

United States Department of the Interior
National Park Service

For NPS use only

National Register of Historic Places
Inventory—Nomination Form

received JUN 11 1986
date entered 8-4-86

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic Dredge Sainte Genevieve, Davenport Multiple Resource Area Nomination

and/or common The Genny

2. Location

Antoine LeClair Park

street & number 100' downstream of the Main St. Landing not for publication

city, town Davenport vicinity of

state Iowa code 019 county Scott code 163

3. Classification

Category	Ownership	Status	Present Use
<input type="checkbox"/> district	<input checked="" type="checkbox"/> public	<input checked="" type="checkbox"/> occupied	<input type="checkbox"/> agriculture <input checked="" type="checkbox"/> museum
<input type="checkbox"/> building(s)	<input type="checkbox"/> private	<input type="checkbox"/> unoccupied	<input type="checkbox"/> commercial <input type="checkbox"/> park
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input type="checkbox"/> educational <input type="checkbox"/> private residence
<input type="checkbox"/> site	Public Acquisition	Accessible	<input type="checkbox"/> entertainment <input type="checkbox"/> religious
<input checked="" type="checkbox"/> object	<input type="checkbox"/> in process	<input checked="" type="checkbox"/> yes: restricted	<input type="checkbox"/> government <input type="checkbox"/> scientific
	<input type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial <input type="checkbox"/> transportation
	N/A	<input type="checkbox"/> no	<input type="checkbox"/> military <input type="checkbox"/> other:

4. Owner of Property

name City of Davenport

street & number City Hall, 226 W. 4th St.

city, town Davenport vicinity of state Iowa

5. Location of Legal Description

courthouse, registry of deeds, etc. City of Davenport, Community Development Department

street & number City Hall, 226 W. 4th Street

city, town Davenport state Iowa

6. Representation in Existing Surveys

title N/A* has this property been determined eligible? yes no

date federal state county local

depository for survey records

city, town state

7. Description

Condition		Check one	Check one
<input type="checkbox"/> excellent	<input type="checkbox"/> deteriorated	<input type="checkbox"/> unaltered	<input type="checkbox"/> original site
<input checked="" type="checkbox"/> good	<input type="checkbox"/> ruins	<input checked="" type="checkbox"/> altered	<input checked="" type="checkbox"/> moved
<input type="checkbox"/> fair	<input type="checkbox"/> unexposed		date <u>berthed in Davenport on</u> <u>August 17, 1985</u>

Describe the present and original (if known) physical appearance

The Dredge Sainte Genevieve is a steam powered cutterhead dredge with an overall length of 267', displacement weight of 1,390 tons, 5'9" draft, reciprocating engines, and a paddlewheel propulsion system. Principal original features which remain intact include the dredge ladder (ladder length of 65' with a 35' depth capacity), dredge pump (1,200 cubic yards per hour capacity), the turbo-generator system (1,760 horse power steam turbine driving 1,200 KW and 250 KW generators), boilers (two 300 psi watertube units), and paddlewheel propulsion system. Cabins, quarters, galley, wardrooms, and storage areas remain 75 to 100% intact.

The Dredge Sainte Genevieve has a steel hull and superstructure of wood with steel strengthening. Her overall hull length is 265' 2" with a width of 47' 10". Moulded depth measures 8' 0" with a 5' 6" draft. Between 1963 and 1973, 97% of the hull bottom and 71% of the sides were replated. The Lower Deck has a steel bulkhead painted in gray and ivory. Trim colors are dark red, black and gray. All paint colors are consistent with the U.S. Army Corps of Engineers application and hues.

The Ste. Genevieve contained facilities onboard for three separate types of functions-- living quarters and crew support; dredging operations; and navigation and propulsion. Although these three uses were interconnected as a result of power supply, engineering requirements and operational necessity, the functions were separated on the three decks as follows:

- Lower Deck--Paddle wheel (propulsion); Engine Room and Tool Shop (propulsion and dredging equipment repairs); Boiler Room and fuel bunkers (propulsion and dredging power); Main Turbine and Pump Room (dredging); and cutterhead (dredging).
- Upper Deck--Crew quarters and lounge, officers' quarters and lounge, galley, dining rooms, and laundry (living quarters and crew support); Lever Room (dredging); and clerk and radio operator's offices (crew support).
- Top Deck---Pilot House (navigation) and spud structure (dredging).

A more detailed description of the condition, function and alterations follows.

8. Significance

Period	Areas of Significance—Check and justify below			
<input type="checkbox"/> prehistoric	<input type="checkbox"/> archeology-prehistoric	<input type="checkbox"/> community planning	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> archeology-historic	<input type="checkbox"/> conservation	<input type="checkbox"/> law	<input type="checkbox"/> science
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> literature	<input type="checkbox"/> sculpture
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> architecture	<input type="checkbox"/> education	<input type="checkbox"/> military	<input type="checkbox"/> social/ humanitarian
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> art	<input checked="" type="checkbox"/> engineering	<input type="checkbox"/> music	<input type="checkbox"/> theater
<input type="checkbox"/> 1800-1899	<input type="checkbox"/> commerce	<input type="checkbox"/> exploration/settlement	<input type="checkbox"/> philosophy	<input type="checkbox"/> transportation
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> communications	<input type="checkbox"/> industry	<input type="checkbox"/> politics/government	<input checked="" type="checkbox"/> other (specify)
		<input type="checkbox"/> invention		

Specific dates 1932-1936(+) **Builder/Architect** Dravo Corporation

Statement of Significance (in one paragraph)

The Dredge Ste. Genevieve is significant as the last sternwheel vessel and the last steam powered cutterhead dredge to be operated by the Corps of Engineers on the Mississippi River. Its retirement in December, 1984 marked the final chapter in the 117 year history of the steam powered dredging carried out by the Corps of Engineers. The Ste. Genevieve's career paralleled a period of major Mississippi River improvements which extended from the beginning of the 9 foot channel project in 1930 until its completion in 1940. Channel maintenance work and construction projects carried out by the Ste. Genevieve in subsequent years were essential for the operation of the Mississippi as a major inland transportation corridor.

The use of steam propelled dredges for government sponsored dredging on the Mississippi River began after the Civil War, and the 1870's saw an expansion of the government role in other types of Mississippi River improvements as well. The St. Louis District of the Corps of Engineers was established to coordinate and plan for improvements in the middle Mississippi River section during this period. Regularizing of the channel, removing snags, and harbor improvements were operations involving dredges in the St. Louis District. After 1900, flood prevention was added to the responsibilities of the Corps of Engineers and flood prevention construction projects involved the use of dredges as well. Dredging improvements were specifically authorized for the St. Louis District by Congressional actions in 1896, 1902, 1907, and 1922.

World War I saw river traffic expand greatly. The establishment of the Federal Barge Line operating between St. Louis and New Orleans beginning in 1918 further expanded the river commerce in the St. Louis District of the Corps of Engineers. As a result, river interests were successful in securing passage of the River and Harbor Act of 1927 which established the goal of a nine foot channel, 30 feet wide for the section of the Mississippi River below St. Louis.

9. Major Bibliographical References

See Continuation Sheet

10. Geographical Data

Acreeage of nominated property less than one acre

Quadrangle name Davenport East, IA-III

Quadrangle scale 1/24,000

UTM References

A

1	5	7	0	2	2	5	0	4	5	9	8	9	4	0
Zone			Easting					Northing						

B

Zone			Easting					Northing						

C

Zone			Easting					Northing						

D

Zone			Easting					Northing						

E

Zone			Easting					Northing						

F

Zone			Easting					Northing						

G

Zone			Easting					Northing						

H

Zone			Easting					Northing						

Verbal boundary description and justification

See Continuation Sheet

List all states and counties for properties overlapping state or county boundaries

state	N/A	code	county	code
state		code	county	code

11. Form Prepared By

name/title Marlys A. Svendsen, Senior Planner/Historian

organization City of Davenport date June 2, 1986

street & number 226 W. 4th Street telephone 319-326-7765

city or town Davenport state Iowa

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

national state local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

State Historic Preservation Officer signature David Cross

title State Historic Preservation Officer date 6/6/86

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I hereby certify that this property is included in the National Register

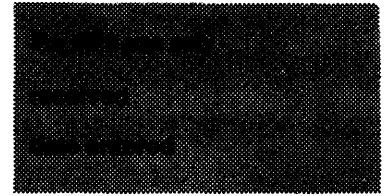
James Byers Entered in the National Register date 8/4/86
Keeper of the National Register

Attest: _____ date _____

Chief of Registration

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LOWER DECK:

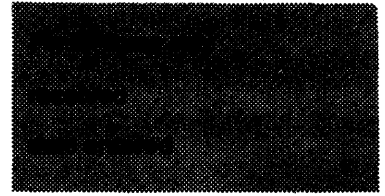
The cutterhead ladder is located at the center of the bow and contains the cutterhead itself and the structure for raising and lowering the cutterhead into the water. The semispherical suction head is equipped with six detachable blades or knives mounted on hub and ring castings and bolted in place. The outside diameter measures 6' 4" with an overall length of the cutter of 6' 3". The material is cast steel. The cutterhead rotated and loosened materials on the river face so that they could be drawn into the suction pipe and pumped back through the hull of the dredge and out one of the discharge pipes.

The Ste. Genevieve's cutterhead had the capacity to make a 250' wide cut to a depth of 35'. In operation, the cutterhead ladder was moved from side to side by reciprocating cables and winches, the latter located in the forward section of the Main Turbine and Pump Room. These winches were powered by port and starboard hauling engines called "gypsy" engines. A center winch raised and lowered the cutterhead to the desired depth. During operation, sliding 6' doors were opened into this area from the forward deck for easy access and observation by the crew.

The forward deck surrounding the cutterhead ladder contains a two hold access points, a gangway connecting port and starboard sections of the forward deck. Two alterations from the dredge's operational state appear here as well. An entrance gangway is secured in place on the port side. The gangway is made of aluminum and extends approximately 15' to shore. The gangway automatically raises and lowers as the water level fluctuates. The second alteration is the display of the "monkey rudders" adjacent to the cutterhead ladder. The monkey rudders were originally installed aft of the paddle wheel and were used for steering. Each measured approximately 4' by 4'. These rudders were removed by the U.S. Army Corps of Engineers while the Ste. Genevieve was moored in St. Louis.

The Main Turbine and Pump Room is located immediately aft of the forward deck. The Turbine and Pump Room is the largest room on board measuring approximately 99' by 35' 4". The dredge pump (original design, parts replaced and rotated throughout the Ste. Genevieve's career) is located at the center of room, approximately 36' below the deck. The dredge pump had a capacity of 1200 cubic yards per hour through its 20" discharge pipe. Its casing is made of two cast iron pieces, each weighing 7,500 pounds. During operation the access covers were opened from 2 to 20 times each six hour watch to inspect for debris. Suction for the pump comes from a snorkel located beneath the cutterhead-pump pipe.

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The dredge pump and cutterhead were driven by separate motors (both original). The cutterhead motor was a shunt wound type manufactured by the Westinghouse Electric Company. The drum type controller was also produced by Westinghouse. The motor operated at a capacity of 350 to 450 rpm. The 1200 horse power pump motor was driven by a 1000 kw generator while a 200 kw generator drove the cutterhead motor. The cutterhead motor was a compound wound design with a capacity of 720 rpm. Like the pump motor, it was produced to specification by the Westinghouse Electric Company.

Both generators derived their power from the main steam turbine located aft of the 1000 kw generator. The main steam turbine has a capacity of 1,800 hp at 5,000 rpm. A DeLaval Helical reduction gear connects this turbine to the 1000 kw generator. At the aft section of the Turbine and Pump Room is the main condenser with a capacity 3,100 square feet, the inter-after condenser, and the circulating pump controller and panel for conducting river water through the main condenser (all original).

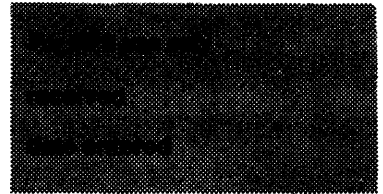
The DC panel which controled the amperage, voltage and cut-offs for these generators and all other generators on board is located along the starboard side. The panel measures 11' by 5'9" and is shielded from the dredge pump and motor by a plexiglass wall. Originally all power on board the Ste. Genevieve was DC but electrical upgrading carried out during the past decade generally involved AC installations. The power panel was disconnected from use in 1985 but the existing wiring onboard remains in use. All power panel switches and fuses remain in place.

Aft of the power panel on the starboard side are two 75 kw turbo DC generators (original). A refrigeration plant with ammonia condenser, compressor, and brine tank is located along the starboard bulkhead. A complete auxiliary power plant (original) is located opposite the generators. The auxiliary power plant was used when starting up from cold or if a major portion of the main condenser system was shut down for repairs. The auxiliary power plant was a small steam turbine system composed of a small condenser and a small condensating circulating pump.

Opposite the main condenser system along the port side are pumps for the fuel oil transfer system, the fire and bilge pump, and the potable water pumps and heater used for providing water service for crew and galley use. These pumps are original but the water purification system has been upgraded from the original stone filter system. Water was stored in two 800 gallon tanks located along the port side below deck.

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The Boiler Room (26' by 35' 4") is located immediately aft of the Main Turbine and Pump Room. The main boilers (original) for the dredge's steam powered propulsion and dredging operation are located here. Manufactured by Babcock and Wilcox, the two boilers are straight tube, cross drum boilers with a single drum measuring 41" by 10' 11". Allowable steam pressure is 310 psi with a heating surface of 3,100 square feet in each boiler. Each boiler has a steam capacity of 16,000 pounds per hour; average use was 11,000 pounds. Superheated steam is provided to the machinery on board by these boilers. Each boiler had three burners and was equipped with sinuous headers and a vertical baffle. Two Babcock and Wilcox superheaters are adjuncts to this system, each providing 100 degrees of heating capacity beyond the boilers' basic capacity. Each superheater has 186 square feet of heating surface.

An auxiliary or donkey boiler for heating the dredge during the winter time is located along the starboard side. It was powered by diesel fuel. This boiler does not show on original plans and is believed to have been an alteration made within the first few years of operation. Fuel oil heaters (original) were used to preheat the main boiler's fuel (black oil) to a temperature of 210 to 225 degrees in order for it to ignite. One watchman maintained this area during each watch, cleaning the filters and burners regularly.

Two oil bunkers (original) are located beneath the Boiler Room, each with a capacity of 8,000 gallons. The Ste. Genevieve consumed a minimum of 3,000 gallons of fuel each day. To augment the onboard storage capacity, a fuel barge with a capacity of 180,000 gallons would accompany the Ste. Genevieve on most trips.

Aft of the Boiler Room are the dredging spuds. The spuds currently on the Ste. Genevieve were installed in 1958 and are made of cast steel. The cylinder shaped spuds measure 46' 4" and have a diameter of 27". The approximate weight of each spud is 14 tons. The original plans for the spuds called for Douglas Fir. The Ste. Genevieve has had a number of replacement spuds at varying weights since its original construction. Replacement spuds were usually redwood or cypress. Spuds were integral to the dredging function of the Ste. Genevieve. In operation, the spuds would be dropped to the river bottom one at a time in order to allow the cutterhead ladder to pivot from side to side. Spud raising and lowering was controlled by the same hauling engines which operated the cutterhead's sideway movement. When wooden spuds were in use, eight-foot 2,000 pound sections or "shoes" would occasionally break-off and remain buried below the river.

The Engine Room is located at the stern of the dredge. This area measures approximately 46' 6" by 40' 8" and functioned as a tool room, machine shop

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and carpentry area. Storerooms for fixture storage was below deck. Fixed machinery in the Engine Room includes two steam powered propelling engines, Nordberg tandem compound engines. Cylinder diameter is 6". Each engine is rated at 500 hp and operates a Pittman arm which transfers the energy to the sternwheel through a crank arm. The Pittman arm is 31'6" long with a 8-1/2" stroke. Forward and reverse motion is accomodated by the direction the paddle wheel is turned.

The Engine Room also contains a variety of power equipment for accomplishing repairs while the Ste. Genevieve was away from port--a drill press, lathe, and bench grinder. Plan storage cabinets, lockers, and work benches finish out the Engine Room's furnishings. The floor plan of the room was altered at least 10 years ago when an AC generator was installed in the forward, port section. Metal walls were installed separating this generator from the balance of the room. For noise abatment the generator was diesel powered.

In the forward, center section of the room is the operator's stand. This raised platform provided a command post for the officer responsible for receiving and executing commands received from the Pilot House by engine order telegraph. The telegraph and throttles are located above the operator's stand and consist of a red lever for astern, black lever for ahead, cutout lever, and release lever. The central location of the operator's stand allowed the operator to observe the engine's operation as well as monitoring steam pressure gauges, cylinder gauges and exhaust gauges on the gauge board.

The paddle wheel itself contains 14 buckets each measuring 28' by 20" by 2". The wheel's diameter is 20' with approximately 16' exposed above the waterline. The Ste. Genevieve's original design has been maintained through the years but its wooden buckets have been replaced frequently as a result of seasonal maintenance and damage resulting from snags or collisions. The sternwheel is painted bright red matching the U.S. Army Corps of Engineer's color specifications.

UPPER DECK:

The Upper Deck contains 29 separate rooms including the Lever Room, Dredge Master's stateroom and bath, guest stateroom, Pilot's stateroom, Chief Engineer's stateroom and bath , radio room, Clerk's office, six double occupancy officer's staterooms, officer's wardroom, linen locker, officer's toilet, officer's mess, galley, pantry, refrigerator/freezer room, crew's mess room, cook's cabin, waiter's cabin, crew's wardroom, laundry, crew's quarters, and crew's toilet.

The Lever Room is located in the center of the forward section and is raised above the balance of the Upper Deck approximately 6'. The Lever Room or

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Operating House takes its name from the fact that this was the area from which all dredging operations were coordinated. The principal functions--raising and lowering the spuds and moving the cutterhead--were controlled by a series of levers. The Dredge Engineer had better than average visibility from this elevated location for monitoring all phases of the dredging from intake to output of the dredge spoil. Alterations of this space were carried out in 1978 and principally included window replacements. Four single light sliding windows on the port and starboard sides replaced three 4-light sliding windows. The three windows across the front have been replaced with new sash with the following configuration: a fixed light in a cantilevered position on the top and a casement window below. The rear windows open onto the Top Deck and contain replacement sash with a single light configuration. The original doors have been replaced with wood doors with a full length, undivided light.

Immediately aft of the Lever Room at the main level of the Upper Deck is the dredge's office. The office functioned as the central clearing house for personnel operations and contracting. The dredge's first aid supplies were also stored here. Two built-in storage closets are located in this office.

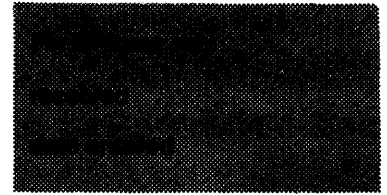
The Master's stateroom and the Engineer's stateroom were located on each side of the Lever Room on the Upper Deck. Both rooms were single occupancy cabins which doubled during the daytime as offices. Both rooms also had lavatories and access to semi-private toilets and showers. The fixed furnishings in these rooms included the beds. Interior walls are painted tongue and groove wood surfaces. Flooring is asbestos tile. (Note: these finishes are found in each of the Upper Deck rooms unless otherwise noted.) Like all of the compartments on the Upper Deck, these staterooms have outside entrances as well as interior access door(s).

Aft of the Master's stateroom along the port side is the guest stateroom. The double occupancy cabin contains the original hanging metal bunk beds and a lavatory. This cabin would be used by visiting guests and Corps of Engineer's officers and inspectors. Aft of the Engineer's stateroom along the starboard side is the Pilot's stateroom. This double occupancy cabin was quarters for the dredge's two pilots--one on duty at all time. Both the guest stateroom and the Pilot's stateroom adjoin the semi-private toilets and showers.

The balance of the officer's quarters are located off a central hallway which doubled as the Officer's Wardroom. Four double occupancy staterooms measuring 7' 6" by 9' 7" were located along the port side and three slightly larger staterooms along the starboard side. In six of the staterooms, the original hanging metal bunks are intact. The Radio Room which doubled as the radio operator's cabin was the forward stateroom on the starboard side. Here the dredge's operational status would be communicated to passing river

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traffic and regular communication would be maintained with the Corps of Engineer's base in St. Louis and other Corps sites. The enclosed storage space above the radio operator's bunk was modernized in the past 10 years, a portable air conditioner was installed in the room's single window, and no original radio equipment remains in this room.

The Officer's Wardroom functioned as a lounge for the dredge's officers. The overhead skylight (now altered with wood panel inserts in place of glazing) provided natural light for the tables located below. Florescent lights, a water cooler, and a hanging electric heater are alterations in the Wardroom fixtures in the past 10 years.

The Linen Closet and Officer's Toilet are located between the Officer's Quarters/Wardroom and the Officers' Mess Room. The Linen Closet was a central storage area for the dredge's linen supplies and included ceiling to floor shelving in a horseshoe configuration. The Officer's Toilet contains original fixtures for the W.C.'s and basins but new shower stalls.

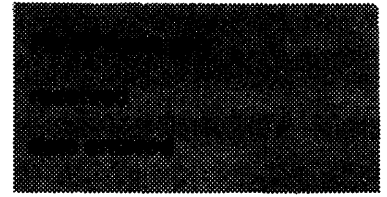
The Galley is located in the center of the Upper Deck with the Officer's Mess Room (forward portside) and the Crew's Mess Room (aft portside) along the port side. The Officer's Mess Room was remodeled in the 1970's with hardboard panels installed over the tongue and groove walls and central air conditioning ducts concealed behind the walls. The Crew's Mess Room has been altered through the closure of the skylight with wood panels replacing the original glazing. The balance of the Crew's Mess is unaltered.

The Ste. Genevieve's Galley is fully equipped as a restaurant kitchen and maintains the original floor plan although modifications have been made in the equipment. Original cabinets include a dresser and shelves and work table/cabinet. New equipment was installed in 1974 when the dredge went through a general improvement program. Equipment dating from this period included the propane powered stove and ice machine. Stainless steel surfaces were applied to all work areas and new stainless steel sinks were also installed. No dishwasher is onboard as a result of a Ste. Genevieve tradition that crew members did their own dishes. The overhead sky light has been closed with wood panels replacing the original glazing.

Food storage areas forward from the Galley included a pantry equipped with open shelving and a walk-in refrigerator/freezer. The refrigerator/freezer was newly installed in 1980 or 81 and contains an access door along the starboard side for easy loading of provisions. Two separate cabins for two cooks and four waiters were located adjacent to the Crew's Mess Room and Galley along the starboard side. Original hanging bunks and lockers are located in each of these cabins.

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A fire wall separates the food preparation and serving areas from the boilers and spud wells which extend through multiple levels of the dredge. A metal grating makes up the boiler casing--a "catwalk" connecting port and starboard sides along the outside of the boilers. Portable metal walkways also provide connections along the outside decks at the spud well points. These walkways remained moveable in order to allow for replacement to spuds or maintenance work.

The balance of the crew's facilities were at the stern. The Crew Wardroom was located along the port side. Evidence of the recreational habits of crewmen is the worn sections of the wall's tongue and groove surface adjacent to the dice table. Original skylight glazing in the ceiling has been replaced with wood panels and the access door to the crew bunkroom was closed as part of a general improvement program in 1975-76.

The Crew Quarters were originally one large open area with stacked bunks in the center of the room. Lockers lined inside walls and a skylight provided light and ventilation overhead. This area was altered in 1974 as part of a general improvement program for the Ste. Genevieve. Alterations included a division of the single 25' 6" by 29' 6" space into three compartments and an access hallway along the port side, the installation of insulation in the walls and ceilings, the installation of central air conditioning, and the installation of plastic coated hardboard paneling as a wall finish. All exterior window openings and doorways remained unaltered.

The Crew's Toilet and Lavatory were originally in separate, adjoining rooms at the stern. In 1975-76, the space was made into a single room and all new plumbing fixtures were installed. As in the Crew Quarters remodeling, no exterior doors or window openings were altered.

Top Deck:

The Top Deck of the Ste. Genevieve is accessed by metal steps or ladders near the Lever Room. The Pilot House is the only enclosed space located on the third level. This room is located above and slightly astern of the Lever Room and operates as the dredge's central control area. From here the master or pilot would navigate the vessel when it was underway. Propulsion and steering directives were carried out through the engine order telegraph (original) located in the center of the room. A series of bells, whistles and lights were also operated from this central location. Radio equipment, radar equipment and other navigational devices were modernized through the years and removed in December, 1984. Originally equipped with a spoke pilotwheel, levers now control the Ste. Genevieve's steering. The other principal feature of the Pilot House is the bench seat located between the two doors. The bench seat (original) or "liar's bench" is a tradition of pilot houses on steamboats in the 19th and 20th centuries nicknamed because

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of the tall tales which originated from this location. Approximately 50% of the brass trim and hardware in the Pilot House and elsewhere on board has been painted through the years.

The principal alterations of the Pilot House through the years have been to the windows. The port and starboard sides originally had three 4-light sliding windows (original windows remain above the pilot bench). These were replaced in 1981 with four single light sliding windows in two openings per side. The double hung windows in front of the Pilot House may have been retained but with single lights rather than 4/4 configurations.

The Top Deck was originally a clear space with access limited to equipment repairs. In 1936 a "Texas Deck" structure was installed using piping and canvas roofing adjacent to the Pilot House. In more recent years, the canvas was replaced with corrugated fiberglass.

Exterior:

The overall appearance of the exterior of the Ste. Genevieve is consistent with its 1932 design and construction. All exterior screen windows and screen doors are oak and most retain their varnished finish. Interior pocket blinds are also retained in approximately 80% of the windows. Exterior paint colors are applied according to current day U.S. Army Corps of Engineer's requirements:

- Old Ivory--exterior bulkhead, all levels
- Gray--railings; lower 2' of the bulkhead, Lower Deck; roof
- Dark Red--exterior deck surfaces, all levels; trim on Top Deck
- Black--signage, window sash, metal structural pieces, steam stacks, cutterhead
- Yellow--kevels, ladders
- Bright Red--paddlewheel buckets

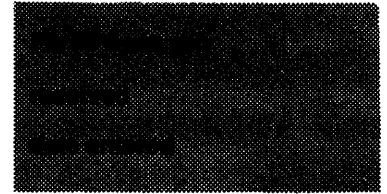
Summary of Integrity:

The Ste. Genevieve retains its distinct, original silhouette or profile. Elements of the profile include the jackstaff, spuds, smokestacks, and pilot house on the top deck; the paddlewheel at the stern; and the cutterhead ladder at the forward bow. The fiberglass Texas Deck structure and air conditioning condensers are the only changes in the profile of the Ste. Genevieve.

The original dredging system and propulsion system are intact. These systems include the cutterhead pumps and generators, turbines, condensers, boilers, auxiliary boiler, auxiliary power plant, fuel oil transfer system, fire and bilge pump, potable water pumps, ammonia condenser/compressor and

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brine tank, propelling engines, Pitman arms, paddlewheel, rudders, and engine order telegraph system.

The original floorplan of the Ste. Genevieve's living quarters deck has been retained except for the crew quarters area where separate lavatory and toilet rooms were made into one room and where the single open sleeping area was divided into three rooms and a hallway. The galley retains its original plan with replacement equipment and work surfaces. Flooring material has been replaced throughout the entire Upper Deck and skylights have wood panels in place of glazing. Approximately half of the officer's staterooms have original bunks, lockers, and chests. New showers have been installed in both officer's and crew's lavatories.

Alterations of the Ste. Genevieve, on balance, are minimal. Survival of floorplan, dredging systems, equipment and silhouette although not unique, are rare among Mississippi River dredges.

Location:

The Dredge Ste. Genevieve is located along a stone seawall which borders downtown Davenport's LeClaire Park. The Genny is held in place by a steel 15' spar and rope (wire cables) anchored in a concrete mooring structure. The mooring structure was designed and constructed for the Genny in July, 1985 and includes five steel pilings driven into bedrock and held in place by 90 cubic yards of concrete. Access to the Ste. Genevieve is by a custom aluminum ramp, 4' by 15', located at the forward section of the Lower Deck.

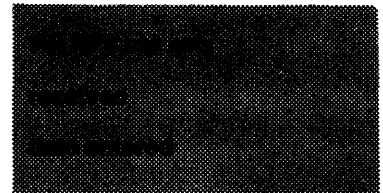
Plans call for the Ste. Genevieve to remain in its current location until a permanent location is prepared. Plans being discussed for a permanent site include an inland slip with drydocking capacity or a breakwater enclosure in the river. A downtown location will be retained for either design.

Methodology:

This nomination is within the boundaries of the Davenport Multiple Resource Area but was not included in earlier submissions due to the recent acquisition of the vessel by the City of Davenport. Similarly, the lack of a resource which speaks to riverine themes precluded a survey of those resources.

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The River and Harbor Act of 1930 extended the nine foot channel goal upstream to Minneapolis. The construction of 26 locks and dams above St. Louis as a part of this project was the largest river improvement project in the United States up to that time. (Note: The first lock and dam built as a part of this project, Lock and Dam 15, is located off the starboard bow of the Ste. Genevieve today.) As result of the Congressional actions, the work program of the St. Louis District was greatly expanded.

It was against this backdrop that in 1931 construction of two self-propelled pipeline dredges was undertaken by the St. Louis District of the Corps of Engineers. The Ste. Genevieve and her sister dredge, the Grafton, were built in 1932 by the Dravo Contracting Company at its Neville Island Yard, Pittsburgh, Pennsylvania. Major William A. Snow served as District Engineer from 1930 to 1933 during the period in which the Ste. Genevieve was constructed and commissioned.

Dravo successfully bid and constructed eight suction dredges for the U.S. Army Corps of Engineers during the decade of the 1930's. This work was regarded as an "important step in the development of the [Dravo] Engineering Works as a major shipbuilding unit." (A Company of Uncommon Enterprise: The Story of Dravo Corporation 1891-1966). The original cost of the Ste. Genevieve was \$413,217.03.

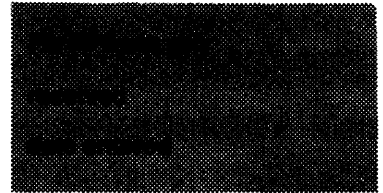
The 1930's was a period of low water on the middle Mississippi and Ohio Rivers, and as a result, dredging activity became critical to the operations of the Federal Barge Line and other barge companies. As many as eleven dredges worked during the decade of the '30's in the St. Louis District. The Ste. Genevieve was one of the principal vessels in the floating plant during this period. The Ste. Genevieve's cutterhead design and immense capacity made her a favored dredge for the St. Louis District's most demanding projects. A measure of the importance of dredging operations by the St. Louis District is the amount budgeted--\$746,000 in 1934.

The result of dredging operations by vessels such as the Ste. Genevieve was the creation of a relatively hazard free transportation corridor which would accomodate larger and deeper draft barges. Increased efficiency and reliability of barge traffic in turn lead to lower freight rates--approximately 80% of rail rates--and a more competitive position for river traffic. The shift in advantage from rail to river reversed a sixty year trend in commercial transportation development that had begun during the Civil War in the Mississippi River Valley.

During her 52 year dredging career, the Ste. Genevieve was headquartered in the St. Louis District. In 1932 when the dredge was commissioned, the St. Louis District included 195 miles of the Mississippi River between the mouths of the Missouri and Ohio Rivers, 23.3 miles of the Mississippi between the Missouri and Illinois Rivers, 8 miles of the Old River and 30

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Miles of the Atchafalaya Rivers, both in Louisiana. Through the years the dredging operations were extended to other rivers as well in order to accomplish operational efficiencies within the Corps of Engineers. As a result, the Ste. Genevieve operated on the Ohio River to well above Cincinnati and more distant sections of the Missouri River.

The Dredge Ste. Genevieve is a significant example of advanced inland waterway dredging technology from its day. The original design of the Ste. Genevieve called for a self-propelled 20" pipeline dredge equipped with a cutterhead dredging apparatus and a sternwheel propulsion system. This system remained intact throughout its operational life. Its operational efficiency and capacity were enhanced by the design decision which placed its spuds in the stern quarter of the vessel. This decision extended the width of the cut possible by the cutterhead.

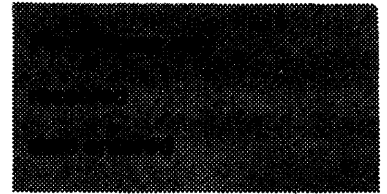
The Corps of Engineer's floating plant was almost entirely steam powered at the time the Ste. Genevieve was designed and built. Following World War II new vessels were more often diesel powered. The steam powered equipment required larger crews for operation and could not be quickly shut down or started up. Steam powered equipment was favored by dredge operators because of its overall reliability and ability to provide extra horse power by adding extra steam. Diesel cylinders created more noise in operation than a steam system.

The Ste. Genevieve's design as a cutterhead enhanced its dredging applications. Unlike dust pan dredges or dipper dredges, a cutterhead can cut through harder materials and can handle much longer pipelines. This flexibility allowed the Ste. Genevieve to operate its channel maintenance function ten months a year. Problem shoals and bars were removed annually.

In addition, the Ste. Genevieve was able to undertake major new construction projects inside and outside of the St. Louis District. An example of the type and scale of project completed by the Ste. Genevieve was the \$2.2 million French Bottoms cut-off near St. Joseph, Missouri in 1952. In this project, the Ste. Genevieve worked in cooperation with the Dredge William Black, Kansas City District, and several private contractors. The Ste. Genevieve's cutterhead design allowed the dredge to cut an 18' deep and 200' wide pilot channel 9,000' in length in order to reroute the Missouri River through French Bottoms. More than 1 million cubic yards of spoil was removed by the Ste. Genevieve in this construction project.

In 1973 the St. Louis District made preliminary plans for surplusing the Ste. Genevieve because of her cost of operations and maintenance. These plans were abandoned in 1974 following major flooding on the Mississippi and Illinois Rivers. Ten years later, the St. Louis District made plans for surplusing again and in December, 1984, the Ste. Genevieve returned to the Corps of Engineer's Service Base for the last time.

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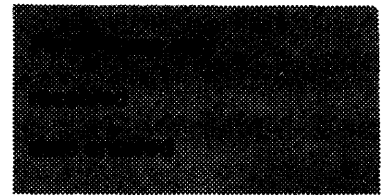
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In April, 1985 the City of Davenport was awarded transfer of the Ste. Genevieve following a competition among Mississippi River towns. Plans for bringing the dredge upstream from St. Louis involved towing by a private barge company in August. A skeleton crew of U.S. Naval Reserve volunteers came onboard from St. Louis to Buffalo, Iowa. Cleaning, stowing gear, painting, and polishing were carried out by additional volunteers before the Ste. Genevieve was delivered to Davenport and opened to visitors on August 17, 1985.

Future plans call for the development of an onboard museum, a small restaurant in the crew quarters (following removal of modern walls) and the engine room, and overnite accommodations in eight of the former staterooms. General restoration of interior finishes (brass, flooring, paint colors, etc.) is planned.

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Verbal Boundary Description

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Verbal Boundary Description and Justification:

The boundaries of the nominated object correspond to its exterior dimensions: the vessel is 267' 2" long with an overall width of 48' 7-1/8" and a moulded depth of 8' 0" with a 5' 6" draft. The Dredge Ste. Genevieve is moored at a location at the foot of Main Street, Davenport, Iowa more extensively described as follows:

Part of Section 35, Township 78 North, Range 3 East of the 5th P.M. in the City of Davenport, Scott County, Iowa being more particularly described as follows:

A tract of land commencing at the point of intersection of the southerly right-of-way line of River Drive with the westerly right-of-way line of Main Street; thence southerly along the said westerly right-of-way line of Main Street and its extension to a point, said point being in the riverward face of the City seawall, said point also being the point of beginning for the tracts described herein:

Tract 1:

thence southerly along the westerly right-of-way line of Main Street extended southerly for a distance of 100 feet more or less; thence westerly, parallel to and 100 feet equidistant from the City seawall for a distance of 350 feet more or less thence northerly parallel to and 350 feet equidistant from the westerly right-of-way line of Main Street and its extension for a distance of 100 feet more or less to a point, said point being in the riverward face of the City seawall; thence easterly along said City seawall to the Point of Beginning. Above tract containing 35,000 square feet more or less.

Tract 2:

The area landward of the City seawall that contains the mooring devices-- containing 300 square feet more or less.