Wheel pit	☐		

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1: +/- years BP Reliability Sample 2: +/- years BP Reliability Sample 3: +/- years BP Reliability

Sample 4: +/- years BP Reliability Sample 5: +/- years BP Reliability Sample 6: +/- years BP Reliability

Sample 7: +/- years BP Reliability Sample 8: +/- years BP Reliability Sample 9: +/- years BP Reliability

☐ Additional radiocarbon results available

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR334 **Site Name:** Catoctin Retaining Wall

Other name(s)

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: 19th century iron furnace retaining wall and engine house site

External Samples/Data: Collection curated at MAC

Synopsis URL

☑ Raw data available online

Datalink 1

Datalink 2

Datalink 3

Summary Description:

Site 18FR334 is the immediate vicinity surrounding a large stone retaining wall at the main furnace area at Catoctin Furnace. The site is situated in the Catoctin Furnace Historic District along US Route 15 in Frederick County, Maryland and falls within Cunningham Falls State Park. It is also subsumed within the broader Catoctin Furnace site or 18FR29. Historical background on the site is provided in the 18FR29 synopsis report. This report deals solely with the details of archeological excavations conducted at 18FR334.

The first documented archeological fieldwork done in the area was conducted under the auspices of the Works Progress Administration (WPA) as part of depression-era relief work in 1936. The fieldwork involved excavation of a trench east of the nearby Isabella stack (see the synopsis report for 18FR333). No report of the excavation findings was ever published and the whereabouts of any collection is unknown. It wasn't until the early 1970s that archeological attention would turn towards the massive stone retaining wall (18FR334) that extended west and south from the Isabella stack. It is thought to have flanked much of the complex associated with "Deborah" (a.k.a. Stack 3), the late 19th and early 20th century anthracite coke and steam powered iron furnace at Catoctin.

In 1971 an archeological salvage program was put into practice due to the impending dualization of US Route 15, which would impact significant portions of the landscape. A thorough archeological survey was conducted throughout the broader Catoctin Furnace area. An archeological team conducting Phase I work did some exploratory trenching in the area in order to locate evidence of the "charcoal house" structure shown on top of the retaining wall system in late 19th-early 20th century photographs , the "Old Charcoal Road", and any other archeological features. A total of 7 backhoe trenches located west and northwest of the old stone retaining wall system were excavated. Unfortunately, the researchers did not report their methods or results. They did however p extensive background research and some discussion of the archeological work was reported. It is clear from the context of this discussion that they di xpose any archeological features suggestive of a roadbed or of structures.

Researchers returned to the site in 1976 to conduct additional test excavations around the base of the retaining wall system, preparatory to the installation of shoring cleats to support buttresses for the wall. Their excavations revealed details of the engine house associated with the Deborah Stack. The researchers also encountered what they interpreted to be the remains of a bellows house and waterwheel pit outside the area of the site, closer to the Isabella stack. Excavation in the area north of the Isabella stack also suggested that the buried remains of the 1787 Stack may be located there (see synopsis report for 18FR333). A total of seven test squares were excavated in the footprint areas of the future shoring cleats at 18FR334. An additional six were excavated near Isabella. Unit sizes were typically between 1.2192 and 1.524 meters (4 and 5 ft) wide, and were excavated to a depth of 61-91 cm (2-3 ft). Each was approximately 2.9 meters (9½ ft) out from the wall where the cleats were to be installed. Six of the test units were placed in close proximity to one another along the southern end of the retaining wall. This was in an area where the steam engine house for the Deborah Stack was located. One test unit was placed in an area near the center of the wall where there was spring seepage.

The area surrounding the engine house revealed a series of stone-faced pits surmounted by rotted timbers secured on numerous upright iron stakes. It is believed that the engines for producing and compressing hot air were situated here. This hot air would be piped into the bosh of the Deborah Stack. The hot air was to raise the temperature of anthracite fuel which melted the iron ore to be made into pig iron ingots in the casting house. A four course brick "buffer" floor underlay one of the engines (Feature 1). This feature was intersected by the cleat position and that portion so affected was removed, with bricks labeled as to position, in case of future restoration. The engines themselves had been removed to an iron furnace in Pennsylvania in the early 20th century. A section of the north wall of the engine house was also intersected by a cleat. The section of the feature so affected was similarly removed after photographs and sketches were made. A large pig iron plate with an abundance of iron tools, nails, and window glass were affected by this cleat. Removing this midden material lead to the discovery of another brick, stone-faced wall (Feature 2), which probably was the south wall of the engine house. A wall trench for a pit wall was also discovered and explored. Material from the Engine House site came from the floor area above a mixed clay fill subsoil. The floor contained brick debris, window glass, and roof timbers resulting from the subsequent collapse of the roofs and walls of the site. The brick and glass types, as well as the nails were of the type associated with the latter part of the 19th century, agreeing with the postulated date of 1872-1907 for use of the Deborah Stack. The one test unit outside of the engine area (near the center of the retaining wall) revealed iron ore and slag on top of clay fill. The bed of a stream, which proceeded from a spring under the wall to a horse-water pond some 15.24 meters (50 ft) to the east, was adjacent to the cleat position but not involved. No features were encountered (other than the slag heap) in this area. Artifact tallies in the table above are approximate.

Additional Phase I work and archeological monitoring of the site have taken place since the late 1970s, however, interpretations of the site have changed little in that time. The site's most significant component is the engine house remains, which could someday aide in interpretive features or even reconstruction at the site. As little work was conducted at the site outside the actual footprints of the retaining wall cleats, the additional research potential of Site 18FR334 is unknown.

E ial Reference Codes (Library ID Numbers):

0 J1, 00006002

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR320 **Site Name:** Catoctin Foundry

Other name(s): Orr's "Check 3"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th century mill race, early-mid-19th century iron foundry/forge

Site Location and Environmental Data:

Maryland Archeological Research Unit No. 17 SCS soil & sediment code AdB2

Latitude 39.5715 Longitude -77.4326 Physiographic province Blue Ridge Terrestrial site ☑ Underwater site ☐

Elevation 134 m Site slope 6-10% Ethnobotany profile available ☐ Maritime site ☐

Site setting

This site is located a short distance north of the intersection of US 15 and MD 806, on the south edge of a large stone and earth dam. Situated near the foot of the east slope of Catoctin Mountain, the site lies on land which apparently once comprised a part of the Auburn estate. Auburn Mansion is visible to the west of the site, across US 15, behind which is an open mine said to have been the first ore mine at Catoctin.

Topography

Floodplain	☐	High terrace	☐
Hilltop/bluff	☐	Rockshelter/ cave	☐
Interior flat	☐	Hillslope	☑
Upland flat	☐	Unknown	☐
Ridgetop	☐	Other	☐
Terrace	☐		
Low terrace	☐		

Ownership

Private	☐
Federal	☐
State of MD	☐
Regional/ county/city	☐
Unknown	☑

Nearest Surface Water

Name (if any) Unnamed tributary of Little

Saltwater		Freshwater	
Ocean	☐	Stream/river	☑
Estuary/tidal river	☐	Swamp	☐
Tidewater/marsh	☐	Lake or pond	☐
		Spring	☐

Minimum distance to water is 350 m

Temporal & Ethnic Contextual Data:

Paleoindian site		Woodland site		Contact period site		ca. 1820 - 1860	Y
Archaic site		MD Adena		ca. 1630 - 1675		ca. 1860 - 1900	
Early archaic		Early woodland		ca. 1675 - 1720		ca. 1900 - 1930	
Middle archaic		Mid. woodland		ca. 1720 - 1780	Y	Post 1930	
Late archaic		Late woodland		ca. 1780 - 1820	Y		
Unknown prehistoric context				Unknown historic context			
				Unknown context			

Ethnic Associations (historic only)

Native American		Asian American	
African American		Unknown	
Anglo-American		Other	Y
Hispanic		Irish-American?;Scottish-American?	

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

Multi-component	☐	Misc. ceremonial	☐
Village	☐	Rock art	☐
Hamlet	☐	Shell midden	☐
Base camp	☐	STU/lithic scatter	☐
Rockshelter/cave	☐	Quarry/extraction	☐
Earthen mound	☐	Fish weir	☐
Cairn	☐	Production area	☐
Burial area	☐	Unknown	☐
Other context	☐		

Historic

Urban/Rural? Rural

Domestic	☐	Furnace/forge	☑	Military	☐	Post-in-ground	☐
Homestead	☐	Other	☑ iron foundry	Battlefield	☐	Frame-built	☐
Farmstead	☐	Transportation	☐	Fortification	☐	Masonry	☐
Mansion	☐	Canal-related	☐	Encampment	☐	Other structure	☐
Plantation	☐	Road/railroad	☐	Townsite	☐	Slave related	☐
Row/townhome	☐	Wharf/landing	☐	Religious	☐	Non-domestic agri	☐
Cellar	☐	Maritime-related	☐	Church/mtg house	☐	Recreational	☐
Privy	☐	Bridge	☐	Ch support bldg	☐	Midden/dump	☐
Industrial	☑	Ford	☐	Burial area	☐	Artifact scatter	☐
Mining-related	☐	Educational	☐	Cemetery	☐	Spring or well	☐
Quarry-related	☐	Commercial	☐	Sepulchre	☐	Unknown	☐
Mill	☑	Trading post	☐	Isolated burial	☐	Other context	☐
Black/metalsmith	☑	Store	☐	Bldg or foundation	☑		
		Tavern/inn	☐	Possible Structure	☐		

Interpretive Sampling Data:

Prehistoric context samples			
Flotation samples taken		Soil samples taken	
		Other samples taken	

Historic context samples			
Flotation samples taken	U	Soil samples taken	U
		Other samples taken	wood,slag,iron

D

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR320 **Site Name:** Catoctin Foundry

Other name(s): Orr's "Check 3"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th century mill race, early-mid-19th century iron foundry/forge

Diagnostic Artifact Data:

Projectile Point Types			
Clovis		Koens-Crispin	
Hardaway-Dalton		Perkiomen	
Palmer		Susquehana	
Kirk (notch)		Vernon	
Kirk (stem)		Piscataway	
Le Croy		Calvert	
Morrow Mntn		Selby Bay	
Guilford		Jacks Rf (notch)	
Brewerton		Jacks Rf (pent)	
Otter Creek		Madison/Potomac	
		Levanna	

All quantities exact or estimated minimal counts

Prehistoric Sherd Types							
Marcey Creek		Popes Creek		Shepard		Keyser	
Dames Qtr		Coulbourn		Townsend		Yeocomico	
Selden Island		Watson		Minguannan		Monongahela	
Accokeek		Mockley		Sullivan Cove		Susquehannock	
Wolfe Neck		Clemson Island		Shenks Ferry			
Vinette		Page		Moyaone			
				Potomac Crk			

Historic Sherd Types							
Earthenware		Jackfield		Porcelain	10	Rhenish	
Astbury		Mn Mottled		Stoneware		Wt Salt-glazed	
Borderware		North Devon		English Brown			
Buckley		Staffordshire		Eng Dry-bodie			
Cream/Pearl	10	Tin Glazed		Nottingham			

Other Artifact & Feature Types:

Prehistoric Artifacts			
Flaked stone (all)		Other fired clay	
Ground stone		Human remain(s)	☐
S owls		Modified faunal	
Fire-cracked rock		Unmodified faunal	
Other lithics (all)		Oyster shell	☐
Ceramics (all)		Floral material	☐
Rimsherds		Uncommon Obj.	
		Other ☐	

Prehistoric Features			
Mound(s)		Storage/trash pit	☐
Midden	☐	Burial(s)	☐
Shell midden	☐	Ossuary	☐
Postholes/molds	☐	Unknown	☐
House pattern(s)	☐	Other	☐
Palisade(s)	☐		
Hearth(s)	☐		
Lithic reduc area	☐		

Lithic Material					
		Fer quartzite	☐	Sil sandstone	☐
Jasper	☐	Chalcedony	☐	European flint	☐
Chert	☐	Ironstone	☐	Basalt	☐
Rhyolite	☐	Argilite	☐	Unknown	☐
Quartz	☐	Steatite	☐	Other	☐
Quartzite	☐	Sandstone	☐		

☑ Dated features present at site

The raceway feature can be roughly dated to 1760-1787.

Historic Artifacts			
Tobacco pipe(s)			
Pottery (all)	565	Activity item(s)	7486
Glass (all)		Human remain(s)	☐
Architectural	5	Faunal material	☑
Furniture		Misc kitchen item	
Arms	1	Floral material	☐
Clothing		Misc.	21
Personal items		Other ☑	slag

Historic Features					
Const feature	☐	Privy/outhouse	☐	Depression/mound	☐
Foundation	☑	Well/cistern	☐	Burial(s)	☐
Cellar hole/cellar	☐	Trash pit/dump	☐	Railroad bed	☐
Hearth/chimney	☐	Sheet midden	☐	Earthworks	☐
Postholes/molds	☐	Planting feature	☐	Mill raceway	☑
Paling ditch/fence	☐	Road/walkway	☐	Wheel pit	☐
				Unknown	☐
				Other	☐

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1: +/- years BP Reliability Sample 2: +/- years BP Reliability Sample 3: +/- years BP Reliability

Sample 4: +/- years BP Reliability Sample 5: +/- years BP Reliability Sample 6: +/- years BP Reliability

Sample 7: +/- years BP Reliability Sample 8: +/- years BP Reliability Sample 9: +/- years BP Reliability

☐ Additional radiocarbon results available

Phase II and Phase III Archeological Database and Inventory

MARYLAND HISTORICAL TRUST

Site Number: 18FR320 **Site Name:** Catoctin Foundry

Other name(s) Orr's "Check 3"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th century mill race, early-mid-19th century iron foundry/forge

External Samples/Data: Collection curated at MAC

Synopsis URL

☑ Raw data available online

Datalink 1 National Endowment for the Humanities - Digital Collections Files

Datalink 2 MAC Lab Collections Finding Aid

Datalink 3

Summary Description:

Site 18FR320 is the location of the remains of a late 18th century raceway and of early-mid 19th century ancillary iron-working facilities. The site is located in the southern portion of the Catoctin Furnace Historic District along US Route 15 in Frederick County, Maryland. Excavations at the site revealed evidence of a raceway that was part of the first hydraulic power system used in iron-working at Catoctin Furnace, and 19th century features and artifacts that suggest use of the area in ancillary iron-working activities such as the finishing and final assembly of cast-iron goods produced elsewhere, and the storage of charcoal fuel. Such activities usually took place near forges, foundries, or furnaces and a charcoal house would have normally been located near the point of consumption. This evidence seems to suggest the presence of a significant historic iron-working facility (forge, foundry, etc.) nearby, just off-site.

The site was first examined by archeologists in 1977 during a Phase I survey through the Catoctin Furnace Historic District and environs prior to the dualization of US Route 15. The area was first drawn to the attention of researchers by a local informant and long-time resident of the Catoctin Furnace area, Mr. William Renner. He generated a sketch map from his own recollections and historical research showing a dam and lake (Auburn Pond) near the intersection of US 15 and MD 806, with a wheel pit in the dam and a rectangular structure labeled "forge – 1760s". Ethnohistorical interviews and archival research add additional details to Renner's interpretation for this portion of the Catoctin Furnace lands. A brief overview of this research will be provided, followed by a general description of the archeological work.

Archival and oral history research reveal that in the year 1774, James, Thomas, Baker, and Roger Johnson constructed the first iron furnace at Catoctin. In 1776, they began producing pig iron under the name of James Johnson and Company. Hematite ore from the Catoctin Mountains provided the raw material for production of the iron while the Catoctin forests provided charcoal for fuel. In addition, water from the local springs and streams provided the energy to pc ıormous bellows blowing air into the furnace, as well as power for forge hammers, mills, and other machines. A complex system of ponds, races, di dams, and aqueducts ensured that the water wheels were supplied with sufficient "drop" to maintain the power levels needed. One of the most im ıt early products of the furnace is rumored to have been supplies (including cannonballs) for George Washington's Army. While pig iron continued to be produced at the furnace, other important products were machine parts, foundry rolling mills, iron car/cart wheels, cast-iron stoves, and other materials. During the Civil War, iron from the furnace was used to armor the famous iron-clad ship, the Monitor. Over the course of history a number of additional furnace stacks, support structures, quarries, casting areas, and other structures were constructed in the area. Some structures were demolished and improved facilities were built.

No issue is more contentious in the interpretation of the Catoctin Furnace area than the location of the original stack built by the Johnsons. Many researchers have argued that all of the furnaces at Catoctin were located in the same general area. This is the main furnace area to the north; site number 18FR29. Archival evidence clearly indicates that a hot blast charcoal furnace (called "Isabella") was built in 1856 near the site of an already extant charcoal furnace dating back to the 18th century. Much of Isabella was dismantled in 1893, but some ruins were left and the stack and casting house were eventually restored for interpretive purposes. The old 18th century stack near Isabella had been dismantled a few years prior (ca. 1890) after being deemed obsolete. The last furnace to be constructed at Catoctin was "Deborah", built in 1873. This was a steam and water operated hot blast, anthracite coke furnace encompassing the latest improvements in furnace technology. Its annual capacity for producing pig iron was 3 times that of the other two furnaces combined. It was dismantled in the early 20th century following the last blast at Catoctin and salvageable parts were shipped to iron furnaces in Pennsylvania. What is less certain historically is whether the old charcoal furnace near Isabella (see above) was the original (ca. 1774) stack, a later 18th century stack constructed on the same site as the original, or a later 18th century stack constructed approximately ¾ mile north of the original (ca. 1774) furnace. The key piece of historical evidence for a furnace stack outside the confines of 18FR29, is a statement by J.H. Alexander concerning information he had received directly from James Johnson, descendent of the founders of Catoctin Furnace. In 1840 Alexander wrote that, "The original furnace was built in 1774 by James Johnson & Co. within a mile of the present furnace stack, and carried on successfully until 1787, in which year the same company erected the present furnace about three-fourths of a mile further up the Little Hunting Creek and nearer the ore banks". Since Alexander's informant was a Johnson, he is probably correct and the 18th century stack standing in 1840 at 18FR29 was the second Johnson stack constructed in 1787. It should also be noted, that Site 18FR320 is situated nearly ¾ mile south of Isabella and is situated at the southern reaches of the earliest as yet discovered hydraulic System at Catoctin (Raceway System A). The possibility that the first Catoctin stack was located on or near 18FR320 was certainly at the forefront of investigators' minds as they worked at the site.

Oral history does suggest that some sort of iron-working facility, typically referred to as a forge, was located south east of the Auburn Pond. One local informant, an 80 year-old man recalled his mother saying she used to play in the "Old Forge" house which was standing in the area without its roof when she was a child. Another man in his 70s used to boat on Auburn Pond and stated that below the lake in a ravine was "the forge". His wife played in the forge as a child also. A man in his late 60s, the son and grandson of miners at Catoctin Furnace, said the area was known throughout the community as the "Old Forge field". When he was young, horses were put in the field to graze. He had seen the Old Forge house in the same locale indicated by the other informants and stated that it was "a pretty good size". The majority of Auburn pond was destroyed by the construction of US Route 15, but the stone-faced, earth embankment of the dam was still extant in 1977. The dam is marked by a right-angle formed by its embankments, the southeast of which measures about 4! eters (150 ft) and the southwest about 30.48 meters (100 ft). The embankment is made of earth standing some 2.1336 meters (7 ft) above base soil o utside and faced with stone wall 1.524 meters (5 ft) high constructed of fieldstone without mortar. A prime function of the dam was to provide water to run a water wheel, the inset niche for which is seen in the southeast wall. The wheel niche measures about 4.572 meters (15 ft) at its entrance and is set back into the dam about 3.6576 (12 ft). The wheel niche, according to the folklore of the area, was an overshot wheel that powered the iron-working hammer at the conjectured forge (see above). An 1858 Map does depict an "old forge" located in the area, just below the dam. South of the dam retaining wall, two stone pillars mark the entrance to the Auburn Mansion grounds; once home to the owners of the furnace. The pillars themselves were only erected in the 1920s, but according to the locals, mark an area in which several report finding artifacts relating to the history of Catoctin over the years.

Intensive survey work, both historical/oral history research and surveying of the major historical features in the area (dam, wheel niche, etc.), revealed

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR320 **Site Name:** Catoctin Foundry

Other name(s) Orr's "Check 3"

Brief Description: late 18th century mill race, early-mid-19th century iron foundry/forge

Prehistoric ☐ Historic ☑ Unknown ☐

relatively quickly that the site was potentially one of great importance and research potential. Thus, research transitioned quickly to Phase II testing during the 1977 field season. Phase II fieldwork entailed the excavation of 3 backhoe trenches in the vicinity of the wheel niche, and 8 small hand excavated test units in the area surrounding the stone entrance posts (see above). Backhoe Trench 1 was made about 4.572 meters (15 ft) in front of the aforementioned wheel niche and ran parallel to the dam retaining wall for 4.572 meters. It was excavated to a depth of 2.4384 meters (8 ft) and revealed a red clay subsoil underlaying a thin humus layer. However, a deep pit had been cut into the red clay by non-natural means in one area and a slag fill had been deposited. Investigators had not reached the bottom of this slag layer even after excavating to the depth indicated. Backhoe Trench 2 was located directly south of Trench 1 and measured 3.048 meters (10 ft) in length and 1.524 meters (5 ft) in depth. An identical slag fill was encountered, consisting of large pieces of "furnace glass", typically associated with the later Catoctin furnaces such as "Isabella" and especially "Deborah". The slag may be associated with the construction of old US 15. Trench 3 located 7.62 meters (25 ft) southwest of Trench 2 measured 3.048 meters by 76.2 centimeters and was 2.54 meters (8 ft, 4 in) deep. The stratigraphy showed stratified sand layers associated with US 15 construction in the 1960s covering the slag layer and resting on the red clay subsoil. The slag layer was designated Feature 1. The hand-excavated test units were placed around the two stone entrance posts and varied in size (but were generally about 0.762 X 0.762 meters). Immediately, objects were uncovered in the test units revealing an area measuring some 24.384 meters (80 ft) north-south and 30.48 meters (100 ft) east-west with a common artifact-bearing strata. The artifact bearing strata (designated Feature 2) lay directly atop the red clay subsoil and was in turn overlain by a fill, a thick humus, and by one of several blankets of fills resulting from road construction projects in the vicinity. At the bottom of this stratigraphic feature, a charcoal zone and several layers of porous iron nuggets were encountered in several pits (usually coated with red clay and iron artifacts).

Artifacts encountered within the Feature 2 layer include 243 activity items related to iron-working, 5 architectural objects, and 21 miscellaneous items. The iron-working activity items were 18 sprues or pieces of gate metal (the iron waste from pouring molten metal into molds), 215 nuggets of porous "sponge iron" (a by-product of iron smelting often used to produce wrought iron), 6 small fragments of slag, two 1.27 cm (½ in) thick metal plates, a squared wrought iron bar with sharp tip, and a wrought iron bar bent at a right angle. The architectural objects are 2 fragments of white "furnace brick" (1 with writing), 2 badly corroded iron nails (these aren't necessarily architectural given the context), and 1 spigot of shiny metal (probably pewter). The miscellaneous items are fragments of charcoal and burnt wood. In addition to these artifacts, a red iron oxide was noted throughout much of the surrounding sand and clay feature fill.

It was clear to researchers that Feature 2 represented some kind of iron-working facility. But exactly what kind was still very much in question. The presence of sprues and gate metal suggests either a foundry or blast furnace, while wrought iron and the coating of red iron oxide are suggestive of a forge. Both foundries and forges could have been engaged in "reclaiming" iron from furnace waste like sponge iron. In addition, the location of the site a little under ¾ of a mile from the main furnace area (Isabella) suggested the possibility that the site might be the 1774 furnace discussed above. It should be noted that all three types of facilities (blast furnaces, foundries, and forges) were engaged in producing very different products despite the frequent (and erroneous) substitution of or for another in common language. A brief description of each is warranted here for clarity's sake.

A blast furnace is primarily a facility for producing metallic iron from iron ore (hematite). Eighteenth and nineteenth century iron furnaces were pyramidal stone structures lined with firebrick to form an enclosed conical hearth. They contained an opening at the top of the pyramidal "stack" and usually two major openings near the base. The top of the stack was "charged" by dumping iron ore, charcoal, and limestone for flux in specific amounts and orders. A fire was lit at the base and the charcoal began to burn, heating up the iron ore. One of the openings near the base of the stack was used to supply air to the furnace hearth by means of water-powered bellows. This brought the temperature ever higher until the iron began to flow down to the base of the stack. The impurities tended to collect at the top of this iron "pool" and would be drained off via a "cinder hole" in the other base opening. Then the iron itself could be allowed to pour out either into sand molds for cast iron products (such as hollowware), or if it wasn't as pure it could be poured into standard size "pig iron" molds. Cast iron products would go to ancillary structures for finishing and then to the market. Pig iron would either be shipped to market or would be sent to a local foundry or finery forge. Foundries, like blast furnaces, also contained an enclosed furnace and a water-powered bellows for supplying air. In physical structure, foundries are quite similar to furnaces, but often on a smaller scale. The furnace at a foundry, however, is used principally for re-melting pig iron as well as cast iron scrap and waste. The molten iron is then poured into molds in a large sand casting floor. Again, this produces cast iron goods for the market. Both blast furnaces and foundries would require extensive foundation excavations and stones for their construction. The foundations of a furnace should be far more substantial than those of a foundry. In addition, several grades of sand would be present in archeological deposits for casting. Sprues or "gate wedges" were often produced where the iron poured through the sand runner into a mold. These were broken off and sold as scrap (but frequently would get discarded around the hearth as well). The hydraulic power system to supply energy to the bellows should also be in evidence at such sites.

Forges are very different. Forges are characterized by an open hearth and a hammer. The purpose of a forge is to refine sponge iron (which could be obtained from the furnace cinder piles) into wrought iron. Through repeated hammering and folding the slag is either beaten out or incorporated into the metal, making it more fibrous and strong. Bellows are also needed to heat the "open" hearth of a forge, and are supplied with power via a water raceway and wheel (as is the hammer itself). A finery forge was an even more specialized structure which was designed to efficiently produce wrought iron from pig iron coming out of the blast furnace. In a finery, the pig iron was remelted in a small furnace (the actual finery) to eliminate carbon and other unwanted elements. The result was a "bloom" of iron and slag which was then hammered until the iron was condensed (with small amounts of slag). The iron was then re-heated in an open hearth called a chafery and by successive trips between finery, chafery, and hammer, the "finer" was able to produce wrought iron bars. The architectural remains from a forge could be quite variable as there were several different designs and types of forges, but evidence for a hammer, bellows, and the water power to drive both should be present at such a site. In addition, tiny sparks of hot iron and slag were driven off as the metal was hammered. This results is a thin deposit of iron oxide or "hammerscale" throughout the floor of a forge site. As the buried deposit at 18FR320 produced cast iron waste materials, casting sand, iron ore, and what appeared to be hammerscale, additional excavation work was warranted to determine exactly what type of iron-working activity took place at the site. Phase III data recovery was undertaken in both 1979 and 1981 in order to mitigate the expected adverse effects of the highway project.

During the 1979 field season a series of nine long, narrow trenches were excavated mechanically to reveal feature and stratigraphic relationships from one part of the site to another. Nine backhoe trenches were excavated there to locate and explore architectural remains. In addition, a site grid was established and square 1.524 meter (5 ft) units were excavated, primarily in the area surrounding the two stone pillars. These were designed to allow careful examination of individual features and strata and to facilitate a more controlled recovery of associated artifacts. A backhoe was used to remove the top 61 cm (2 ft) of fill to reveal features and then they were excavated by hand. Soils were screened through hardware mesh only when deemed necessary for the recovery of small artifacts. Major discoveries included a rectangular building foundation with a yellowish sandy floor (Feature 1), a rather substantial stone wall (Feature 4), smaller stone walls (Feature 6), and numerous deposits of slag and charcoal containing cast iron artifacts and waste materials. A raceway (which would be expected if the site were any of the aforementioned structural types) was not encountered, but excavation just to the north (18FR331) did detect a raceway heading in that general direction. Thus, a major goal of 1the 1981 excavations was to locate a raceway on-site and obtain additional information relating to the discovered features. The excavation grid established in 1979 was also employed in 1981 and new units were tied to it. While the 1979

mechanically excavated trenches were not oriented to the site grid (but were eventually tied to it), all of the trenches excavated mechanically in 1981 were oriented to it, with one exception. A decision was made to orient a single trench perpendicular to the face of the Auburn dam in order to reveal a more representative cross section of this feature. Based on the 1979 excavations, it was believed that most of the site's data were to be obtained through examination of its features, supplemented by artifactual data. Accordingly, recovery techniques were chosen with an emphasis toward the horizontal exposure of features with less emphasis on the recovery of every artifact. The bulk of the excavation was carried out with pick and shovel, trowels being utilized only when necessary. Again, excavated soils were passed through hardware cloth only when necessary for the recovery of small artifacts. Only 3 long, narrow, mechanical trenches were excavated, but 30 large block units provided good horizontal exposure. The square test units were typically 3.048 meters (10 ft) on a side (although some were smaller as they overlapped with previously excavated units or for other reasons.

Ignoring historically late features (such as the Auburn Mansion driveway additions and later road fills), Site 18FR320 ultimately revealed the following significant features. An early raceway was encountered during excavations in 1981. This passed through the south part of the site, providing power to some installation located to the east of the site at a time when nothing else is located at 18FR320. This was part of Catoctin Furnace's Hydraulic System A, which dates to the earliest period of industrial improvement at Catoctin Furnace (roughly 1760-1787). The raceway arrived in the site area near its northeast edge and continued due south, roughly parallel to the highway. Near the south end of the site it makes an abrupt turn east, falling rapidly in elevation. This rapid west to east fall would have supplied significant "drop" to power waterwheels for various purposes. The Auburn ore bank is located just to the west of the point where the race made its turn, which is also suggestive. For additional details regarding the hydraulic system at Catoctin (including System A) see the synopsis report for 18FR331. Several stratigraphic layers (reddish-brown silty clay and slag and charcoal layers) we encountered, which included evidence for iron-working activities. Materials in these layers were significant amounts of refining slag and charcoal, together with casting debris, fragments of cast iron artifacts, implements to finish the artifacts, and possible blacksmithing tools, all laid down at a time after the silting over of the nearby raceway. Evidence of two structures, one of which certainly post-dates the layers described above, was encountered. Perhaps of greatest importance; neither structure (despite evidence for both refining and casting of iron) can be interpreted as a forge, foundry, or blast furnace. The "hammerscale" turned out to be a different kind of iron oxide deposit and no evidence of a hammer emplacement was encountered. Also, no substantial heaps of ore, flux, or smelting slag were found at 18FR320. No burned or unburned molding sand was found (the sand that was found was not the very thick deposit expected in a casting house). Some small pieces of firebrick were encountered, but were interpreted as anomalous. In sum, it is clear that the primary activities of casting and refining were not taking place within the confines of the excavation. The stone and earth dam to the north (Auburn) cannot be dated with certainty in relation to the rest of the site, but it must post-date at least one phase or lens of the slag and charcoal layers and probably post dates the abandonment of the structures. Interpretations of these features are provided below.

Few details are provided in the full site report regarding the exact quantities and types of artifacts encountered at 18FR320. As stated previously, research w: red primarily towards the uncovering of features as these were deemed the most useful for interpretive purposes in this type of salvage archeology sil . A total of 7,809 artifacts were recovered from 18FR320; most reflecting the industrial function of the site. Ironworking activities were primarily id...d through the classification of tools, fragments of manufactured items, and slag. A large portion of the assemblage consisted of cast and wrought iron objects. Few non-industrial objects were recovered. Archaeological evidence supports historical documentation that indicated that bombshells, pots, kettles, salt pans, iron stoves, and dutch ovens were produced at Catoctin. A large percentage of the artifacts from the site were flat, featureless cast iron pieces, probably from plain stove plates. Two stove door latches, two stove feet, and a stove door frame were also recovered. The only decorated stove parts were ornamented along an edge to mask a joint. Fragments of various-sized cooking pots and kettles were also recovered, including an almost complete cast iron pot. The types of tools and machinery hardware identified at the site indicated the iron working activities at Catoctin Furnace, and suggested the presence of a blacksmith. A variety of wrought tools, including 11 cold chisels, 6 files, 3 wrenches, 2 mold maker's slicks, a hammer and a draw knife, were used on site to trim and finish iron castings. In addition, cast iron flask clamps, gaggers, runners, sprues (24), and wedge-shaped iron gates (49) provide evidence of iron casting processes. The presence of horseshoes, ox shoes, and wagon parts (wrought iron goods) confirm the use of draft animals to transfer ore and fuel to the furnace and to transport goods to various markets. Evidence of non-industrial activities at the site probably relate to the individuals who worked there. The 565 ceramic sherds include coarse earthenwares, transfer-printed and annular whitewares, green-edged and blue-edged pearlwares, American stonewares, and hand-painted Chinese export porcelains. The bulk of glass bottles are colorless, with a few fragments of dark blue and green wine/beer bottles. Window glass was also encountered, concentrated around the northeast and southeast walls of Feature 1 (the rectangular building w/ sandy floor). In addition, a copper alloy powder flask with an embossed shell motif was recovered. Given the low level of details provided in the full site report for these artifacts, all objects are categorized in the table above as "activity items" (due to their probable function in iron-working activities), with the exception of the 565 sherds and 1 arms-related object (the powder flask). No quantification is available for glass goods so these are included in the total count of activity items.

Eight pieces of slag and 10 items of cast iron were submitted to laboratories for analytical tests. Quantitative elemental analysis of the major constituents of the slag was obtained from proton-induced x-ray emission spectroscopy (PIXE), and a brief metallographic examination was conducted. The ten cast iron objects (a sprue, a tripod kettle leg, a handle ear, a section of flat plate, a runner, 3 wedge gates, a gutter or possibly a section of pig, and a fragment of pig iron) were subjected to the same analyses and also subjected to scanning electron microscopy. Analysis of the slag revealed that green glass slag recovered at the site was clearly the result of primary smelting processes in a charcoal-fueled blast furnace; i.e. not the later coke-fueled furnace "Deborah" which would have introduced a higher sulfur content into the slag. Ferrous slag (the spongy iron cinders/nuggets) were provisionally identified as deriving from the refining of pig or cast iron in a finery and chafery forge (see above). Slight differences in the structure of these slags can be explained by differing cooling rates. One slag sample is anomalous and was interpreted as furnace or hearth rake-out. Analysis of the ten cast iron objects reveals one over-riding result; the objects had a very high phosphorous content. This reveals, what much of the historic record suggests; that the Catoctin iron industry was known for producing fine cast iron objects, but was not known for producing suitable wrought iron. Phosphorous was undesirable in wrought iron, but since it would increase fluidity and melting range of the cast irons, it would generally have given them good castability.

This evidence, coupled with the excavation work begins to start shaping a picture of the iron-working activities taking place at the site. The major revelation was that, while the refining of iron and perhaps the casting of iron were taking place near Site 18FR320, it was at a locus well outside the area of impact of the U: alignment study and probably, as indicated by historical and archival research, beneath the road fill of MD Route 806 to the east. A raceway (d ted Feature 44) dates to an early stage at the site and directed water in this general direction with significant "drop", probably a "head race" to power some as yet unidentified structure to the east. There was no refining slag within the race fill, but there were small nodules of furnace glass (smelting slag) from a charcoal-fueled blast furnace. The aforementioned gunpowder flask was also found within the fill and is thought to date between 1800 and 1825. It is postulated that this race was supplying water power for the first furnace at Catoctin built by the Johnsons around 1774. According to Alexander's letter it was out of blast around 1787, the date when another charcoal stack was built ¾ of a mile to the north in what would become the main furnace area at Catoctin. Major alterations were made to the raceway design when Hydraulic System B was constructed (see synopsis report for 18FR331). These would have accelerated the silting over of the old raceway through the site, which seems to have occurred between 1787 and the early 1830s. Aside from the raceway, the crucial period for the site's use and the spike of activity seen in the charcoal, slag and other layers equates most probably with the 20 year span between

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Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR320 **Site Name:** Catoctin Foundry

Other name(s) Orr's "Check 3"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th century mill race, early-mid-19th century iron foundry/forge

1830 and 1850. One structure dating to that period is probably a charcoal house. The construction of Feature 4 (one of the two structures identified), oral traditions, and the layers within and around it are all in keeping with an identification of it as a charcoal house. No definitive interpretation can be offered for the other structure (Feature 1). While casting debris, sand, and fragments of cast iron artifacts were encountered, there is no evidence of a furnace foundation for either a blast furnace or foundry and the sand layers are not thick enough to have served as a casting floor. The presence of certain tools and a lack of diagnostic objects (suggesting the floor of the structure was kept very clean) indicate that the building may have been an ancillary iron-working structure used as a workspace for the "finishing" of cast iron wares.

No direct evidence of the "forge" that historical evidence points to in this area was encountered. A few fragments of firebrick were recovered and the race certainly must have provided power to "something", but the only solid evidence for a forge comes from historical records (most notably a mid 19th century map and oral histories). The analysis of slags from the site also presents a problem. Several of the spongy iron slag samples were identified as coming from a finery forge. At the same time, metal analysis and the historical record indicate that Catoctin did not produce good ores for the production of wrought iron. The locale could have supported a foundry. Runners, gate metal, etc. would normally be knocked off of the finished iron piece at a location not far removed from the furnace or foundry (and casting floors). A finery forge and foundry must have been situated east of the site in the direction supplied by the raceway. This was the ultimate conclusion reached by the site investigators. They suggested that the conjectured forge might have been an experimental, short-lived attempt by the furnace owners to produce wrought iron. The aforementioned 1858 Map reference to an "old forge" in the vicinity would seem to suggest that by that time the endeavor was already defunct and had been for some time. A foundry may have been set up in its place, or the two conjectured structures could have been part of a combined complex. The main hitch in any of these ideas is that the most likely period for the use of such structures is the very era during which the raceway is silting up (1787-ca. 1831). Better dating of the dam's construction and the structures of Hydraulic System B and C would definitely aide in interpretation.

While the site itself has largely been exhausted of its research potential, areas directly to the east of the site warrant further examination. Much of this area has been altered by road construction. However, much of the alteration was likely the addition of historic fills that may have buried and sealed the site. Testing should be undertaken if an opportunity presents itself to determine if A) evidence of the early (1774) furnace can be obtained and B) if the conjectured early-mid 19th century finery forge, foundry, or combined forge and foundry are located in this area to the east of 18FR320.

External Reference Codes (Library ID Numbers):

00005963, 00005972, 00005973, 00005976

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR331 **Site Name:** Catoctin Raceway

Other name(s): Orr's "Check 17"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: possibly late 18th and 19th century raceway

Site Location and Environmental Data:

Latitude 39.5742 Longitude -77.4333

Elevation 137 m Site slope 11-20%

Site setting: This raceway lies just east of US 15, running along a line about 446 to 448' asl.

Maryland Archeological Research Unit No. 17

Physiographic province: Blue Ridge

Ethnobotany profile available ☐ Maritime site ☐

SCS soil & sediment code: EcC3

Terrestrial site ☑ Underwater site ☐

Topography

Floodplain	☐	High terrace	☐
Hilltop/bluff	☐	Rockshelter/ cave	☐
Interior flat	☐	Hillslope	☑
Upland flat	☐	Unknown	☐
Ridgetop	☐	Other	☐
Terrace	☐		
Low terrace	☐		

Ownership

Private	☑
Federal	☐
State of MD	☐
Regional/ county/city	☐
Unknown	☐

Nearest Surface Water

Name (if any): Little Hunting Creek

Saltwater		Freshwater	
Ocean	☐	Stream/river	☐
Estuary/tidal river	☐	Swamp	☑
Tidewater/marsh	☐	Lake or pond	☐
		Spring	☐

Minimum distance to water is 300 m

Temporal & Ethnic Contextual Data:

Paleoindian site		Woodland site		Contact period site		ca. 1820 - 1860	Y
Archaic site		MD Adena		ca. 1630 - 1675		ca. 1860 - 1900	Y
Early archaic		Early woodland		ca. 1675 - 1720		ca. 1900 - 1930	
Middle archaic		Mid. woodland		ca. 1720 - 1780		Post 1930	
Late archaic		Late woodland		ca. 1780 - 1820	P		

Unknown prehistoric context | Unknown historic context | Unknown context

Ethnic Associations (historic only)

Native American		Asian American	
African American		Unknown	Y
Anglo-American		Other	
Hispanic			

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

Multi-component	☐	Misc. ceremonial	☐
Village	☐	Rock art	☐
Hamlet	☐	Shell midden	☐
Base camp	☐	STU/lithic scatter	☐
Rockshelter/cave	☐	Quarry/extraction	☐
Earthen mound	☐	Fish weir	☐
Cairn	☐	Production area	☐
Burial area	☐	Unknown	☐

Other context ☐

Historic

Urban/Rural? Rural

Domestic	☐	Furnace/forge	☐	Military	☐	Post-in-ground	☐
Homestead	☐	Other	☐	Battlefield	☐	Frame-built	☐
Farmstead	☐	Transportation	☐	Fortification	☐	Masonry	☐
Mansion	☐	Canal-related	☐	Encampment	☐	Other structure	☐
Plantation	☐	Road/railroad	☐	Townsite	☐	Slave related	☐
Row/townhome	☐	Wharf/landing	☐	Religious	☐	Non-domestic agri	☐
Cellar	☐	Maritime-related	☐	Church/mtg house	☐	Recreational	☐
Privy	☐	Bridge	☐	Ch support bldg	☐	Midden/dump	☐
Industrial	☑	Ford	☐	Burial area	☐	Artifact scatter	☐
Mining-related	☐	Educational	☐	Cemetery	☐	Spring or well	☐
Quarry-related	☐	Commercial	☐	Sepulchre	☐	Unknown	☐
Mill	☑	Trading post	☐	Isolated burial	☐	Other context	☐
Black/metalsmith	☐	Store	☐	Bldg or foundation	☐		
		Tavern/inn	☐	Possible Structure	☐		

Interpretive Sampling Data:

Prehistoric context samples			
Soil samples taken		Flotation samples taken		Other samples taken	

Historic context samples			
Soil samples taken	N	Flotation samples taken	N	Other samples taken	

E

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR331 **Site Name:** Catoctin Raceway

Other name(s): Orr's "Check 17"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: possibly late 18th and 19th century raceway

Diagnostic Artifact Data:

Projectile Point Types			
Clovis		Koens-Crispin	
Hardaway-Dalton		Perkiomen	
Palmer		Susquehana	
Kirk (notch)		Vernon	
Kirk (stem)		Piscataway	
Le Croy		Calvert	
Morrow Mntn		Selby Bay	
Guilford		Jacks Rf (notch)	
Brewerton		Jacks Rf (pent)	
Otter Creek		Madison/Potomac	
		Levanna	

All quantities exact or estimated minimal counts

Prehistoric Sherd Types					
Marcey Creek		Popes Creek		Shepard	Keyser
Dames Qtr		Coulbourn		Townsend	Yeocomico
Selden Island		Watson		Minguannan	Monongahela
Accokeek		Mockley		Sullivan Cove	Susquehannock
Wolfe Neck		Clemson Island		Shenks Ferry	
Vinette		Page		Moyaone	
				Potomac Crk	

Historic Sherd Types					
Earthenware		Jackfield		Porcelain	Rhenish
Astbury		Mn Mottled		Stoneware	Wt Salt-glazed
Borderware		North Devon		English Brown	
Buckley		Staffordshire		Eng Dry-bodie	
Cream/Pearl	1	Tin Glazed		Nottingham	

Other Artifact & Feature Types:

Prehistoric Artifacts			
Flaked stone (all)		Other fired clay	
Ground stone		Human remain(s)	☐
S owls		Modified faunal	
Fire-cracked rock		Unmodified faunal	
Other lithics (all)		Oyster shell	☐
Ceramics (all)		Floral material	☐
Rimsherds		Uncommon Obj.	
		Other ☐	

Prehistoric Features			
Mound(s)		Storage/trash pit	☐
Midden	☐	Burial(s)	☐
Shell midden	☐	Ossuary	☐
Postholes/molds	☐	Unknown	☐
House pattern(s)	☐	Other	☐
Palisade(s)	☐		
Hearth(s)	☐		
Lithic reduc area	☐		

Lithic Material					
Fer quartzite	☐	Sil sandstone	☐		
Jasper	☐	Chalcedony	☐	European flint	☐
Chert	☐	Ironstone	☐	Basalt	☐
Rhyolite	☐	Argilite	☐	Unknown	☐
Quartz	☐	Steatite	☐	Other	☐
Quartzite	☐	Sandstone	☐		

☐ Dated features present at site

Historic Artifacts			
Tobacco pipe(s)			
Pottery (all)	16	Activity item(s)	103
Glass (all)	6	Human remain(s)	☐
Architectural	14	Faunal material	☐
Furniture		Misc kitchen item	3
Arms		Floral material	☐
Clothing		Misc.	26
Personal items	1	Other ☐	

Historic Features					
Const feature	☐	Privy/outhouse	☐	Depression/mound	☐
Foundation	☐	Well/cistern	☐	Burial(s)	☐
Cellar hole/cellar	☐	Trash pit/dump	☐	Railroad bed	☐
Hearth/chimney	☐	Sheet midden	☐	Earthworks	☐
Postholes/molds	☐	Planting feature	☐	Mill raceway	☑
Paling ditch/fence	☐	Road/walkway	☐	Wheel pit	☐
				Unknown	☐
				Other	☑
				retaining wall,dam	

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1: +/- years BP Reliability Sample 2: +/- years BP Reliability Sample 3: +/- years BP Reliability

Sample 4: +/- years BP Reliability Sample 5: +/- years BP Reliability Sample 6: +/- years BP Reliability

Sample 7: +/- years BP Reliability Sample 8: +/- years BP Reliability Sample 9: +/- years BP Reliability

☐ Additional radiocarbon results available

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR331 **Site Name:** Catoctin Raceway

Other name(s) Orr's "Check 17"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: possibly late 18th and 19th century raceway

External Samples/Data: Collection curated at MAC

Synopsis URL

☐ Raw data available online

Datalink 1

Datalink 2

Datalink 3

Summary Description:

Site 18FR331 consists primarily of apparent 18th and 19th century features associated with a series of raceways which played various roles in the hydraulic power system at Catoctin Furnace. The site is located in the southern portion of the Catoctin Furnace Historic District along US Route 15 in Frederick County, Maryland. Excavations at the site revealed at least three hydraulic power systems for the total time period of the furnace. Although primarily devoid of artifact concentrations, a sufficient number of diagnostic artifacts were recovered to work out the basic chronology of the three hydraulic systems. In addition to the hydraulic systems, some evidence was uncovered at the site pointing to the possibility that an iron furnace built in the 1770s is located at the northeast end of the site.

The site was first examined by archeologists in 1977 during a Phase I survey through the Catoctin Furnace Historic District and environs prior to the dualization of US Route 15. During the investigations, the area was extensively surveyed on foot and the presence of a U-shaped section of raceway was noted. An area at the north end of the site and directly to the east of the raceway was also brought to the attention of the researchers by a long-time resident of the area. Mr. William Renner had played a role in WPA excavations in the main furnace area ½ mile north of the site in 1936. These excavations focused on the area surrounding the extant ruins of the mid-19th century "Isabella" furnace stack (now restored). Renner noted that during the construction of his son-in-law's garage, stratigraphy was encountered that closely matched that encountered by Renner in the Isabella stack's casting shed. This consisted of numerous superimposed layers of red and yellow sand interspersed with charcoal and other casting house debris. He also recalled that several 1.22 meter-long (4 ft) iron bolts for holding stones together were found in the site area, but had since disappeared. It was speculated that the deposits observed by Renner could be the remains of the very first iron blast furnace constructed at Catoctin around 1774, and that the nearby raceway supplied water power for the furnace bellows and other machinery. The conjectured stack/casting floor location was designated Feature 1 and the raceway was designated Feature 2. A[illegible]ure 1 was located beneath a standing garage and was outside the easement area for the highway project, archeological testing was not conducted in th[illegible] in 1979 when Phase II testing took place at 18FR331. Very limited testing was eventually conducted in the spring of 1980. Several backhoe trench e[illegible]ons were undertaken in the raceway area in 1979, which revealed a more complex hydraulic system than previously envisioned. Archival and oral history research also played a role at the Phase I and Phase II stages in 1977 and 1979 respectively. A brief overview of this research will be provided, prior to an overview of the archeological excavations.

Archival and oral history research revealed that in the year 1774, James, Thomas, Baker, and Roger Johnson constructed the first iron furnace at Catoctin. In 1776, they began producing pig iron under the name of James Johnson and Company. Hematite ore from the Catoctin Mountains provided the raw material for production of the iron while the Catoctin forests provided charcoal for fuel. In addition, water from the local springs and streams provided the energy to power enormous bellows blowing air into the furnace, as well as power for forge hammers, mills, and other machines. A complex system of ponds, races, ditches, dams, and aqueducts ensured that the water wheels were supplied with sufficient "drop" to maintain the power levels needed. One of the most important early products of the furnace is rumored to have been supplies (including cannon and cannonballs) for George Washington's Army. While pig iron continued to be produced at the furnace, other important products were machine parts, foundry rolling mills, iron car/cart wheels, cast-iron stoves, and other materials. During the Civil War, iron from the furnace was used to armor the famous iron-clad ship, the Monitor. Over the course of history a number of additional furnace stacks, support structures, quarries, casting areas, and other structures were constructed in the area. Some structures were demolished and improved facilities were built.

No issue is more contentious in the interpretation of the Catoctin Furnace area than the location of the original stack built by the Johnsons. Many researchers have argued that all of the furnaces at Catoctin were located in the same general area. This is the main furnace area to the north; site number 18FR29. Archival evidence clearly indicates that a hot blast charcoal furnace (called "Isabella") was built in 1856 near the site of an already extant charcoal furnace dating back to the 18th century. Much of Isabella was dismantled in 1893, but some ruins were left and the stack and casting house were eventually restored for interpretive purposes. The old 18th century stack near Isabella had been dismantled a few years prior (ca. 1890) after being deemed obsolete. The last furnace to be constructed at Catoctin was "Deborah", built in 1873. This was a steam and water operated hot blast, anthracite coke furnace encompassing the latest improvements in furnace technology. Its annual capacity for producing pig iron was 3 times that of the other two furnaces combined. It was dismantled in the early 20th century following the last blast at Catoctin and salvageable parts were shipped to iron furnaces in Pennsylvania. What is less certain historically is whether the old charcoal furnace near Isabella (see above) was the original (ca. 1774) stack, a later 18th century stack constructed on the same site as the original, or a later 18th century stack constructed approximately ¾ mile north of the original (ca. 1774) furnace. The key piece of historical evidence for a furnace stack outside the confines of 18FR29, is a statement by J.H. Alexander concerning information he had received directly from James Johnson, descendent of the founders of Catoctin Furnace. In 1840 Alexander wrote that, "The original furnace was built in 1774 by James Johnson & Co. within a mile of the present furnace stack, and carried on successfully until 1787, in which year the same company erected the present furnace about three-fourths of a mile further up the Little Hunting Creek and nearer the ore banks". Since Alexander's informant was a Johnson, he is probably correct and the 18th century stack standing in 1840 at 18FR29 was the second Johnson stack constructed in 1787. While Site 18FR331 is located well south of the main furnace areas at 18FR29, it should be noted that it is also far short of ¾ mile to the south (it is just under ½ mile away from Isabella). Archival evidence and oral history can re[illegible]lle else to confirm the Alexander account and archeological excavation is warranted to solve this mystery.

The raceway (Feature 2) at 18FR331 was the primary subject of archeological testing at the site in 1979. In surface appearance, it is a continuation of the raceway noted at several points throughout the US Route 15 survey area, and appeared to originate in the Racepond (18FR327) north of the main furnace area and next to the Little Hunting Creek. It eventually led to the former Auburn pond area to the south. In some places the raceway is blurred and no longer stands out from the surrounding landscape, but in others it is quite evident and even supported by significant stone retaining walls (such as the one noted at 18FR321). At 18FR331, the exposed portions of the raceway were 91 cm to 1.22 meters (3 to 4 ft) deep and ran for sections of 15.24 meters (50 ft) or more at a time. It was supported by a stone wall facing eastward, over much of the distance between the location of Feature 1 (east of the wall and at the far north end of the defined site) and the old Auburn Dam some 137.16 meters (450 ft) to the south. It should be noted that next to Feature 1, the raceway is nearly level

with the surrounding ground surface. It is difficult to see how it could have powered an overshot wheel at this point to work furnace bellows.

Eight large trenches and at least 3 smaller trenches/test pits were excavated at the site to expose a vertical profile through the raceway. A backhoe was used to remove fill, while features and trenching in significant deposits was expanded and modified by hand excavation with shovel and trowel. Precise details regarding the size of units and the excavation procedures for each are not provided in the full site report, but trenches typically cut across Feature 2 (the raceway) in a general east-west direction. Feature 3 was exposed in some of the trenches and constituted a continuation of a stone retaining wall resting on residuum (the same wall noted at the surface above). It also became evident that at least two raceway channels were superimposed or entwined throughout Feature 2 of 18FR331. A third, also appears evident, but seems to have followed a slightly different course. Thus, the "raceway" is actually three raceways; components of three different hydraulic power systems in operation during different periods at Catoctin Furnace.

The first power system, Hydraulic System A, was constructed sometime around 1760 and appears to have run from a dam to the southeast of 18FR29 on Little Hunting Creek (according to Renner), flowing southwest until just before the area that would eventually become known as "The Big Ore Bank" (see synopsis report for 18FR328). It then turned abruptly south following the same general route that the other two raceways would eventually follow to the northern edge of 18FR331, where the conjectured 1774 furnace may have been located. Archeology reveals that it then continued south, below the Auburn Dam at a time when the dam had not yet been constructed. Excavations at site 18FR320 reveal that the "tailrace" (if indeed Hydraulic System A powered bellows at Feature 1) made an abrupt turn to the east and flowed through an area where there is some evidence of ancillary iron-working activities at a later date (see the synopsis report for 18FR320), but where nothing else is located at this early date. These waters could have powered forges, foundries, mills, or other iron working facilities and support industries as yet undiscovered to the east of 18FR320 (and outside the US-15 project right-of-way). Oral history and some scant archival evidence does suggest that the area around the Auburn dam was the site of some early iron working activity (usually thought to be a forge or foundry). Alternatively, the 1774 stack may have actually been located in these unexcavated areas east of 18FR320. The race would not have been a tailrace, but a headrace dropping rapidly from west to east to power the bellows of the 1774 stack before flowing back to Little Hunting Creek. Such a location would be much closer to the ¾ mile south of the main furnace area referenced in Alexander's 1840 letter. The Auburn ore bank is located just to the west of the point where the race made its turn, which is also suggestive.

Within most of 18FR331, Hydraulic System B was cut directly into the raceway for System A at a time prior to the construction of the Auburn dam. System B was probably constructed around 1787 when the Johnson's supposedly built the old charcoal stack to the north (the 1787 stack). The existing raceway and dam were not situated to supply sufficient water "drop" to this area and, thus, the new racepond at site 18FR327 was constructed and Hydraulic System B flowed south from there to the new stack. It then joined up with the earlier raceway to head south towards Auburn. It more-or-less followed the same route as System A (as stated previously, evidence within the site suggests B was cut directly into A in many areas) until it reached the area just south of the eventual Au Dam. Instead of following System A south before turning abruptly east, System B branched off gradually to the southeast to some unknown de on. Perhaps it fueled some of the 19th century ironworking activities in evidence here (18FR320). Or it may have simply flowed gradually back to Little Hu..... Creek. System A to the east apparently continued to flow at least into the early 1830s. Significant silting of the System A raceway appears to have taken place from about 1774 to 1831 indicating a probable period for the lifespan of that structure. The Auburn dam was built sometime between 1831 and 1856, after Hydraulic System B, but before C. Most historical research has suggested (but not proved) a date sometime shortly after Peregrine Fitzhugh's 1843 purchase of the property for the construction of the dam. It is well-documented that Fitzhugh made several other improvements during the period from about 1843-1845 and the dam may have been a part of this general redevelopment. Water from the Auburn pond was held back by a dam bank which begins at the northeast edge of the site (near Feature 1) and wraps around to a significant retaining wall on the south. A water wheel niche appears to be cut into this retaining wall near its eastern end. Perhaps this waterwheel powered the conjectured 19th century forge, foundry, or other iron-working structure(s) thought to be located east of 18FR320. An "old forge" is located near here on an 1858 map. This structure, if it existed, may have been in operation between 1831 and about 1850 (assuming an early date for the dam and the 1858 reference to it being "old" meaning it was abandoned a few years earlier) or between 1843/1845 and 1850 (assuming the theories about Fitzhugh building the dam are correct). There is also evidence at 18FR320 of a charcoal house and ancillary iron working activity areas dating to between about 1830 and 1850. The activity area appears to have been a locale for the finishing and final assembly of cast-iron goods produced elsewhere. Such activities usually took place near forges, foundries, or furnaces and a charcoal house would have normally been located near the point of consumption.

Hydraulic System C was built around 1856, when significant improvements were made at Catoctin and the Isabella stack was built next to the old 18th century charcoal stack. The walls of Hydraulic System B between the racepond at 18FR327 and the two furnace stacks were raised on both sides to produce a channel that carried double the original load of water. A new dam was installed further south on Little Hunting Creek, just above the stacks and Raceway C ran south from this dam to join up with the improved System B just before reaching the waterwheels for the two furnaces. A greatly expanded tailrace was needed to divert all of the additional water south, and thus Raceway C continues south towards the Auburn area following its own course. It runs parallel to System A/B, just to the east of it until reaching the Big Ore bank area (see synopsis report for 18FR328). It then crosses over to the west side of System A/B and enters Auburn Pond at its northwest edge.

Artifacts encountered during the 1979 Phase II excavations include 103 activity items, all of which except a single horseshoe are clearly related to the iron industry at Catoctin. These include a wedge gate, a piece of ash, 16 fragments of iron ore, 59 fragments of slag, 6 iron waste pieces, 18 fragments of charcoal, and a piece of clay with charcoal. Fourteen architectural objects were encountered; 3 pieces of brick, 2 flagstones, 7 fieldstone pieces, and 2 nails. The only personal object recovered was a clasp knife with a tortoise shell handle. Kitchen-related objects in the raceway fill included 16 ceramic sherds (1 pearlware, 4 miscellaneous stoneware, 7 whiteware, and 4 redware), 6 glass bottle fragments (at least 1 is hand-blown), a piece of tin can, 1 shell fragment and a walnut shell. The only other objects reported were 26 rocks which may or may not have been components of the raceway structures.

Archeologists returned to the site in the spring of 1980 to conduct limited archeological testing in the area at the north end of the site where Feature 1(a possible location of the 1774 furnace) was situated. A small test unit of unspecified size was excavated by hand. Strata were encountered which were similar to g floors in other areas throughout Catoctin (18FR320 and 18FR333). Slag was encountered, but no other artifacts are described. The location wa additional examination and likely would have been excavated further if funding had been available for work outside the highway project right-of-way.

Site 18FR331 revealed evidence which is extremely helpful in interpreting the activities at Catoctin Furnace. It reveals several stages in the evolution of the hydraulic systems that powered the furnaces and other industrial structures in the area. Unfortunately, many questions remain. Interpretation would certainly be improved through additional excavation at the northeast edge of the site in the area of Feature 1. Determining if this is the remains of the 1774 furnace built by the Johnsons remains the most significant research question concerning the area's history. Additional work outside the site boundaries, in the area east of 18FR320 would also probably be necessary to adequately address this issue.

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR331 **Site Name:** Catoctin Raceway

Other name(s) Orr's "Check 17"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: possibly late 18th and 19th century raceway

External Reference Codes (Library ID Numbers):

00005963, 00005972, 00005973

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR330 **Site Name:** Catoctin Kunkel Ore Mine & RR

Other name(s): Orr's "Check 16";Fitzhugh-Kunkel Ore Bank

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: 19th-early 20th century ore mine and railroad tracks

Site Location and Environmental Data:

Latitude 39.6006 Longitude -77.4288

Elevation 159 m Site slope 6-10%

Maryland Archeological Research Unit No. 17

SCS soil & sediment code TeC

Physiographic province Blue Ridge

Terrestrial site ☑ Underwater site ☐

Ethnobotany profile available ☐ Maritime site ☐

Site setting

This ore bank is situated 1 mile north of the furnace. It is also called the Blue Mountain Mine, and was probably opened in 1857 or shortly before, and provided ore for Stack 1 and the recently built Stack 2. The ore was hauled to the Catoctin Furnace area by ore railroad. The enormous bank measures about 2300' N-S by 300-800' E-W, with a depth varying from 25 to 60' from east to west sides. It was in operation continuously until the closing of the furnaces in 1903, and then continued to supply ore for export to Pennsylvania furnaces until 1912.

Topography

Floodplain	☑	High terrace	☐
Hilltop/bluff	☐	Rockshelter/cave	☐
Interior flat	☐	Hillslope	☐
Upland flat	☐	Unknown	☐
Ridgetop	☐	Other	☐
Terrace	☑		
Low terrace	☐		

Ownership

Private	☑
Federal	☐
State of MD	☐
Regional/county/city	☐
Unknown	☐

Nearest Surface Water

Name (if any) High Run

Saltwater		Freshwater	
Ocean	☐	Stream/river	☐
Estuary/tidal river	☐	Swamp	☑
Tidewater/marsh	☐	Lake or pond	☐
		Spring	☐

Minimum distance to water is 0 m

Temporal & Ethnic Contextual Data:

Paleoindian site		Woodland site		Contact period site		ca. 1820 - 1860	Y
Archaic site		MD Adena		ca. 1630 - 1675		ca. 1860 - 1900	Y
Early archaic		Early woodland		ca. 1675 - 1720		ca. 1900 - 1930	Y
Middle archaic		Mid. woodland		ca. 1720 - 1780		Post 1930	
Late archaic		Late woodland		ca. 1780 - 1820			

Unknown prehistoric context ☐ Unknown historic context ☐ Unknown context ☐

Ethnic Associations (historic only)

Native American		Asian American	
African American		Unknown	Y
Anglo-American		Other	
Hispanic			

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

Multi-component	☐	Misc. ceremonial	☐
Village	☐	Rock art	☐
Hamlet	☐	Shell midden	☐
Base camp	☐	STU/lithic scatter	☐
Rockshelter/cave	☐	Quarry/extraction	☐
Earthen mound	☐	Fish weir	☐
Cairn	☐	Production area	☐
Burial area	☐	Unknown	☐

Other context ☐

Historic

Urban/Rural? Rural

Domestic	☐	Furnace/forge	☐	Military	☐	Post-in-ground	☐
Homestead	☐	Other	☑ iron ore min	Battlefield	☐	Frame-built	☐
Farmstead	☐	Transportation	☐	Fortification	☐	Masonry	☐
Mansion	☐	Canal-related	☐	Encampment	☐	Other structure	☐
Plantation	☐	Road/railroad	☑	Townsite	☐	Slave related	☐
Row/townhome	☐	Wharf/landing	☐	Religious	☐	Non-domestic agri	☐
Cellar	☐	Maritime-related	☐	Church/mtg house	☐	Recreational	☐
Privy	☐	Bridge	☐	Ch support bldg	☐	Midden/dump	☐
Industrial	☑	Ford	☐	Burial area	☐	Artifact scatter	☐
Mining-related	☑	Educational	☐	Cemetery	☐	Spring or well	☐
Quarry-related	☐	Commercial	☐	Sepulchre	☐	Unknown	☐
Mill	☐	Trading post	☐	Isolated burial	☐	Other context	☑
Black/metalsmith	☐	Store	☐	Bldg or foundation	☐	tailings spoil piles,	
		Tavern/inn	☐	Possible Structure	☐		

Interpretive Sampling Data:

Prehistoric context samples Soil samples taken ☐ Flotation samples taken ☐ Other samples taken ☐

Historic context samples Soil samples taken N Flotation samples taken N Other samples taken

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MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR330 **Site Name:** Catoctin Kunkel Ore Mine & RR

Other name(s): Orr's "Check 16";Fitzhugh-Kunkel Ore Bank

Brief Description: 19th-early 20th century ore mine and railroad tracks

Prehistoric ☐ Historic ☑ Unknown ☐

Diagnostic Artifact Data:

Projectile Point Types

Clovis		Koens-Crispin	
Hardaway-Dalton		Perkiomen	
Palmer		Susquehana	
Kirk (notch)		Vernon	
Kirk (stem)		Piscataway	
Le Croy		Calvert	
Morrow Mntn		Selby Bay	
Guilford		Jacks Rf (notch)	
Brewerton		Jacks Rf (pent)	
Otter Creek		Madison/Potomac	
		Levanna	

All quantities exact or estimated minimal counts

Prehistoric Sherd Types

Marcey Creek		Popes Creek		Shepard		Keyser	
Dames Qtr		Coulbourn		Townsend		Yeocomico	
Selden Island		Watson		Minguannan		Monongahela	
Accokeek		Mockley		Sullivan Cove		Susquehannock	
Wolfe Neck		Clemson Island		Shenks Ferry			
Vinette		Page		Moyaone			
				Potomac Crk			

Historic Sherd Types

Earthenware		Jackfield		Porcelain		Rhenish	
Astbury		Mn Mottled		Stoneware		Wt Salt-glazed	
Borderware		North Devon		English Brown			
Buckley		Staffordshire		Eng Dry-bodie			
Cream/Pearl		Tin Glazed		Nottingham			

Other Artifact & Feature Types:

Prehistoric Artifacts

Flaked stone (all)		Other fired clay	
Ground stone		Human remain(s)	☐
Bones		Modified faunal	
Fire-cracked rock		Unmodified faunal	
Other lithics (all)		Oyster shell	☐
Ceramics (all)		Floral material	☐
Rimsherds		Uncommon Obj.	
		Other ☐	

Prehistoric Features

Mound(s)		Storage/trash pit	☐
Midden	☐	Burial(s)	☐
Shell midden	☐	Ossuary	☐
Postholes/molds	☐	Unknown	☐
House pattern(s)	☐	Other	☐
Palisade(s)	☐		
Hearth(s)	☐		
Lithic reduc area	☐		

Lithic Material

Jasper	☐	Chalcedony	☐	European flint	☐
Chert	☐	Ironstone	☐	Basalt	☐
Rhyolite	☐	Argilite	☐	Unknown	☐
Quartz	☐	Steatite	☐	Other	☐
Quartzite	☐	Sandstone	☐		
Fer quartzite	☐	Sil sandstone	☐		

☐ Dated features present at site

Historic Artifacts

Pottery (all)		Tobacco pipe(s)	
Glass (all)		Activity item(s)	1
Architectural		Human remain(s)	☐
Furniture		Faunal material	☐
Arms		Misc kitchen item	
Clothing		Floral material	☐
Personal items		Misc.	1
		Other ☐	

Historic Features

Const feature	☐	Privy/outhouse	☐	Depression/mound	☐	Unknown	☐
Foundation	☐	Well/cistern	☐	Burial(s)	☐	Other	☑
Cellar hole/cellar	☐	Trash pit/dump	☐	Railroad bed	☑	tailings spoil piles	
Hearth/chimney	☐	Sheet midden	☐	Earthworks	☐		
Postholes/molds	☐	Planting feature	☐	Mill raceway	☐		
Paling ditch/fence	☐	Road/walkway	☑	Wheel pit	☐		

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1:	+/-	years BP	Reliability	Sample 2:	+/-	years BP	Reliability	Sample 3:	+/-	years BP	Reliability
Sample 4:	+/-	years BP	Reliability	Sample 5:	+/-	years BP	Reliability	Sample 6:	+/-	years BP	Reliability
Sample 7:	+/-	years BP	Reliability	Sample 8:	+/-	years BP	Reliability	Sample 9:	+/-	years BP	Reliability

☐ Additional radiocarbon results available

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR330 **Site Name:** Catoctin Kunkel Ore Mine & RR

Other name(s) Orr's "Check 16";Fitzhugh-Kunkel Ore Bank

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: 19th-early 20th century ore mine and railroad tracks

External Samples/Data:

Collection curated at MAC

Synopsis URL

☐ Raw data available online

Datalink 1

Datalink 2

Datalink 3

Summary Description:

Site 18FR330 is the location of the former Catoctin Kunkel Ore Mine and the purported railroad thought to be associated with it. The site is also referred to as the Blue Mountain Mine and the Fitzhugh-Kunkel Ore Bank. The site is located north of the Catoctin Furnace Historic District, along US Route 15 in Frederick County, Maryland. This mine is thought to have been opened up around 1857 and supplied ore to two nearby iron furnace stacks. According to historic records and interviews with local informants who remember operations at the furnace, the ore was hauled to the Catoctin Furnace area by railroad along tracks that crossed under the present Route 806, the site of the ore washer and dump. The enormous ore banks measure about 701 meters (2300 ft) north-south by 91-244 meters (300-800 ft) east-west with a depth varying from 7.62 to 18.29 meters (25-60 ft) from east to west sides. The mine was in operation continuously until the closure of the furnaces in 1903 and then continued to supply ore for export to Pennsylvania furnaces until 1912.

The mine area is well known locally and was first examined by archeologists in 1977 during a Phase I survey through the Catoctin Furnace Historic District and environs prior to the dualization of US 15. During the Phase I investigations, the mine area was surveyed on foot on two occasions. The absence of limestone outcrops was noted in both instances. It was seen that the right-of-way for the new US 15 alignment crossed over the broad, flat valley which formed the entrance of the mine. The alignment did not touch either the mine banks of the west or an administrative area (the former location of mine offices and a repair shop) located some 152.4 meters (500 ft) to the east. The valley was heavily shaded with tall trees and was largely free of ground vegetation with the exception of a moss-like growth (which the excavators describe as giving the locale an eerie, other-worldly appearance). An entrance road flanked the northern rim of the valley, some 152.4 meters (500 ft) from a centrally located stream that flows through the valley. The stream provided water for the washer dump located just east of the administrative area off MD 806. No evidence was encountered for the two railroad tracks though to be used for transporting ore to the washer dump and furnaces, although several flat zones were interpreted as potential roadbeds.

In it was determined that the proposed widening of US Route 15 on the western edge of the existing highway would possibly impact the presumed lo of the former railroad bed. Thus, Phase II testing in the vicinity of the Catoctin Kunkel Ore Mine and Railroad was designed, principally, to determine if a railroad had in fact been present and whether it would be severely impacted by construction of the new highway lanes. Phase II work involved extensive background archival research, shovel test pitting, and the excavation of several trenches. The results of archival investigation will be discussed briefly prior to a description of the field examinations.

Archival research and discussions with local informants reveal important background information relating to the site. In the year 1774, James, Thomas, Baker, and Roger Johnson constructed the first iron furnace at Catoctin. In 1776, they began producing pig iron under the name of James Johnson and Company. Hematite ore from the Catoctin Mountains provided the raw material for production of the iron while the Catoctin forests provided charcoal for fuel. One of the most important early products of the furnace is rumored to have been supplies (including munitions) for George Washington's Army. While pig iron continued to be produced at the furnace, other important products were machine parts, foundry rolling mills, iron car/cart wheels, cast-iron stoves, and other materials. During the Civil War, iron from the furnace was used to armor the famous iron-clad ship, the Monitor. Over the course of history a number of additional furnace stacks, support structures, quarries, casting areas, and other structures were constructed in the area. Some structures were demolished and improved facilities were built. The furnace continued to operate until the early 20th century.

The Catoctin Kunkel Ore Mine is thought to have been opened up around the year 1857. The mine had recently come under new ownership and a second furnace stack was built by 1856 to operate alongside the original one built in the 18th century. The new ore bank may have been needed to meet the demands of the dually operating furnaces. The Kunkel mine had its own community located just east of it, which was known as "Ore Bank Village". Together with "Catoctin Village", located in the furnace area, it formed the greater Catoctin community. Many of the older local residents were members of this community and the sons of miners who worked there. One local informant relayed that his father had dug a number of exploratory pits in the early 20th century at the locale, in the desperate days when iron ore began to run out. Another informant's father ran a massive steam shovel used for strip mining the area. However, they were unable to provide detailed descriptions of daily life for the full site report.

Field investigations at 18FR330 began and were completed in July of 1979. An extensive pedestrian survey of the surrounding area was conducted and provided the investigators with an understanding of topographic and cultural features in the area. The survey was conducted on both banks of the aforementioned stream and continued from Route 15 upstream to the ore mine site. No obvious evidence of railroad tracks, road bed or ballast, or railroad-oriented artifacts were found on the surface or in the stream bank cuts. Just above the near vertical bank cuts, however, was a series of flat zones that warranted further investigation. Large tailings piles were located on the north bank of the stream to the west of US Route 15 and between the highway and the ore mine. Early 20th century maps indicate that the railroad was located on that side of the stream, but the configuration and topography at the time of the Phase II testing would not support this as the actual location of the railroad. The south side of the stream, however, had several terraces that were relatively flat and that could be the site of the railroad leading from Kunkel Ore Mine to the washing area.

F ge tailing piles were recorded on this south side of the stream above the potential road beds. Each contained evidence of its method of formation. N road beds were present on the tops of each leading from the upland side of the tailings edges. All five appeared to have narrow gage wheel ruts, a[illegible]ntly due to the use of small horse or mule drawn carts for the dumping of spoils. Eight post hole tests were excavated on the lowest terrace. Profiles varied greatly, suggesting that the area had been filled. The same situation was encountered in post holes excavated to the south on a second terrace; revealing fill that consisted of iron ore fragments, blue clay pockets, ash, large rocks, and organic material.

Three test trenches were excavated below the tailings piles in the area thought to be the potential railroad beds. The trenches were situated in order to transect these flat areas. Two of the trenches were 91 cm X 7.62 meters (3 ft X 25 ft), while the third was aborted short of that length. In all trenches evidence was found to support the idea that the flat areas were road (not railroad) beds. In one trench, a ballast network of large rocks underlay a cap of yellow and

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR330 **Site Name:** Catoctin Kunkel Ore Mine & RR

Other name(s) Orr's "Check 16";Fitzhugh-Kunkel Ore Bank

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: 19th-early 20th century ore mine and railroad tracks

blue clay. The rock strata contained numerous air pockets since the clay caps prevented sediments from percolating into the strata. These prepared road beds were used by wheeled carts with uniform wheel bases (axle widths), as indicated by observed wheel ruts. The only artifacts recovered during the excavations were a cast iron fragment and a single railroad spike recovered from a wheel rut.

It is not possible, on the basis of these archeological investigations to validate the oral history and historic map record that the Kunkel Ore Mine was serviced by a railroad. One certainly did exist, there are late 19th century photographs of the railroad in operation within the Ore bank. But based on the test trench observations, it is likely that these deposits represent an earlier period of the mine's operations (prior to the 1850s) when the mine was serviced by wheeled vehicles; probably mule drawn carts. Tailings piles were created by the dumping of spoil from wheeled vehicles of similar configuration (wheel bases). Excavations revealed that the entire area has been extensively modified and that the site topography is due largely to mining operations. No significant intact artifact deposits appeared to be present in the area tested prior to US Route 15 dualization, but areas just to the northwest, closer to the actual Kunkel Ore mine may have additional research potential.

External Reference Codes (Library ID Numbers):

00005963, 00005972, 00005973

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR327 **Site Name:** Catoctin Race Pond

Other name(s) Orr's "Check 11"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: early 19th to early 20th century race pond

Site Location and Environmental Data:

Maryland Archeological Research Unit No. 17 SCS soil & sediment code Ma

Latitude 39.5839 Longitude -77.4347

Physiographic province Blue Ridge Terrestrial site ☑ Underwater site ☐

Elevation 159 m Site slope

Ethnobotany profile available ☐ Maritime site ☐

Site setting

This site lay west of the old alignment of US 15, which covered approximately 2/3 of the pond. The proposed southbound lane would cut through part of the existing pond. A drainage ditch and retaining wall from the 1930s lay northwest of the pond, and west of the pond was the water input ditch coming from the dam at Little Hunting Creek, where a water control gate was constructed in the 1920s. Site dimensions represent the original pond size.

Topography

Floodplain	☐	High terrace	☐
Hilltop/bluff	☐	Rockshelter/ cave	☐
Interior flat	☐	Hillslope	☐
Upland flat	☐	Unknown	☐
Ridgetop	☐	Other	☐
Terrace	☐		
Low terrace	☑		

Ownership

Private	☐
Federal	☐
State of MD	☑
Regional/ county/city	☐
Unknown	☐

Nearest Surface Water

Name (if any) Little Hunting Creek

Saltwater		Freshwater	
Ocean	☐	Stream/river	☑
Estuary/tidal river	☐	Swamp	☐
Tidewater/marsh	☐	Lake or pond	☐
		Spring	☐

Minimum distance to water is 25 m

Temporal & Ethnic Contextual Data:

Paleoindian site		Woodland site		Contact period site		ca. 1820 - 1860	Y
Archaic site		MD Adena		ca. 1630 - 1675		ca. 1860 - 1900	Y
Early archaic		Early woodland		ca. 1675 - 1720		ca. 1900 - 1930	Y
Middle archaic		Mid. woodland		ca. 1720 - 1780		Post 1930	
Late archaic		Late woodland		ca. 1780 - 1820			

Unknown historic context ☐

Unknown prehistoric context ☐ Unknown context ☐

Ethnic Associations (historic only)

Native American		Asian American	
African American		Unknown	Y
Anglo-American		Other	
Hispanic			

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

Multi-component	☐	Misc. ceremonial	☐
Village	☐	Rock art	☐
Hamlet	☐	Shell midden	☐
Base camp	☐	STU/lithic scatter	☐
Rockshelter/cave	☐	Quarry/extraction	☐
Earthen mound	☐	Fish weir	☐
Cairn	☐	Production area	☐
Burial area	☐	Unknown	☐

Other context ☐

Historic

Urban/Rural? Rural

Domestic	☐	Furnace/forge	☐	Military	☐	Post-in-ground	☐
Homestead	☐	Other	☐	Battlefield	☐	Frame-built	☐
Farmstead	☐	Transportation	☐	Fortification	☐	Masonry	☐
Mansion	☐	Canal-related	☐	Encampment	☐	Other structure	☐
Plantation	☐	Road/railroad	☐	Townsite	☐	Slave related	☐
Row/townhome	☐	Wharf/landing	☐	Religious	☐	Non-domestic agri	☐
Cellar	☐	Maritime-related	☐	Church/mtg house	☐	Recreational	☐
Privy	☐	Bridge	☐	Ch support bldg	☐	Midden/dump	☑
Industrial	☑	Ford	☐	Burial area	☐	Artifact scatter	☐
Mining-related	☑	Educational	☐	Cemetery	☐	Spring or well	☑
Quarry-related	☐	Commercial	☐	Sepulchre	☐	Unknown	☐
Mill	☐	Trading post	☐	Isolated burial	☐	Other context	☑
Black/metalsmith	☐	Store	☐	Bldg or foundation	☐	race pond	
		Tavern/inn	☐	Possible Structure	☐		

Interpretive Sampling Data:

Prehistoric context samples			
Soil samples taken			
Flotation samples taken		Other samples taken	

Historic context samples			
Soil samples taken	N		
Flotation samples taken	N	Other samples taken	

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MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR327 **Site Name:** Catoctin Race Pond

Other name(s): Orr's "Check 11"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: early 19th to early 20th century race pond

Diagnostic Artifact Data:

Projectile Point Types

Clovis		Koens-Crispin	
Hardaway-Dalton		Perkiomen	
Palmer		Susquehana	
Kirk (notch)		Vernon	
Kirk (stem)		Piscataway	
Le Croy		Calvert	
Morrow Mntn		Selby Bay	
Guilford		Jacks Rf (notch)	
Brewerton		Jacks Rf (pent)	
Otter Creek		Madison/Potomac	
		Levanna	

All quantities exact or estimated minimal counts

Prehistoric Sherd Types

Marcey Creek		Popes Creek		Shepard	Keyser
Dames Qtr		Coulbourn		Townsend	Yeocomico
Selden Island		Watson		Minguannan	Monongahela
Accokeek		Mockley		Sullivan Cove	Susquehannock
Wolfe Neck		Clemson Island		Shenks Ferry	
Vinette		Page		Moyaone	
				Potomac Crk	

Historic Sherd Types

Earthenware		Jackfield	Porcelain 1	Rhenish
Astbury		Mn Mottled	Stoneware	Wt Salt-glazed
Borderware		North Devon	English Brown	
Buckley		Staffordshire	Eng Dry-bodie	
Cream/Pearl	2	Tin Glazed	Nottingham	

Other Artifact & Feature Types:

Prehistoric Artifacts

Flaked stone (all)		Other fired clay	
Ground stone		Human remain(s)	☐
S owls		Modified faunal	
Fire-cracked rock		Unmodified faunal	
Other lithics (all)		Oyster shell	☐
Ceramics (all)		Floral material	☐
Rimsherds		Uncommon Obj.	
		Other ☐	

Prehistoric Features

Mound(s)		Storage/trash pit	☐
Midden	☐	Burial(s)	☐
Shell midden	☐	Ossuary	☐
Postholes/molds	☐	Unknown	☐
House pattern(s)	☐	Other	☐
Palisade(s)	☐		
Hearth(s)	☐		
Lithic reduc area	☐		

Lithic Material

Jasper	☐	Chalcedony	☐	Fer quartzite	☐
Chert	☐	Ironstone	☐	Sil sandstone	☐
Rhyolite	☐	Argilite	☐	European flint	☐
Quartz	☐	Steatite	☐	Basalt	☐
Quartzite	☐	Sandstone	☐	Unknown	☐
				Other	☐

☐ Dated features present at site

Historic Artifacts

Pottery (all)	67	Tobacco pipe(s)	
Glass (all)	15	Activity item(s)	4
Architectural	23	Human remain(s)	☐
Furniture		Faunal material	☐
Arms		Misc kitchen item	1
Clothing		Floral material	☑
Personal items		Misc.	124
		Other ☐	

Historic Features

Const feature	☐	Privy/outhouse	☐	Depression/mound	☐
Foundation	☐	Well/cistern	☐	Burial(s)	☐
Cellar hole/cellar	☐	Trash pit/dump	☐	Railroad bed	☐
Hearth/chimney	☐	Sheet midden	☐	Earthworks	☐
Postholes/molds	☐	Planting feature	☐	Mill raceway	☑
Paling ditch/fence	☐	Road/walkway	☐	Wheel pit	☐
				Unknown	☐
				Other	☑
				race pond	

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1: +/- years BP Reliability Sample 2: +/- years BP Reliability Sample 3: +/- years BP Reliability

Sample 4: +/- years BP Reliability Sample 5: +/- years BP Reliability Sample 6: +/- years BP Reliability

Sample 7: +/- years BP Reliability Sample 8: +/- years BP Reliability Sample 9: +/- years BP Reliability

☐ Additional radiocarbon results available

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR327 **Site Name:** Catoctin Race Pond **Prehistoric** ☐

Other name(s) Orr's "Check 11" **Historic** ☑

Brief Description: early 19th to early 20th century race pond **Unknown** ☐

External Samples/Data: Collection curated at MAC

Synopsis URL

☐ Raw data available online

Datalink 1

Datalink 2

Datalink 3

Summary Description:

Site 18FR327 is a small pond, the remnant of what was known locally as Locust Pond, 2/3 of which was covered by the original (now southbound) lane of US Route 15. The site is located north of the Catoctin Furnace Historic District, along US Route 15 in Frederick County, Maryland. The pond was used for ore washing, and provided water power to run the forge hammers, grist and saw mills, and the water wheels used to power bellows for the iron smelting furnaces at Catoctin. The pond is supplied by a spring and groundwater, and is drained via a berm ditch to a nearby creek built by SHA when the pond was reduced in the early 1960s. It is evident that historically an intake ditch from the creek to the north supplied additional water (thus increasing the size of the pond), while a raceway trough at one time led from the pond's southeast corner to the Catoctin Furnaces and beyond. The site was also used for recreation (fishing and skating) and raising goldfish over periods of its history.

The racepond was first examined by archeologists in 1977 during a Phase I survey through the Catoctin Furnace Historic District and environs prior to the dualization of US 15. During the Phase I investigations, the pond area was extensively surveyed on foot and important features were noted and mapped. It was determined that the dualization of the highway would result in the near complete filling in of the remaining pond and the leveling of surrounding features to accommodate the new highway lane. Thus the site would be largely destroyed and warranted Phase II testing. A Phase II research plan was established that involved extensive background research to obtain clues as to how the pond was used over the course of time and its place in the Catoctin Furnace infrastructure, soil sediment coring to determine the subsurface structure under the pond and the succession of plant species in the vicinity, and a series of test trenches to examine presumed pond-related features. A brief overview of the archival and oral history research will be presented first, followed by discussion of the archeology.

A research and discussions with local informants reveal important background information relating to the site. In the year 1774, James, Thomas, Baker, a ier Johnson constructed the first iron furnace at Catoctin. In 1776, they began producing pig iron under the name of James Johnson and Company. H.....e ore from the Catoctin Mountains provided the raw material for production of the iron while the Catoctin forests provided charcoal for fuel. In addition, water from the local springs and streams provided the energy to power enormous bellows blowing air into the furnace, as well as power for forge hammers, mills, and other machines. A complex system of ponds, races, ditches, dams, and aqueducts ensured that the water wheels were supplied with sufficient "drop" to maintain the power levels needed. Site 18FR327 appears to have played a role in that complex water supply system. One of the most important early products of the furnace is rumored to have been supplies (including munitions) for George Washington's Army. While pig iron continued to be produced at the furnace, other important products were machine parts, foundry rolling mills, iron car/cart wheels, cast-iron stoves, and other materials. During the Civil War, iron from the furnace was used to armor the famous iron-clad ship, the Monitor. Over the course of history a number of additional furnace stacks, support structures, quarries, casting areas, and other structures were constructed in the area. Some structures were demolished and improved facilities were built. One noteworthy addition was the construction of the "Isabella" furnace stack around 1856. The Catoctin Furnace continued to operate until the early 20th century.

The initial function and method of construction for the racepond cannot be determined from archival work and interviews. Nor can the original layout of raceways shuttling water to and/or from the pond be determined without archeological work. More detailed information is, however, available for the early 20th century layout and function of the racepond. Interviews with local informants reveal that the pond was primarily spring-fed despite the presence of a relict input raceway on the north bank of the pond which at one time supplied additional water to enlarge the pond. A cement dam and intake valve fed the input raceway from the dammed mill pond at North Little Hunting Creek. These structures were built or at least improved by Lanceolot Jacques, owner and real estate developer of the Catoctin Furnace area during the 1920s. The water was used to create lakes out of nearby abandoned iron mining pits. This complex of lakes was part of Jacques' "deer park" development. It is possible that Jacques did not build the raceway from the creek to the racepond at 18FR327, but merely installed the intake valve and a new dam (a possible replacement) at the head of an already extant furnace-related raceway. The "deer park" was a development scheme by Jacque to make a portion of the furnace area profitable as a recreational area. It seems this idea never really took off, but the facilities did provide an ideal environment for raising fish. Beginning in the late 1920s, the ponds developed by Jacques were rented by one George English who began using them to raise goldfish. According to one local informant, some very large carp goldfish were supplied to the White House to stock pools on the mansion lawn and grounds. This profitable fish farming business was expanded and at one time the area from Catoctin Mountain to Lewistown was known as "the Goldfish Capital of the World". The racepond at 18FR327 was used to raise goldfish during the summer, and drained every fall via a tailrace to the southeast so that the fish could be collected. This tailrace emptied into an old ore mine, which Jacques had converted into another "deer park" pond. The water in this second pond was impounded by a stone barrage on its south side and a second cement dam to the east. In times of flooding, water could spill over this second cement dam into yet another abandoned ore mine. Originally it seems that the water was transported from the racepond at 18FR327 southeast via the tailrace, but instead of spilling into the abandoned ore mines, it was transported over a narrow gap between them by a wooden aqueduct. It then continued in a raceway south towards the furnace facilities.

Oral history also reveals that President Franklin D. Roosevelt used the pond at 18FR327 to catch mountain trout during World War II. The President's p ll physicians had suggested that he relax on the weekends away from the humid conditions of Washington DC for his own health. While the President w tial to sailing on his yacht, the Secret Service became increasingly concerned that the vessel would become a target for German U boats off the Atlantic coast. As a safer alternative, a retreat was established on National Park Service property (Catoctin Mountain Park) just a few miles from Catoctin Furnace, which the President called "Shangri-La". Today it is called "Camp David". According to the former caretaker of the fish ponds, when the President was visiting Shangri-La, the racepond at 18FR327 was drained, the goldfish were removed, and the pond was stocked with government hatchery trout for the president. The goldfish were then replaced when the president's catch was completed. The physical layout of the pond changed little from the time of Roosevelt until the early 1960s when the construction of US Route 15 altered the landscape considerably. At this time the size of the pond was reduced considerably, the old raceway from the mill pond on North Little Hunting Creek was apparently filled in, and a berm ditch was dug on the north side of the pond to drain the spring-fed waters of the pond into the creek.

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR327 **Site Name:** Catoctin Race Pond

Other name(s) Orr's "Check 11"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: early 19th to early 20th century race pond

Phase II fieldwork in 1979 consisted primarily of a series of 11 soil core borings in the vicinity of 18FR327 and the excavation of 9 backhoe and hand-excavated trenches. The trenches were irregular in size and shape (depending on ground conditions and topography). Eight were located in the immediate area of the pond and one was excavated to the south in the area where a wooden aqueduct was rumored to have been located (see above). The soil cores indicated that a deep depression in the bedrock underlay the pond, reaching to a depth of 15.24 meters (50 ft). The depression contained fill at a minimum of 5.5-6.7 meters (18-22 ft) below the pond surface. The fill contained evidence of iron ore, iron granules, brick, charcoal, glassy slag, rubble, and wood. It was determined that this depression could not be natural and that it was much deeper than that needed for the efficiency of a racepond. It was interpreted as evidence that an ore mine had been excavated and then subsequently refilled with debris. Thus, the racepond at 18FR327, like the ponds to the south created by Jacques, was initially an iron ore mine. Analysis of pollen within the soil cores revealed the presence of "sprouting" tree species which invariably spring up when forests are clear-cut, several flowers associated with open fields, and swamp plant species. The forests surrounding Catoctin furnace are thought to have been clear-cut for lumber approximately every 25-35 years and this evidence seems to support that contention.

The backhoe trenches helped to better define the evolution of the racepond and its uses, and identified the sequence of raceways and other structures that fed water to and carried water away from the pond. Very few artifacts were encountered, but those that were recovered are described below. The findings indicated 8 phases of change at the 18FR327 pond, (1) beginning with the iron ore mine indicated by fill debris in the borings cores. (2) After mining activities were completed the hole filled with water from a nearby spring. (3) Those managing the mines took advantage of the new pond and used it to wash the iron ore now coming out of nearby mines. Deposits of gray clay and loam indicative of such ore washing spotted the banks and shore areas of the pond in several trenches. (4) Sometime later the pond was converted into a racepond with water intake and tailrace connecting it to the Catoctin Furnaces by a raceway. The intake ditch was likely the one utilized later by Jacques with a new dam and input valve at its head. The excavation of the tailrace showed two levels of activity. The first level is associated with initial construction of the raceway (5) while the second level raised the raceway banks high on both sides to produce a channel that carried double the original load of water. This event is thought to be correlated with the development of a second blast furnace (Isabella) around 1856, whose water wheel (directly connected to the pond by the south-running raceway) required the additional water. The racepond was used in this way until 1893 when this additional furnace was decommissioned and the water wheel became an obsolete means by which to power the furnace (steam power had actually replaced water wheels at most furnaces by that period). No evidence of the wooden raceway was encountered, but it seems likely that it existed and its remains are buried in the pond muck somewhere in the vicinity. Such a feature must have post dated the ore mines (Jacques' ponds) south of 18FR327. Post furnace activities included (6) the use of the pond in connection with Lanceolot Jacques' developments, (7) and as a goldfish pond and presidential trout fishing pond. (8) It was used as an ice skating pond prior to being nearly covered by US Route 15 in 1961.

A small number of cultural items were recovered from the various test trenches at 18FR327. Most of the artifacts came from a shallow pit in the plateau to the ni the racepond area (between the pond and North Little Hunting Creek) that had been used as a refuse dump. Artifacts from the site include 45 redware sl 17 brown glazed), 2 blue shell-edged pearlware sherds, 1 blue-on-white porcelain sherd, 16 whiteware/ironstone sherds, 1 light blue transfer-print ri d (post 1840), 1 domestic gray stoneware sherd, 1 stoneware sherd w/white exterior and dark brown interior (late 19th C.), 6 fragments of green medicine bottle with markings (2nd half 19th C.), 1 green bottle glass, 1 clear curved glass fragment, 1 peach pit, 1 horseshoe, 1 bolt, 1 piece of pig iron, 1 iron strap, 7 clear window glass fragments, 2 cut nails, at least 6 brick fragments, 6 rusted nails, 2 spikes, 8 iron fragments, at least 34 pieces of slag, 4 badly rusted objects, at least 18 charcoal fragments, and 60 small rock fragments.

Research at 18FR327 revealed information useful in interpreting one of the ancillary structures associated with the Catoctin Iron Furnace. This site played a role in the development of the furnace and then later was utilized in an important local industry (goldfish farming) and was visited by an important US President. The site has now been largely destroyed by the dualization of US Route 15. Thus, it has no remaining research potential.

External Reference Codes (Library ID Numbers):

00005963, 00005972, 00005973

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR328 **Site Name:** Catoctin Three Ore Mines

Other name(s): Orr's "Check 12"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th-19th century ore mines, charcoal road, and raceway head

Site Location and Environmental Data:

Latitude: 39.5824 Longitude: -77.4348

Elevation: 159 m Site slope:

Site setting: Four depressed areas located west and northwest of the furnaces, a section of the raceway, and an old charcoal road comprise these six features. The raceway (Feature # 5) was associated with site 18FR327 (Check 11), the race pond.

Maryland Archeological Research Unit No. 17

Physiographic province: Blue Ridge

Ethnobotany profile available ☐ Maritime site ☐

SCS soil & sediment code: Ma

Terrestrial site ☑ Underwater site ☐

Topography

Floodplain	☑	High terrace	☐
Hilltop/bluff	☐	Rockshelter/cave	☐
Interior flat	☐	Hillslope	☐
Upland flat	☐	Unknown	☐
Ridgetop	☐	Other	☐
Terrace	☐		
Low terrace	☑		

Ownership

Private	☐
Federal	☐
State of MD	☑
Regional/ county/city	☐
Unknown	☐

Nearest Surface Water

Name (if any): Little Hunting Creek

Saltwater		Freshwater	
Ocean	☐	Stream/river	☑
Estuary/tidal river	☐	Swamp	☐
Tidewater/marsh	☐	Lake or pond	☐
		Spring	☐

Minimum distance to water is 0 m

Temporal & Ethnic Contextual Data:

Paleoindian site		Woodland site		Contact period site		ca. 1820 - 1860	Y
Archaic site		MD Adena		ca. 1630 - 1675		ca. 1860 - 1900	Y
Early archaic		Early woodland		ca. 1675 - 1720		ca. 1900 - 1930	
Middle archaic		Mid. woodland		ca. 1720 - 1780		Post 1930	
Late archaic		Late woodland		ca. 1780 - 1820	Y		

Unknown historic context ☐

Unknown prehistoric context ☐ Unknown context ☐

Ethnic Associations (historic only)

Native American		Asian American	
African American		Unknown	Y
Anglo-American		Other	
Hispanic			

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

Multi-component	☐	Misc. ceremonial	☐
Village	☐	Rock art	☐
Hamlet	☐	Shell midden	☐
Base camp	☐	STU/lithic scatter	☐
Rockshelter/cave	☐	Quarry/extraction	☐
Earthen mound	☐	Fish weir	☐
Cairn	☐	Production area	☐
Burial area	☐	Unknown	☐

Other context ☐

Historic

Urban/Rural? Rural

Domestic	☐	Transportation	☐	Military	☐	Post-in-ground	☐
Homestead	☐	Canal-related	☐	Battlefield	☐	Frame-built	☐
Farmstead	☐	Road/railroad	☑	Fortification	☐	Masonry	☐
Mansion	☐	Wharf/landing	☐	Encampment	☐	Other structure	☐
Plantation	☐	Maritime-related	☐	Townsite	☐	Slave related	☐
Row/townhome	☐	Bridge	☐	Religious	☐	Non-domestic agri	☐
Cellar	☐	Ford	☐	Church/mtg house	☐	Recreational	☐
Privy	☐			Ch support bldg	☐	Midden/dump	☑
Industrial	☑	Educational	☐	Burial area	☐	Artifact scatter	☐
Mining-related	☑	Commercial	☐	Cemetery	☐	Spring or well	☐
Quarry-related	☐	Trading post	☐	Sepulchre	☐	Unknown	☐
Mill	☑	Store	☐	Isolated burial	☐	Other context	☐
Black/metalsmith	☐	Tavern/inn	☐	Bldg or foundation	☐		
				Possible Structure	☐		

Furnace/forge ☐

Other ☑ iron ore min

Interpretive Sampling Data:

Prehistoric context samples			
Soil samples taken			
Flotation samples taken		Other samples taken	

Historic context samples			
Soil samples taken	N		
Flotation samples taken	N	Other samples taken	iron ore samples

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MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR328 **Site Name:** Catoctin Three Ore Mines

Other name(s): Orr's "Check 12"

Brief Description: late 18th-19th century ore mines, charcoal road, and raceway head

Prehistoric ☐ Historic ☑ Unknown ☐

Diagnostic Artifact Data:

Projectile Point Types

Clovis		Koens-Crispin	
Hardaway-Dalton		Perkiomen	
Palmer		Susquehana	
Kirk (notch)		Vernon	
Kirk (stem)		Piscataway	
Le Croy		Calvert	
Morrow Mntn		Selby Bay	
Guilford		Jacks Rf (notch)	
Brewerton		Jacks Rf (pent)	
Otter Creek		Madison/Potomac	
		Levanna	

All quantities exact or estimated minimal counts

Prehistoric Sherd Types

Marcey Creek		Popes Creek		Shepard	Keyser
Dames Qtr		Coulbourn		Townsend	Yeocomico
Selden Island		Watson		Minguannan	Monongahela
Accokeek		Mockley		Sullivan Cove	Susquehannock
Wolfe Neck		Clemson Island		Shenks Ferry	
Vinette		Page		Moyaone	
				Potomac Crk	

Historic Sherd Types

Earthenware	Jackfield		Porcelain 2	Rhenish
Astbury	Mn Mottled		Stoneware	Wt Salt-glazed
Borderware	North Devon		English Brown	
Buckley	Staffordshire		Eng Dry-bodie	
Cream/Pearl	Tin Glazed		Nottingham	

Other Artifact & Feature Types:

Prehistoric Artifacts

Flaked stone (all)		Other fired clay	
Ground stone		Human remain(s)	☐
S owls		Modified faunal	1
Fire-cracked rock		Unmodified faunal	
Other lithics (all)		Oyster shell	☐
Ceramics (all)		Floral material	☐
Rimsherds		Uncommon Obj.	
		Other ☐	

Prehistoric Features

Mound(s)		Storage/trash pit	☐
Midden	☐	Burial(s)	☐
Shell midden	☐	Ossuary	☐
Postholes/molds	☐	Unknown	☐
House pattern(s)	☐	Other	☐
Palisade(s)	☐		
Hearth(s)	☐		
Lithic reduc area	☐		

Lithic Material

Jasper	☐	Chalcedony	☐	European flint	☐
Chert	☐	Ironstone	☐	Basalt	☐
Rhyolite	☐	Argilite	☐	Unknown	☐
Quartz	☐	Steatite	☐	Other	☐
Quartzite	☐	Sandstone	☐		

Fer quartzite ☐ Sil sandstone ☐

☐ Dated features present at site

Historic Artifacts

Pottery (all)	13	Tobacco pipe(s)	
Glass (all)	60	Activity item(s)	30
Architectural	21	Human remain(s)	☐
Furniture		Faunal material	☐
Arms		Misc kitchen item	14
Clothing	3	Floral material	☐
Personal items	1	Misc.	9
		Other ☑	ore tailings

Historic Features

Const feature	☐	Privy/outhouse	☐	Depression/mound	☐
Foundation	☐	Well/cistern	☐	Burial(s)	☐
Cellar hole/cellar	☐	Trash pit/dump	☐	Railroad bed	☑
Hearth/chimney	☐	Sheet midden	☐	Earthworks	☐
Postholes/molds	☐	Planting feature	☐	Mill raceway	☑
Paling ditch/fence	☐	Road/walkway	☑	Wheel pit	☐

Unknown ☐ Other ☑ ore mines

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1: +/- years BP Reliability Sample 2: +/- years BP Reliability Sample 3: +/- years BP Reliability

Sample 4: +/- years BP Reliability Sample 5: +/- years BP Reliability Sample 6: +/- years BP Reliability

Sample 7: +/- years BP Reliability Sample 8: +/- years BP Reliability Sample 9: +/- years BP Reliability

☐ Additional radiocarbon results available

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR328 **Site Name:** Catoctin Three Ore Mines

Other name(s) Orr's "Check 12"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th-19th century ore mines, charcoal road, and raceway head

External Samples/Data: Collection curated at MAC

Synopsis URL

☐ Raw data available online

Datalink 1

Datalink 2

Datalink 3

Summary Description:

Site 18FR328 consists of four depressed areas located west and northwest of the Catoctin Furnace Historic District, along US Route 15 in Frederick County, Maryland. In addition, a possible historic road trace cuts beneath Route 15 near one of the depressions. The depressions were thought to be filled remnants of historic iron mines that supplied ore to the nearby furnaces. The road remnant was purported by locals to have been the historic "Old Charcoal Road" which was used to deliver processed charcoal to the furnace stacks for use as fuel. The archeological inquiry that took place in this area in the late 1970s was geared towards verifying these speculations.

The site was first examined by archeologists in 1977 during a Phase I survey through the Catoctin Furnace Historic District and environs prior to the dualization of US Route 15. During the Phase I investigations, the depressions and possible road trace were extensively surveyed on foot and important features were noted and mapped. The first depression noted (Feature 1) was roughly circular or oval in shape and approximately 45.72 meters (150 ft) in diameter, but with two box-like projections on the west side and a narrow "gorge" carved out to the east. The east bank of the depression rises about 3.6576 meters (12 ft) above the floor of the depression and the west bank rises some 9.144 meters (30 ft). It was tested in 1977 to determine if it was in-fact an old mine. A backwards L-shaped trench was excavated with a backhoe through the fill in the eastern "gorge" area. Ore-bearing strata within the depression were found to have been cut in a U-shaped pattern to a depth of 4.572 meters (15 feet), thus confirming that the depression was indeed a relict mine. This hole had then been filled in with sand. Thin bands of different colored soil atop this were interpreted as the remains of ore-bearing soils that were dragged out of the mine through the "gorge", which served as the entrance to the mine from what was once a wide mining road (in 1977 it lay beneath the extant road bed of US 15). In the early days of mining, carts or buggies were loaded with ore near the mine fronts and then hauled out via the gorge/entrance to the road beyond. In later periods, ore carts on rails were supposedly used to transport the ore. The two box-like projections on the west end of the depression were interpreted as th ne fronts. The excavations seem to suggest that this mine was in operation earlier in the furnace's history. Massive iron nuggets were encountered at ju le over 2 meters below the surface. This was below the water table and the contention of the excavators was that the mine must have been excavated pr... ... he advent of steam pumps (to pump out ground water), otherwise the precious ore would not have been left in situ. In general, this mine is far shallower than other mines in the vicinity which are known to have been worked much later.

The second depression (Feature 2) was located south of the first depression and on the opposite side of US Route 15 (the east side). Much of this area was filled when the highway was built, but in areas where the depression could still be discerned, its banks extended as high as 2.44-3 meters (8-10 ft) above the depression floor. The locale was well-documented historically to have been an ore mine. Preliminary interviews with local informants revealed that in the 1920s the abandoned mine was flooded by Lanceolot Jacques, owner and real estate developer of the Catoctin Furnace area at the time. Jacques built an entire complex of lakes from the old mines and raceways at Catoctin, which he called the "deer park". It was a development scheme by Jacque to make a portion of the furnace area profitable as a recreational area. It seems this idea never really took off, but the facilities did provide an ideal environment for raising fish. Beginning in the late 1920s, the ponds developed by Jacques were rented by one George English who began using them to raise goldfish. This profitable fish farming business was expanded and at one time the area from Catoctin Mountain to Lewistown was known as "the Goldfish Capital of the World". This mine was filled from a tailrace that emptied the racepond at 18FR327 (see associated synopsis report for additional historical context) to the north. The water was impounded by a stone barrage built on the mine's south side and a cement dam to the east. In times of flooding, water could spill over this second cement dam into yet another abandoned ore mine. Originally, it seems that the water from the racepond at 18FR327 was transported southeast via the tailrace, but instead of spilling into this abandoned ore mine, it was transported over the narrow gap (where the cement dam was eventually built) via a wooden aqueduct. The water then continued in a raceway south towards the furnace facilities. The pond was filled-in when US 15 was built in the 1960s. No excavations were conducted in this area during Phase I survey as it was historically documented to be a mine, but work in the vicinity was scheduled to take place during Phase II operations.

The third depression (Feature 3) was directly to the east of Feature 2. It was 3-3.66 meters (10-12 ft) deep in an irregular area about 36.576 meters (120 feet) in diameter. It was at one time connected to the ore mine immediately west of it by a narrow passageway (the "gorge"). This entrance was blocked by the cement dam built by Jacques (see above). Oral history indicates that it also served as an ore mine and it was not excavated or examined further. The fourth depression (Feature 4) was quite large and was located well south of the two connected mines. A geologic map from 1911 indicated that this was also an ore pit. This mine was almost completely covered by the original alignment of US 15. Plans were made to explore the area further at the Phase II stage to confirm that it was also an ore mine. Running east-west between this depression and the two connected mines (the two associated with Jacques' "deer park") was an area depicted on SHA maps of the highway area topography as a roughly 12.192 meter (40 ft) flat horizontal zone surrounded by depressions (i.e. the mines previously discussed). Preliminary survey work indicated that this raised area was a kind of "bridge" built of slag fill extending due west; perpendicular to the highway. This was south of where a feature known as the "Old Charcoal Road" was thought to have crossed the right-of-way for the existing lane of US 15. However, interviews with local informants revealed that this location was actually closer to the vicinity in which they remembered the "Old Charcoal Road" intersecting the route. The presumed Old Charcoal Road also appeared to follow a path that would eventually join a local dirt and stone road that was still in use in the 1960s according to Maryland SHA. This feature (Feature 6) was also reserved for further examination during Phase II testing. Feature 5 was a r r determined to be primarily related to another site (18FR327) and will not be discussed here.

After this initial survey work had been completed, a Phase II research plan was established that involved extensive background research to place the mines in their proper historical context, soil sediment coring to determine the subsurface structure in some of the mine areas, and a series of test trenches to better understand the structure of the mines and road and the way in which they were utilized. A brief overview of the archival and oral history research will be presented first, followed by discussion of the Phase II archeology.

Archival research and discussions with local informants reveal important background information relating to the site. In the year 1774, James, Thomas, Baker, and Roger Johnson constructed the first iron furnace at Catoctin. In 1776, they began producing pig iron under the name of James Johnson and Company.

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR328 **Site Name:** Catoctin Three Ore Mines

Other name(s) Orr's "Check 12"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th-19th century ore mines, charcoal road, and raceway head

Hematite ore from the Catoctin Mountains provided the raw material for production of the iron while the Catoctin forests provided charcoal for fuel. The Catoctin Furnace company held thousands of acres of the surrounding forest land, which were harvested on a 25-35 year cycle to produce charcoal. A given forest area was essentially clear-cut for live timber, leaving a couple of standing trees for re-seeding. Logs were cut into standardized lengths and drawn down the mountainside on sleds to "hearth stands". An expert called a "collier" cleared a roughly 9 meter level, circular area of all stone and forest debris and then stacked the wood in a special pattern. It was then covered with earth, leaving a smokehole near the top. Hot coals would be dropped into this hole and the slow-burning fire would be tended by the collier around-the-clock for 2-3 weeks until all of the wood was charred. It took approximately 1 cord of cut wood to produce 6 bushels of charcoal. The charcoal was then cooled and hauled to the furnace site on mule-drawn wagons. According to local tradition, the wagons travelled to the furnace complex along the Old Charcoal Road and halted at the "Bell-Ringing Tree". A bell was affixed in the upper branches of a tall Sycamore tree and was rung by the collier to summon the charcoal weigher. The charcoal weigher determined the quantity in the collier's load and paid him based on a set rate per bushel. After depositing the fuel in the charcoal house at the furnace, the colliers would return to their hearth stands along the same route, trailing charcoal dust all along the way. This practice would have been a part of the regular rhythm at the factory until 1893, when coal coke completely replaced charcoal as fuel for the furnace stacks.

Charcoal was not the only power source utilized at the furnace. Water from the local springs and streams provided the energy to power enormous bellows blowing air into the furnace, as well as power for forge hammers, mills, and other machines. A complex system of ponds, races, ditches, dams, and aqueducts ensured that the water wheels were supplied with sufficient "drop" to maintain the power levels needed. It was this system of water channeling that was exploited by Lancelot Jacques (see above) to flood some of the mines under question at 18FR328. Additional details related to the period of Jacques' "deer park" and the period of use as a goldfish farm are discussed in the synopsis report for 18FR327. One of the most important early products of the furnace is rumored to have been supplies (including munitions) for George Washington's Army. While pig iron continued to be produced at the furnace, other important products were machine parts, foundry rolling mills, iron car/cart wheels, cast-iron stoves, and other materials. During the Civil War, iron from the furnace was used to armor the famous iron-clad ship, the Monitor. Over the course of history a number of additional furnace stacks, support structures, quarries, casting areas, and other structures were constructed in the area. Some structures were demolished and improved facilities were built. One noteworthy addition was the construction of the "Isabella" furnace stack around 1856.The Catoctin Furnace continued to operate until the early 20th century.

Archeological researchers returned to Site 18FR328 in 1979 to conduct Phase II testing. In the vicinity of Feature 1, the original trenches laid out in 1977 were enlarged with a backhoe, revealing undisturbed natural strata on the sides of the ore mine depression. The trench revealed that the mining excavations were dug to approximately 3 meters below the present surface of the depression, where a yellow soil marked the end of a layer of iron ore. Six split rails sharpened and used as stakes were found at this bottom level, along with a large squared beam containing square spikes of iron. An L-shaped trench was also dug at the west end (near the box like projections of the ore pit -- see above) to a depth of 1.524 meters (5 ft). Natural strata consisting of gray clay and brown soil w countered in the sides, and the loose fill of these strata was found at the base of the excavation unit. A number of shovel test pits were placed b the two box-shaped projections which revealed fill similar to that seen in the upper layer of the 1979 trench. No artifacts were found in the shovel te , but cinders, typical of furnace tailings, were encountered.

Two backhoe cuts were made into the banks of the Feature 2 depression to confirm what was already documented historically; that it was a mine. Ore deposits were encountered which were relatively undisturbed. Twelve borings were drilled into these iron ore deposits and like the Feature 1 mine, revealed that a significant quantity of ore remained below the water table. This, again, suggests that this was an early mine, utilized at a time when water could not be easily pumped out of diggings via steam power. No excavations were conducted in the Feature 3 mine area as it was well documented historically and was outside the area that would be impacted by highway dualization. The depression at Feature 4 could not be adequately tested due to the steep road embankments (US Route 15 cut directly atop this locale). A trench was cut in the vertical face of the presumed Charcoal Road near the north end of the mine, but no iron ore was seen. A geologist who assisted with the project did, however, note the presence of iron ore nuggets in surface exposures at different levels throughout the depression. Two iron rails were also found, one being very badly twisted, at the juncture of the probable mine wall and the road embankment. Seven borings confirmed that the depression was a deep ore mine that extended below the present water table (suggesting a more recent mine).

Feature 1 was interpreted as a box mine; an exploration for iron ore made from the Feature 2 mine. This mine was dug following the iron ore strata and avoiding sterile zones such as a large "island" of sterile strata noted in one of the Feature 2 trenches. This resulted in a pattern of mine excavation that locals described as being like a "rabbit warren". Feature 3 was presumed to also be a continuation of the Feature 2 mine, probably underneath a wooden aqueduct which locals state once carried water over the gap between the two mines and on to the furnace (see the 18FR327 synopsis report). These mine features revealed clues as to the mining practices at Catoctin during the period prior to the use of steam pumps (first utilized in the latter part of the 19th century). First a squared face was dug (the box-like projections of Feature 1) approximately 12.2-15.25 meters (40-50 ft) wide and half as deep. Digging proceeded forward by throwing non-ore soil to the rear and side, and ore fragments into carts. Ore carts at this period were probably on sleds with furnace tailings used to give a prepared surface for travel. A wide stepped platform was gradually lowered to the base of the retrievable ore body (essentially the water table). The sides of the excavation were shored-up by the use of squared timbers held in position by perpendicular split-rail stakes like those encountered at the base of the Feature 1 mine. The total face of the mine was kept parallel and on the same plane by alternately digging adjacent box-shaped sections (the two parallel projection on the west side of Feature 1). The vein of iron ore was followed until significant overburden, as in a steeply rising mountain side, was encountered or the vein went too deeply into ground water. Ground water could be kept drained with ditches, but excavation could not proceed as deeply as it later would with steam pumps.

The Feature 4 mine was considered to belong to the later complex of mines including the Big Ore Bank and the Kunkel Mine (18FR330) because of its greater depth and the presence of iron rails. The depth of mine excavation was well below the water table indicating that steam pumps were in use. The iron rails, were thought to be the kind of rails on which ore carts were pushed/pulled to haul the material out of the mine during the later periods at Catoctin. These replaced the wooden sleds that were thought to have been used in earlier periods.

T sence of the Old Charcoal Road at Feature 6 was also confirmed during Phase II work in 1979. This was situated north of the furnaces and paralleled a historic retaining wall. An initial backhoe trench was cut across the road revealing a thick zone of gray slag which covered the north side of a high terrace (henceforth called the upper terrace). A layer of gravel was found just under the surface. Beneath this was a thick band of powdered charcoal over a band of red gravel from furnace tailings. The gravel layers formed a strip some 4.572 meters (15 ft) wide and both the red gravel and upper gravel layers contained ruts about axle distance apart. These features in turn rested on a gray clay fill which resembled the soil resulting from ore washings. A thin zone of green slag intervened between the gray slag mantle and the fill. Several unrefined waste iron pieces, a possible brake handle, and an iron bar came from this green slag zone. A small midden at one end of this trench (the grid west end) extended about 46 cm below the surface in mixed clay soils with the majority of material being of a 20th century domestic nature. A second trench was cut into a terrace located approximately 2.13 meters (7 ft) to the south, below the upper terrace

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR328 **Site Name:** Catoctin Three Ore Mines **Prehistoric** ☐

Other name(s) Orr's "Check 12" **Historic** ☑

Brief Description: late 18th-19th century ore mines, charcoal road, and raceway head **Unknown** ☐

on which the main road was situated. The trench contained 3 charcoal features similar to the band encountered in the first trench. Each was similarly underpinned by soil washing debris. This suggested that a second road was situated below the Old Charcoal Road. A wagon spring was found in one of these features. A third trench was placed next to the initial trench on the edge of the main road terrace. It was excavated almost vertically downslope to a depth of 3.6576 meters (12 ft) to the floor of the feature 4 iron mine. A thick mantle of charcoal draped over the side of the terrace. The gray clay fill proceeded to a light yellow subsoil near the base of the cut. The same type of midden material of recent origin was found along the talus slope of the Old Charcoal Road embankment and at the base where a disturbed mix of clay soils revealed modern milk and scotch whiskey bottles and an electrical insulator pipe. This was probably a surface dump that was redeposited during earth moving activities when US 15 was initially constructed in the 1960s. A 1.524 meter (5 ft) grid was placed over the gravel and charcoal areas at the surface of the upper terrace and ten squares were excavated by hand. Two 1.8288 meter (6 ft) wide depressions were discovered in the charcoal layer, which seem to indicate the presence of two "lanes" on the road. In the fills within these ruts (consisting mainly of clay and gray slag) were found several clear 20th century bottle fragments along with machine-cut nails. This indicated that the fill material was a late addition. Other artifacts were also recovered in this area and are included in the counts below. Several shovel test pits were put into this upper terrace following the path of the road which revealed stratigraphy of the road similar to that described above. It was noted that on the west side of US Route 15, some 152 meters (500 ft) up the mountain slope, four roads or trails were found ranging in size from 3 to 3.66 meters (10-12 ft) in width. The trails appeared to converge on a line made by the extension of the charcoal road (i.e. they appeared as if they would meet up with it).

These excavations revealed several details concerning the area of the Old Charcoal Road. It seems that the road embankment (the upper terrace), was built of ore washings for the purpose of conveying charcoal in wagons from the hearth stands on the mountain to the furnace of the original stack at Catoctin, and later to the "Isabella" stack (see above), both located directly to the east. The road was accessed via the network of scattered trails which met up with the road as evidenced west of US 15. The charcoal roads were marked by red furnace gravel mantles put down to support the wagon wheels. The roads and adjacent areas were covered with charcoal dust which came from the emptied wagons as they returned to the mountain hearths. Alternatively, the charcoal could have been intentionally placed as good road bed material. The mountain trails converging on a projection of the Old Charcoal Road probably led into successively smaller trails terminating at the charcoal hearth stands. As the demand for charcoal grew with the expansion of the iron industry, a second terrace was built to the south. This terrace contained two charcoal roads corresponding to the two roads (the two wide depressions) found on the upper terrace; one for coming and one for going. The upper terrace was probably constructed in the latter part of the 18th century, and the lower road in the middle of the 19th century when the construction of the Isabella stack (in 1856-1857) increased demand for fuel. The charcoal roads were probably used in this way until the late 19th century. The last charcoal-fueled furnace blast took place in 1893. An exposed section of road on the upper terrace revealed the use of scattered, hard gray slag on the charcoal road surface. This slag is believed to have come from the third furnace stack built at Catoctin which burned anthracite coke. Modern artifacts were recovered in the fill that washed into the old road ruts.

Ar recovered during Phase II work in the vicinity of the Old Charcoal Road include 28 activity items (13 unrefined iron droplets, 1 iron wire piece, 1 flat irc a probable wagon brake handle, 3 pieces of slag, 1 metal piston ring, 1 spark plug, 1 auto-body part, 1 cycle spoke, a wagon spring, 1 wire cl...pin, 2 paint can tops, and 1 brass pen sheath), 14 architectural remains (7 machine-cut nails, 1 wrought nail, 2 wire nails, 1 square headed screw, 1 small piece of copper wire, and 1 electrical insulator pipe), 3 clothing objects (1 shoe sole, 1 leather shoe heel, 1 plastic hair beret), 1 personal item (an aluminum key),87 kitchen-related artifacts (7 whiteware sherds, 1 transfer-print ware sherd, 2 porcelain sherds, 3 stoneware crock sherds, 57 bottle glass pieces, 2 glass jar fragment, 1 glass lid fragment, 1 metal bottle cap, 1 large can top, 2 metal jar tops, 1 beer can, 1 tin can, and 8 small tin can fragments), and 9 miscellaneous artifacts (2 unidentifiable metal fragments, 4 green painted wood slivers, 2 clay "plugs" and a piece of tin foil). In addition to these remains, lots of evidence of cinders, slag, and general ore tailings were found throughout much of the fill.

Research at 18FR328 revealed information useful in interpreting the process of early mining and charcoal consumption at Catoctin Iron Furnace. Much of the site has been destroyed or altered by the dualization of US Route 15. However some portions remain (Feature 3) and may have additional research potential.

External Reference Codes (Library ID Numbers):

00005963, 00005972, 00005973

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR324 **Site Name:** Catoctin/Carty House

Other name(s) Orr's "Check 7"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: 19th-early 20th century log house foundations

Site Location and Environmental Data:

Latitude 39.5802 Longitude -77.4346

Elevation 146 m Site slope

Site setting

The fieldstone foundation was overgrown. Walls were 21' on a side, and barely protruded above the ground surface; however, at the south side of the house a stone wall held by mortar occurred with an entrance passage in it. A sunken area indicated that a cellar occurred at the south end.

Maryland Archeological Research Unit No. 17

Physiographic province Blue Ridge

Ethnobotany profile available ☐ Maritime site ☐

SCS soil & sediment code Ma

Terrestrial site ☑ Underwater site ☐

Topography

Floodplain	☐	High terrace	☑
Hilltop/bluff	☐	Rockshelter/ cave	☐
Interior flat	☐	Hillslope	☐
Upland flat	☐	Unknown	☐
Ridgetop	☐	Other	☐
Terrace	☐		
Low terrace	☐		

Ownership

Private	☐
Federal	☐
State of MD	☑
Regional/ county/city	☐
Unknown	☐

Nearest Surface Water

Name (if any) Little Hunting Creek

Saltwater		Freshwater	
Ocean	☐	Stream/river	☑
Estuary/tidal river	☐	Swamp	☐
Tidewater/marsh	☐	Lake or pond	☐
		Spring	☐

Minimum distance to water is 200 m

Temporal & Ethnic Contextual Data:

Paleoindian site		Woodland site		Contact period site		ca. 1820 - 1860	Y
Archaic site		MD Adena		ca. 1630 - 1675		ca. 1860 - 1900	Y
Early archaic		Early woodland		ca. 1675 - 1720		ca. 1900 - 1930	Y
Middle archaic		Mid. woodland		ca. 1720 - 1780		Post 1930	
Late archaic		Late woodland		ca. 1780 - 1820			

Unknown prehistoric context

Unknown historic context

Unknown context

Ethnic Associations (historic only)

Native American		Asian American	
African American		Unknown	
Anglo-American		Other	Y
Hispanic		Irish-American?	

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

Multi-component	☐	Misc. ceremonial	☐
Village	☐	Rock art	☐
Hamlet	☐	Shell midden	☐
Base camp	☐	STU/lithic scatter	☐
Rockshelter/cave	☐	Quarry/extraction	☐
Earthen mound	☐	Fish weir	☐
Cairn	☐	Production area	☐
Burial area	☐	Unknown	☐

Other context ☐

Historic

Urban/Rural? Rural

Domestic	☑	Furnace/forge	☐	Military	☐	Post-in-ground	☐
Homestead	☑	Other	☐	Battlefield	☐	Frame-built	☐
Farmstead	☐	Transportation	☐	Fortification	☐	Masonry	☑
Mansion	☐	Canal-related	☐	Encampment	☐	Other structure	☑
Plantation	☐	Road/railroad	☐	Townsite	☐	Slave related	☐
Row/townhome	☐	Wharf/landing	☐	Religious	☐	Non-domestic agri	☐
Cellar	☐	Maritime-related	☐	Church/mtg house	☐	Recreational	☐
Privy	☐	Bridge	☐	Ch support bldg	☐	Midden/dump	☑
Industrial	☐	Ford	☐	Burial area	☐	Artifact scatter	☐
Mining-related	☑	Educational	☐	Cemetery	☐	Spring or well	☐
Quarry-related	☐	Commercial	☐	Sepulchre	☐	Unknown	☐
Mill	☐	Trading post	☐	Isolated burial	☐	Other context	☑
Black/metalsmith	☐	Store	☐	Bldg or foundation	☑	foundation	
		Tavern/inn	☐	Possible Structure	☐		

Interpretive Sampling Data:

Prehistoric context samples			
Soil samples taken		Flotation samples taken	Other samples taken

Historic context samples			
Soil samples taken	N	Flotation samples taken N	Other samples taken

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MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR324 **Site Name:** Catoctin/Carty House

Other name(s) Orr's "Check 7"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: 19th-early 20th century log house foundations

Diagnostic Artifact Data:

Projectile Point Types

Clovis		Koens-Crispin	
Hardaway-Dalton		Perkiomen	
Palmer		Susquehana	
Kirk (notch)		Vernon	
Kirk (stem)		Piscataway	
Le Croy		Calvert	
Morrow Mntn		Selby Bay	
Guilford		Jacks Rf (notch)	
Brewerton		Jacks Rf (pent)	
Otter Creek		Madison/Potomac	
		Levanna	

Prehistoric Sherd Types

Marcey Creek		Popes Creek		Shepard		Keyser	
Dames Qtr		Coulbourn		Townsend		Yeocomico	
Selden Island		Watson		Minguannan		Monongahela	
Accokeek		Mockley		Sullivan Cove		Susquehannock	
Wolfe Neck		Clemson Island		Shenks Ferry			
Vinette		Page		Moyaone			
				Potomac Crk			

Historic Sherd Types

Earthenware		Jackfield		Porcelain	4	Rhenish	
Astbury		Mn Mottled		Stoneware		Wt Salt-glazed	3
Borderware		North Devon		English Brown			
Buckley		Staffordshire		Eng Dry-bodie			
Cream/Pearl	4	Tin Glazed		Nottingham			

All quantities exact or estimated minimal counts

Other Artifact & Feature Types:

Prehistoric Artifacts

Flaked stone (all)		Other fired clay	
Ground stone		Human remain(s)	☐
S owls		Modified faunal	
Fire-cracked rock		Unmodified faunal	
Other lithics (all)		Oyster shell	☐
Ceramics (all)		Floral material	☐
Rimsherds		Uncommon Obj.	
		Other ☐	

Prehistoric Features

Mound(s)		Storage/trash pit	☐
Midden	☐	Burial(s)	☐
Shell midden	☐	Ossuary	☐
Postholes/molds	☐	Unknown	☐
House pattern(s)	☐	Other	☐
Palisade(s)	☐		
Hearth(s)	☐		
Lithic reduc area	☐		

Lithic Material

Fer quartzite	☐	Sil sandstone	☐		
Jasper	☐	Chalcedony	☐	European flint	☐
Chert	☐	Ironstone	☐	Basalt	☐
Rhyolite	☐	Argilite	☐	Unknown	☐
Quartz	☐	Steatite	☐	Other	☐
Quartzite	☐	Sandstone	☐		

☑ Dated features present at site

Builder's trench w/ cut nails & whiteware suggests construction shortly after 1825. Two postmolds w/ wire nails suggesting late 19th/early 20th c.

Historic Artifacts

Pottery (all)	1214	Tobacco pipe(s)	87
Glass (all)	101	Activity item(s)	27
Architectural	9	Human remain(s)	☐
Furniture	1	Faunal material	☑
Arms		Misc kitchen item	8
Clothing	49	Floral material	☐
Personal items	6	Misc.	2
		Other ☐	

Historic Features

Const feature	☑	Privy/outhouse	☐	Depression/mound	☐	Unknown	☐
Foundation	☑	Well/cistern	☐	Burial(s)	☐	Other	☐
Cellar hole/cellar	☐	Trash pit/dump	☑	Railroad bed	☐		
Hearth/chimney	☐	Sheet midden	☐	Earthworks	☐		
Postholes/molds	☐	Planting feature	☐	Mill raceway	☐		
Paling ditch/fence	☐	Road/walkway	☑	Wheel pit	☐		

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1: +/- years BP Reliability Sample 2: +/- years BP Reliability Sample 3: +/- years BP Reliability

Sample 4: +/- years BP Reliability Sample 5: +/- years BP Reliability Sample 6: +/- years BP Reliability

Sample 7: +/- years BP Reliability Sample 8: +/- years BP Reliability Sample 9: +/- years BP Reliability

☐ Additional radiocarbon results available

Phase II and Phase III Archeological Database and Inventory

MARYLAND HISTORICAL TRUST

Site Number: 18FR324 **Site Name:** Catoctin/Carty House

Other name(s) Orr's "Check 7"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: 19th-early 20th century log house foundations

External Samples/Data: Collection curated at MAC

Synopsis URL

☑ Raw data available online

Datalink 1 National Endowment for the Humanities - Digital Collections Files

Datalink 2 MAC Lab Collections Finding Aid

Datalink 3

Summary Description:

The Catoctin/Carty House Site (18FR324) is the remnant of a mid 19th century miner's house associated with the nearby Catoctin Furnace. The site is located along US Route 15 in Frederick County, Maryland. The site consists of a roughly 6.4 meter (21 ft) square fieldstone foundation, which was identified by locals as "Earl Carty's House". Earl Carty was a miner who worked in the "Big Ore Bank" located to the south of the house. His son and daughter-in-law lived in the house, a typical log cabin, well into the 1920s.

Archival and oral history research reveal that in the year 1774, James, Thomas, Baker, and Roger Johnson constructed the first iron furnace at Catoctin, Maryland. In 1776, they began producing pig iron under the name of James Johnson and Company. Hematite ore from the Catoctin Mountains provided the raw material for production of the iron while the Catoctin forests provided charcoal for fuel. In addition, water from the local springs and streams provided the energy to power enormous bellows blowing air into the furnace, as well as power for forge hammers, mills, and other machines. A complex system of ponds, races, ditches, dams, and aqueducts ensured that the water wheels were supplied with sufficient "drop" to maintain the power levels needed. One of the most important early products of the furnace is rumored to have been supplies (including munitions) for George Washington's Army. While pig iron continued to be produced at the furnace, other important products were machine parts, foundry rolling mills, iron car/cart wheels, cast-iron stoves, and other materials. During the Civil War, iron from the furnace was used to armor the famous iron-clad ship, the Monitor. Over the course of history, a number of additional furnace stacks, support structures, quarries, casting areas, and other structures were constructed in the area. Some structures were demolished and improved facilities were built.

Near the end of the 19th century, the Catoctin Furnace complex began to fall on hard times due to changes in technology and industrialization. The extant fu at Catoctin prior to 1873 were fueled by charcoal. The abundant forestland of the area during the furnace's early days of operation was a boon, in: h as it supplied a ready quantity of charcoal fuel. However, more efficient methods using coal as a fuel had been developed and adopted by the fu s competitors. In 1873, a new furnace stack, nicknamed "Deborah", was built which could take advantage of coal fuel. Unfortunately, now the forests surrounding Catoctin isolated it and made transportation of coal to the stacks difficult and expensive. In particular, no railroad was available nearby which could cheaply transport coal to the furnaces and iron products out. In the mid 1880s the furnace owners finally built a railroad between Catoctin and the outside world, but it was too late to stave off the inevitable decline. The Catoctin Furnaces continued to operate until 1903 when blasting ceased. Iron ore continued to be mined for a generation or so and was shipped to Pennsylvania furnaces for processing. It was during this period of decline that Mr. Earl Carty worked the Big Ore Bank at Catoctin. None of the local informants could recall when Earl Carty's house (Site 18FR324) had been built, but one informant did recall that as a boy he had helped to transport a "laboratory shed" from the Furnace area to the Carty house. It was leaned up against the west side of the house as an addition. It was also stated that his son and daughter-in-law lived in the house as late as the 1920s.

The site was first examined by archeologists in 1977 during a Phase I survey through the Catoctin Furnace Historic District and environs prior to the dualization of US Route 15. During the investigations, the area was cleared of bush revealing a square made of fieldstone walls approximately 6.4 meters (21 ft) on a side. The walls barely protruded over the ground surface, however, at the south side of the house a stone wall held by mortar with a 0.9144 meter (3 ft) entrance passage in it was situated. A sunken area indicated that the entrance was for a cellar in this location. A decision was made to begin Phase II testing immediately and a series of test units and trenches were established around the foundations. In total, two 76.2 cm (2.5 ft) square units, two 61 cm (2 ft) square units, and a single 30.5 cm (1 ft) trench were placed against the foundations and two additional 76.2 cm units were placed in the surrounding yard area.

The units around the foundations revealed evidence of the root cellar and also identified a section of brick walkway on the west side of the house. They also yielded several fragments of mortar, 3 pieces of window glass, 1 brick, several slag fragments, several iron ore fragments, 1 button, 3 white salt-glazed stoneware sherds from a "crinkley-edged" saucer, 3 other stoneware sherds, 1 whiteware sherd, 1 metal bottle cap, 4 pieces of tin can, 2 bone fragments, 1 clay pipe bowl, and a pipe stem. The.two units in the house yard revealed a slag layer and some charred wood and charcoal fragments that may indicate the presence of outbuildings. The window glass that was encountered was quite thin. The thin glass, clay pipe fragments, and "crinkley-edged" stoneware suggest an artifact complex from the first half of the 19th century.

The site was revisited in 1979 for additional Phase II testing. It had been determined that the site foundations themselves would not be impacted by the road dualization project and could be preserved in place. However, the area to the west of the house was within the project area and it was this section of the site which was the focus of the 1979 investigations. A total of 74 shovel tests were excavated on a 1.524 meter (5 ft) interval to sterile subsoil or a depth of approximately 76 cm throughout the west yard. Fragments of brick and other artifacts were recovered from 14 of these STPs. Thirteen 1.524 X 1.524 meter test units were excavated in areas yielding artifacts. Several features were identified and are described, but unfortunately, the interim report (the only report that MHT has) does not describe the artifacts encountered. Collections from the site are available and are described briefly below. The features found in the west yard included a subsurface trash deposit, a brick walkway, a brick slab foundation for a possible outbuilding, the house builder's trench, another pe icular trench (utilities?), and numerous postholes associated with the house. Materials such as machine-cut nails and whiteware sherds in the bu trench, indicate that the building was likely constructed after 1825. The majority of the material, however, dates to around the mid-19th century. It was suggested by researchers that the house may have initially been constructed around 1825, but that an influx of money into the community at the time of the Civil War (when there would have been a major demand for iron) may be responsible for the large number of items evidently acquired around that time.

A total of 5,954 artifacts were recovered from excavations at the Carty House (both the 1977 & 1979 projects). They represent the domestic refuse of the dwelling's inhabitants between its construction around 1825 through the early 20th century, when it was abandoned. Collections in the possession of MHT contain a total of 1,214 ceramic sherds from the Carty House including lead-glazed coarse earthenwares, creamwares, pearlwares, whitewares, ironstones, yellowwares, Rockingham-type glazed wares, and soft and hard-paste porcelains. Also present were 87 white clay tobacco pipe fragments, 90 glass bottle

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR324 **Site Name:** Catoctin/Carty House

Other name(s) Orr's "Check 7"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: 19th-early 20th century log house foundations

fragments, five glass canning jar lid liners, and three table glass fragments. A number of clothing items were also recovered from the Carty House. Buttons, including 22 shell, 17 porcelain, 5 metal, 3 glass, and 2 bone, were found in various shapes and sizes. Activity items include 9 toys (7 marbles, a lead alloy toy sword, and a white porcelain doll fragment), attesting to the presence of children at the site. There are also 3 graphite pencil fragments, as well as the furnace-related slag and ore discussed above in the activity-related assemblage. In addition, five hair comb fragments and a purple glass bead represent personal items from the site. Other objects in the collections were a complete iron spoon (kitchen-related), and a copper alloy furniture tack in the shape of a shell.

No additional information is available regarding Site 18FR324. The site was preserved in place, and as the stone foundations are just beyond the US 15 right-of-way, the site may retain some additional research potential and would apparently be available to researchers wishing to explore the daily life of miners at Catoctin in the 19th and early 20th centuries.

External Reference Codes (Library ID Numbers):

00005963, 00005972, 00005973, JPPM-NEH

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR323 **Site Name:** Catoctin/Renner Burial Ground **Other name(s)** Orr's "Check 6"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th-early 19th century African-American cemetery

Site Location and Environmental Data:

Maryland Archeological Research Unit No. 17 SCS soil & sediment code EcB2

Latitude 39.5768 Longitude -77.4341 Physiographic province Blue Ridge Terrestrial site ☑ Underwater site ☐

Elevation 140 m Site slope 0-5% Ethnobotany profile available ☑ Maritime site ☐

Site setting

The cemetery lay directly between a quarry pit to the south and a washer-pond to the north. It is located on the east side of Route 15, between Thurmont and Frederick, about 1/4 mile south of Catoctin Hollow Road. About one third of the site was affected by construction of the northbound lane of US 15.

Topography

Floodplain	☐	High terrace	☑
Hilltop/bluff	☐	Rockshelter/ cave	☐
Interior flat	☐	Hillslope	☐
Upland flat	☐	Unknown	☐
Ridgetop	☐	Other	☐
Terrace	☐		
Low terrace	☐		

Ownership

Private	☑
Federal	☐
State of MD	☐
Regional/ county/city	☐
Unknown	☐

Nearest Surface Water

Name (if any) Little Hunting Creek

Saltwater		Freshwater	
Ocean	☐	Stream/river	☑
Estuary/tidal river	☐	Swamp	☐
Tidewater/marsh	☐	Lake or pond	☐
		Spring	☐

Minimum distance to water is 300 m

Temporal & Ethnic Contextual Data:

Paleoindian site		Woodland site		Contact period site		ca. 1820 - 1860	Y
Archaic site		MD Adena		ca. 1630 - 1675		ca. 1860 - 1900	
Early archaic		Early woodland		ca. 1675 - 1720		ca. 1900 - 1930	
Middle archaic		Mid. woodland		ca. 1720 - 1780		Post 1930	
Late archaic		Late woodland		ca. 1780 - 1820	Y		

Unknown prehistoric context ☐ Unknown historic context ☐ Unknown context ☐

Ethnic Associations (historic only)

Native American		Asian American	
African American	Y	Unknown	
Anglo-American		Other	
Hispanic			

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

Multi-component	☐	Misc. ceremonial	☐
Village	☐	Rock art	☐
Hamlet	☐	Shell midden	☐
Base camp	☐	STU/lithic scatter	☐
Rockshelter/cave	☐	Quarry/extraction	☐
Earthen mound	☐	Fish weir	☐
Cairn	☐	Production area	☐
Burial area	☐	Unknown	☐

Other context ☐

Historic

Urban/Rural? Rural

Domestic	☐	Furnace/forge	☐	Military	☐	Post-in-ground	☐
Homestead	☐	Other	☐	Battlefield	☐	Frame-built	☐
Farmstead	☐	Transportation	☐	Fortification	☐	Masonry	☐
Mansion	☐	Canal-related	☐	Encampment	☐	Other structure	☐
Plantation	☐	Road/railroad	☐	Townsite	☐	Slave related	☑
Row/townhome	☐	Wharf/landing	☐	Religious	☐	Non-domestic agri	☐
Cellar	☐	Maritime-related	☐	Church/mtg house	☐	Recreational	☐
Privy	☐	Bridge	☐	Ch support bldg	☐	Midden/dump	☐
Industrial	☐	Ford	☐	Burial area	☑	Artifact scatter	☐
Mining-related	☐	Educational	☐	Cemetery	☑	Spring or well	☐
Quarry-related	☐	Commercial	☐	Sepulchre	☑	Unknown	☐
Mill	☐	Trading post	☐	Isolated burial	☐	Other context	☐
Black/metalsmith	☐	Store	☐	Bldg or foundation	☐		
		Tavern/inn	☐	Possible Structure	☐		

Interpretive Sampling Data:

Prehistoric context samples			
Soil samples taken			
Flotation samples taken		Other samples taken	

Historic context samples			
Soil samples taken	Y		
Flotation samples taken	Y	Other samples taken	floral,textile

J

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR323 **Site Name:** Catoctin/Renner Burial Ground

Other name(s) Orr's "Check 6"

Brief Description: late 18th-early 19th century African-American cemetery

Prehistoric ☐ Historic ☑ Unknown ☐

Diagnostic Artifact Data:

Projectile Point Types

Clovis		Koens-Crispin	
Hardaway-Dalton		Perkiomen	
Palmer		Susquehana	
Kirk (notch)		Vernon	
Kirk (stem)		Piscataway	
Le Croy		Calvert	
Morrow Mntn		Selby Bay	
Guilford		Jacks Rf (notch)	
Brewerton		Jacks Rf (pent)	
Otter Creek		Madison/Potomac	
		Levanna	

Prehistoric Sherd Types

Marcey Creek		Popes Creek		Shepard	Keyser
Dames Qtr		Coulbourn		Townsend	Yeocomico
Selden Island		Watson		Minguannan	Monongahela
Accokeek		Mockley		Sullivan Cove	Susquehannock
Wolfe Neck		Clemson Island		Shenks Ferry	
Vinette		Page		Moyaone	
				Potomac Crk	

Historic Sherd Types

Earthenware		Jackfield	Porcelain	Rhenish
Astbury		Mn Mottled	Stoneware	Wt Salt-glazed
Borderware		North Devon	English Brown	
Buckley		Staffordshire	Eng Dry-bodie	
Cream/Pearl	1	Tin Glazed	Nottingham	

All quantities exact or estimated minimal counts

Other Artifact & Feature Types:

Prehistoric Artifacts

Flaked stone (all)	13	Other fired clay	
Ground stone		Human remain(s)	☐
S owls		Modified faunal	
Fire-cracked rock		Unmodified faunal	
Other lithics (all)		Oyster shell	☐
Ceramics (all)	1	Floral material	☐
Rimsherds		Uncommon Obj.	
		Other ☐	

Prehistoric Features

Mound(s)		Storage/trash pit	☐
Midden	☐	Burial(s)	☐
Shell midden	☐	Ossuary	☐
Postholes/molds	☐	Unknown	☐
House pattern(s)	☐	Other	☐
Palisade(s)	☐		
Hearth(s)	☐		
Lithic reduc area	☐		

Lithic Material

Fer quartzite	☐	Sil sandstone	☐		
Jasper	☐	Chalcedony	☐	European flint	☐
Chert	☐	Ironstone	☐	Basalt	☐
Rhyolite	☐	Argilite	☐	Unknown	☐
Quartz	☐	Steatite	☐	Other	☐
Quartzite	☐	Sandstone	☐		

☑ Dated features present at site

Burials dated from 1790-1840 by coffin nails.

Historic Artifacts

Pottery (all)	9	Tobacco pipe(s)	
Glass (all)	1	Activity item(s)	4
Architectural	7	Human remain(s)	☑
Furniture	1019	Faunal material	☐
Arms		Misc kitchen item	
Clothing	54	Floral material	☑
Personal items		Misc.	33
		Other ☐	

Historic Features

Const feature	☐	Privy/outhouse	☐	Depression/mound	☐
Foundation	☐	Well/cistern	☐	Burial(s)	☑
Cellar hole/cellar	☐	Trash pit/dump	☐	Railroad bed	☐
Hearth/chimney	☐	Sheet midden	☐	Earthworks	☐
Postholes/molds	☐	Planting feature	☐	Mill raceway	☐
Paling ditch/fence	☐	Road/walkway	☐	Wheel pit	☐
				Unknown	☐
				Other	☐

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1:	+/-	years BP	Reliability	Sample 2:	+/-	years BP	Reliability	Sample 3:	+/-	years BP	Reliability
Sample 4:	+/-	years BP	Reliability	Sample 5:	+/-	years BP	Reliability	Sample 6:	+/-	years BP	Reliability
Sample 7:	+/-	years BP	Reliability	Sample 8:	+/-	years BP	Reliability	Sample 9:	+/-	years BP	Reliability

☐ Additional radiocarbon results available

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR323 **Site Name:** Catoctin/Renner Burial Ground

Other name(s) Orr's "Check 6"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th-early 19th century African-American cemetery

External Samples/Data: Collection curated at MAC, Smithsonian

Synopsis URL

☑ Raw data available online

Datalink 1 National Endowment for the Humanities - Digital Collections Files

Datalink 2 MAC Lab Collections Finding Aid

Datalink 3 Ethnobotany Profiles for MD

Summary Description:

The Catoctin/Renner Burial Ground (18FR323) is a late 18th and early 19th century slave cemetery. It is located along US Route 15, just to the south of the historic iron furnace at Catoctin in Frederick County, Maryland. Both oral history and archeological work seem to be compatible with the idea that those interred at the burial ground were enslaved individuals. The owners of the Catoctin Iron Works in the late 18th and early 19th century, who owned the land on which the burial site is located, did own slaves and probably used their labor in the operation of the furnace complex.

The site was first examined by archeologists in 1977 during a Phase I survey through the Catoctin Furnace Historic District and environs prior to the dualization of US Route 15. During the investigations, the right-of-way for the highway was thoroughly surveyed and mapped, and extensive amounts of local historical research and interviews with local informants were conducted. One local informant, William Renner (for whom the site has been named), could recount local lore regarding a cemetery (located on property he had previously owned) that supposedly contained the graves of "blacks and Indians", as well as some plague victims. A brief site visit by the archeological team revealed fieldstone gravemarkers laid out in rows. These markers were mostly of unretouched local stone, about 61 cm long by 23 cm in diameter, erected to stand on their long axes. Only about half of each stone showed above the surface. Some stone had a small ledge or flat space chipped off the upper end, but no incised, painted, or other inscriptions were visible. As the site indeed appeared to contain a cemetery and Maryland state law mandated the complete removal of all human remains affected by proposed development, the investigators proceeded to Phase II testing to determine the extent of the site and to confirm the presence of burials.

Archival and oral history research played an important role in the initial stages of analysis, prior to excavation. This research revealed that in the year 1774, James, Thomas, Baker, and Roger Johnson constructed the first iron furnace at Catoctin. In 1776, they began producing pig iron under the name of James Jo[illegible] and Company. Hematite ore from the Catoctin Mountains provided the raw material for production of the iron while the Catoctin forests provided ch[illegible]l for fuel. In addition, water from the local springs and streams provided the energy to power enormous bellows blowing air into the furnace, as well as po[illegible]r forge hammers, mills, and other machines. A complex system of ponds, races, ditches, dams, and aqueducts ensured that the water wheels were supplied with sufficient "drop" to maintain the power levels needed. One of the most important early products of the furnace is rumored to have been supplies (including munitions) for George Washington's Army. While pig iron continued to be produced at the furnace, other important products were machine parts, foundry rolling mills, iron car/cart wheels, cast-iron stoves, and other materials. During the Civil War, iron from the furnace was used to armor the famous iron-clad ship, the Monitor. Over the course of history a number of additional furnace stacks, support structures, quarries, casting areas, and other structures were constructed in the area. Some structures were demolished and improved facilities were built.

The owners and operators of the Catoctin Iron Works in the period 1700-1840 all owned slaves. The demographic distribution of the slaves listed in the 1811 will of one of the owners of the Catoctin Works, Baker Johnson, suggests that his slaves were a community of family groups. Rather than leaving skilled iron workers to his family to ensure the survival of the furnace, he appears to have been more concerned with preserving the slaves' own nuclear family units when determining their disposition among his heirs. This calls into question, whether Baker's slaves were engaged at the iron works. However, census records indicate that many of the Catoctin area slaves were employed at a variety of occupations, and elsewhere than in their owners' places of residence. At other contemporary iron works in the region, the use of slave labor was a fairly common practice, including at the Antietam Furnace (18WA288). During the 1820s and 1830s, when the use of slaves is well documented at the Antietam furnace, it and the Catoctin Iron Works were owned by the same gentleman; Mr. John Brien. Regardless, of whether they were employed at the furnace or not (and it seems likely that at least some must have been), there were numerous slaves living in the area.

There was probably also a number of free blacks in the vicinity. The free black population of Frederick grew significantly from 1790 until 1860, and it would seem that the prospect of employment in the furnace area might be a powerful attractant. Whether, free or slave, the black community at Catoctin lived in a segregated world and would not have worshipped alongside whites. Interestingly, there are no historic maps or other documentary indicators of a separate church for the black community. According to one unsubstantiated account, special services were held at the Episcopal Harriet Chapel (next to the furnace itself) for the area's African-American residents (both slave and free). Thus, there is no other location specifically associated with the black inhabitants of the furnace area which serves as a "better" candidate for the location of a slave cemetery.

Interviews with the local inhabitants did not clear things up either. Most had no knowledge of the cemetery's existence, and those that did knew little other than the site was reputedly associated with plague and pestilence (typhoid fever was specifically mentioned), or had been used by "Indians and Negroes". Children had traditionally avoided the place due to these associations, and perhaps that is where some of these ideas originated over the years. According to Renner, even the "old timers" he had once known could only remember one burial event in the cemetery. They told the story of a mulatto individual who had died of smallpox on the mountain. After a regrettable delay, his remains were brought down in an iron coffin and buried in the graveyard. The coffin was supposedly of the common Late 19th/early 20th century type produced at the furnace. Renner also relayed that one morning, sometime in the mid 1940s, he had tracked a "polecat" to its den in the cemetery to retrieve a chicken that had been stolen in the night. During his digging into the den, he uncovered the le[illegible]n interred individual, which he rapidly covered up after retrieving his chicken. Later he drove off some boys who dug a shallow trench under a he[illegible]ne in search of skeletons. No other information could be gained from archival research or oral history. Ultimately, archeology would have to resolve the issue of the community with which the graves should be associated.

Phase II work began in 1977 with the excavation of five test units of varying size. This work yielded two depressions of uncertain origin as well as the graves of at least two human infants. It was also observed that the cemetery lay directly north of a limestone quarry pit (18FR325) and at least part of the site seemed to contain an over-burden or "mantle" of limestone rock fragments, presumably from the quarry. Aside from the human remains, the only objects mentioned in the Phase II report are "several small square nails" and charred material that included leather (found in one of the unidentified depressions). As it was believed that a significant number of burials (as many as 100) might be preserved beneath the limestone rubble in the western portion of the site, the

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR323 **Site Name:** Catoctin/Renner Burial Ground

Other name(s) Orr's "Check 6"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th-early 19th century African-American cemetery

project proceeded immediately to full-scale data recovery (Phase III) excavations.

The initial stage of Phase III work consisted of clearing an area of the undergrowth to allow all visible gravestone markers to be located, and to permit the perimeters of the cemetery to be identified. A datum point and zero-line were established along the eastern edge of the (then) existing northbound lane of Route 15 and a 3.048 meter (10 ft) grid system was laid down. The grid was only laid down within the right-of-way for the proposed dualization of US Route 15, even though the cemetery extended farther to the east. As the graves outside of the right-of-way would not be impacted by construction, they were left undisturbed. After establishment of the grid, surface probing was undertaken to locate potential gravemarking stones. A total of 126 such stones (not included in the artifact tables above) were located and mapped, of which 106 were local quartzite, 7 were limestone, and the remainder were milky quartz or other stone.

During the 1979 field season, trenches were excavated manually and mechanically to locate burials and to define the perimeters of the site. Twenty-six graves were found between a depth of 73 cm and 1.5 meters below the surface. All graves were excavated in 10.16 cm (4 in) arbitrary levels, and burial fill was screened through hardware cloth. In order to locate every burial remaining in the right-of-way, a gradall removed the topsoil at the beginning of the 1980 field season. Nine additional graves were excavated, following the procedures and standards established during the 1979 investigation.

The cemetery was laid out in north-south rows spaced 3.048 meters (10 ft) apart, with graves oriented east to west approximately 1.2192 meters (4 ft) apart. All 35 graves were single interment coffin burials, with one exception; a child interred directly above an adult female. Individuals were buried supine, with heads to the west, and in an extended position with hands folded over the abdomen. Rectangular and pinch-toe type coffins were made of white oak and chestnut. Age at death in this cemetery population ranged from neonate to elderly, and the condition of the skeletal remains varied from poor to excellent. The diagnostic materials in the graves (primarily coffin nails) are consistent with a date range of circa 1790-1840. There was no discernable pattern of date distributions spatially across the area excavated.

Burial-related artifacts encountered at the site include 54 clothing items, 1,014 furniture objects, and 1 miscellaneous object (a peach pit). The clothing items are typical of very simple funerary clothing; 27 cuprous metal shroud pins, at least 5 fibers from burial shrouds (identified as were identified as woven, wool textiles), 11 cuprous buttons, 2 white metal buttons, 2 shell buttons, and 7 other buttons. The funerary furniture (coffins), consisted almost exclusively of pinch-toe coffins, the remains of which had mostly decayed. However, metal parts were preserved and recovered. These include 471 machine-cut coffin nails, 500 hand-wrought coffin nails, 14 unidentifiable (hand-headed) coffin nails, 6 machine-made screws, 10 unidentifiable screws, 2 pieces of coffin wood with nails, 7 other pieces of coffin wood, and 4 metal plates used as coffin hardware. The peach pit may be part of a funerary offering. While the burials appeared to reflect European Christian mortuary practices, there was also evidence of possible African-American folk beliefs. In addition to the peach pit, the presence of fruit ar[illegible] funeral wreaths, as opposed to flowers, was noted in at least three other interments. The disposition of seeds suggested intentional placement at th[illegible] of interment in at least three of these four cases. One infant contained a cluster of raspberry or blackberry seeds, which formed a corona around its cr[illegible], while two adult graves had sassafras on top of the coffin surface. Full details regarding the ethnobotanical assemblage are available in the linked ethnobotany profile.

In addition to the burial-related artifacts, several additional objects were encountered including 4 activity items (a metal animal trap, a piece of barbed wire, and 2 horseshoes with nails), 7 architectural artifacts (3 pieces of brick, 1 nail, 2 cut wood fragments, and a spike), 10 kitchen-related artifacts (1 pearlware sherd, 3 whiteware sherds, 1 redware sherd, 4 unidentified ceramic sherds, and a bottle fragment), 31 miscellaneous objects, and 14 prehistoric artifacts. The miscellaneous historic objects were a piece of charcoal, 24 animal bones, 2 rodent skeletons, 3 pieces of slag and a metal object. The prehistoric artifacts were 2 rhyolite bifaces, a quartz scraper, 1 utilized/retouched quartz flake, 5 quartz flakes, 3 rhyolite flakes, 1 other flake, and an unidentified sherd. As an Archaic lithic scatter is located just to the south, the presence of prehistoric material is not surprising.

Analysis of the human remains is telling. In every case where a skull was adequately preserved to permit association with a "racial group", individuals were determined to have been Afican/Black/African-American; most with few or no cranial features associated with whites. With little admixture with white genes, these individuals were probably recent arrivals from Africa. Age and sex distributions within the cemetery appear to be typical for 18th-early 19th century cemeteries and spatial patterning of burials was entirely random with respect to age and sex. However, some individuals seem to have been buried in groups, possibly providing evidence of family interments. Signs of disease and trauma include one adult male with a lower leg fracture with fusion and an apparent trephination through the left parietal, another adult male with a severe and probably crippling fusion of lower lumbars to sacrum, many individuals with arthritic degeneration of neck vertebrae, signs of rickets, periostitis indicative of systemic infections, and poor teeth. From the lack of material goods in the burials, it can be inferred that the people were of low socio-economic status.

So, the physical anthropology indicates that these people were black and possibly first or second generation Africans. It also seems to suggest a life of manual labor. And they were apparently poor. The historic sources indicate that they were probably slaves who had some connection to the iron furnace complex. However, the sorts of distinctive burial practices generally associated with the African heritage in black American cemeteries were absent here. There were no graveyard decorations, no heaps of broken crockery, bottles, white seashells, etc. as have been observe d in other slave cemeteries of the period. Only the possible appearance at the cemetery of fruit and seed funeral wreaths, as opposed to flowers, was unusual in otherwise very "Christian" burials. Religion was often imposed by a Christian master upon his slaves and he had full authority as to how they would be buried. Thus, these may not have been Christianized Africans, but merely Africans made slaves and forced to live in a Christianized society where every aspect of their lives (including death) was governed by someone else's choices. The botanical offerings may have been the only means of funeral-associated personal expression permitted them by their masters. All of the data seem to be quite consistent with the local lore that this was a slave cemetery. No evidence of Native American burials or mass graves from a plague was encountered.

All of the remains were transferred to the Smithsonian Institution. The remaining burials at the site were left unexcavated as they were outside the highway pr[illegible]ght-of-way. These burials should remain undisturbed, but should be monitored in case future work impinges on Site 18FR323.

External Reference Codes (Library ID Numbers):

00005963, 00005972, 00005973, 00005974, JPPM-NEH

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR325 **Site Name:** Catoctin Limestone Quarry

Other name(s): Orr's "Check 9"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 19th century exploratory limestone quarry pit

Site Location and Environmental Data:

Latitude 39.5763 Longitude -77.4341

Elevation 140 m Site slope 0-5%

Maryland Archeological Research Unit No. 17

SCS soil & sediment code EcB2

Physiographic province Blue Ridge

Terrestrial site ☑ Underwater site ☐

Ethnobotany profile available ☐ Maritime site ☐

Site setting

This is a small limestone quarry measuring 40 x 50 feet with a 10 foot race and a small road extending to the east. The site was until recently concealed in the bush of the woods in this area. The site was used as a refuse dump in the 20th century.

Topography

Floodplain	☐	High terrace	☐
Hilltop/bluff	☐	Rockshelter/ cave	☐
Interior flat	☐	Hillslope	☑
Upland flat	☐	Unknown	☐
Ridgetop	☐	Other	☐
Terrace	☐		
Low terrace	☐		

Ownership

Private	☐
Federal	☐
State of MD	☑
Regional/ county/city	☐
Unknown	☐

Nearest Surface Water

Name (if any) Little Hunting Creek

Saltwater		Freshwater	
Ocean	☐	Stream/river	☑
Estuary/tidal river	☐	Swamp	☐
Tidewater/marsh	☐	Lake or pond	☐
		Spring	☐

Minimum distance to water is 350 m

Temporal & Ethnic Contextual Data:

Paleoindian site		Woodland site		Contact period site		ca. 1820 - 1860	
Archaic site		MD Adena		ca. 1630 - 1675		ca. 1860 - 1900	Y
Early archaic		Early woodland		ca. 1675 - 1720		ca. 1900 - 1930	
Middle archaic		Mid. woodland		ca. 1720 - 1780		Post 1930	
Late archaic		Late woodland		ca. 1780 - 1820			

Unknown prehistoric context ☐ Unknown historic context ☐ Unknown context ☐

Ethnic Associations (historic only)

Native American		Asian American	
African American		Unknown	Y
Anglo-American		Other	
Hispanic			

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

Multi-component	☐	Misc. ceremonial	☐
Village	☐	Rock art	☐
Hamlet	☐	Shell midden	☐
Base camp	☐	STU/lithic scatter	☐
Rockshelter/cave	☐	Quarry/extraction	☐
Earthen mound	☐	Fish weir	☐
Cairn	☐	Production area	☐
Burial area	☐	Unknown	☐

Other context ☐

Historic

Urban/Rural? Rural

Domestic	☐	Furnace/forge	☐	Military	☐	Post-in-ground	☐
Homestead	☐	Other	☐	Battlefield	☐	Frame-built	☐
Farmstead	☐	Transportation	☐	Fortification	☐	Masonry	☐
Mansion	☐	Canal-related	☐	Encampment	☐	Other structure	☐
Plantation	☐	Road/railroad	☐	Townsite	☐	Slave related	☐
Row/townhome	☐	Wharf/landing	☐	Religious	☐	Non-domestic agri	☐
Cellar	☐	Maritime-related	☐	Church/mtg house	☐	Recreational	☐
Privy	☐	Bridge	☐	Ch support bldg	☐	Midden/dump	☐
Industrial	☑	Ford	☐	Burial area	☐	Artifact scatter	☐
Mining-related	☐	Educational	☐	Cemetery	☐	Spring or well	☐
Quarry-related	☑	Commercial	☐	Sepulchre	☐	Unknown	☐
Mill	☐	Trading post	☐	Isolated burial	☐	Other context	☐
Black/metalsmith	☐	Store	☐	Bldg or foundation	☐		
		Tavern/inn	☐	Possible Structure	☐		

Interpretive Sampling Data:

Prehistoric context samples			
Soil samples taken		Flotation samples taken	
Other samples taken			

Historic context samples			
Soil samples taken	N	Flotation samples taken	N
Other samples taken			

K

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR325 **Site Name:** Catoctin Limestone Quarry

Other name(s) Orr's "Check 9"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 19th century exploratory limestone quarry pit

Diagnostic Artifact Data:

Projectile Point Types

Clovis		Koens-Crispin	
Hardaway-Dalton		Perkiomen	
Palmer		Susquehana	
Kirk (notch)		Vernon	
Kirk (stem)		Piscataway	
Le Croy		Calvert	
Morrow Mntn		Selby Bay	
Guilford		Jacks Rf (notch)	
Brewerton		Jacks Rf (pent)	
Otter Creek		Madison/Potomac	
		Levanna	

Prehistoric Sherd Types

Marcey Creek		Popes Creek		Shepard	Keyser
Dames Qtr		Coulbourn		Townsend	Yeocomico
Selden Island		Watson		Minguannan	Monongahela
Accokeek		Mockley		Sullivan Cove	Susquehannock
Wolfe Neck		Clemson Island		Shenks Ferry	
Vinette		Page		Moyaone	
				Potomac Crk	

Historic Sherd Types

Earthenware		Jackfield	Porcelain	Rhenish
Astbury		Mn Mottled	Stoneware	Wt Salt-glazed
Borderware		North Devon	English Brown	
Buckley		Staffordshire	Eng Dry-bodie	
Cream/Pearl		Tin Glazed	Nottingham	

All quantities exact or estimated minimal counts

Other Artifact & Feature Types:

Prehistoric Artifacts

Flaked stone (all)		Other fired clay	
Ground stone		Human remain(s)	☐
S owls		Modified faunal	
Fire-cracked rock		Unmodified faunal	
Other lithics (all)		Oyster shell	☐
Ceramics (all)		Floral material	☐
Rimsherds		Uncommon Obj.	
		Other ☐	

Prehistoric Features

Mound(s)		Storage/trash pit	☐
Midden	☐	Burial(s)	☐
Shell midden	☐	Ossuary	☐
Postholes/molds	☐	Unknown	☐
House pattern(s)	☐	Other	☐
Palisade(s)	☐		
Hearth(s)	☐		
Lithic reduc area	☐		

Lithic Material

Jasper	☐	Chalcedony	☐	European flint	☐
Chert	☐	Ironstone	☐	Basalt	☐
Rhyolite	☐	Argilite	☐	Unknown	☐
Quartz	☐	Steatite	☐	Other	☐
Quartzite	☐	Sandstone	☐		

Fer quartzite ☐ Sil sandstone ☐

☐ Dated features present at site

Historic Artifacts

Pottery (all)		Tobacco pipe(s)	
Glass (all)	5	Activity item(s)	16
Architectural	2	Human remain(s)	☐
Furniture		Faunal material	☐
Arms		Misc kitchen item	2
Clothing		Floral material	☐
Personal items		Misc.	5
		Other ☐	

Historic Features

Const feature	☐	Privy/outhouse	☐	Depression/mound	☐
Foundation	☐	Well/cistern	☐	Burial(s)	☐
Cellar hole/cellar	☐	Trash pit/dump	☐	Railroad bed	☐
Hearth/chimney	☐	Sheet midden	☐	Earthworks	☐
Postholes/molds	☐	Planting feature	☐	Mill raceway	☐
Paling ditch/fence	☐	Road/walkway	☐	Wheel pit	☐

Unknown ☐ Other ☑ quarry pit

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1: +/- years BP Reliability Sample 2: +/- years BP Reliability Sample 3: +/- years BP Reliability

Sample 4: +/- years BP Reliability Sample 5: +/- years BP Reliability Sample 6: +/- years BP Reliability

Sample 7: +/- years BP Reliability Sample 8: +/- years BP Reliability Sample 9: +/- years BP Reliability

☐ Additional radiocarbon results available

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR325 **Site Name:** Catoctin Limestone Quarry

Other name(s) Orr's "Check 9"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 19th century exploratory limestone quarry pit

External Samples/Data:

Collection curated at MAC

Synopsis URL

☐ Raw data available online

Datalink 1

Datalink 2

Datalink 3

Summary Description:

Site 18FR325 is an apparent late 19th century exploratory limestone quarry pit. It is located within the Catoctin Furnace Historic District, along US Route 15 in Frederick County, Maryland. The local limestone served as a flux material used in the production of iron in the furnaces at Catoctin. Thus, there are many similar limestone quarries scattered throughout the region.

The site was first discovered during the 1977 Phase I survey associated with the dualization of US Route 15. State Highway Administration maps of the area did not depict the quarry and it was unknown to researchers at the time the survey began. It was thoroughly concealed by the vegetation in the area. It consisted of a partially exposed limestone outcrop faced by a 12.192 X 12.192 meter (40 X 40 ft) box-like depression approached by a 3.66 meter (12 ft) ramp. Once it was discovered, Phase II work was planned to determine what the purpose of the quarry was and to determine if any artifact were in the vicinity which could fix the date of the quarry's use.

A backhoe dug an irregular trench across the face of the outcrop to a depth of 1.8288 meters (6 ft) below the surface of the depression. Quantities of limestone chips came from the lower level of the trench. These chips bore evidence of being produced by the use of an iron hammer or maul on the outcrop. Quantities of green bottle glass, a three legged iron pot, and a probable kerosene tin were found along with charcoal. Refuse chips similar to those found in the quarry were found scattered on the ground surface nearby. Examination by a project geologist revealed that this particular limestone outcrop contained several impurities making it a poor choice for a source of flux.

Artifacts of probable 19th century age recovered at 18FR325 include 2 charred branch fragments, 9 limestone spalls, 1 clear piece of window glass, 2 ar e coal fragments, 1 piece of coal ash, a 3 legged iron pot fragment (of a type commonly produced at Catoctin), and a probable ribbed kerosene can wi out. Twentieth century artifacts from the site include a piece of metal electrical housing, 1 piece of metal wire, 4 bottle glass fragments, 5 wood chips, ar on screw.

The site was interpreted as an apparent late 19th century experimental digging to obtain limestone for use as flux in the Catoctin furnace. Larger pieces of crushed limestone, mauled from the outcrop, were removed for this purpose, and the debris scattered over the nearby ground. The miners, apparently ate their lunches in and around the depression leaving charred wood, iron pot, and bottle fragments. Kerosene was used to start fires for any cooking. Only a small area of the outcrop was removed. The quarry was probably abandoned due to the lack of suitable quality limestone. Oral history informs us that in the last days of the furnace, considerable testing for ingredients to use in the furnaces took place. The site has no additional research potential.

External Reference Codes (Library ID Numbers):

00005963, 00005972, 00005973

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR322 **Site Name:** Catoctin Amerindian

Other name(s): Orr's "Check 5"

Prehistoric ☑ Historic ☐ Unknown ☐

Brief Description: Archaic-Early Woodland possible lithic quarry

Site Location and Environmental Data:

Maryland Archeological Research Unit No. 17 SCS soil & sediment code EcC3

Latitude 39.5755 Longitude -77.4339 Physiographic province Blue Ridge Terrestrial site ☑ Underwater site ☐

Elevation 146 m Site slope 11-20% Ethnobotany profile available ☐ Maritime site ☐

Site setting

The area from which the finds were reported are on a slope overlooking a creek. The northern part of the area is adjacent to Check 8, a mine shaft, and Check 9, a limestone quarry. In addition, a stone (largely milky quartz) outcrop occurs at the southern part of the explored area.

Topography

Floodplain	☐	High terrace	☐
Hilltop/bluff	☐	Rockshelter/ cave	☐
Interior flat	☐	Hillslope	☑
Upland flat	☐	Unknown	☐
Ridgetop	☐	Other	☐
Terrace	☐		
Low terrace	☐		

Ownership

Private	☐
Federal	☐
State of MD	☑
Regional/ county/city	☐
Unknown	☐

Nearest Surface Water

Name (if any) Little Hunting Creek

Saltwater		Freshwater	
Ocean	☐	Stream/river	☑
Estuary/tidal river	☐	Swamp	☐
Tidewater/marsh	☐	Lake or pond	☐
		Spring	☐

Minimum distance to water is 350 m

Temporal & Ethnic Contextual Data:

Paleoindian site		Woodland site		Contact period site		ca. 1820 - 1860	
Archaic site	Y	MD Adena		ca. 1630 - 1675		ca. 1860 - 1900	
Early archaic		Early woodland	Y	ca. 1675 - 1720		ca. 1900 - 1930	
Middle archaic		Mid. woodland		ca. 1720 - 1780		Post 1930	
Late archaic		Late woodland		ca. 1780 - 1820			

Unknown prehistoric context ☐ Unknown historic context ☐ Unknown context ☐

Ethnic Associations (historic only)

Native American	☐	Asian American	☐
African American	☐	Unknown	☐
Anglo-American	☐	Other	☐
Hispanic	☐		

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

Multi-component	☐	Misc. ceremonial	☐
Village	☐	Rock art	☐
Hamlet	☐	Shell midden	☐
Base camp	☐	STU/lithic scatter	☑
Rockshelter/cave	☐	Quarry/extraction	☑
Earthen mound	☐	Fish weir	☐
Cairn	☐	Production area	☐
Burial area	☐	Unknown	☐

Other context ☐

Historic

Urban/Rural?

Domestic	☐	Furnace/forge	☐	Military	☐	Post-in-ground	☐
Homestead	☐	Other	☐	Battlefield	☐	Frame-built	☐
Farmstead	☐	Transportation	☐	Fortification	☐	Masonry	☐
Mansion	☐	Canal-related	☐	Encampment	☐	Other structure	☐
Plantation	☐	Road/railroad	☐	Townsite	☐	Slave related	☐
Row/townhome	☐	Wharf/landing	☐	Religious	☐	Non-domestic agri	☐
Cellar	☐	Maritime-related	☐	Church/mtg house	☐	Recreational	☐
Privy	☐	Bridge	☐	Ch support bldg	☐	Midden/dump	☐
Industrial	☐	Ford	☐	Burial area	☐	Artifact scatter	☐
Mining-related	☐	Educational	☐	Cemetery	☐	Spring or well	☐
Quarry-related	☐	Commercial	☐	Sepulchre	☐	Unknown	☐
Mill	☐	Trading post	☐	Isolated burial	☐	Other context	☐
Black/metalsmith	☐	Store	☐	Bldg or foundation	☐		
		Tavern/inn	☐	Possible Structure	☐		

Interpretive Sampling Data:

Prehistoric context samples			
Soil samples taken	N		
Flotation samples taken	N	Other samples taken	

Historic context samples			
Soil samples taken			
Flotation samples taken		Other samples taken	

L

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR322 **Site Name:** Catoctin Amerindian **Other name(s):** Orr's "Check 5"

Prehistoric ☑ Historic ☐ Unknown ☐

Brief Description: Archaic-Early Woodland possible lithic quarry

Diagnostic Artifact Data:

Projectile Point Types

Clovis		Koens-Crispin	
Hardaway-Dalton		Perkiomen	
Palmer		Susquehana	
Kirk (notch)		Vernon	
Kirk (stem)		Piscataway	
Le Croy		Calvert	
Morrow Mntn		Selby Bay	
Guilford		Jacks Rf (notch)	
Brewerton		Jacks Rf (pent)	
Otter Creek		Madison/Potomac	
		Levanna	

All quantities exact or estimated minimal counts

Prehistoric Sherd Types

Marcey Creek		Popes Creek		Shepard		Keyser	
Dames Qtr		Coulbourn		Townsend		Yeocomico	
Selden Island		Watson		Minguannan		Monongahela	
Accokeek		Mockley		Sullivan Cove		Susquehannock	
Wolfe Neck		Clemson Island		Shenks Ferry			
Vinette		Page		Moyaone			
				Potomac Crk			

Historic Sherd Types

Earthenware		Jackfield		Porcelain		Rhenish	
Astbury		Mn Mottled		Stoneware		Wt Salt-glazed	
Borderware		North Devon		English Brown			
Buckley		Staffordshire		Eng Dry-bodie			
Cream/Pearl		Tin Glazed		Nottingham			

Other Artifact & Feature Types:

Prehistoric Artifacts

Flaked stone (all)	106	Other fired clay	
Ground stone		Human remain(s)	☐
S owls		Modified faunal	
Fire-cracked rock		Unmodified faunal	1
Other lithics (all)	43	Oyster shell	☐
Ceramics (all)		Floral material	☐
Rimsherds		Uncommon Obj.	
		Other ☐	

Prehistoric Features

Mound(s)		Storage/trash pit	☐
Midden	☐	Burial(s)	☐
Shell midden	☐	Ossuary	☐
Postholes/molds	☐	Unknown	☐
House pattern(s)	☐	Other	☑
Palisade(s)	☐	milky quartz outcrop	
Hearth(s)	☐		
Lithic reduc area	☐		

Lithic Material

Fer quartzite	☐	Sil sandstone	☐		
Jasper	☐	Chalcedony	☐	European flint	☐
Chert	☐	Ironstone	☐	Basalt	☐
Rhyolite	☐	Argilite	☐	Unknown	☐
Quartz	☑	Steatite	☐	Other	☐
Quartzite	☐	Sandstone	☐		

☐ Dated features present at site

Historic Artifacts

Tobacco pipe(s)			
Pottery (all)	1	Activity item(s)	1
Glass (all)		Human remain(s)	☐
Architectural		Faunal material	☐
Furniture		Misc kitchen item	
Arms		Floral material	☐
Clothing		Misc.	
Personal items		Other ☐	

Historic Features

Privy/outhouse	☐	Depression/mound	☐	Unknown	☐
Const feature	☐	Well/cistern	☐	Burial(s)	☐	Other	☐
Foundation	☐	Trash pit/dump	☐	Railroad bed	☐		
Cellar hole/cellar	☐	Sheet midden	☐	Earthworks	☐		
Hearth/chimney	☐	Planting feature	☐	Mill raceway	☐		
Postholes/molds	☐	Road/walkway	☐	Wheel pit	☐		
Paling ditch/fence	☐						

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1:	+/-	years BP	Reliability	Sample 2:	+/-	years BP	Reliability	Sample 3:	+/-	years BP	Reliability
Sample 4:	+/-	years BP	Reliability	Sample 5:	+/-	years BP	Reliability	Sample 6:	+/-	years BP	Reliability
Sample 7:	+/-	years BP	Reliability	Sample 8:	+/-	years BP	Reliability	Sample 9:	+/-	years BP	Reliability

☐ Additional radiocarbon results available

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR322 **Site Name:** Catoctin Amerindian **Prehistoric** ☑

Other name(s) Orr's "Check 5" **Historic** ☐

Brief Description: Archaic-Early Woodland possible lithic quarry **Unknown** ☐

External Samples/Data: Collection curated at MAC, private collection

Synopsis URL

☐ Raw data available online

Datalink 1

Datalink 2

Datalink 3

Summary Description:

The Catoctin Amerindian Site (18FR322) is an Archaic through Early Woodland short-term camp or possible lithic quarry. The site is located on a slope overlooking a creek in the Catoctin Furnace Historic District of Frederick County, Maryland. An outcrop of stone (largely milky quartz) occurs just to the south of the site. The site was first noted in the 1930s by the property owner, who recovered 10 projectile points over a period of 39 years on his land. Most came from his vegetable garden, and some came from his garage cellar when it was being constructed.

The site first came to the attention of professional archeologists in 1977 during a Phase I survey through the Catoctin Furnace Historic District and environs prior to the dualization of US Route 15. During the investigations the site area was surveyed and locales where artifacts had previously been recovered were pointed out by the aforementioned informant. The individual also provided excavators with access to his collection. Hasty sketches included in the Phase I report depict 11 points, not 10, of the large variety associated with the Archaic and Early Woodland periods. No attempt was apparently made to assign these objects to known diagnostic point types. Based on this evidence, a decision was made to proceed directly to Phase II testing in 1977.

A total of twelve 0.762 meter (2.5 ft) test squares were excavated within the presumed area of the site. Eleven were dug approximately 0.9144 meters (3 ft) into the relatively soft soil in areas to the west and south of the vegetable garden where so many artifacts had been recovered by the one-time landowner. One test unit was dug near the rock outcrop to the south. Four milky quartz chopper tools were found at the site; all at a depth of around 30.5 to 38 cm. These artifacts consisted of thin veins of milky quartz with a cutting edge chipped and blunted by use. The backs of these choppers had been blunted by two blows to produce a low gabled effect. In one of the units where such a chopper was found, a light scattering of charcoal flecks (6 fragments) was encountered at the 30.5 to 38 cm level. In addition, a quartz "backed blade", 5 quartz flakes, 43 stone fragments, 1 bone sliver, a redware crockery sherd, and a piece of coal we[illegible]o found at the site.

Th[illegible]suggested the presence of a temporary camp and/or workshop. Prehistoric peoples would have been attracted by the rock outcrops and the ready water supplied by the nearby creek. Such sites are thousands of years old and have normally undergone extensive erosion, especially during the Euroamerican period. However, the presence of the charcoal layer and the uniform depth at which artifacts were recovered suggested that an intact living surface might be buried at the site. If this were true, then the bases of hearths, pits, postmolds, and other buried features might be recovered through additional work. As the site could not be avoided during road dualization, plans were implemented to conduct additional Phase II work, which was undertaken in 1979.

The 1979 Phase II work began in July and ended in early August of that year. A general pedestrian survey of the area was first conducted. The garden, garage area (see above), nearby quartz outcrops, and an adjacent mine and quarry area (associated with the Catoctin iron industry of the late 19th and early 20th century) were all examined for evidence of aboriginal activity. Most areas were covered by vegetation, however, the surface examination of the garden area resulted in the discovery of a few rhyolite debitage flakes, some exhibiting secondary wear, and a single rhyolite projectile point fragment. A grid system was then established and a total of 89 shovel test units were excavated at 3.05 meter (10 ft) intervals. Little evidence of archeological resources was encountered. The STP survey demonstrated that the site was more intensely occupied near the crest of the knoll in the garden area and sparsely occupied down the slope towards the garage and nearby quartz outcrops. This frequency distribution was used to identify areas of potential significance. All shovel tests were excavated well into sterile subsoil and each discernable substratum was screened separately. Periodic soil samples were collected to be further analyzed in the laboratory as necessary (no report of these findings was included in the final site report).

A total of seven 1.524 meter (5 ft) test units were excavated in those areas of the site found to be most productive of artifacts during the shovel testing. Three stratigraphic layers were encountered in all of the test units. Artifacts were recovered from the plowzone and the upper portions of the yellowish-brown loamy clay layer directly below it. The lowest stratum was sterile subsoil. Each strata was excavated as a separate unit by the use of flat shovels and trowels. All soil in the upper plowzone and loamy clay layer was screened through hardware mesh. Excavations were terminated at the top of the subsoil with the exception of one unit where excavators continued a little way into the subsoil. No features were encountered and no prehistoric living surface was detected. Approximately 80 debitage flakes and 5 projectile points were encountered in 1989. However, none of these objects is diagnostic, and so it is not possible to define the exact site function or period of occupation(s). The results suggest that the site was occupied sporadically by transient aboriginal peoples over a period of perhaps thousands of years. The lack of ceramics and other evidence of sedentary life indicates that the site was utilized for a limited function, probably as a resource procurement transient camp, and probably prior to the introduction of ceramics to the area. It is likely that little or no permanent or semi-permanent structures were erected on site.

Based on the results of Phase II work and the impact to the site brought on by the dualization of the highway, Site 18FR322 is not considered to have any enduring research potential.

E: al Reference Codes (Library ID Numbers):

0C[illegible]3, 00005972, 00005973

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR321 **Site Name:** Catoctin Bathhouse,Spring,Race

Other name(s) Orr's "Check 4"

Brief Description: late 18th-early 20th century bathhouse and raceway

Prehistoric ☐ Historic ☑ Unknown ☐

Site Location and Environmental Data:

Maryland Archeological Research Unit No. 17 SCS soil & sediment code EcC3

Latitude 39.5729 Longitude -77.4329 Physiographic province Blue Ridge Terrestrial site ☑ Underwater site ☐

Elevation 134 m Site slope 11-20% Ethnobotany profile available ☐ Maritime site ☐

Site setting

This site lies immediately east of the southbound lane of US 15, northwest of the Tresselt House and west of a fish pond and hatchery. The site is likely now located directly beneath the northbound lane.

Topography

Floodplain	☐	High terrace	☑
Hilltop/bluff	☐	Rockshelter/ cave	☐
Interior flat	☐	Hillslope	☐
Upland flat	☐	Unknown	☐
Ridgetop	☐	Other	☐
Terrace	☐		
Low terrace	☑		

Ownership

Private	☐
Federal	☐
State of MD	☑
Regional/ county/city	☐
Unknown	☐

Nearest Surface Water

Name (if any) Little Hunting Creek

Saltwater		Freshwater	
Ocean	☐	Stream/river	☑
Estuary/tidal river	☐	Swamp	☐
Tidewater/marsh	☐	Lake or pond	☐
		Spring	☐

Minimum distance to water is 325 m

Temporal & Ethnic Contextual Data:

Paleoindian site		Woodland site		Contact period site		ca. 1820 - 1860	Y
Archaic site		MD Adena		ca. 1630 - 1675		ca. 1860 - 1900	Y
Early archaic		Early woodland		ca. 1675 - 1720		ca. 1900 - 1930	Y
Middle archaic		Mid. woodland		ca. 1720 - 1780		Post 1930	
				ca. 1780 - 1820	Y		
Late archaic		Late woodland		Unknown historic context			
Unknown prehistoric context				Unknown context			

Ethnic Associations (historic only)

Native American		Asian American	
African American		Unknown	
Anglo-American		Other	Y
Hispanic		Irish American?,Scottish American?	

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

Multi-component	☐	Misc. ceremonial	☐
Village	☐	Rock art	☐
Hamlet	☐	Shell midden	☐
Base camp	☐	STU/lithic scatter	☐
Rockshelter/cave	☐	Quarry/extraction	☐
Earthen mound	☐	Fish weir	☐
Cairn	☐	Production area	☐
Burial area	☐	Unknown	☐
Other context	☐		

Historic

Urban/Rural? Rural

Domestic	☑	Furnace/forge	☐	Military	☐	Post-in-ground	☐
Homestead	☐	Other	☐	Battlefield	☐	Frame-built	☐
Farmstead	☐	Transportation	☐	Fortification	☐	Masonry	☑
Mansion	☐	Canal-related	☐	Encampment	☐	Other structure	☐
Plantation	☐	Road/railroad	☐	Townsite	☐	Slave related	☑
Row/townhome	☐	Wharf/landing	☐	Religious	☐	Non-domestic agri	☐
Cellar	☐	Maritime-related	☐	Church/mtg house	☐	Recreational	☐
Privy	☐	Bridge	☐	Ch support bldg	☐	Midden/dump	☐
Industrial	☐	Ford	☐	Burial area	☐	Artifact scatter	☐
Mining-related	☐	Educational	☐	Cemetery	☐	Spring or well	☑
Quarry-related	☐	Commercial	☐	Sepulchre	☐	Unknown	☐
Mill	☑	Trading post	☐	Isolated burial	☐	Other context	☑
Black/metalsmith	☐	Store	☐	Bldg or foundation	☑	spring,dam,bathhouse	
		Tavern/inn	☐	Possible Structure	☐		

Interpretive Sampling Data:

Prehistoric context samples			Historic context samples		
Soil samples taken			Soil samples taken	N	
Flotation samples taken		Other samples taken	Flotation samples taken	N	Other samples taken

M

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR321 **Site Name:** Catoctin Bathhouse,Spring,Race
Other name(s) Orr's "Check 4"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th-early 20th century bathhouse and raceway

Diagnostic Artifact Data:

Projectile Point Types

Clovis		Koens-Crispin	
Hardaway-Dalton		Perkiomen	
Palmer		Susquehana	
Kirk (notch)		Vernon	
Kirk (stem)		Piscataway	
Le Croy		Calvert	
Morrow Mntn		Selby Bay	
Guilford		Jacks Rf (notch)	
Brewerton		Jacks Rf (pent)	
Otter Creek		Madison/Potomac	
		Levanna	

All quantities exact or estimated minimal counts

Prehistoric Sherd Types

Marcey Creek		Popes Creek		Shepard	Keyser
Dames Qtr		Coulbourn		Townsend	Yeocomico
Selden Island		Watson		Minguannan	Monongahela
Accokeek		Mockley		Sullivan Cove	Susquehannock
Wolfe Neck		Clemson Island		Shenks Ferry	
Vinette		Page		Moyaone	
				Potomac Crk	

Historic Sherd Types

Earthenware		Jackfield		Porcelain 5	Rhenish
Astbury		Mn Mottled		Stoneware	Wt Salt-glazed
Borderware		North Devon		English Brown	
Buckley		Staffordshire		Eng Dry-bodie	
Cream/Pearl 28		Tin Glazed		Nottingham	

Other Artifact & Feature Types:

Prehistoric Artifacts

Flaked stone (all)		Other fired clay	
Ground stone		Human remain(s)	☐
S owls		Modified faunal	
Fire-cracked rock		Unmodified faunal	
Other lithics (all)		Oyster shell	☐
Ceramics (all)		Floral material	☐
Rimsherds		Uncommon Obj.	
		Other ☐	

Prehistoric Features

Mound(s)		Storage/trash pit	☐
Midden	☐	Burial(s)	☐
Shell midden	☐	Ossuary	☐
Postholes/molds	☐	Unknown	☐
House pattern(s)	☐	Other	☐
Palisade(s)	☐		
Hearth(s)	☐		
Lithic reduc area	☐		

Lithic Material

Fer quartzite	☐	Sil sandstone	☐		
Jasper	☐	Chalcedony	☐	European flint	☐
Chert	☐	Ironstone	☐	Basalt	☐
Rhyolite	☐	Argilite	☐	Unknown	☐
Quartz	☐	Steatite	☐	Other	☐
Quartzite	☐	Sandstone	☐		

☐ Dated features present at site

Historic Artifacts

Pottery (all)	148	Tobacco pipe(s)	2
Glass (all)	350	Activity item(s)	810
Architectural	1735	Human remain(s)	☐
Furniture	2	Faunal material	☐
Arms	1	Misc kitchen item	7
Clothing	5	Floral material	☐
Personal items	2	Misc.	175
		Other ☐	

Historic Features

Const feature	☐	Privy/outhouse	☐	Depression/mound	☐
Foundation	☑	Well/cistern	☐	Burial(s)	☐
Cellar hole/cellar	☐	Trash pit/dump	☐	Railroad bed	☐
Hearth/chimney	☐	Sheet midden	☐	Earthworks	☐
Postholes/molds	☐	Planting feature	☐	Mill raceway	☑
Paling ditch/fence	☐	Road/walkway	☐	Wheel pit	☐
				Unknown	☐
				Other	☑

ruin,concrete spring

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1: +/- years.BP Reliability Sample 2: +/- years BP Reliability Sample 3: +/- years BP Reliability

Sample 4: +/- years BP Reliability Sample 5: +/- years BP Reliability Sample 6: +/- years BP Reliability

Sample 7: +/- years BP Reliability Sample 8: +/- years BP Reliability Sample 9: +/- years BP Reliability

☐ Additional radiocarbon results available

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR321 **Site Name:** Catoctin Bathhouse,Spring,Race

Other name(s) Orr's "Check 4"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th-early 20th century bathhouse and raceway

External Samples/Data: Collection curated at MAC

Synopsis URL

☑ Raw data available online

Datalink 1 National Endowment for the Humanities - Digital Collections Files

Datalink 2 MAC Lab Collections Finding Aid

Datalink 3

Summary Description:

The Catoctin Furnace Bathhouse (18FR321) is a 19th-century structure associated with a spring near the Auburn Mansion in the Catoctin Furnace Historic District. The site is located along US Route 15 in Frederick County, Maryland. The stone building was utilized as a springhouse from approximately 1815 to 1860, when it was modified to a bathhouse. Another springhouse and a raceway are also present at the site, but are not thought to be functionally related to the bathhouse.

The site was first examined by archeologists in 1977 during a Phase I survey through the Catoctin Furnace Historic District and environs prior to the dualization of US Route 15. During the investigations, the area was extensively surveyed on foot and three major features were noted and mapped. Feature 1 was the "Bathhouse" structure itself and consisted of collapsed wall debris, the original outlines of which were still discernable. Feature 2 was a nearby spring originally thought to have supplied water to the bathhouse. The spring was a clear pool confined with a cement square 1.2192 by 1.524 meters (4 by 5 ft). Sand filled the bottom of the cement box. The water came from bedrock layers going back into the slope of the ground and outlined in a rough square of hewn bedrock. A plywood board covered the cement box frame and had a small hole about 61 cm square cut in it for dipping water out. The spring box overflowed constantly and other water trickled from underneath to produce a stream which was channeled into a pipe for use in an abandoned goldfish pond to the east. Feature 3 was a raceway and portions of a retaining wall located directly behind the spring, the former providing water for the Auburn Pond to the west. It was initially thought that this feature might be related to the bathhouse. One local informant relayed that water was supplied to the bathhouse via a pipe from the raceway. Excavation would ultimately determine that this was not the case and the feature is largely unrelated to the bathhouse at 18FR321.

Archival and oral history research played an important role at the Phase I stage, prior to some initial exploratory excavations. This research revealed that in th 1774, James, Thomas, Baker, and Roger Johnson constructed the first iron furnace at Catoctin. In 1776, they began producing pig iron under the na James Johnson and Company. Hematite ore from the Catoctin Mountains provided the raw material for production of the iron while the Catoctin fo rovided charcoal for fuel. In addition, water from the local springs and streams provided the energy to power enormous bellows blowing air into the furnace, as well as power for forge hammers, mills, and other machines. A complex system of ponds, races, ditches, dams, and aqueducts ensured that the water wheels were supplied with sufficient "drop" to maintain the power levels needed. One of the most important early products of the furnace is rumored to have been supplies (including cannon and cannonballs) for George Washington's Army. While pig iron continued to be produced at the furnace, other important products were machine parts, foundry rolling mills, iron car/cart wheels, cast-iron stoves, and other materials. During the Civil War, iron from the furnace was used to armor the famous iron-clad ship, the Monitor. Over the course of history a number of additional furnace stacks, support structures, quarries, casting areas, and other structures were constructed in the area. Some structures were demolished and improved facilities were built. Around the year 1805, Baker Johnson (who had by then become sole owner of the furnace works) constructed a large home for his family near the furnace named "Auburn." This home still stands today. The Catoctin Furnace continued to operate until the early 20th century.

A pamphlet owned by the McPherson Family, occupants of the Auburn Mansion for the greater part of the 19th century and into the modern era, contained a photograph of a structure known as the "Bathhouse". It showed a small 3.6576 meter (12 ft) square house covered with plaster with a gabled and shingled roof. Several local informants stated that the walls had been made of stone and covered with a whitewashed clay plaster. Apparently, portions of the stone walls were still standing in 1947 when the surface stones were removed to form the driveway of an adjacent house. According to community folklore, slave women heated water secured at the spring and placed the water in a large container within the bathhouse. Women from the old Iron Master's house (a nearby stone cottage), used the bathhouse in the 18th century, and later the female inhabitants at "Auburn" used it for their periodic baths. It has been referred to locally as the "lady's bathhouse". Among the earliest rumored to use the bathhouse would have been the family of William Bright; iron master for the Johnson brothers in the 1770s. During survey work, one of the local landowners brought the excavators a coin with an English queen figure dated 1771 or 1773, which was found in a grove just to the east of the Bathhouse. One local informant believed that a pipe led from the nearby raceway supplying Auburn Pond to the bathhouse. Other informants, however, argued that a spring provided water to the bathhouse. Much of the archeological effort expended at 18FR321 would be geared towards resolving this contradiction.

Two 61 cm (2 ft) excavation units were opened up during the Phase I survey in 1977, to make preliminary explorations of Feature 1 (the bathhouse). One was located at the northwest corner of the collapsed pile of building rubble. It revealed six courses of fieldstone .9144 meters (3 ft) below the ground surface. At the base of this test unit, a dark green-black glass shard was found. This piece was similar to bottle glass from 18th century deposits in Annapolis. In stratigraphic layers directly above this, several red-glazed redware sherds, a blue-leaf painted grayware sherd, and a clear glass shard with air bubbles (a wine glass) were recovered. An additional test unit was placed in the structure's interior, uncovering a stone floor at a depth of 45.72 cm (18 inches). It consisted of three smooth flagstones placed horizontally and fitted together. The test was not extended due to the heavy burden of wall stones, however, the excavators were confident that they had uncovered the Bathhouse floor. Other artifacts were encountered during this stage of investigations, however, they are not described in the Phase I report for 18FR321 or in the final site report. It was determined that the dualization of the highway would result in a mantle of soil and construction features covering the site to significant depths and effectively sealing it off. Thus the site warranted Phase II testing prior to the road cc tion work.

Phase II investigations at 18FR321 began in 1979. The plans for the site called for the careful excavation, measuring, and recording of the remains at 18FR321, the installation of instruments to observe the effect of the road on the ruins (in regard to vibration, compaction, torque-stress, chemical changes, etc.), and packing the site in sand. This would allow a significant portion of the site to be excavated and the remainder to be preserved and monitored beneath the roadway. Four trenches were excavated to subsoil at the corners of Feature 1 (the Bathhouse building), perpendicular to the walls, and were expanded to explore up to half of each wall. In addition, two trenches were dug, one in front of the doorway and one 2.4384 meters (8 ft) east of the southeast corner, to search for possible pathways leading to/from the bathhouse. Stratigraphic layers were excavated separately, and all soil was screened through 1/8 inch hardware mesh. The Phase II investigation excavated approximately 50% of this feature before it was buried for the dualization of U.S. Route 15.

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR321 **Site Name:** Catoctin Bathhouse,Spring,Race

Other name(s) Orr's "Check 4"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th-early 20th century bathhouse and raceway

A number of artifacts were encountered in the area surrounding Feature I including 805 activity-related items, 1,693 architectural artifacts, 4 clothing objects (3 buttons and a shoe heel) , 2 furniture-related items (a bathtub fixture and iron doorknob), 461 kitchen-related artifacts, 1 personal object (a pocketknife), 2 tobacco-related objects (clay pipe stem and bowl fragments), 1 arms object (a shotgun shell), and 175 miscellaneous artifacts (44 wood fragments and 131 fragments of charcoal). The activity items were a shovel handle, an iron hoe, 2 pieces of barbed wire, a paint can top, 2 pieces of a wooden object covered in sheet metal, and 798 objects related to the iron manufacturing activities of the region (163 pieces of ore, 3 pieces of flux limestone, 2 pieces of iron casting debris, 554 fragments of slag, 1 piece of iron plating, 74 iron ore fragments, 1 iron ring). The architectural remains were 7 clumps of hard-packed earth (the original bathhouse floor), 940 bricks and brick fragments, 152 pieces of plaster, 97 fragments of mortar, 113 flagstone spalls, 1 wooden post, 2 board fragments, a piece of wood with a wire nail embedded, 36 fragments of window glass, 2 pieces of lead window came, 15 pieces of tar paper, and 320 nails (1 wrought nail, 9 cut nails, 9 wire nails, 17 L-head nails, 76 T-head nails, 208 unidentified nails), 3 spikes, 3 wrought brads, and a piece of iron grate. The kitchen-related artifacts were 5 creamware sherds, 23 pearlware sherds, 2 early porcelain sherds, 3 other porcelain fragments, a mochaware sherd, 34 miscellaneous stoneware sherds, 47 whiteware sherds, 195 redware sherds, 2 other ceramic sherds, 5 table glass fragments, 137 bottle glass fragments, a kettle leg, 2 knife blades, 2 tin can fragments, and 2 pieces of shell.

The excavation work revealed that an early structure, predating the bathhouse was present at the site. This structure had a mortarless fieldstone foundation measuring 3.6576 meters (12 ft) on each side, and a brick entry step. It appeared to function as a springhouse for the refrigeration of foods. Artifacts date the construction of this springhouse to the early 19th century, and included items which are considered to be functionally related to its activities. Four hundred and fifty ceramic sherds, dating from ca. 1815-1820 to 1860, include American stoneware and earthenware vessels, and a large amount of transfer-printed and blue and green shell-edged pearlwares and whitewares. The majority of the ceramic sherds are kitchen-related wares representing dishes and crocks for food storage and refrigeration. Architectural debris, such as nails, plaster, and brick fragments, were also common. Evidence was encountered suggesting that a one-inch thick wooden trough was placed around the interior of the stone walls to channel spring water into a metal catch basin in the southeast corner. Water escaped through a barred iron grillwork and a square iron pipe on the downhill side, which continued in use after renovations converted the building into a bathhouse. The excavators conjectured that a raised brick floor was present in the structure's unexcavated center. The presence of the ceramic sherds suggests that this early springhouse was used to refrigerate foods. An individual could stand on the dry brick floor in the center of the springhouse and place filled crockery on the wooden trough. It would be kept cool by the cold spring waters as they flowed through the trough and around the base of the crock. The dating of the ceramic sherds to the period between 1815 and 1860 would seem to preclude its use by William Bright's family (see above). However, a depression in the subsoil layer suggests that the area was stripped to the subsoil removing humus and any archeological materials that may have been present. The Bright's may have been aware of the spring and utilized an earlier, unknown structure, but evidence of this would have been destroyed at the time the 19th century springhouse was built. In addition, evidence of a one-time packed earth floor was found in some of the feature fill, which may represent ar period of use.
Th /ersion to a bathhouse is evident in ceramic and bottle glass artifacts dating from the second half of the 19th century. Sixteen complete bricks and a lar ...mber of hand-molded brick fragments were discovered in the fill that elevated the original stone floor. These bricks are also dated to the second half of the 19th century. It appeared that when the structure was renovated for use as a bathhouse, approximately 30.5 cm of soil was placed over the original floor and a "Y"-shaped brick drain was installed and used to transport water directly to the square iron catch basin. Oral history seems to suggest that a pump was installed above the catch basin for filling containers when needed. The iron pipe, grill works and other features used to channel the water when it was a springhouse continued in use, with a new flagstone floor atop them. Local informants state that a wood and/or plaster bathtub was installed in the southwest corner where the square pipe was located. The building was abandoned in 1915, when indoor plumbing was installed in the Auburn Mansion, and stones from the walls were cannibalized to construct a driveway. Slim evidence was found of pathways leading to/from the bathhouse. What little evidence was encountered was right next to the structure.

Feature 2 (the cement springhouse) was originally thought to have served as the source for the water used in the bathhouse. The Phase II testing in the vicinity of Feature 1, however, clearly demonstrated that the bathhouse had its own spring and springhouse. Excavations in the vicinity of Feature 2 further proved that this was not the case and demonstrated that Feature 2 was built in the 20th century. Two excavation activities were undertaken. The first consisted of pumping out the cement box spring and screening the 61 cm of sand at its base. The upper portions of the sand contained several dozen fragments of plastic pipe. The same pipe extended from the box through a hole toward the fish hatchery 61 meters to the east. The bottom contained an 1885 Indian Head penny and an overall button of the 20th century type. A few pellets of slag were also found. The second excavation was a 61 cm wide trench dug in a grid east-west direction through a low mound of stones. This was thought to possibly be the broken down wall of a spring house. The trench revealed only stone slabs which were identical to the local bedrock. The remains of a wooden frame to go over the cement spring were found, but no evidence of a springhouse structure were encountered. The interpretation of the findings was that the spring was constructed by removing bedrock, pouring the cement box, and diverting the spring flow to the now abandoned fish hatchery. Shortly after excavation, a local informant came forward and stated that her husband constructed the springhouse for his fish hatchery in the 1920s. Small improvements had been made over the years until the fish hatchery was abandoned just a few years before excavators noted it in 1977. She also stated that Winston Churchill had visited the fish hatchery during World War II when he and President Franklin D. Roosevelt were holding meetings at Shangri La Retreat (known today as Camp David). Churchill was reportedly grateful to Mr. Fredercik Tresselt (the informant's husband) for supplying him with game fish (from Tresselt's traveling aquarium exhibit) for the table (he too was a goldfish hobbyist).

Feature 3, which provides a backdrop for the site, was determined to be a raceway functionally unrelated to Site 18FR321. An oral history account related that a 15.24 cm (6 inch) water pipe had led to the bathhouse from the raceway and provided the water for the baths. As stated previously, the bathhouse appears to have had its own spring source and a second informant states that water was pumped from the spring for the baths. While sections of iron pipe were found between the raceway and bathhouse, they seem to originate in the spring and may have supplied water to an outdoor pump.

The bathhouse portion of the site, presumably retains some degree of archeological integrity if the plans proposed for sealing the site in sand and monitoring of it below the road bed were followed. The potential for investigations would, however, be contingent upon some future removal of the highway. The center of th ure 1 floor remains unexcavated and this seems like the natural place to start should any such opportunity present itself.

External Reference Codes (Library ID Numbers):

00005963, 00005972, 00005973, JPPM-NEH

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR326 **Site Name:** Catoctin Exhumed Cemetery
Other name(s): Orr's "Check 10"
Brief Description: late 18th-19th century exhumed family cemetery

Prehistoric ☐ Historic ☑ Unknown ☐

Site Location and Environmental Data:

Maryland Archeological Research Unit No. 17 SCS soil & sediment code
Latitude 39.5591 Longitude -77.4306 Physiographic province Blue Ridge Terrestrial site ☑ Underwater site ☐
Elevation 131 m Site slope Ethnobotany profile available ☐ Maritime site ☐

Site setting
This site lies considerably south of the main Catoctin Furnace complex. There were several gravelike depressions in the approx. 50'-wide overgrown area.

Topography
Floodplain ☐ High terrace ☐
Hilltop/bluff ☐ Rockshelter/cave ☐
Interior flat ☐ Hillslope ☐
Upland flat ☑ Unknown ☐
Ridgetop ☐ Other ☐
Terrace ☐
Low terrace ☐

Ownership
Private ☑
Federal ☐
State of MD ☐
Regional/county/city ☐
Unknown ☐

Nearest Surface Water
Name (if any) Little Hunting Creek

Saltwater		Freshwater	
Ocean	☐	Stream/river	☑
Estuary/tidal river	☐	Swamp	☐
Tidewater/marsh	☐	Lake or pond	☐
		Spring	☐

Minimum distance to water is 325 m

Temporal & Ethnic Contextual Data:

Paleoindian site		Woodland site		Contact period site		ca. 1820 - 1860	Y
Archaic site		MD Adena		ca. 1630 - 1675		ca. 1860 - 1900	Y
Early archaic		Early woodland		ca. 1675 - 1720		ca. 1900 - 1930	
Middle archaic		Mid. woodland		ca. 1720 - 1780		Post 1930	
Late archaic		Late woodland		ca. 1780 - 1820	Y		

Unknown prehistoric context
Unknown historic context
Unknown context

Ethnic Associations (historic only)

Native American		Asian American	
African American		Unknown	Y
Anglo-American		Other	
Hispanic			

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

Multi-component	☐	Misc. ceremonial	☐
Village	☐	Rock art	☐
Hamlet	☐	Shell midden	☐
Base camp	☐	STU/lithic scatter	☐
Rockshelter/cave	☐	Quarry/extraction	☐
Earthen mound	☐	Fish weir	☐
Cairn	☐	Production area	☐
Burial area	☐	Unknown	☐

Other context ☐

Historic
Urban/Rural? Rural

Domestic	☐	Furnace/forge	☐	Military	☐	Post-in-ground	☐
Homestead	☐	Other	☐	Battlefield	☐	Frame-built	☐
Farmstead	☐	Transportation	☐	Fortification	☐	Masonry	☐
Mansion	☐	Canal-related	☐	Encampment	☐	Other structure	☐
Plantation	☐	Road/railroad	☐	Townsite	☐	Slave related	☐
Row/townhome	☐	Wharf/landing	☐	Religious	☐	Non-domestic agri	☐
Cellar	☐	Maritime-related	☐	Church/mtg house	☐	Recreational	☐
Privy	☐	Bridge	☐	Ch support bldg	☐	Midden/dump	☐
Industrial	☐	Ford	☐	Burial area	☑	Artifact scatter	☐
Mining-related	☐	Educational	☐	Cemetery	☑	Spring or well	☐
Quarry-related	☐	Commercial	☐	Sepulchre	☑	Unknown	☐
Mill	☐	Trading post	☐	Isolated burial	☐	Other context	☐
Black/metalsmith	☐	Store	☐	Bldg or foundation	☐		
		Tavern/inn	☐	Possible Structure	☐		

Interpretive Sampling Data:

Prehistoric context samples			Historic context samples		
Soil samples taken			Soil samples taken	N	
Flotation samples taken		Other samples taken	Flotation samples taken	N	Other samples taken

N

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR326 **Site Name:** Catoctin Exhumed Cemetery

Other name(s): Orr's "Check 10"

Brief Description: late 18th-19th century exhumed family cemetery

Prehistoric ☐ Historic ☑ Unknown ☐

Diagnostic Artifact Data:

Projectile Point Types

Clovis		Koens-Crispin	
Hardaway-Dalton		Perkiomen	
Palmer		Susquehana	
Kirk (notch)		Vernon	
Kirk (stem)		Piscataway	
Le Croy		Calvert	
Morrow Mntn		Selby Bay	
Guilford		Jacks Rf (notch)	
Brewerton		Jacks Rf (pent)	
Otter Creek		Madison/Potomac	
		Levanna	

All quantities exact or estimated minimal counts

Prehistoric Sherd Types

Marcey Creek		Popes Creek		Shepard		Keyser	
Dames Qtr		Coulbourn		Townsend		Yeocomico	
Selden Island		Watson		Minguannan		Monongahela	
Accokeek		Mockley		Sullivan Cove		Susquehannock	
Wolfe Neck		Clemson Island		Shenks Ferry			
Vinette		Page		Moyaone			
				Potomac Crk			

Historic Sherd Types

Earthenware		Jackfield		Porcelain		Rhenish	
Astbury		Mn Mottled		Stoneware		Wt Salt-glazed	
Borderware		North Devon		English Brown			
Buckley		Staffordshire		Eng Dry-bodie			
Cream/Pearl		Tin Glazed		Nottingham			

Other Artifact & Feature Types:

Prehistoric Artifacts

Flaked stone (all)		Other fired clay	
Ground stone		Human remain(s)	☐
S owls		Modified faunal	
Fire-cracked rock		Unmodified faunal	
Other lithics (all)		Oyster shell	☐
Ceramics (all)		Floral material	☐
Rimsherds		Uncommon Obj.	
		Other ☐	

Prehistoric Features

Mound(s)		Storage/trash pit	☐
Midden	☐	Burial(s)	☐
Shell midden	☐	Ossuary	☐
Postholes/molds	☐	Unknown	☐
House pattern(s)	☐	Other	☐
Palisade(s)	☐		
Hearth(s)	☐		
Lithic reduc area	☐		

Lithic Material

Fer quartzite	☐	Sil sandstone	☐		
Jasper	☐	Chalcedony	☐	European flint	☐
Chert	☐	Ironstone	☐	Basalt	☐
Rhyolite	☐	Argilite	☐	Unknown	☐
Quartz	☐	Steatite	☐	Other	☐
Quartzite	☐	Sandstone	☐		

☐ Dated features present at site

Historic Artifacts

Pottery (all)		Tobacco pipe(s)	
Glass (all)		Activity item(s)	
Architectural		Human remain(s)	☑
Furniture		Faunal material	☐
Arms		Misc kitchen item	
Clothing		Floral material	☐
Personal items		Misc.	
		Other ☑	headstone/grave stone

Historic Features

Const feature	☐	Privy/outhouse	☐	Depression/mound	☐	Unknown	☐
Foundation	☐	Well/cistern	☐	Burial(s)	☑	Other	☐
Cellar hole/cellar	☐	Trash pit/dump	☐	Railroad bed	☐		
Hearth/chimney	☐	Sheet midden	☐	Earthworks	☐		
Postholes/molds	☐	Planting feature	☐	Mill raceway	☐		
Paling ditch/fence	☐	Road/walkway	☐	Wheel pit	☐		

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1:	+/-	years BP	Reliability	Sample 2:	+/-	years BP	Reliability	Sample 3:	+/-	years BP	Reliability
Sample 4:	+/-	years BP	Reliability	Sample 5:	+/-	years BP	Reliability	Sample 6:	+/-	years BP	Reliability
Sample 7:	+/-	years BP	Reliability	Sample 8:	+/-	years BP	Reliability	Sample 9:	+/-	years BP	Reliability

☐ Additional radiocarbon results available

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR326 **Site Name:** Catoctin Exhumed Cemetery

Other name(s) Orr's "Check 10"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: late 18th-19th century exhumed family cemetery

External Samples/Data:

Collection curated at No Collections

Synopsis URL

☐ Raw data available online

Datalink 1

Datalink 2

Datalink 3

Summary Description:

Site 18FR326 is an apparent 18th and 19th century family cemetery. However, the burials within it are believed to have been entirely exhumed and reburied elsewhere in the 1960s by crews working for the Maryland SHA. It is located south of the Catoctin Furnace Historic District, along US Route 15 in Frederick County, Maryland.

During the 1977 Phase I survey associated with the dualization of US Route 15, the cemetery was marked on existing SHA maps of the proposed highway alignment with the notation "an old graveyard, only stone 1787" at this location. The burials were directly in line with the proposed northbound lane. Researchers visited the site but no gravestone was located. There were several gravelike depressions in the approximately 15.24 meter (50 ft) wide area. The owner of the property at that time confirmed that the cemetery had contained approximately 9 bodies which were removed at the time US 15 was first constructed in 1960. He stated that the bodies were reburied in the graveyard of the "Old Church" at Lewistown a few miles to the south.

On the assumption that other burials might still be present, the site was included for further examination during the 1979 Phase II work. Researchers returned to the site to conduct more intensive survey. Based on the size of the site and the presumed number of burials, it was determined that it likely served as a typical family burial ground. It was also determined that the impact of highway construction would not disturb the soil deeply enough to encounter any remaining human remains. With this information it was decided not to excavate the site. Any remaining burials would simply be buried by the northbound lane construction, rather than destroyed. The site has no research potential.

External Reference Codes (Library ID Numbers):

0C 3, 00005972, 00005973

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR332 **Site Name:** South Catoctin Quarry and Kiln

Other name(s): Orr's "Check 19"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: historic quarry and kiln

Site Location and Environmental Data:

Maryland Archeological Research Unit No. 17 SCS soil & sediment code

Latitude 39.5555 Longitude -77.4301

Physiographic province Blue Ridge Terrestrial site ☑ Underwater site ☐

Elevation 128 m Site slope

Ethnobotany profile available ☐ Maritime site ☐

Site setting

This site lies immediately beneath the eastern edge of the northbound US 15 lane, and to the east of the roadway.

Topography

Floodplain	☐	High terrace	☐
Hilltop/bluff	☐	Rockshelter/ cave	☐
Interior flat	☐	Hillslope	☐
Upland flat	☑	Unknown	☐
Ridgetop	☐	Other	☐
Terrace	☐		
Low terrace	☐		

Ownership

Private	☑
Federal	☐
State of MD	☐
Regional/ county/city	☐
Unknown	☐

Nearest Surface Water

Name (if any) Sandy Run

Saltwater		Freshwater	
Ocean	☐	Stream/river	☑
Estuary/tidal river	☐	Swamp	☐
Tidewater/marsh	☐	Lake or pond	☐
		Spring	☐

Minimum distance to water is 225 m

Temporal & Ethnic Contextual Data:

Paleoindian site		Woodland site		Contact period site		ca. 1820 - 1860	
Archaic site		MD Adena		ca. 1630 - 1675		ca. 1860 - 1900	
Early archaic		Early woodland		ca. 1675 - 1720		ca. 1900 - 1930	
Middle archaic		Mid. woodland		ca. 1720 - 1780		Post 1930	
Late archaic		Late woodland		ca. 1780 - 1820			

Unknown historic context Y

Unknown prehistoric context

Unknown context

Ethnic Associations (historic only)

Native American		Asian American	
African American		Unknown	Y
Anglo-American		Other	
Hispanic			

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

Multi-component	☐	Misc. ceremonial	☐
Village	☐	Rock art	☐
Hamlet	☐	Shell midden	☐
Base camp	☐	STU/lithic scatter	☐
Rockshelter/cave	☐	Quarry/extraction	☐
Earthen mound	☐	Fish weir	☐
Cairn	☐	Production area	☐
Burial area	☐	Unknown	☐

Other context ☐

Historic

Urban/Rural? Rural

Domestic	☐	Furnace/forge	☐	Military	☐	Post-in-ground	☐
Homestead	☐	Other	☑ limestone ki	Battlefield	☐	Frame-built	☐
Farmstead	☐	Transportation	☐	Fortification	☐	Masonry	☐
Mansion	☐	Canal-related	☐	Encampment	☐	Other structure	☐
Plantation	☐	Road/railroad	☐	Townsite	☐	Slave related	☐
Row/townhome	☐	Wharf/landing	☐	Religious	☐	Non-domestic agri	☐
Cellar	☐	Maritime-related	☐	Church/mtg house	☐	Recreational	☐
Privy	☐	Bridge	☐	Ch support bldg	☐	Midden/dump	☐
Industrial	☑	Ford	☐	Burial area	☐	Artifact scatter	☐
Mining-related	☐	Educational	☐	Cemetery	☐	Spring or well	☐
Quarry-related	☑	Commercial	☐	Sepulchre	☐	Unknown	☐
Mill	☐	Trading post	☐	Isolated burial	☐	Other context	☐
Black/metalsmith	☐	Store	☐	Bldg or foundation	☐		
		Tavern/inn	☐	Possible Structure	☐		

Interpretive Sampling Data:

Prehistoric context samples			
Soil samples taken		Flotation samples taken	
Other samples taken			

Historic context samples			
Soil samples taken	N	Flotation samples taken	N
Other samples taken			

0

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR332 **Site Name:** South Catoctin Quarry and Kiln

Other name(s): Orr's "Check 19"

Brief Description: historic quarry and kiln

Prehistoric ☐ Historic ☑ Unknown ☐

Diagnostic Artifact Data:

Projectile Point Types

Clovis		Koens-Crispin	
Hardaway-Dalton		Perkiomen	
Palmer		Susquehana	
Kirk (notch)		Vernon	
Kirk (stem)		Piscataway	
Le Croy		Calvert	
Morrow Mntn		Selby Bay	
Guilford		Jacks Rf (notch)	
Brewerton		Jacks Rf (pent)	
Otter Creek		Madison/Potomac	
		Levanna	

All quantities exact or estimated minimal counts

Prehistoric Sherd Types

Marcey Creek		Popes Creek		Shepard		Keyser	
Dames Qtr		Coulbourn		Townsend		Yeocomico	
Selden Island		Watson		Minguannan		Monongahela	
Accokeek		Mockley		Sullivan Cove		Susquehannock	
Wolfe Neck		Clemson Island		Shenks Ferry			
Vinette		Page		Moyaone			
				Potomac Crk			

Historic Sherd Types

Earthenware		Jackfield		Porcelain		Rhenish	
Astbury		Mn Mottled		Stoneware		Wt Salt-glazed	
Borderware		North Devon		English Brown			
Buckley		Staffordshire		Eng Dry-bodie			
Cream/Pearl		Tin Glazed		Nottingham			

Other Artifact & Feature Types:

Prehistoric Artifacts

Flaked stone (all)		Other fired clay	
Ground stone		Human remain(s)	☐
S owls		Modified faunal	
Fire-cracked rock		Unmodified faunal	
Other lithics (all)		Oyster shell	☐
Ceramics (all)		Floral material	☐
Rimsherds		Uncommon Obj.	
		Other ☐	

Prehistoric Features

Mound(s)		Storage/trash pit	☐
Midden	☐	Burial(s)	☐
Shell midden	☐	Ossuary	☐
Postholes/molds	☐	Unknown	☐
House pattern(s)	☐	Other	☐
Palisade(s)	☐		
Hearth(s)	☐		
Lithic reduc area	☐		

Lithic Material

Fer quartzite	☐	Sil sandstone	☐		
Jasper	☐	Chalcedony	☐	European flint	☐
Chert	☐	Ironstone	☐	Basalt	☐
Rhyolite	☐	Argilite	☐	Unknown	☐
Quartz	☐	Steatite	☐	Other	☐
Quartzite	☐	Sandstone	☐		

☐ Dated features present at site

Historic Artifacts

Pottery (all)		Tobacco pipe(s)	
Glass (all)		Activity item(s)	3004
Architectural		Human remain(s)	☐
Furniture		Faunal material	☐
Arms		Misc kitchen item	
Clothing		Floral material	☐
Personal items		Misc.	
		Other ☐	

Historic Features

Const feature	☐	Privy/outhouse	☐	Depression/mound	☐
Foundation	☐	Well/cistern	☐	Burial(s)	☐
Cellar hole/cellar	☐	Trash pit/dump	☐	Railroad bed	☐
Hearth/chimney	☐	Sheet midden	☐	Earthworks	☐
Postholes/molds	☐	Planting feature	☐	Mill raceway	☐
Paling ditch/fence	☐	Road/walkway	☐	Wheel pit	☐

Unknown ☐ Other ☑ quarry

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1:	+/-	years BP	Reliability	Sample 2:	+/-	years BP	Reliability	Sample 3:	+/-	years BP	Reliability
Sample 4:	+/-	years BP	Reliability	Sample 5:	+/-	years BP	Reliability	Sample 6:	+/-	years BP	Reliability
Sample 7:	+/-	years BP	Reliability	Sample 8:	+/-	years BP	Reliability	Sample 9:	+/-	years BP	Reliability

☐ Additional radiocarbon results available

MARYLAND HISTORICAL TRUST

Phase II and Phase III Archeological Database and Inventory

Site Number: 18FR332 **Site Name:** South Catoctin Quarry and Kiln

Other name(s) Orr's "Check 19"

Prehistoric ☐ Historic ☑ Unknown ☐

Brief Description: historic quarry and kiln

External Samples/Data: Collection curated at MAC

Synopsis URL

☐ Raw data available online

Datalink 1

Datalink 2

Datalink 3

Summary Description:

Site 18FR332 is a small quarry and kiln complex located south of the Catoctin Furnace Historic District, along US Route 15 in Frederick County, Maryland. It is situated in the Grove limestone and the New Oxford formation about 2 miles south of the furnace. It is one of several such quarries and kilns in the area. The limestone outcrop strikes east-west and the quarry measured about 45.72 meters (150 ft) east-west with an angular "C"-shaped excavation extending 10.7 meters (35 ft) to the south. An abandoned country road ran east-west immediately to the south of the quarry. The small size of the quarry indicated its probable use to meet private needs such as building stone, lime for whitewash, or fertilizer. The location of the crumbling kiln next to the quarry indicates that the quarried limestone was used (at least part of the time) to make quicklime.

The kiln was first identified in 1956 on the Maryland SHA right-of-way and easement map prior to the construction of US Route 15. Initially, this feature was believed to have been largely removed between construction of the highway and the late 1970s. In 1977, the limestone quarry was first noted by archeologists during a Phase I survey through the Catoctin Furnace Historic District and environs prior to the dualization of US 15. At that time a local informant revealed that the kiln was in-fact still in the location noted on the old SHA easement maps, but was buried beneath the shoulder of the road. In 1979 it was determined that the site would be adversely impacted by the dualization of the highway and archeologists returned to the site to conducted Phase II test excavations.

Archival research and discussions with local informants reveal important background information relating to the site and its possible functions. In the year 1774, Thomas Baker and Roger Johnson constructed the first iron furnace at Catoctin. In 1776, they began producing pig iron under the name of James Johnson and Company. Hematite ore from the Catoctin Mountains provided the raw material for production of the iron while the Catoctin forests provided charcoal for fuel. One of the most important early products of the furnace is rumored to have been supplies (including munitions) for George Washington's Ar[illegible]hite pig iron continued to be produced at the furnace, other important products were machine parts, foundry rolling mills, iron car/cart wheels, cast-ir[illegible]es, and other materials. During the Civil War, iron from the furnace was used to armor the famous iron-clad ship, the Monitor. Over the course of hi[illegible] number of additional furnace stacks, support structures, quarries, casting areas, and other structures were constructed in the area. Some structures were demolished and improved facilities were built. The furnace continued to operate until the early 20th century. Limestone quarries were important support facilities for the furnace as they provided limestone for construction activities as well as flux for the furnace. In addition, quarries also provided limestone for a number of private uses (as noted above). Thus, there are quite a number of such limestone quarries within a short distance of the furnace.

However common, these quarries and the kilns that are often associated with them were a basic and important part of the life of the people of the Catoctin area. Local informants state that each big house (farm) had its own quarry. A landowner generally "burned" limestone for his own farm's consumption at convenient times throughout the year. The rock would be drawn during the day and then burned overnight in the kilns. Burning made the lumps of limestone soft and produced quicklime for use as a soil additive in the fields (a kind of fertilizer), or to make whitewash. Whitewash was used on most fences and houses to protect the wood from the elements and keep termites out. One local informant described having his own "kid's kiln" in which he and his friends produced lime to sell to the locals at 75¢ a bushel. They obtained fuel for the burnings by collecting coke fragments along the nearby Monocacy Valley Railroad line. Analysis of limestone samples recovered during the Phase I survey of the quarry at 18FR332 revealed the presence of several impurities. This indicates that the limestone would not likely have been used as flux for the iron furnace, but was likely used either for building purposes or to produce lime for the purposes described above.

When researchers arrived on site in 1979 to conduct Phase II testing, they had originally planned to excavate the kiln reported to still be on-site. However, upon further consultation it was determined that excavations could not take place without severely disrupting traffic patterns on US Route 15. Since the kiln feature was believed to be preserved beneath the shoulder of the highway and construction plans called primarily for the addition of fill to grade the road for dualization, the decision was made to preserve the kiln in-place (without excavation) beneath the new road. In the quarry area, a backhoe excavation was cut into the feature for approximately 9.144 meters (30 ft) up against the face of the limestone quarry. The cut revealed the stone floor of the quarry 91.4 cm (3 ft) below the ground surface. The soil above the floor was a dark organic muck resulting from the pond which the owner indicated had occupied the center of the quarry excavations. Approximately 3,004 irregular fragments of limestone, resulting from the quarrying process, littered the base of the excavation. However, no other cultural materials were found.

The lack of evenly excavated blocks of limestone, along with the other evidence cited above, strongly suggests that this quarry was not used for building stone or flux, but rather was used to produce lime for fertilizer and/or whitewash paint. Thus, the site is probably not associated with the historic furnace. Aside from these very general conclusions, little else can be determined regarding the quarry and kiln. As excavation was not undertaken within the highway shoulder, any remaining research potential at 18FR332 is in the kiln area. It has likely been heavily disturbed and is now buried under even more fill. As such limekilns are well represented elsewhere, the site's research potential should be considered largely exhausted.

External Reference Codes (Library ID Numbers):

00[illegible]3, 00005972, 00005973

Phase II and Phase III Project Cover Sheet

All information contained within the individual site database and inventory sheets is solely the work of the researchers and authors noted below. The data provided has been culled from the original site reports noted below and in many cases has been lifted directly from them with little or no editing. The database and inventory sheets are meant to serve as a synopsis of the report findings and a finding aid and are not intended to replace or republish the research of the authors noted below.

RI r INFORMATION:

1975 Orr, K.G. and R.G. Orr
Field Report on the Archaeological Situation at the Catoctin Furnace Stack 2 Casting Shed Site, Frederick County, Maryland.
Submitted to the Maryland Dept. of General Services and Maryland Geological Survey

Library ID No: 00006046 Catalog/Shelving ID: FR 87, 88

Research Firm/Institution:

Orr and Son, Consulting Archaeologists

Oxon Hill, MD

Sites examined:

18FR29 18FR333

Project Details:

Phase I
Phase II [X]
Phase III

Project Justification:	Project Objectives:
The basic purpose of the excavation was to record and preserve the archeological features and artifacts which might be affected by the restoration of the casting shed.	-Determine the location and nature of the original floor of the casting shed. -Carefully record and preserve significant features in/on the casting shed floor by sealing them under the restoration's new floor of clay and shale. -Establish with greater certainty the levels of remaining construction in the area. -Undertake an examination of footings for the restoration to reveal details for authentic reconstruction as well as possible artifacts for us in archeological interpretation and dating.

MAC Accession: 1981.024.013, 1981.024.014

R h Potential:

Site 18FR29 encompasses the area surrounding the main furnace area of Catoctin. The locale actually contains two sites within its boundaries; 18FR333 and 18FR334. Results of excavations at 18FR29 are discussed in the individual synopsis reports for 18FR333 and 18FR334 and assessments of remaining research potential are provided for these two sites rather than 18FR29 as a whole.

See below for remaining research questions at 18FR333.

REPORT INFORMATION:

1976 Orr, K.G. and R.G. Orr
Field Report on the Archaeological Investigations (FO4) of Areas of the Catoctin Furnace, Frederick, Maryland, Disturbed by 13 Temporary Shoring Cleats of the Retaining Wall.
Submitted to the Maryland Department of Natural Resources

Library ID No: 00006002 Catalog/Shelving ID: FR 44

Research Firm/Institution:

Orr and Son, Consulting Archaeologists

Oxon Hill, MD

Sites examined:

18FR29 18FR334

Project Details:

Phase I
Phase II [X]
Phase III

Project Justification:	Project Objectives:
The basic purpose of the excavation was to assist in locating positions for cleat pits to support buttresses shoring up a historic retaining wall at the site.	-Locate positions for cleat bases which will least disturb the adjacent archeological remains. -Recover and record whatever materials of an archeological nature are disturbed by the pits.

MAC Accession: 1981.024.013, 1981.024.014

Research Potential:

Site 18FR29 encompasses the area surrounding the main furnace area of Catoctin. The locale actually contains two sites within its boundaries; 18FR333 and 18FR334. Results of excavations at 18FR29 are discussed in the individual synopsis reports for 18FR333 and 18FR334 and assessments of remaining research potential are provided for these two sites rather than 18FR29 as a whole.

See below for remaining research questions at 18FR333.

See below for remaining research questions at 18FR334.

RI[illegible]T INFORMATION:

1977 Orr, K.G. and R.G. Orr
An Intensive Archaeological Survey of Alignment 1 Corridor, U.S. Route 15 from Putnam Road to Maryland Route 77 in Frederick County, Maryland (including Field Catalog FR 89).
Submitted to the Maryland State Highway Administration

Library ID No: 00005963 Catalog/Shelving ID: FR 17A, 89

Research Firm/Institutution:
Orr and Son, Consulting Archaeologists
2221 Cowan Boulevard
Fredericksburg, VA 22401

Sites examined:

18FR320 18FR321 18FR322 18FR323 18FR324 18FR325 18FR326

18FR327 18FR328 Additional sites as listed above:
18FR330, 18FR331, 18FR332, Others

Project Details:

Phase I [X]
Phase II
Phase III

Project Justification:	Project Objectives:
Intensive archeological survey was conducted in the vicinity of the Catoctin Furnace along the proposed dualization route for the existing US Route 15 between Putnam Rd. and MD 77 at Thurmont.	-Determine the number, extent, and the cost/time factor involved in preserving or otherwise mitigating possible advers impacts on historic resources that are or may be related to the Catoctin Furnace.

MAC Accession: 1981.023, 1981.024

Research Potential:

See below for remaining research questions at 18FR320.

[illegible]elow for remaining research questions at 18FR321.

See below for remaining research questions at 18FR322.

See below for remaining research questions at 18FR323.

See below for remaining research questions at 18FR324.

See below for remaining research questions at 18FR325.

See below for remaining research questions at 18FR326.

See below for remaining research questions at 18FR327.

See below for remaining research questions at 18FR328.

See below for remaining research questions at 18FR330.

See below for remaining research questions at 18FR331.

See below for remaining research questions at 18FR332.

REPORT INFORMATION:

1980 Orr, K.G.
Interim Report of the Catoctin Furnace Archaeological Mitigation Project.

Submitted to the Maryland State Highway Administration

Library ID No: 00005972 Catalog/Shelving ID: FR 23B

Research Firm/Institutution:
Orr and Son, Consulting Archaeologists
Apt. 303 Landover House, 3201 Landover Street
Alexandria, VA 22305

Si[illegible]amined:

[illegible]23 18FR324 18FR325 18FR326 18FR327 18FR328 18FR330

18FR331 18FR332 Additional sites as listed above:
18FR320, 18FR321, 18FR322, Others

Project Details:

Phase I

Phase II [X]

Phase III [X]

Project Justification:	Project Objectives:
The nature of the advers effect on archeological sites in the vicinity of the Catoctin Furnace along the proposed dualization route for the existing US Route 15 between Putnam Rd. and MD 77 at Thurmont, was determined in the 1977 intensive survey. This document consitutes an interim report on the mitigation efforts planned or undertaken once resources had been identified.	-Determine the extent to which the 1979 excavations satisfied the mitigation requirements of the project. -Define and propose additional mitigation activities as required for the project.

vation

MAC Accession: 1981.023, 1981.024

Research Potential:

See below for remaining research questions at 18FR320.

See below for remaining research questions at 18FR321.

See below for remaining research questions at 18FR322.

See below for remaining research questions at 18FR323.

See below for remaining research questions at 18FR324.

See below for remaining research questions at 18FR325.

See below for remaining research questions at 18FR326.

See below for remaining research questions at 18FR327.

See below for remaining research questions at 18FR328.

See below for remaining research questions at 18FR330.

See below for remaining research questions at 18FR331.

See below for remaining research questions at 18FR332.

REPORT INFORMATION:

1982 Orr, K.G.
The Catoctin Furnace Archaeological Mitigation Project: Final Report of the 1979 Excavation.

II

Submitted to the Maryland State Highway Administration

Library ID No: 00005973 Catalog/Shelving ID: FR 23C

Research Firm/Institutution:

Orr and Son, Consulting Archaeologists
Apt. 303 Landover House, 3201 Landover Street
Alexandria, VA 22305

Sites examined:

18FR323 18FR324 18FR325 18FR326 18FR327 18FR328 18FR330

18FR331 18FR332 Additional sites as listed above: 18FR320, 18FR321, 18FR322, Others

Project Details:

Phase I

Phase II [X]

Phase III [X]

Project Justification:	Project Objectives:
The nature of the advers effect on archeological sites in the vicinity of the Catoctin Furnace along the proposed dualization route for the existing US Route 15 between Putnam Rd. and MD 77 at Thurmont, was determined in the 1977 intensive survey. This document consitutes the final report on the mitigation efforts undertaken once resources had been identified.	-Complete the archeological survey to identify all cultural and historical aspects of the project area. -Relocate graves situated within the existing highway corridor. -Design a monitoring program to assess the effect of site excavation and burial on sites within the project area. -Outline plans for the conservation, storage, and disposition of all artifacts retrieved from the sites within the project area.

MAC Accession: 1981.023, 1981.024

Research Potential:

See below for remaining research questions at 18FR320.

See below for remaining research questions at 18FR321.

Based on the results of Phase II work and the impact to the site brought on by the dualization of the highway, Site 18FR322 is not considered to have any remaining research potential.

See below for remaining research questions at 18FR323.

See below for remaining research questions at 18FR324.

Site 18FR325 has no additional research potential.

excavation.

Research Potential:

See below for remaining research questions at 18FR320.

REPORT INFORMATION:

Neumann, T.W.
Phase I Intensive Archeological Investigation of Catoctin Furnace (18FR29), Cunningham Falls State Park, Frederick County, Maryland.
Submitted to the Maryland Department of General Services

Library ID No: 00006001 Catalog/Shelving ID: FR 43

Research Firm/Institutution:

R. Christopher Goodwin & Associates, Inc.
636A Solarex Court
Frederick, MD 21701

Sites examined:

18FR29 18FR333 18FR334 Others

Project Details:

Phase I [X]

Phase II

Phase III

MAC Accession: 1991.007

Research Potential:

Site 18FR29 encompasses the area surrounding the main furnace area of Catoctin. The locale actually contains two sites within its boundaries; 18FR333 and 18FR334. Results of excavations at 18FR29 are discussed in the individual synopsis reports for 18FR333 and 18FR334 and assessments of remaining research potential are provided for these two sites rather than 18FR29 as a whole.

Site 18FR333's most significant component is the mid 19th century iron furnace and casting house. Data obtained during these excavations were used in pair of the furnace and reconstruction of the casting house for interpretation. Other significant components include the waterwheel house and probable in of bellows for Isabella and the 1787 Stack. One promising avenue for future research at 18FR333 is an examination of the area just north of the Isabella stack. It is believed that the base of the 1787 Stack may be buried here beneath rubble from the old retaining wall.

Site 18FR334's most significant component is the engine house remains, which could someday aide in interpretive features or even reconstruction at the site. As little work was conducted at the site outside the actual footprints of the retaining wall cleats, the additional research potential of Site 18FR334 is unknown.

REPORT INFORMATION:

2007 King, J.A., E. Chaney, and Raftery, S.
Archaeological Collections in Maryland.
Submitted to NEH, MHT, SHA, and the ACNATSCI Estuarine Research Center

Library ID No: JPPM-NEH Catalog/Shelving ID: web

Research Firm/Institutution:

Jefferson Patterson Park and Museum
10115 Mackall Road
St. Leonard, MD 20685

Sites examined:

18FR320 18FR321 18FR323 18FR324 Others

Project Details:

Project Justification:	Project Objectives:
This project is a web-based approach to making descriptions of the archeological collections at the Maryland Archaeological Conservation Lab in St. Leonard, MD available to scholars, museum curators, educators, students, and the interested public. Detailed descriptions of collections and even limited access to original field notes, maps, accession records, and images is afforded via an online database published on the Jefferson Patterson Park and Museum's web page.	-Introduce the general public to some of the important archaeological collections curated at the MAC Lab.

MAC Accession: 1981.023.003, 1981.024.002

Research Potential:

While Site 18FR320 has itself largely been exhausted of its research potential, areas directly to the east warrant examination. Much of this area has been altered by road construction. However, much of the alteration was likely the addition of historic fills that may have buried and sealed the site. Testing should be undertaken if an opportunity presents itself to determine if A) evidence of the early (1774) furnace can be obtained and B) if the conjectured early-mid 19th century finery forge, foundry, or combined forge and foundry are located in this area to the east of 18FR320.

The bathhouse portion of Site 18FR321, presumably retains some degree of archeological integrity if the plans proposed for sealing the site in sand and monitoring of it below the road bed were followed. The potential for investigations would, however, be contingent upon some future removal of a significant ay. The center of the Feature 1 floor remains unexcavated and this seems like the natural place to start should any such opportunity present itself.

maining burials at Site 18FR323 were left unexcavated as they were outside the highway project right-of-way. These burials should remain undisturbed, but should be monitored in case future work impinges on the site.

Site 18FR324 was preserved in place, and as the stone foundations are just beyond the US 15 right-of-way, the site may retain some additional research potential and would apparently be available to researchers wishing to explore the daily life of miners at Catoctin in the 19th and early 20th centuries.