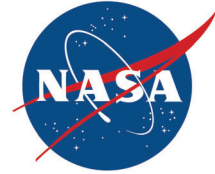


National Aeronautics and Space Administration

John F. Kennedy Space Center
Kennedy Space Center, FL 32899



February 14, 2024

Reply to Attn of: SI-E3

Florida Division of Historical Resources
Attn: Kelly Chase
500 S. Bronough Street
R. A. Gray Building
Tallahassee, Florida 32399-0250

Subject: 2023 Annual Report and Review of Historic Preservation Activities at the Kennedy Space Center (KSC), Florida

Dear Kelly,

Enclosed is the 2023 Annual Report required by the Programmatic Agreement (PA) for Management of Historic Properties at the Kennedy Space Center, Florida (2009 PA), signed in May 2009 by the National Aeronautics and Space Administration (NASA) at KSC, the Florida State Historic Preservation Office (FL SHPO) and the Advisory Council on Historic Preservation (ACHP). Per Stipulation VIII.D - Annual Report and Review, NASA KSC has summarized activities reported between January 1, 2023 and December 31, 2023.

The document is organized into five tables:

- Table 1 lists projects at or adjacent to KSC's historic properties identified in the Historic Property List (Table 5). These projects were evaluated by the KSC Cultural Resources Manager and did not require consultation because consultation is already complete and/or the activities are exempt from consultation per PA Appendix C and/or Stipulation VI.B.
- Table 2 lists projects in all other locations. These projects were evaluated by the KSC Cultural Resources Manager and did not require consultation because consultation is already complete and/or the activities are exempt from consultation per PA Appendix C and/or Stipulation VI.B.
- Table 3 lists projects for which Section 106 consultation with FL SHPO was required. The projects were coordinated with the ACHP, Consulting Parties, and/or the public, as appropriate.
- Table 4 lists all open Mitigation Plans and Memoranda of Agreement. It provides the status of outstanding mitigation commitments to resolve adverse effects determined in consultation with FL SHPO, ACHP, National Park Service, and Consulting Parties, as appropriate.

- Table 5 is the Historic Property List. It lists all above-ground historic properties identified at KSC since 2008 and provides the status of each. National Historic Landmarks are not included, since they are not governed by this PA.

Execution of the 2009 PA has enabled KSC to streamline the Section 106 process by exempting many routine activities from consultation. NASA KSC looks forward to working with your office on being recognized as a Participating Center in NASA's Nationwide Programmatic Agreement which will replace the 2009 PA once executed.

If you have any questions or require further assistance, please contact me at katherine.s.zeringue@nasa.gov or 321-867-8454.

Sincerely,

Katherine Zeringue Digitally signed by Katherine Zeringue
Date: 2024.02.14 09:33:32 -05'00'

Katherine Zeringue
Cultural Resources Manager

Enclosure:
2023 Annual Report on Cultural Resource Activities

cc:
HQS FPO/R. Klein
KSC/SI-E3/D. Dankert
KSC/AD/D. Thorpe
KSC/AD/J. Krouchick
KSC/CC/T. Tezel
KSC/SI-C2/R. Griffin
ACHP/C. Daniel

Consulting Parties:
FWS/T. Penn
NPS/K. Kneifl
CCSFS/MS-9125/T. Penders
Apollo One Memorial Foundation, Inc.
Brevard County Historical Commission
Cape Canaveral Space Force Museum
Florida Public Archaeological Network – East Central Region
Historical Society of North Brevard
Indian River Anthropological Association
North Brevard Heritage Foundation
South Brevard Historical Society

**2023 ANNUAL REPORT
ON
CULTURAL RESOURCE ACTIVITIES
FOR THE
NATIONAL AERONAUTICS AND SPACE
ADMINISTRATION
AT THE
JOHN F. KENNEDY SPACE CENTER**

JANUARY – DECEMBER 2023

*Prepared in accordance with KCA-4185, Programmatic Agreement
Among NASA KSC, ACHP, AND FL SHPO Regarding Management of
Historic Properties at KSC, Stipulation VIII.D - Annual Report and
Review.*

Table 1. Projects at Historic Properties (see Table 5) That Did Not Require Consultation

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
<p>K6-0848/Vehicle Assembly Building, 8BR1684</p>	<p>High Bay 2 Threshold Repairs: Remove deteriorated exterior threshold timbers, rework lime rock base and replace with new timbers to allow Crawler and MLP to transit across threshold.</p>	<p>#2 Building Maintenance and Repair VI.B</p>		<p>12099</p>
	<p>High Bay 1 Threshold Repairs: Remove deteriorated exterior threshold timbers, rework lime rock base and replace with new timbers.</p>	<p>#2 Building Maintenance and Repair VI.B</p>		<p>12212</p>
	<p>Replace existing work trailer in VAB North Parking lot.</p>	<p>#7 Facility Removal or Replacement #20 Temporary Facilities</p>	<p>No ground disturbance is planned as part of this project.</p>	<p>23-0007</p>
	<p>Install Environmental Control System (ECS) in High Bay 3 (HB3), F Tower Previously reported in 2022 Annual Report (see REC/SP# 12045). No new SOW.</p>		<p>In 2012, the platforms in the VAB's HB3 were dismantled in support of the new SLS Program and new platforms were installed. NASA completed consultation regarding a No Adverse Effect determination via email dated March 23, 2012, with SHPO concurrence on April 17, 2012 [DHR Project File Number: 2012-1598].</p>	<p>12154</p>

*Unless otherwise noted, all projects with ground disturbance are located in a low ZAP, disturbed area, with no known archaeological sites present.

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
			Recordation [HAER No. FL-8-11-B] was completed and accepted by National Park Service/Library of Congress on 8/10/2009.	
	<p>VAB HVAC Replacement</p> <p>Previously reported in 2022 Annual Report (see REC/SP# 11819).</p> <p>New Scope of Work (SOW): Eliminated work in Towers L, M and N. SOW includes replacement of multiple computer room air conditioner units, reconfiguration of ductwork in K Tower, the replacement of fire dampers, and duct cleaning.</p> <p>(Also see LCC.)</p>	<p>#5 Energy Conservation</p> <p>#9 Fire Detection and Suppression</p>		12275; 12601
	Replace old lighting with LED lights in E Tower 34th Floor and A and C Tower 5th Floors.	#4 Electrical		12302
	Renovate Tower N Restroom and Janitorial Closets.	#2 Building Maintenance and Repair		12443

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
		#7 Facility Removal or Replacement		
	Install uninterrupted power supply, tap boxes, and HVAC in High Bay 3, Tower F.	#4 Electrical #5 Energy Conservation		12482
	Corrosion control.	#2 Building Maintenance		12338; 12242
K6-0947/VAB Utility Annex, 8BR3150	Add 100 feet of sidewalk within Utility Annex area.	#18 Roads VI.B		23-0074
K7-1005/Barge Terminal Facility, 8BR2986	Replace pavement at Barge Terminal Dock.	#18 Roads		12427
K6-0900/Launch Control Center, 8BR1685	LCC HVAC Replacement Previously reported in 2022 (see REC/SP# 11819). New SOW: Eliminated replacement of main air handlers. Added replacement of fire dampers and duct cleaning. (Also see VAB.)	#5 Energy Conservation #9 Fire Detection and Suppression		12275; 12601
	Install Leibert unit to manage increased heat loads in room 3R15.	#5 Energy Conservation		12326
UK-0008/Crawlerway, 8BR1689	Place 2 temporary trailers and a generator on Crawler Path at the Mobile Service Structure Park Site to	#20 Temporary Facilities	Note: Consultation and mitigation for the demolition of MLP-3 was concluded on 9/8/2010 [DHR Project File No.:	23-0010

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
	support demolition of MLP-3.		2010-3995]. HAER was accepted by FL SHPO on 12/9/2009 [HAER No. FL-8-11-D].	
	Create laydown yard to support High Bay 2 modifications for SLS.	#20 Temporary Facilities VI.B		23-0029
	Environmental Control System (ECS): Install concrete pad adjacent to SpaceX Falcon Hanger in existing parking lot to accommodate ECS and install fence.	#5 Energy Conservation #8 Fencing VI.B	Adverse Effect consultation regarding construction of Falcon Hanger over Crawlerway and at the perimeter of the LC-39A Historic District was completed in 2014 (see DHR Project File No. 2014-1462). It was determined Adverse Effects were previously mitigated through completion of Level III HABS/HAER.	23-0052
CT-1 & CT-2/Crawler Transporter 1 & 2, 8BR1688	CT2 Drive Truck (A) Interior Refurbishment: Degrease and reapply appropriate materials.	#2 Building Maintenance and Repair		12196
	Corrosion control.	#2 Building Maintenance and Repair		12338; 12242
M7-0355/Neil Armstrong Operations and Checkout (O&C) Building, 8BR1693	Install power circuits and receptacles in chemical labs.	#4 Electrical		12168
	Replace O&C South Wing	#4 Electrical		11947; 12271;

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
	<p>Electrical Distribution Equipment: Replace 20 O&C South Wing substations</p> <p>Originally reported in 2021 Annual Report (see REC/SP# 11516).</p> <p>New SOW: Remove/replace all medium voltage transformers, switchboards, and cabling. Install metal conduit for new cabling. Demolish/replace concrete curbing in equipment rooms. Replace equipment room doors.</p>	VI.B		12363
	Install 2 power circuits in basement including breakers, conduit, and wires to connect with preexisting hardware/panels.	#4 Electrical		12453
	Re-purpose and refurbish O&C 4247 and NW 2nd floor area for use as a secured LM/Orion admin space.	#2 Building Maintenance and Repair		12574
L6-0247/ Manufacturing Building/Booster	Replace existing Oxygen Deficiency Monitoring	#2 Building Maintenance and Repair	Aft Skirt Test Facility in not eligible for the NRHP.	12115

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
Fabrication Facility (BFF), 8BR1998	<p>System (ODMS) at the BFF and the BFF Aft Skirt Test Facility (L7-0251)</p> <p>Previously reported in 2021 Annual Report (see REC/SP# 11540, 11633).</p> <p>No change in SOW.</p>			
	<p>Replace Switchgear: Demolish existing electrical switchgear and transformers, substations, and install new switchgear and transformers.</p>	#4 Electrical		12199
	<p>Laydown Yard for BFF Roof Replacement: Install trailers, portable bathrooms and generator in existing parking lot.</p>	#20 Temporary Facilities	<p>No ground disturbance is planned as part of this project. Roof replacement was previously reported in 2021 Annual Report (see REC/SP# 11279).</p>	23-0018
	<p>Paint High Bay.</p>	#2 Building Maintenance and Repair		12259; 12522
	<p>Crane Refurbishment: Refurbish 10 cranes through replacement of parts.</p>	#2 Building Maintenance and Repair		12307
	<p>Upgrade HVAC System</p> <p>Previously reported in 2021</p>	#5 Energy Conservation		12362; 12589

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
	<p>Annual Report (see REC/SP# 11567).</p> <p>No change in SOW except additional buildings within BFF complex added including L6-0146 E&A Building, L6-0147 Chiller Building, L6-0247 Manufacturing Building, L6-0248 Service Building, L6-0249 GSE Repair/Wash Building, L6-0297 Storage Building.</p>	#9 Fire Detection and Suppression		
	Replace light fixtures on West side of building.	#14 Lighting		12273
	<p>Repair/Replace Windows at BFF Complex: Windows at the BFF complex leak and are damaged. Repair work includes replacement of interior/exterior gaskets/sealants, replacement of window tint, and repair of windowsill cracks at L6-0146 and L6-0247. One window will be replaced at L6-0247, room 2301A.</p>	#2 Building Maintenance		12393
	Interior Renovations	#2 Building Maintenance and Repair	The Engineering and Administration Building (L6-	12602

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
	<p>Previously reported in 2021 Annual Report (see REC/SP# 11588).</p> <p>New SOW: Additional buildings added including BFF Chiller Building (L6-0147), BFF Engineering & Administration Building (L6-0146), GSE Service Building (L6-0248), Aft Skirt Test Building (L7-0251), Manufacturing Building (L6-0247), and Storage Building (L6-0297).</p>		<p>0146), Chiller Building (L6-0147), Service Building (L6-0248), GSE Repair/Wash Building (L6-0249), and the Multi-Purpose Storage Building (L6-0297) have been evaluated and determined ineligible for the NHRP.</p>	
	<p>Paint BFF Ordnance Room, BSM Cell and Pharmacy.</p>	<p>#2 Building Maintenance and Repair</p>		<p>12633</p>
<p>M7-0777/Canister Rotation Facility (aka Launch Abort System Facility), 8BR2016</p>	<p>New Florida City Gas utility run from existing gas line on 3rd Street SE to LASF</p> <p>Previously reported in 2022 Annual Report (see REC/SP# 22-0016).</p> <p>New SOW: Gas line will be installed via directional drilling. Slight change in location. New line</p>	<p>VI.B</p>		<p>23-0014</p>

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
	will provide natural gas for new gas boiler at the LASF.			
	Install temporary trailer in parking lot.	#20 Temporary Facilities		23-0045
M7-0360/Space Station Processing Facility, 8BR2671	SSPF Generator Disconnects Previously reported in 2022 Annual Report (see REC/SP# 11975). New SOW: Install new, upsized disconnect switches and feeder/conduit at the loading dock and the 3rd floor mechanical room.	#4 Electrical		12295
	Relocate 2 panel circuits within Rooms 1411 and 1417 and extend conduit wires under raised floor. Drill 3 in. hole through wall into the High Bay, within the raised floor area, to accommodate pull through wires.	#4 Electrical		12616
M7-0361A/Ammonia Vapor Containment Building, No BR #	Replace air handler unit AHU-1, and condensing units (CU-1 and 2) Previously reported in 2021 Annual Report (see REC/SP# 11583).	#2 Building Maintenance and Repair		12088

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
	No new SOW.			
K8-1699/Beach House, 8BR2990	Install New 3 Ton Air Cooled Heat Pump to replace previous unit. Construct a 3x3 ft. concrete pad outside on the north side of the facility, route underground PVC electrical conduit approximately 75 ft. from the west side of the facility to the condenser pad.	#5 Energy Conservation VI.B		12391
	Extend existing sidewalks.	#2 Building Maintenance and Repair VI.B		12440
	Replace Beach House Deck Previously reported in 2022 Annual Report (see REC/SP# 12032). New SOW: Repair termite damage in sill and rim joists. Move existing waterlines to avoid new concrete deck piers.	#2 Building Maintenance and Repair VI.B		N/A
M3-0003/Indian River Bridge, 8BR2956	Replace Indian River Bridge: Construct 2 new high-span bridges and demolish existing bridge.		Adverse effect is governed by FDOT Mitigation Plan [DHR Project File No. 2019-1535C]. See Table 4.	12153

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
	Create laydown Yard on Northwest Side of NASA Causeway approach. Place compact fill and temporary drainpipe.	VI.B		23-0044
E4-2414/Haulover Canal Bridge, 8BR2957	Replace submarine power and control cables that connect north and south piers via directional boring. Replace Power Termination Cabinets in both piers.	#2 Building Maintenance and Repair #4 Electrical	Work will be in a moderate and high ZAP, although it is a previously disturbed area with no recorded archaeological sites. Due to directional boring, unexpected discovery stipulations in place.	11933
Launch Complex 39 Pad A Historic District, 8BR1686	Hypergol Fuel Facility (J8-1906) Roof Structure Removal.	#2 Building Maintenance	Relevant for all LC-39A Notes (unless otherwise stated). NASA received concurrence from the FL SHPO for all future modifications and demolitions to LC-39A on May 10, 2013 [DHR Project File No.: 2013-1817]; the consultation acknowledged that no additional mitigation measures for adverse effects were recommended. Recordation (FL-8-11-F) of LC-39A was completed and accepted by the National Park Service/Library of	12401

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
			Congress on October 13, 2010.	
	Liquid Oxygen (LOX) Farm Expansion including construction of foundations for 3 new LOX storage tanks, concrete paving, and an electrical building.	#15 New Building Construction VI.B	Unexpected Discovery stipulations in place due to proximity to ZAP/historic area (Canaveral Club).	23-0056; 12437
	Install electrical conduit to connect elevators to KSC power grid.	#4 Electrical VI.B		23-0064
	Extend existing CH4 Vent Pipe 30 ft. and install a 15 ft. radius of gravel centered at the end of it.	#17 Retrofitting VI.B		23-0072
	Replace damaged helium tank.	#2 Building Maintenance and Repair		12560; 23-0076
	Install new underground fiber line to weld tent on west side of 39A. Existing circuit will be used.	#17 Retrofitting VI.B		23-0078
Launch Complex 39 Pad B Historic District, 8BR1687	Repair conduits and grounding cables and replace transformer at Camera Pads 3 and 6. Excavate soil less than one foot adjacent to and partially under existing slabs to expose conduit and grounding cables for inspection and repairs.	#4 Electrical VI.B	Relevant for all LC-39B Notes (unless otherwise stated): LC-39A and LC-39B are considered identical resources. NASA received concurrence from the FL SHPO for all future modifications and demolitions to LC-39A on May 10, 2013 [DHR Project File No.: 2013-	12093

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
			1817]; the consultation acknowledged that no additional mitigation measures for adverse effects were recommended. Recordation (FL-8-11-F) of LC-39A was completed and accepted by the National Park Service/Library of Congress on October 13, 2010. Since LC- 39B is identical to LC-39A, per the PA, Stipulation V.A.2, construction and modifications at Pad B can proceed.	
	Install Liquid Nitrogen (LN2) System Previously reported in 2022 Annual Report (see REC/SP# 12056). No new SOW.	#17 Retrofitting VI.B		12183; 23-0043; 12583
	Install new 120V power circuits for LED lighting and power receptacles.	#4 Electrical		12301
	Replace Various Doors at the Mobile Launcher (ML) Facility (J7-0337) including ML Elevator Shaft Doors (10-ea) and frames, ML Elevator Machine	#2 Building Maintenance and Repair		12370

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
	Room Door, and the Compressed Air Machine Room Door.			
	LOX Tanker Turnaround Area: Widen roadway at Camera Pad 4 to create a turnaround area within the Pad Perimeter to allow LOX tankers to avoid driving over the Crawlerway.	#18 Roads VI.B	Unexpected Discovery stipulations in place.	23-0054; 12417
	Replace Fan Coil Unit within Pad Surface Elevator Equipment Room and seal existing outdoor air louver to prevent future damage from launches.	#2 Building Maintenance and Repair		12464
	Corrosion control.	#2 Building Maintenance		12338; 12242
Shuttle Landing Facility (SLF) Historic District, 8BR1986	Stormwater Improvements at SLF Part 1: Install 3 culverts at F Avenue, Sharkey Road at the Runway, and on the Tow Way.	#18 Roads VI.B		23-0025
	Block 3 Development: Construction of a new Satellite Manufacturing and Payload Processing Facility (Project Comet).		Consultation regarding development of Block 3 was completed in 2014. SHPO concurred with No Adverse Effect on 11/14/2012 [DHR Project File No. 2012-5144]. Unexpected discovery	12445; 23-0071

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
			stipulation is in place.	
	Block 1 Development: Infrastructure development, wetland mitigation, and grading.		<p>Consultation regarding the infrastructure was completed in 2012 and 2014. SHPO concurred with a No Adverse Effect determination on 11/14/2012 [DHR Project File No. 2012-5144] and 3/13/2014 [DHR Project File No. 2013-4444].</p> <p>Wetland mitigation previously reported in 2019 Annual Report (see: Shuttle Landing Facility (SLF) Wetland Mitigation).</p> <p>Unexpected discovery stipulations in place.</p>	12446; 12470
66340/Multi-Media Blast Facility, 8BR2009	Replace air conditioning. SOW includes electrical and mechanical work to replace indoor air handler, outdoor condensing unit, refrigerant lines, electrical wiring and conduit up to their disconnects and the PVC condensate line.	#4 Electrical #5 Energy Conservation		12586
NASA KSC Railroad System Historic District, 8BR2932	See below.			

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
UK-0022/Railroad Track, 8BR2931	Remove and Replace Railroad/Roadway Panels on Kennedy Parkway Previously reported in 2022 Annual Report (see REC/SP# 11969). New SOW to include replacement of select rail ties and 2 switch ties.	#18 Roads VI.B	Also applicable: ACHP Program Comment for Rail Rights of Way, Exempted Activities List II.A, Track and Trackbed and II.E.2 Railroad and Rail Transit/Roadway At-Grade Crossings and Grade Separations	12244; 12399; 12525
NASA-owned Cape Canaveral Air Force Station Industrial Area Historic District, 8BR3073	See below.			
60680/Missile Assembly Building AE, 8BR2976	Paint exterior of building.	#2 Building Maintenance and Repair		12340; 12591
	Laydown Yards in existing work yard to facilitate painting.	#20 Temporary Facilities		23-0050
	Modify Hangar AE power system to accommodate new server requirements.	#4 Electrical		12590
	New Server Room Electrical Power Run. A new server room has been created and needs power.	#4 Electrical		12557
Multiple Locations: K6-0900/Launch Control Center, 8BR1685; 60680/Missile Assembly Building - Hangar AE (CCSFS),	Install Electric Vehicle Charging Stations Previously reported in 2022 Annual Report	#5 Energy Conservation VI.B	Also applicable: ACHP's Exemption for Electrical Vehicle Supply Equipment issued 10/26/2022.	12148; 23-0068

Historic Property	Project	Appendix C Applicability	Notes*	REC/SP#
8BR2976; K6-0848/Vehicle Assembly Building (southeast parking lot), 8BR1684; M7-0355/Operations & Checkout Building, 8BR1693	(see REC/SP# 11902). No change in SOW.			

Table 2. Projects at Non-historic Properties That Did Not Require Consultation

Location	Project	Appendix C Applicability	Notes*	REC/SP#
<i>Facility Work</i>				
SpaceX Roberts Road Campus	Place 2 smoking gazebos on the ground and secure with hurricane anchors.	#20 Temporary Facilities VI.B		22-0091
	<p>Roberts Road West Site - Updated Site Plan</p> <p>Previously reported in the 2018 Annual Report and 2021 Annual Report (see REC/SP# 21-0046).</p> <p>Updated SOW: Revised parking areas; add new laydown/build yards; add a gas farm, a new fuel station and a new building to house Environmental hazardous materials. Extend the paved area of Roberts Road Westward to cover the entire Campus area.</p>		FL SHPO reviewed the Environmental Assessment and concurred on 08/01/18 that there would be No Adverse Effects to historic properties resulting from the development of the SpaceX Campus.	23-0021
	Roberts Road - Crew 40 Tower Module Laydown Yard: Establish laydown yard to build a crew tower on site. Once constructed, the crew tower will be transported to Launch Complex 40 for use.	#20 Temporary Facilities VI.B		23-0042
	Build 2 maintenance bays on the west side of the current Factory facility.		FL SHPO reviewed the Environmental Assessment and concurred on 08/01/18 that there would be no adverse effects to archaeological or historic resources resulting from	23-0046

*Unless otherwise noted, all projects with ground disturbance are located in a low ZAP, disturbed area, with no known archaeological sites present.

Location	Project	Appendix C Applicability	Notes*	REC/SP#
			the development of the SpaceX Campus.	
	Factory/X2 Expansion: 40,000 sq ft building expansion on the north side of the existing factory.	VI.B	FL SHPO reviewed the Environmental Assessment and concurred on 08/01/18 that there would be no adverse effects to archaeological or historic resources resulting from the development of the SpaceX Campus.	23-0057
	Roberts Road North Expansion Previously reported in 2022 Annual report (see Consultation Section). No new SOW.		A CRAS was completed in August 2022 (FMSF Report No. not assigned). NASA determined there would be No Adverse Effect to historic properties. SHPO concurred on November 3, 2022. [DHR Project File No.: 2022-6435].	23-0060
	Construct a 150 ft Cell Tower at the Roberts Road campus.		FL SHPO reviewed the Environmental Assessment and concurred on 08/01/18 that there would be no adverse effects to archaeological or historic resources	23-0082

Location	Project	Appendix C Applicability	Notes*	REC/SP#
			resulting from the development of the SpaceX Campus.	
KSC Visitor Center Facilities	<p>Main Visitors Complex: Construct Additional Parking Lot</p> <p>Previously reported in 2019 Annual Report (see Additional Parking Lot 7 With Modifications at Visitor Complex).</p> <p>No new SOW.</p>	#15 New Building Construction		12206
	Main Visitors Complex: Replace 3 semi-impervious areas with 3" of asphalt pavement.	#18 Roads VI.B		23-0040
	Main Visitors Complex: Construct shade structures at Will Call and Granite Ball fountain seating areas.	#15 New Building Construction VI.B	Minor additions to existing facilities that do not fall within a Historic District.	23-0081
	<p>Apollo/Saturn V Center: Demolish/replace existing structure (J6-1876) north of the Apollo/Saturn V Center within the circular access road. Replace with a new storage building to facilitate expand/redesign of the existing kitchen footprint.</p> <p>Previously reported in 2022 Annual Report (see REC/SP# 12025).</p> <p>No change in SOW.</p>	#7 Facility Removal or Replacement VI.B	<p>Apollo/Saturn V Center was built in 1997 and the support buildings to the north were built in 2001.</p> <p>A CRAS was completed in March 1991 (FMSF Report No. 2689). No historic properties were identified in the project area.</p>	23-0033; 12275
	Apollo/Saturn V Center: Repair concrete patio.	#18 Roads VI.B	Unexpected discovery stipulations in place.	12343

Location	Project	Appendix C Applicability	Notes*	REC/SP#
	Apollo/Saturn V Center: Park mobile trailer (used as temporary kitchen) on NE lawn of building. Spiral anchors will secure the trailer in the ground.	#20 Temporary Facilities VI.B	Location does not fall within the boundaries of 8BR170. Unexpected discovery stipulations in place.	23-0070
Blue Origin	<p>Blue Origin OLS Manufacturing Complex various site Improvements at North, South and Deep South Campus</p> <p>Previously reported in 2022 Annual Report (see REC/SP# 22-0038, 11787, 11639) and 2021 Annual Report (see REC/SP# 21-0067).</p> <p>New SOW: Blue Origin is proposing i) to prepare 4 vacant areas (100.04 acres) of the OLS Manufacturing Complex for construction, ii) to construct a parking lot and iii) to erect a temporary storage building. The projects will provide for the infrastructure needs of existing and near future facilities for the manufacture of the Blue Origin Orbital Launch System (OLS) space flight hardware and launch vehicle components.</p>		A CRAS was completed in March 2003 (FMSF Report No. 28954). No resources eligible for the NRHP were identified in the project area. SHPO concurred with NASA's No Historic Properties Affected finding on March 2, 2004 [DHR Project File No.: 2004-936].	23-0022; 23-0083; 12329
Exploration Park/Off Space Commerce Way	<p>Construct Orbite Astronaut Training Complex</p> <p>Previously reported in 2022 Annual Report</p>		A CRAS was completed in March 2021 (FMSF Report No. 28108). NASA	12305

Location	Project	Appendix C Applicability	Notes*	REC/SP#
	<p>[see REC/SP# 11801, 11668].</p> <p>No new SOW.</p>		<p>determined there would be No Adverse Effect. SHPO concurred on Jan 25, 2022 [DHR Project File No. 2022-0036].</p>	
<p>Industrial Area/10 St SE and F Ave SE</p>	<p>Construct Launch Abort System Storage Facility</p> <p>Previously reported in 2021 Annual Report (see REC/SP# 22-0008).</p> <p>New SOW: Slight change in location. Reduction in size of clamshell to 7,400 sq. ft. Addition of driveway and parking areas.</p>	<p>#15 New Building Construction</p> <p>#8 Fencing</p> <p>VI.B</p>		<p>23-0003</p>
<p>Industrial Area/5th St SE</p>	<p>Install storage shed at the Child Development Center (M6-0883). Anchors will be used to secure it to the ground.</p>	<p>#20 Temporary Facilities</p>	<p>No ground disturbance is expected as a part of this project.</p>	<p>23-0024</p>
<p>Industrial Area/Corner of 6th St SE and G Ave SE</p>	<p>ISRU Pilot Excavator (IPEX) Rover Site Clearing: Plan includes landscape modifications and addition of pervious in-situ ground cover to simulate a Lunar surface. Add a temporary and moveable fabric covered enclosure @ 130' x 65' (8450 sq ft).</p>	<p>#13 Landscaping</p> <p>#20 Temporary Facilities</p> <p>VI.B</p>		<p>23-0009</p>
<p>Industrial Area/SW corner of 3rd St. SE and E Ave SE</p>	<p>Build 80,000 sf Orion Storage Facility with parking lot and fencing.</p>	<p>#7 Facility Removal or Replacement</p> <p>#8 Fencing</p> <p>#16 Parking</p> <p>VI.B</p>	<p>Within boundary of former Parachute Processing Building location.</p>	<p>23-0030</p>

Location	Project	Appendix C Applicability	Notes*	REC/SP#
Industrial Area/NW portion	Move portable communication infrastructure building from current location at W bridge approach for NASA Causeway Bridge to Industrial area @ M6-0539 (Storage Shed).	#20 Temporary Facilities		23-0035
Industrial Area/Corner of 10 St SE and Banana River Drive NE	Place and tie down CONEX boxes in existing parking lot.	#12 Hurricane Modifications #20 Temporary Facilities VI.B		23-0051
Industrial Area	Abandon and demolish Generator Building (M6-0039A).	#3 Building Removal	Built 1985.	12377
Industrial Area/Auditorium and Training Building (M7-0351)	Replace fire alarm control panel and smoke duct beam. Originally reported in 2022 Annual Report (see REC/SP# 11926). No new SOW.	#9 Fire Detection and Suppression		12243
Phillips Pkwy/KSC Beachside Atmospheric Corrosion Test Site (K8-0600)	NOAA High Frequency Radar (HFR) Installation: Create 2 antenna sites and install utility lines from existing HFR electronics shed to antennas.		Part of the project is located within a known historic area which contained @ 5 structures on the 1949 quad map (likely beach houses). NOAA consulted on this project in 2020 [DHR Project File No.: 2020-5861]. SHPO concluded that the project was unlikely to affect historic properties but	12328; 11655

Location	Project	Appendix C Applicability	Notes*	REC/SP#
			requested an unexpected discovery protocol. Unexpected discovery stipulations in place.	
Philips Pkwy/Universal Camera Site (UCS)-7	Place a 20' camera tower on existing concrete slab to monitor launch operations.	VI.B		23-0015
Philips Pkwy/UCS-7	Modify Universal Camera Site #7. Widen existing driveways and add gutters and drainage flumes.	#18 Roads VI.B		23-0004
Philips Pkwy/KSC/CCSFS Boundary	Construct Final Denial Barrier North Gate Previously reported in 2021 Annual Report (see REC/SP# 21-0032). New Scope: Install new flashing warning light/sign 500 ft. north of the NASA and CCSFS Boundary. Directionally bore from the property line to the proposed location of the light on the west side of the road.	#1 Antiterrorism and Force Protection Measures	Project is located near a high ZAP but is confined to the previously disturbed road area. Unexpected discovery stipulations in place.	12189
Shuttle Landing Facility Area	SLF Block 1 Infrastructure Development including Road Extension between Hangar Road and Sharkey Road along existing utility corridor. Proposed improvements include a two-lane paved roadway and stormwater management roadside ditches. The project area is @ 4,400' long x 400' wide.		Work is outside of the SLF Historic District. NASA received SHPO concurrence with a No Adverse Effect Finding on 11/14/2012 [DHR Project File No.: 2012-5144] and 3/13/2014 [DHR	12089; 12180

Location	Project	Appendix C Applicability	Notes*	REC/SP#
	Previously reported in the 2012, 2014, 2016, 2019, and 2020 Annual Reports. No new SOW.		Project File No.: 2014-0534]. Unexpected discovery stipulations in place.	
	Cut Lines for Wetland Determination, Block 6 Development.	VI.B	Mechanical cutting at ground surface. Minimal ground disturbance. No excavation is authorized.	12221
Contractors Road/Launch Equipment Shop (K6-1247)	Paint Shop Relocation: Relocated paint shop and a new self-contained outdoor paint booth to the LES shop south wall. Relocate six tanks under the awning on the north side of the LES shop.	#7 Facility Removal or Replacement VI.B	K6-1247 was built in 1965 and determined ineligible for the NRHP under the Space Shuttle Program Evaluation Survey. No new information exists that would trigger reevaluation at this time. K6-1397 was built in 1984.	23-0048
Contractors Road/Pesticide Mixing Pad at Roads & Grounds Area	Extend existing concrete slab and install pre-engineered metal building (PEMB) over existing containment area. Replace electrical water pump, water hose, and hose reel. Previously reported in 2020 (see REC/SP# 20-0059). No change in SOW.	#15 New Building Construction #22 Water Systems VI.B		23-0005
Contractors Road/Logistics Facility (K6-1547)	Install a single metal fabricated facility (@ 5,000 SF to 10,000 SF) on an existing concrete	#4 Electrical	Unexpected discovery stipulations in place.	23-0073

Location	Project	Appendix C Applicability	Notes*	REC/SP#
	pad in the south-east corner of the Logistics Facility site. Install electrical supply lines, fire suppression water feeds, and external connections.	#9 Fire Detection and Suppression #15 New Building Construction VI.B		
Multiple Locations: Pad B Operations Support Building (J7-0689); Logistics Building (K6-1547); Operations Support Building 1 (K6-1096) (VAB Area)	Install Electric Vehicle Charging Stations Previously reported in 2022 Annual Report (see REC/SP# 11902). No new SOW.	#5 Energy Conservation VI.B	Also applicable: ACHP's Exemption for Electrical Vehicle Supply Equipment issued 10/26/2022.	12148; 23-0068
Multiple Locations: Intersection of Kennedy Pkwy N and 39 th St. NW (SLF Area); intersection of 2 nd St SW and B Ave SW (Industrial Area); intersection of Kennedy Pkwy S and Space Commerce Way (Industrial Area)	Install electrical medium Voltage Switches (VFI) pads in existing utility corridors: Install new slabs @ 14'x6' to house new electrical equipment. Install new duct banks.	#4 Electrical VI.B		23-0013
Multiple Locations: K6-1844B/Abrasive Recovery Building; K6-0743/Crawler Transport Maintenance Building	Perform corrosion control.	#2 Building Maintenance and Repair		12242
Multiple Locations: KARS 1 Culvert at Audubon Rd (near boat ramp); KARS 1 Culvert at Hall Rd (Ball field 1 entrance); KARS 1 Culvert at S Audubon Rd.; Buck Creek Culvert; Kennedy Parkway South (multiple culverts)	Clean, repair and/or replace culverts at various locations within KSC property impacted by Hurricanes Ian/Nicole.	#22 Water Systems	Moderate ZAPs and historical areas are noted in the project area. Work will occur in previously disturbed areas. Unexpected discovery stipulations in place.	12284
Multiple Locations: Jay Jay Railroad Bridge; Banana River Bridge	Shoreline stabilization around the Jay-Jay Bridge (E and W) and	#6 Erosion Control	Saturn V/Apollo Center is also included in the	12415

Location	Project	Appendix C Applicability	Notes*	REC/SP#
	E/W NASA Causeway (north side) approaches.	VI.B	project but will be subject to separate consultation.	
Titan III Road at KSC/CCSFS Boundary	Install fiber optic cable at weather tower. Trench @ 160 ft between 2 – 3 ft deep to extend existing fiber optic cable between manhole and building.	VI.B		23-0028
MINWR/Off of Beach Road	Construct New MINWR Community Conservation & Education Center (CCEC).		USFWS was the lead federal agency for Section 106 Consultation for this project. A Phase I archaeological survey was completed in July 2017. No historic properties were identified. SHPO concurred with MINWR's finding of "no effect" on October 30, 2017.	23-0032; 12270
Launch Complex 41 (LC-41)	Lease Launch Complex 41 and surrounding property, rail corridor and adjacent land to support USAF facilities and infrastructure.	#21 Transfer of Real Estate		12366
Goddard Road/Antenna Site (L7-1559)	Install secondary antenna and create lines of sight.	#17 Retrofitting #13 Landscaping VI.B		23-0059
C-Band Radar Road	Space Force TEPS Antenna Site: Install silt fence, 2 concrete pads, power supply, and communications equipment.	#8 Fencing #17 Retrofitting VI.B	Unexpected discovery stipulations in place.	23-0066

Location	Project	Appendix C Applicability	Notes*	REC/SP#
	Originally reported in 2021 Annual Report (see REC/SP# 21-0038, 21-0059). New SOW – slight change in footprint only.			
NASA Pkwy W/KSC Security Gate #3	Repair roadway, install bollards, and install electrical conduit.	#1 Antiterrorism and Force Protection Measures #4 Electrical #18 Roads VI.B		23-0075
Kennedy Pkwy N	Abandon Guard Overwatch (Gate 4) (H5-2146).	#3 Building Removal	Built in 2006. Determined ineligible with SHPO concurrence on 9/28/2016 [DHR File Project No. 2016-4014].	12379
Roadwork				
Kennedy Parkway	Culvert Replacement at Sharkey Road, 30 th Street NW, and Astronaut Road.	#18 Roads VI.B	These areas were previously subject to subsurface testing (FMSF Report No. 3447). No known archaeological sites.	23-0026
Space Commerce Way	Space Commerce Way Widening (2 to 4 lanes) Originally reported in 2021 (see REC/SP# 11619). No new SOW.		CRAS was completed by FDOT in 2022 with negative findings (FMSF Report No. 28010). SHPO concurred on 9/28/2016 [DHR File Project No. 2016-4014].	12371

Location	Project	Appendix C Applicability	Notes*	REC/SP#
Saturn Causeway	Widen road between the VAB and Phillips Pkwy. Includes ditches, relocation of signs, bollards, and utilities. Originally reported in 2022 Annual Report (see REC/SP# 22-0032, 11769). New SOW: Work extended from original terminus at LC39-A to Phillips Parkway.	#18 Roads #19 Signage VI.B		23-0058
Intersection of Beach Road and Kennedy Pkwy N	Construct Stabilized Maintenance Roads to VFIs 796 and 797 Originally reported in 2022 Annual Report (see REC/SP# 11756). No new SOW.	#18 Roads VI.B	Work will take place in the vicinity of the Wilson's Corner Historic Area. Part of the project is in a previously surveyed area where no resources were identified (FMSF Report No. 3447). All roads will be placed in previously disturbed/cleared areas within the intersection's ROW. Unexpected discovery stipulations in place.	12489
Intersection of US Highway 1 S and SR-3	Construct a 3300 sq ft driveway apron within the ROW of SR-3 for private property access.	#18 Roads VI.B	Unexpected discovery stipulations in place.	23-0069
Utility Work				
NASA/Kennedy Pkwy interchange bridge	Raise Orsino/C-5 Transmission Lines: Replace existing poles	VI.B	Area has been subject to archaeological	23-0016; 12615

Location	Project	Appendix C Applicability	Notes*	REC/SP#
	and install new poles. In total, 8 new poles will be installed that range from a height of 90' to 165'.		survey with negative findings (See CRAS of Transmission Corridor T21584 2020 and CRAS Five Improvement Locations on NASA Causeway 2020.	
South side of Schwartz Road Between Kennedy Pkwy and A Ave NE, and 180 feet along A Ave NE	New Utility Corridor to Support Solar Array Site 6: Directionally bore and install new underground utility corridor (32 ft wide by 2,301 ft long). Hand dig holes for cable pulling @ 33-40 inches in size every 500'. Tree clearing in the NW corner of the corridor.		Area has been subject to archaeological survey with negative findings and is in a low probability area with no known archaeological sites present (FMSF Report No. 3447 and Archaeological Survey of Schwartz Road Borrow Area Expansion 1989).	23-0017
Astronaut Road and Kennedy Parkway	Upsize the watermain and force main to a larger size along Astronaut Road to the tie in locations along Kennedy Parkway to support the growth and increase in demand at the SLF. The water main will be shifted North of Astronaut Road and upsized from 6" to 12". The Force Main will remain South of Astronaut Road and be upsized from 4" to 6". The project will also include construction of	#22 Water Systems VI.B	Areas north of Astronaut Road were previously cleared via SHPO Consultation for the SLF Block 1 Development on 11/14/2012 [DHR Project File No.: 2012-5144] and 3/13/2014 [DHR Project File No.: 2014-0534]. Areas south of Astronaut Road will occur in	23-0031

Location	Project	Appendix C Applicability	Notes*	REC/SP#
	a master lift station for the SLF Development at the corner of Astronaut Road and Hangar Road.		existing utility corridors which are previously disturbed. Areas along Kennedy Parkway were previously subject to subsurface testing (FMSF Report No. 3447). Work will not occur in known archaeological sites. Unexpected discovery stipulations in place.	
Static Test Road	Replace existing power poles and overhead power lines along Static Test Road. Remove or replace existing medium voltage switches.	#4 Electrical	Unexpected discovery stipulations in place.	12360
<i>Laydown Yards</i>				
Industrial Area/Old Central Instrumentation Facility (CIF) Footprint	ML-2 Mod Yard - CIF Area: Create laydown yard with crane mat area to build/fabricate major components of the new Mobile Launcher 2 (ML-2). Area will include paved roadways, gravel parking lots, tents, trailers, and a covered concrete work area.	#18 Roads #20 Temporary Facilities VI.B	Area is previously disturbed and located where former CIF stood; the building was demolished in 2018.	23-0027
E Avenue SW @ intersection with Ransom Road	MILA laydown Area to support Space Commerce Way expansion: Use the former MILA area parking lot as a laydown yard for materials and a base camp location for operations.	#20 Temporary Facilities		23-0034; 23-0053

Location	Project	Appendix C Applicability	Notes*	REC/SP#
Industrial Area/Along 3 rd Street SE by M7-0581 (Prototype Building)	Move 2 Conex Boxes from Ransom Road location to M7-0581. These storage containers will be stored on the NW side of the building.	#20 Temporary Facilities		23-0039
VAB Area/Hazardous Waste Staging Area adjacent to Crawlerway leading out to 39-B	Create laydown yard in existing parking lot.	#20 Temporary Facilities		23-0049
VAB Area/At intersection of Saturn Causeway and Instrumentation Road	Create laydown yard in existing parking lot to support Saturn Causeway Road Analysis.	#20 Temporary Facilities		23-0061
NASA Causeway Bridge/Indian River Bridge NE Side Approach	Create staging area for USFWS Moore Creek Levee Repair Project.	#20 Temporary Facilities	Area was previously surveyed for DOT's Indian River Bridge Replacement Project with no archaeological resources present (FMSF Report No. 25880).	23-0067
Indian River Bridge, NW Side of NASA Parkway W	Create staging area for Indian River Bridge replacement.	#20 Temporary Facilities	Area was previously surveyed for DOT's Indian River Bridge Replacement Project with no archaeological resources present (FMSF Report No. 25880).	23-0044
<i>Remediation Projects</i>				
Shuttle Landing Facility Vicinity/ Various Locations	Groundwater Monitoring for PFAS at various locations: Install temporary groundwater monitoring wells.	#11 Health and Safety VI.B	The proposed sampling areas are in low and moderate ZAP areas with no known archaeological	12084; 12125; 12592

Location	Project	Appendix C Applicability	Notes*	REC/SP#
	<p>Previously reported in 2022 Annual Report (see REC/SP#11792; 12048).</p> <p>New SOW: Add additional sampling locations. Install well points and staff gauges with hand tools adjacent to Tow Way, Kennedy Pkwy, and Sharkey Road. Back fill with cement.</p>		<p>sites present. The only exception is one location at Hugh's Place (8BR541) which is ineligible for the NRHP. The majority of testing locations fall within previously disturbed areas located within road ROWs. Unexpected discovery stipulations in place.</p>	
<p>Shuttle Landing Facility Vicinity/ Sharkey Road, Tow Way, Kennedy Pkwy N.</p>	<p>Fire Station #2 Environmental Sampling</p> <p>Previously reported in 2021 Annual Report (see REC#/SP 11590).</p> <p>New SOW: Install 4 staff gauges and temporary monitoring wells with hand tools.</p>	<p>#11 Health and Safety</p> <p>VI.B</p>	<p>Areas are within drainage ditches/ponds in previously disturbed areas. Unexpected discovery stipulations in place.</p>	<p>12563</p>
<p>Contractor Support Building #7/J6-2327 along Kennedy Pkwy N</p>	<p>PFAS Assessment: Groundwater sampling in 9 boring locations to depths of @ 45-60 feet. Backfill with cement.</p>	<p>VI.B</p>	<p>Sampling areas are located in a previously surveyed area with no recorded archaeological sites (FMSF Report No. 4491) or are in the road ROW for Kennedy Pkwy N.</p>	<p>12203</p>
<p>Off Cape Road</p>	<p>Monitoring Well Installation: Place nine boreholes within PRL 217/SWMU 113 and backfill with cement.</p>	<p>VI.B</p>	<p>Within high and moderate ZAPs. Unexpected discovery</p>	<p>12232; 12449</p>

Location	Project	Appendix C Applicability	Notes*	REC/SP#
			stipulations in place.	
LC-34	Hot Spot Investigation Areas: Use direct push technology to collect groundwater and soil samples.	VI.B	Previously surveyed with negative results (FMSF Survey Report No. 25006).	12395
Beacon 42 Boat Ramp, U.S. Fish & Wildlife/ National Park Support Buildings and Area	Soil Remediation/PRL #228 Previously reported in 2022 Annual Report (see REC/SP# 12006). New SOW: Install a single monitoring well to a max depth of 20 ft below ground surface. in an area previously excavated in early 2023.	#11 Health and Safety VI.B	The project is in a high ZAP and Historical Area #31 Beacon Camp. The Relic Grove Site (8Br1680) is to the west. However, the project will take place in a previously surveyed area that yielded negative findings (FMSF Report No. 3271). Unexpected discovery stipulations in place.	12593
Wilson's Corner	Solid Waste Management Unit 001 Previously reported in 2021 Annual Report (see REC/SP# 11338). New SOW: Maintenance of air sparge system including continued operation and maintenance checks on air sparge system; periodic mowing and clearing to maintain paths to monitoring wells; hand digging to	#2 Building Maintenance and Repair #11 Health and Safety #13 Landscaping	The project is located within the historical area of Wilson's Corner, noted as containing two structures and a church that appear on the 1949 quadrangle map. This project is in a previously disturbed area, some of which has been subject to survey (FMSF Survey No.	12580

Location	Project	Appendix C Applicability	Notes*	REC/SP#
	access air sparge wellheads; groundwater Sampling; repairs to existing monitoring wells; removal of above-ground concrete debris; and sonic drilling activities for monitoring well installation.		3447). Unexpected discovery stipulations in place.	

Table 3. Projects Requiring Consultation in 2023

Project	Project Description	Notes	SHPO Concurrence	REC/SP#
Cultural Resource Assessment Survey, Wetlands Mitigation Sites	Create three wetland mitigation sites. All three sites total @ 121.28 acres.	No Historic Properties Affected A combination of a due diligence review and archaeological survey was conducted for the proposed wetland mitigation areas.	September 26, 2023 DHR Project File No.: 2022-7243	N/A
Modifications to Launch Control Center	Modernize office space within First Floor Spaceport Integration and Console Rooms (1R33-37 and 1R40).	No Adverse Effect	March 23, 2023 DHR Project File No.: 2023-1049	12158; 12372
Proposed Modification to the Crawlerway and Demolition of Mobile Launcher Platform 3	Temporarily modify Crawlerway in MSS Park Site to aid in demolition of MLP-3; MLP-3 demolition notification.	No Adverse Effect Consultation regarding demolition of MLP-3 was completed in 2010 [DHR Project File No. 2010-3995].	April 4, 2023 DHR Project File No.: 2023-1214 SHPO noted demolition of MLP-3 was adequately mitigated through completion of Level II HAER, accepted by SHPO and NPS in 2009.	12160; 23-0010
Proposed Lease and Modification to the Vehicle Assembly Building High Bay 1 and 2 and the Crawlerway	Lease of High Bay 1 to a commercial provider and resulting modifications to High Bay 1 and the Crawlerway; and NASA's modifications to High Bay 2 for the SLS.	Adverse Effects which were adequately mitigated through 2009 HAER	April 19, 2023 DHR Project File No.: 2023-1728	12238; 12462; 12505; 12579
FPL Saturn Substation and Distribution Project	Extend distribution facilities 4.5 miles from the new	No Adverse Effect	August 8, 2023	23-0038; 22-0077; 23-0063;

Project	Project Description	Notes	SHPO Concurrence	REC/SP#
	Saturn substation location to the LLF. Facilities will include 8 directionally bored conduits, 4 FPL switch cabinets and load bearing feeder splice boxes spaced at @ 800' intervals.	A CRAS was conducted. One archaeological site that is ineligible for the NRHP is present. Other historic properties within the APE noted.	DHR Project File No. 2023-2624-B	12461; 12487; 12573; 12546; 12599; 12218; 12369; 12433; 12434
KSC Visitor Center Administrative Complex and Exhibit Space	Demolish four existing buildings in the administrative complex and construct a new exhibit hall. Construct a new administration building within the footprint of the current Parking Lot #2.	No Historic Properties Affected Building survey conducted. No buildings or historic districts listed in or eligible for listing in the NRHP present. Ground disturbance limited to previously disturbed areas and areas of low probability.	November 21, 2023 with Unexpected Discovery stipulation condition DHR Project File No.: 2023-6370	12431; 12327; 12261
KSC Visitor Center Retail Warehouse	Build a new warehouse in a currently undeveloped area.	No Historic Properties Affected A CRAS was conducted. No archaeological sites present. Two drainage canals associated with former orange groves were determined ineligible for the NRHP.	December 6, 2023 DHR Project File No.: 2023-6603	12145; 12309
Missile Assembly Building AE (Hangar AE) Stair Tower	Remove existing stair access and replace it with a free-standing stair	No Adverse Effect with condition that stair tower is	January 3, 2024 DHR Project File No.: 2023-7169	12679; 12314

Project	Project Description	Notes	SHPO Concurrence	REC/SP#
	tower to address safety issues.	painted to match the color of the existing building.		

Table 4. Outstanding Mitigation Plans and Memoranda of Agreements

Historic Property	Agreement Name	Mitigation Measure(s)	Status
Launch Complex 34 (LC-34), 8BR2279	MOA Between NASA and FL SHPO Regarding the Launch Pedestal Hazard Abatement at Launch Complex 34, at the Cape Canaveral Air Force Station	Before/after digital photos per NPS Digital standards were distributed to FL SHPO and NPS on 10/26/22.	Complete. No further reporting of NASA-specific commitments will occur. FL SHPO accepted the photos on 12/2/2022 and stated that NASA has fulfilled its MOA commitments. NPS accepted the photos on 7/14/2023.
Indian River Bridge (aka NASA Causeway Bridge) (M3-0003), 8BR2956	FDOT Mitigation Plan [DHR Project File No. 2019-1535C]	FDOT is lead federal agency for this Mitigation Plan. The only NASA-specific commitment is to post the HAER and FMSF for public interpretation on the NASA-KSC website. This was completed on 1/20/2023.	Complete. No further reporting of NASA-specific commitments will occur.

**Historic Properties at Kennedy Space Center
2008 - 2023**

<i>Facility Number</i>	<i>FMSF Number</i>	<i>Facility Name</i>	<i>Associated Program(s)</i>	<i>Listed, Eligible, Individual (I), or Contributing (C) Resource</i>	<i>Status</i>
OV-0104	No BR #	Orbiter Atlantis	SSP	Eligible, I	
K6-0848	8BR1684	Vehicle Assembly Building	Apollo SSP	Listed, I Eligible, I	
K6-0947	8BR3150	VAB Utility Annex	Apollo	Listed, C (to VAB)	
K7-1005	8BR2986	Barge Terminal Facility	Apollo SSP	Eligible, C (to VAB) Eligible, C	
K6-0900	8BR1685	Launch Control Center	Apollo SSP	Listed, I Eligible, I	
UK-0008	8BR1689	Crawlerway	Apollo SSP	Listed, I Eligible, I	
CT-1, CT-2	8BR1688	Crawler Transporter 1 & 2	Apollo SSP	Listed, I Eligible, I	
M6-0409X	8BR1690	Press Site: Clock and Flag Pole	Apollo SSP	Listed, I Eligible, I	
M6-0399	8BR1691	Headquarters Building	Apollo	Listed, I	Demolished 2022
M7-0355	8BR1693	Neil Armstrong Operations and Checkout (O&C) Building	Apollo	Listed, I	
M6-0342	8BR1692	Central Instrumentation Facility	Apollo	Listed, I	Demolished 2018
L6-0247	8BR1998	Manufacturing Building/Booster Fabrication Facility (BFF)	SSP	Eligible, I	
M7-0657	8BR2014	Parachute Refurbishment Facility	SSP	Eligible, I	Demolished 2016
M7-0777	8BR2016	Canister Rotation Facility (aka Launch Abort System Facility)	SSP	Eligible, I	
	8BR2017		SSP		Disposed 2011
		Payload Cannister 1 & 2		Eligible, I	
	8BR2019	Retrieval Ship, Liberty Star	SSP	Eligible, I	Transferred out of NASA Ownership
	8BR2020	Retrieval Ship, Freedom Star	SSP	Eligible, I	Transferred out of NASA Ownership

Associated Programs: Mercury = Project Mercury; SSP = Space Shuttle Program; ELV = Expendable Launch Vehicle Program; ISS = International Space Station Program.

Listed, Eligible, Individual, or Contributing Resource: Listed = Listed in the National Register of Historic Places (NRHP); Eligible = Eligible for listing in the NRHP; I = Individually Listed or Eligible Resource; C = Contributing Resource to a Historic District or Multiple Property Listing

<i>Facility Number</i>	<i>FMSF Number</i>	<i>Facility Name</i>	<i>Associated Program(s)</i>	<i>Listed, Eligible, Individual (I), or Contributing (C) Resource</i>	<i>Status</i>
MLP-1, MLP-2, MLP-3	8BR2021	Mobile Launcher Platforms (1, 2 & 3)	SSP	Eligible, I	1 & 3 – Mothballed; 2 Demolished 2003
K6-0494	8BR1997	Rotation/Processing Facility	SSP	Eligible, I	
M7-0360	8BR2671	Space Station Processing Facility	ISS	Eligible, I	
M7-0361A	No BR #	Ammonia Vapor Containment Building	ISS	Eligible, C (to SSPF)	
49635	8BR2905	Bioastronautics Operations Support Unit (BOSU)	Apollo	Eligible, I	Demolished 2014
K8-1699	8BR2990	Beach House	Apollo SSP	Eligible, I Eligible, I	
M7-0409	8BR2969	Engineering Development Lab	Apollo	Eligible, I	
M3-0003	8BR2956	Indian River Bridge	Apollo SSP ISS	Eligible, I Eligible, I Eligible, I	Demolished 2023
E4-2414	8BR2957	Haulover Canal Bridge	Apollo SSP ISS	Eligible, I Eligible, I Eligible, I	
M7-1150	8BR2955	Banana River Bridge	Apollo SSP ISS	Eligible, I Eligible, I Eligible, I	
	8BR1686	Launch Complex 39 Pad A Historic District	Apollo SSP	Listed Eligible	Leased
J8-1708	8BR1995	Launch Complex 39 Pad A	Apollo SSP	Listed, I Eligible, I, C	Leased
J8-1462	8BR2094	High Pressure GH2 Facility	Apollo SSP	Listed, C Eligible, C	Leased
J8-1502	8BR2095	LOX Facility	Apollo SSP	Listed, C Eligible, C	Leased
J8-1503	8BR2096	A-1 Operations Support Building	Apollo SSP	Listed, C Eligible, C	Leased
J8-1614	8BR2102	A-2 Operations Support Building	Apollo SSP	Listed, C Eligible, C	Leased
J8-1512	8BR2097	Camera Pad No. 1	Apollo SSP	Listed, C Eligible, C	Leased
J8-1714	8BR2105	Camera Pad No. 2	Apollo SSP	Listed, C Eligible, C	Leased
J8-1961	8BR2107	Camera Pad No. 3	Apollo SSP	Listed, C Eligible, C	Leased
J8-1956	8BR2106	Camera Pad No. 4	Apollo	Listed, C	Leased

<i>Facility Number</i>	<i>FMSF Number</i>	<i>Facility Name</i>	<i>Associated Program(s)</i>	<i>Listed, Eligible, Individual (I), or Contributing (C) Resource</i>	<i>Status</i>
			SSP	Eligible, C	
J8-1554	8BR2100	Camera Pad No. 6	Apollo SSP	Listed, C Eligible, C	Leased
J8-1513	8BR2098	LH2 Facility	Apollo SSP	Listed, C Eligible, C	Leased
J8-1563	8BR2101	Electrical Equipment Building No. 1	Apollo SSP	Listed, C Eligible, C	Leased
J8-1553	8BR2099	Electrical Equipment Building No. 2	Apollo SSP	Listed, C Eligible, C	Leased
J8-1811	8BR2110	Electrical Equipment Building No. 3	SSP	Eligible, C	Demolished 2023
J8-1856	8BR2111	Electrical Equipment Building No. 4	SSP	Eligible, C	Leased
J8-1703	8BR2103	Slidewire Termination Facility	Apollo SSP	Listed, C Eligible, C	Leased
J8-1707	8BR2104	Water Chiller Building	Apollo SSP	Listed, C Eligible, C	Leased
J8-1610	8BR2108	Water Tank	SSP	Eligible, C	Leased
J8-1611	8BR2109	Flare Stack	SSP	Eligible, C	Leased
J8-1906	8BR2113	Hypergol Fuel Facility	SSP	Eligible, C	Leased
J8-1862	8BR2112	Hypergol Oxidizer Facility	SSP	Eligible, C	Demolished 2017
J8-1564	No BR #	Foam Building	Apollo	Listed, C	Leased
J8-1565	No BR #	Pump House	Apollo	Listed, C	Leased
J8-1659	No BR #	Compressed Air Building	Apollo	Listed, C	Leased
J8-1753	No BR #	Remote Air Intake Building	Apollo	Listed, C	Leased
J8-1858	No BR #	Azimuth Alignment Station	Apollo	Listed, C	Demolished 2014
	8BR1687	Launch Complex 39 Pad B Historic District	Apollo SSP	Listed Eligible	
J7-0337	8BR2010	Launch Complex 39 Pad B	Apollo SSP	Listed, I Eligible, I, C	
J7-0132	8BR2114	B-1 Operations Support Building	Apollo SSP	Listed, C Eligible, C	
J7-0243	8BR2122	B-2 Operations Support Building	Apollo SSP	Listed, C Eligible, C	
J7-0140	8BR2115	High Pressure GH2 Facility	Apollo SSP	Listed, C Eligible, C	Demolished 2017
J7-0182	8BR2116	LOX Facility	Apollo SSP	Listed, C Eligible, C	
J7-0191	8BR2118	Camera Pad B No. 1	Apollo SSP	Listed, C Eligible, C	

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J7-0342	8BR2124	Camera Pad B No. 2	Apollo SSP	Listed, C Eligible, C	
J7-0589	8BR2127	Camera Pad B No. 3	Apollo SSP	Listed, C Eligible, C	
J7-0584	8BR2126	Camera Pad B No. 4	Apollo SSP	Listed, C Eligible, C	
J7-0183	8BR2117	Camera Pad B No. 6	Apollo SSP	Listed, C Eligible, C	
J7-0192	8BR2119	LH2 Facility	Apollo SSP	Listed, C Eligible, C	
J7-0241	8BR2121	Electrical Equipment Building No. 1	Apollo SSP	Listed, C Eligible, C	
J7-0231	8BR2120	Electrical Equipment Building No. 2	Apollo SSP	Listed, C Eligible, C	
J7-0331	8BR2123	Slidewire Termination Facility	Apollo SSP	Listed, C Eligible, C	Mothballed 2017
J7-0240	8BR2128	Flarestack	SSP	Eligible, C	
J7-0385	8BR2125	Water Chiller Building	Apollo SSP	Listed, C Eligible, C	
J7-0288	8BR2129	Water Tank	SSP	Eligible, C	
J7-0242	8BR3046	Foam Building	Apollo	Listed, C	Mothballed
J7-0490	8BR2130	Hypergol Oxidizer Facility	SSP	Eligible, C	Demolished 2011
J7-0534	8BR2132	Hypergol Fuel Facility	SSP	Eligible, C	Demolished 2011
J7-0491	8BR2131	Electrical Equipment No. 3	SSP	Eligible, C	Demolished 2011
J7-0535	8BR2133	Electrical Equipment No. 4	SSP	Eligible, C	Demolished 2011
J7-0338	No BR #	Compressed Air Building	Apollo	Listed, C	
J7-0537	No BR #	Azimuth Alignment Station	Apollo	Listed, C	Mothballed
J7-0432	No BR #	Remote Air Intake Building	Apollo	Listed, C	
	8BR1986	Shuttle Landing Facility (SLF) Historic District	SSP	Eligible	
UK-0027	8BR1987	Shuttle Landing Runway	SSP	Eligible, I, C	Leased
J6-2313	8BR1988	Landing Aids Control Building	SSP	Eligible, I, C	Leased
J6-2262	8BR1989	Mate-Demate Device	SSP	Eligible, I, C	Demolished 2016
	8BR1990	Orbiter Processing Historic District	SSP	Eligible	

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K6-0894	8BR1991	Orbiter Processing Facility	SSP	Eligible, I, C	Leased
K6-0696	8BR1992	Orbiter Processing Facility High Bay 3 (includes the Space Shuttle Main Engine Processing Facility)	SSP	Eligible, I, C	Leased
K6-0794	8BR1994	Thermal Protection System Facility	SSP	Eligible, I, C	
	8BR1996	Solid Rocket Booster (SRB) Disassembly and Refurbishment Complex Historic District	SSP	Eligible	
66250	8BR2001	Hangar AF	SSP	Eligible, C	Federal Transfer 2021
66251	8BR2002	High Pressure Gas Facility	SSP	Eligible, C	Federal Transfer 2021
66240	8BR2003	High Pressure Wash Facility	SSP	Eligible, C	
66242	8BR2004	First Wash Building	SSP	Eligible, C	Demolished 2014
66244	8BR2005	SRB Recovery Slip	SSP	Eligible, C	Federal Transfer 2014
66310	8BR2006	SRB Paint Building	SSP	Eligible, C	
66320	8BR2007	Robot Wash Building	SSP	Eligible, C	Demolished 2016
66249	8BR2008	Thrust Vector Control Deservicing Building	SSP	Eligible, C	
66340	8BR2009	Multi-Media Blast Facility	SSP	Eligible, C	
	8BR2932	NASA KSC Railroad System Historic District	SSP	Eligible	
UK-0022	8BR2931	Railroad Track	SSP	Eligible, C	
H2-1198	8BR2906	Jay Jay Bridge	SSP	Eligible, C	
NLAX170	8BR2908	70-Ton Aft Skirt Car	SSP	Eligible, C	
NLAX171	8BR3042	70-Ton Aft Skirt Car	SSP	Eligible, C	Transferred out of NASA Ownership
	8BR2923	Locomotive 1	SSP	Eligible, C	Transferred out of

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					NASA Ownership
	8BR3043	Locomotive 2	SSP	Eligible, C	Transferred out of NASA Ownership
	8BR3044	Locomotive 3	SSP	Eligible, C	Transferred out of NASA Ownership
	8BR2015	Hypergolic Maintenance and Checkout Area Historic District	SSP	Ineligible due to loss of historic properties	
M7-0961	8BR1993	Hypergol Module Processing North	SSP	Eligible, I, C	Demolished 2016
M7-1212	8BR2933	Hypergol Module Processing South	SSP	Eligible, I, C	Demolished 2020
M7-1061	8BR2000	Hypergol Support Building	SSP	Eligible, C	Demolished 2016
	8BR3073	NASA-owned Cape Canaveral Air Force Station Industrial Area Historic District*	Mercury ELV SSP	Eligible Eligible Eligible	
01728	8BR3069	Hangar N	SSP	Eligible, C	Federal Transfer 2015
54928	8BR2190	Little N Storage Building	SSP	Eligible, C	Federal Transfer 2015
55005	8BR2972	Hangar M Annex	SSP	Eligible, C	Demolished 2016
60540	8BR2977	Solar Array Test Building	ELV	Eligible, C	Demolished 2016
60650	8BR2975	E&O Building	Mercury ELV	Eligible, C Eligible, C	Federal Transfer 2014
60680	8BR2976	Missile Assembly Building AE	ELV	Eligible, I, C	
01726	8BR3070	Hangar S	Mercury	Eligible, I, C	Federal Transfer 2017

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		*Thrust Vector Control Deservicing Building and Hangar AF also contribute to the historic district			