



DESIGNATION STUDY

**UPPER HARBOR TERMINAL HISTORIC DISTRICT
MONOLITHIC CONCRETE DOMES**

MINNEAPOLIS, MINNESOTA

AUGUST 20, 2021

Hess Roise

100 North First Street
Minneapolis, Minnesota 55401

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DESIGNATION STUDY PURPOSE AND BACKGROUND

The City of Minneapolis owns the Upper Harbor Terminal (UHT), a large industrial site on the Mississippi River in north Minneapolis. The closure of the Upper Saint Anthony Falls Lock and Dam in 2015 ended barge traffic to the terminal and limited its future use as a multi-modal complex for commodities. The city will be redeveloping the terminal's forty-eight acres into a mix of private development and public parkland.

Prepared prior to an official HPC action, this study is intended to fulfill the requirements for local historic designation outlined in Title 23, Chapter 599.230 of the Minneapolis Code of Ordinances. The UHT has been studied multiple times over the past eighteen years. Earlier studies completed by Hess, Roise and Company in May 2003 and October 2007 proposed large potential historic districts related to the Upper and Lower Saint Anthony Falls Locks and Dams and the Upper Mississippi Harbor Development. The 2007 report found both potential districts to be eligible for listing in the National Register of Historic Places (NRHP) and for local designation as Minneapolis Historic Districts. In 2017, the 106 Group Ltd. evaluated the UHT for listing as a standalone historic district. That report found that the UHT and four Monolithic Domes were eligible for local designation. In 2020, the Minneapolis Park and Recreation Board (MPRB) and City of Minneapolis's Community Planning and Economic Development (CPED) retained Hess, Roise and Company to resurvey and reevaluate the historic eligibility of the Upper Harbor Historic District, which includes the Upper Harbor Terminal. An archaeological subconsultant, Nienow Cultural Consultants, completed a Phase Ia archaeological review and report for the city-owned UHT.¹

Elizabeth Gales, the Principal Investigator and author, meets the *Secretary of the Interior's Professional Qualification Standards* in History and Architectural History.

¹ Charlene K. Roise and Penny Petersen, "Lower Saint Anthony Falls Hydroelectric Project Architectural/Historical Survey," May 2003, prepared by Hess, Roise and Company for Spaulding Consultants; Erin Hanafin Berg, Charlene Roise, and Penny Petersen, "Upper Mississippi Harbor Development, Architectural/Historical Survey, Minneapolis, Hennepin County," October 2007, prepared by Hess, Roise and Company for the Community Planning and Economic Development, City of Minneapolis; Nicole Foss and Saleh Miller, "Intensive Architecture/History Evaluation for the Upper Harbor Terminal, Minneapolis, Hennepin County, Minnesota," April 2017, prepared by the 106 Group for Community Planning and Economic Development, City of Minneapolis; Elizabeth Gales, "Upper Harbor Historic District and Upper Harbor Terminal: Survey and Reevaluation for Historic Eligibility," prepared by Hess, Roise and Company for the Minneapolis Park and Recreation Board and Community Planning and Economic Development, City of Minneapolis, August 2020, revisions December 2020 and April 2021.

BASIC PROPERTY INFORMATION

Current Name:	Upper Harbor Terminal
Historic Name:	Upper Harbor Terminal
Current Address:	3360 North First Street 51 Thirty-fourth Avenue North 2 Thirty-sixth Avenue North 51 Thirty-sixth Avenue North 3639 Washington Avenue North 3700 Washington Avenue North 3701 Washington Avenue North 3800 North First Street
Historic Address:	3360 North First Street 51 Thirty-fourth Avenue North 2 Thirty-sixth Avenue North 51 Thirty-sixth Avenue North 3639 Washington Avenue North 3700 Washington Avenue North 3701 Washington Avenue North 3800 North First Street (2 Dowling Avenue North)
Construction Date:	1968 to 1991
Original Contractor:	
Original Architect, Master Builder, Engineer, Designer, Artist, or Craftsperson:	TKDA
Historic Use:	Industrial
Current Use:	Industrial
Ward:	4
Neighborhoods:	McKinley; Camden Industrial Area

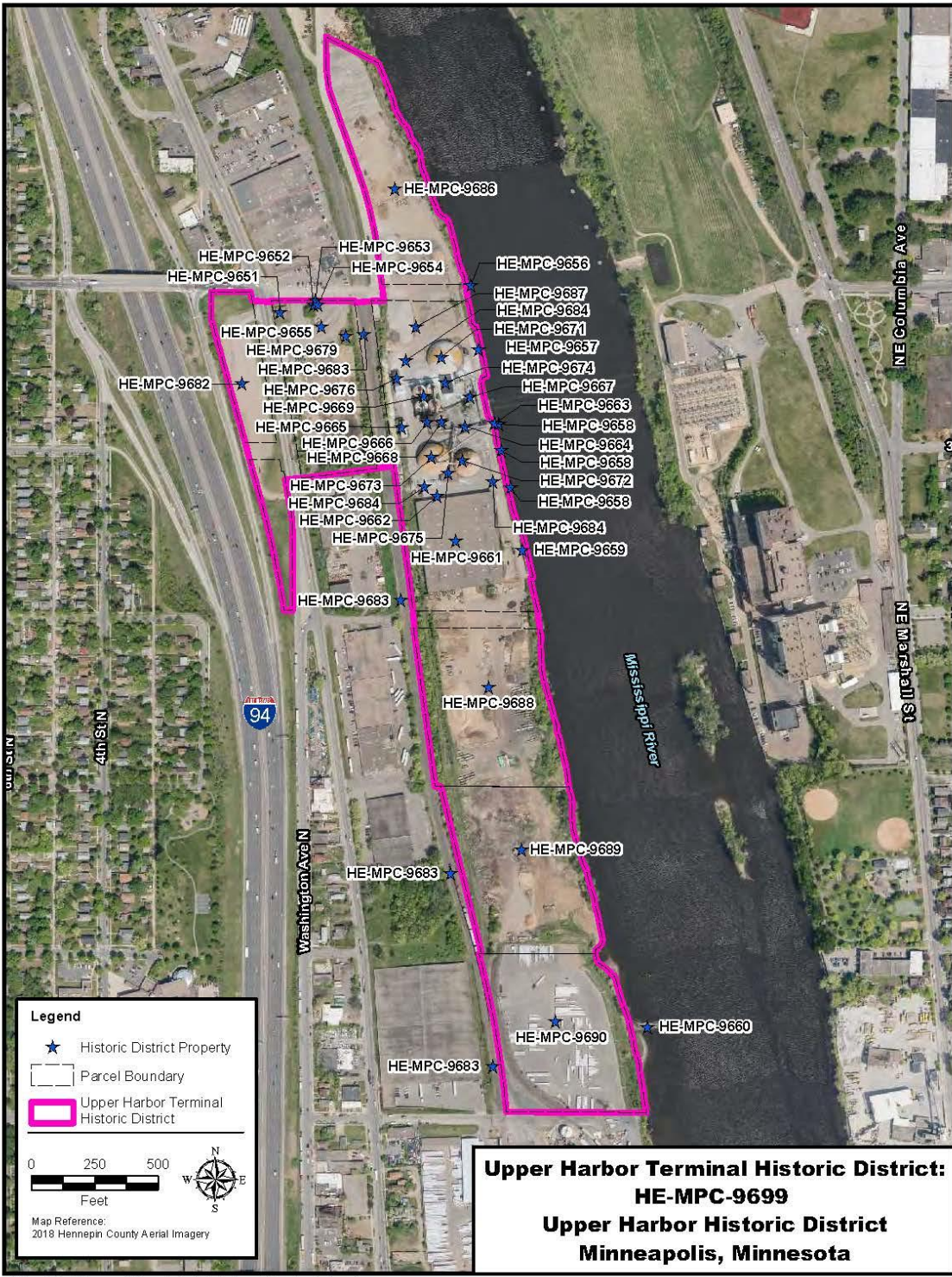
PART 1: PHYSICAL DESCRIPTION OF THE HISTORIC DISTRICT AND MONOLITHIC DOMES

Boundaries of the District

The boundaries of the district include the parcels owned by the City of Minneapolis that were developed for the purpose of the Upper Harbor Terminal.

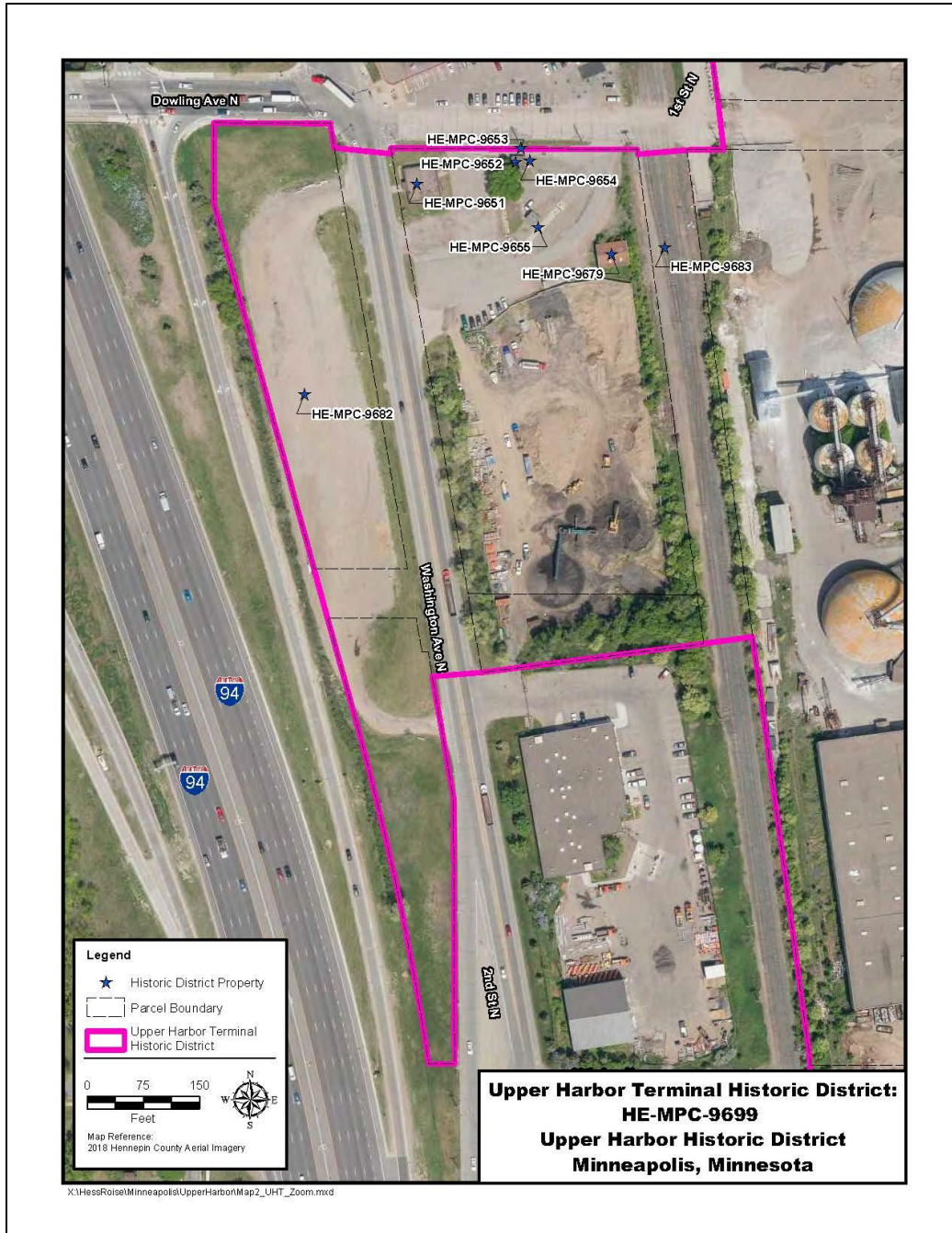
- **Parcel 1** – 3800 North First Street (03-029-24-31-0008)
Bounded by the Mississippi River to the east, Dowling Avenue North to the south, and North First Street to the west. A privately owned property, 3939 North First Street, is to the north.
- **Parcel 2** – 2 Thirty-sixth Avenue North (03-029-24-34-0026)
Bounded by Dowling Avenue North to the north, the Mississippi River to the east, Thirty-sixth Avenue North to the south, and the Soo Line Railroad Company corridor to the west.
- **Parcel 3** – 51 Thirty-sixth Avenue North (10-029-24-21-0002)
Bounded by Thirty-sixth Avenue North to the north, the Mississippi River to the east, 51 Thirty-fourth Avenue North to the south, and the Soo Line Railroad Company corridor to the west.
- **Parcel 4** – 51 Thirty-fourth Avenue North (10-029-24-21-0048)
Bounded by 51 Thirty-sixth Avenue North to the north, the Mississippi River to the east, 3360 North First Street to the south, and the Soo Line Railroad Company corridor to the west.
- **Parcel 5** – 3360 North First Street (10-029-24-24-0065)
Bounded by 51 Thirty-fourth Avenue North to the north, the Mississippi River to the east, Thirty-third Avenue North to the south, and the Soo Line Railroad Company corridor to the west.
- **Parcel 6a** – 3700 Washington Avenue North (03-029-24-34-0007)
Bounded by Dowling Avenue North to the north, Soo Line Railroad Company corridor to the east, Parcel 6b to the south, and Washington Avenue North to the west.
- **Parcel 6b** – 3648 Washington Avenue North (03-029-24-34-0028)
Bounded by Parcel 6a to the north, Soo Line Railroad Company corridor to the east, and Washington Avenue North to the west. A property owned by the Minnesota Department of Transportation, 3636 Washington Avenue North, is to the south.
- **Parcel 7a** – 3701 Washington Avenue North (03-029-24-34-0029)
Bounded by Dowling Avenue North to the north, Washington Avenue North to the east, Parcel 7b to the south, and Interstate 94 to the west.
- **Parcel 7b** – 3639 Washington Avenue North (03-029-24-34-0031)
Bounded by Parcel 7a to the north, Washington Avenue North and North Second Street to the east, Washington Avenue North to the south, and Interstate 94 to the west.

Portions of roads, including Washington Avenue North, Dowling Avenue North, and Thirty-sixth Avenue North are within the boundaries of the district. A portion of the Soo Line Railroad Company corridor, 114 Thirty-sixth Avenue North (03-029-24-34-0001), is also within the district.

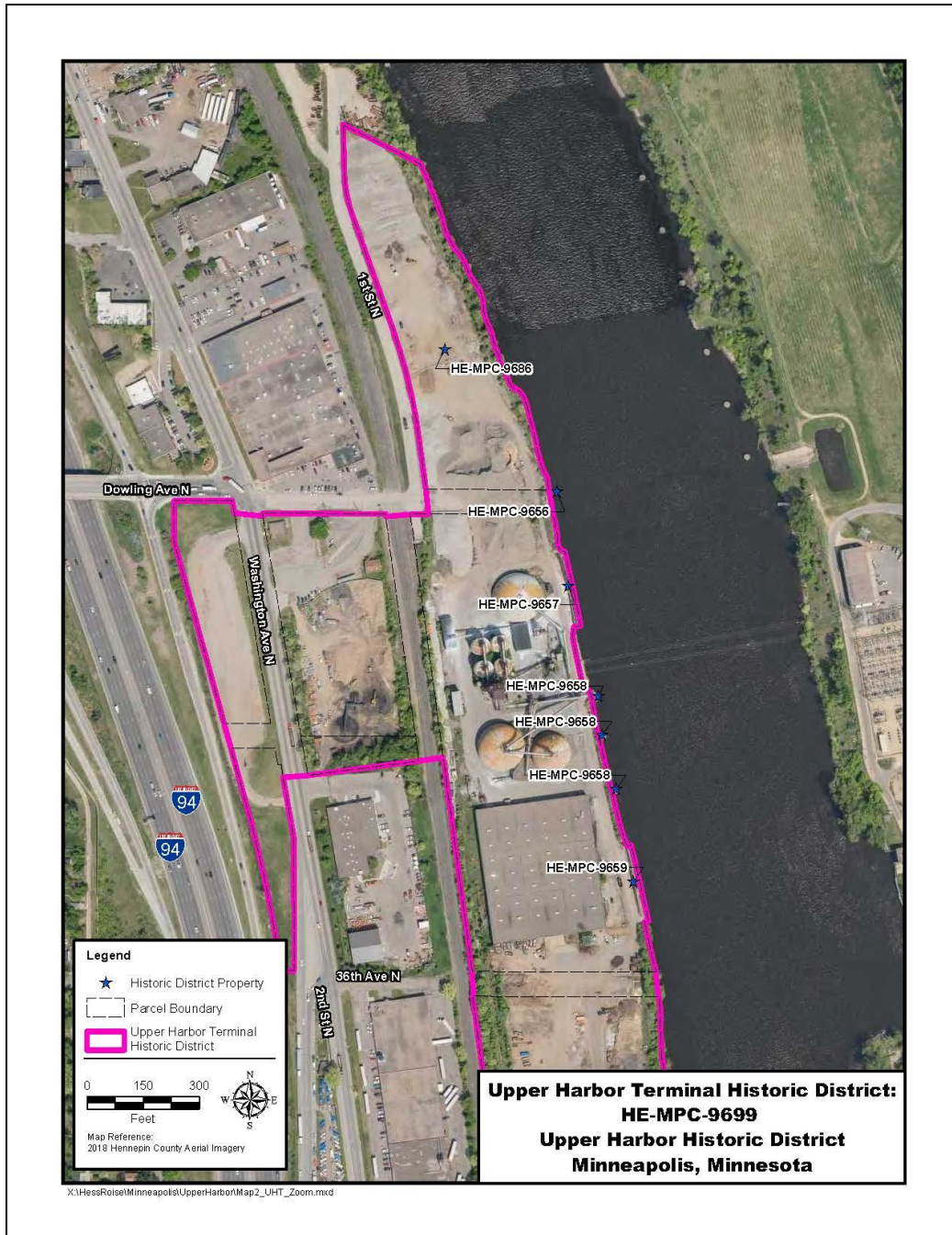


Description of Resources in the Historic District

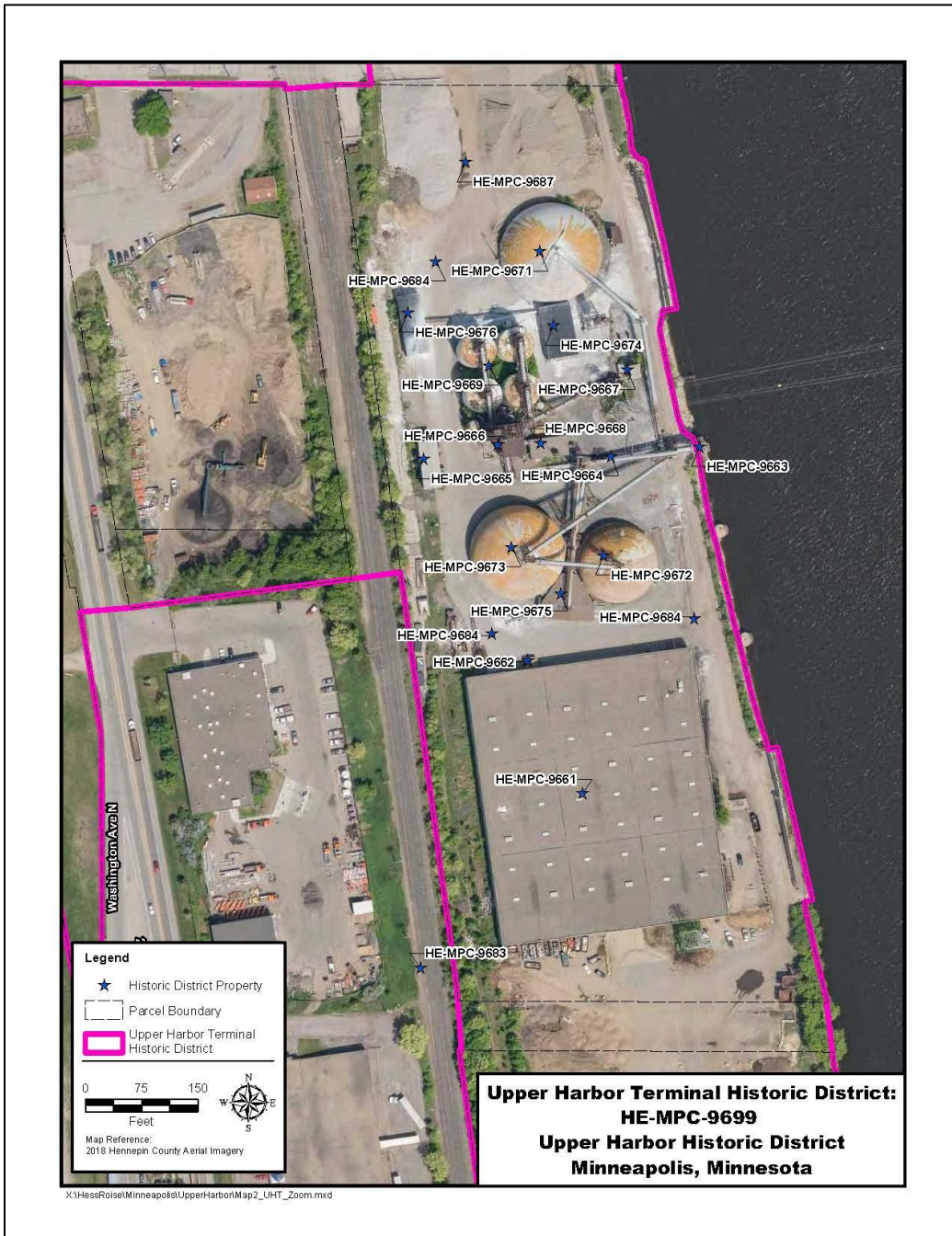
The UHT is a large industrial site composed of forty-eight acres spread across nine parcels. The site is bounded by private property and North First Street on the north; the Mississippi River on the east; Thirty-third Avenue North on the south; and Interstate 94, North Second Street, and Washington Avenue North on the west. The Soo Line Railroad Company corridor runs north-south through the site and divides the five eastern parcels (Parcels 1 to 5) from the four western parcels (Parcels 6a to 7b). The buildings and structures on the site do not have traditional building numbers. The Minnesota SHPO inventory numbers are used in the description below. The inventory numbers are keyed into the district map included above. Inventory forms for each of the resources with detailed descriptions and photographs are attached in the appendices.



The district is characterized by large parcels of open land that are used for open commodity storage. The character of these parcels can vary based on the commodities being stored. A variety of commodities have been stored in the open at the UHT including coal, road salt, gravel, sand, and tree mulch. Parcels 1, 3, 4, and 5 are used exclusively for commodity storage. Part of Parcel 6a and all of Parcel 6b are also used for commodities. Buildings and structures in the district are grouped on Parcel 2 and Parcel 6a. Parcels 7a and 7b hold a paved parking lot. The rail and roadway systems described above are considered resources in the district (HE-MPC-9683 and HE-MPC-9684).



Parcel 6a is located at the southeast corner of Dowling Avenue North at Washington Avenue North. A small office building, two small scale houses, and two truck scales sit on the north end of the lot. The office building (HE-MPC-9651) and the older scale house (HE-MPC-9652) are Brutalist in style. They have rectangular footprints and are clad in variegated tan brick with metal-frame windows. Metal panels wrap around the tops of the facades and emphasize the flat roofs. The office building has glass-and-metal double doors at the front entrance on Washington Avenue. A hollow-core metal door is set in the east facade, and a similar door is set in the west facade of the scale house. Both buildings are currently vacant. A truck scale (HE-MPC-9653), which is only visible as a large steel plate flush with the grade, is set in the ground north of the scale house and parallel to Dowling Avenue. A newer, one-story, prefabricated scale house (HE-



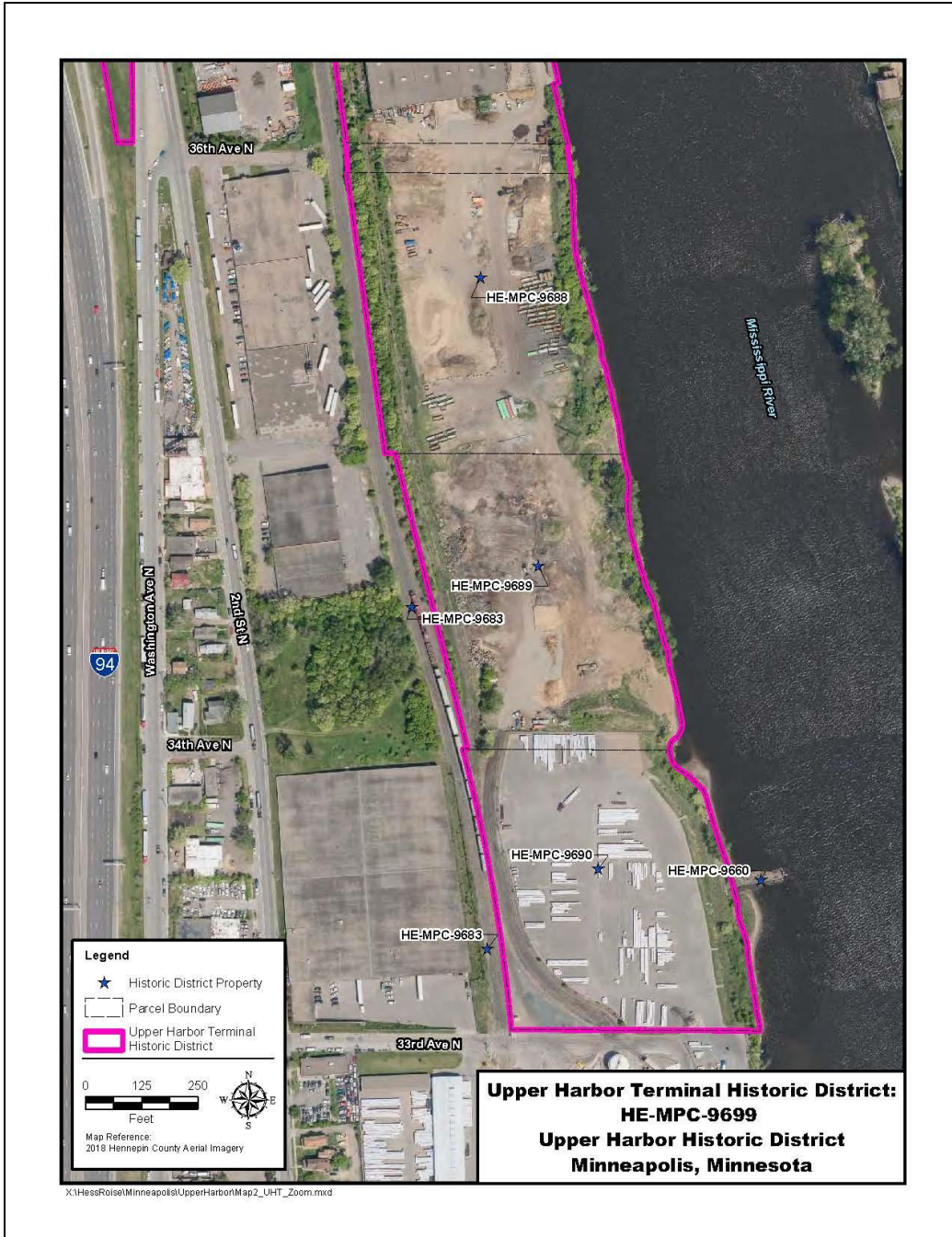
MPC-9654) clad in blue clapboard siding with a front-gable roof, sits east of the older scale house. The building can be easily moved and was formerly located next to a second truck scale (HE-MPC-9655), which is set in the ground on a diagonal axis south of the scale houses. In the past, trucks entering and leaving the UHT were required to be weighed to determine shipping rates. The original scale house and scale were too difficult for large trucks to access so the diagonal scale and blue scale house were added ca. 1983 on a diagonal orientation.

The south side of Parcel 6a and all of Parcel 6b are currently used for storing aggregate and sand. Chain-link fences surround the lot to partially screen the operations, which consist of large piles of aggregate and sand. Trucks enter the parcel through two curb cuts on Washington Avenue near the north end of the parcel. This area housed two large asphalt tanks surrounded by concrete dike walls. The asphalt tanks were demolished in 2011, but the dike walls (HE-MPC-9678) remain and support the chain-link fences. A former boiler shed (HE-MPC-9679), which supplied heat to the asphalt tanks, is located on the east edge of the parcel. It has a rectangular footprint and is clad gray corrugated-metal siding. The front-gable roof is also clad in corrugated metal and a garage door is located in the west facade. Dense vegetation surrounds the building and conceals most of the north, east, and south facades.

Parcels 7a and 7b are west across Washington Avenue North from Parcels 6a and 6b. It holds an asphalt-paved truck staging area (HE-MPC-9682) that is accessed by two curb cuts on Washington Avenue. The area was used to queue trucks waiting to enter the UHT. It has not been used in several years and concrete cubes sit across the driveways to restrict access.

Continuing east on Dowling Avenue from Parcel 6a, the road intersects with North First Street, which runs parallel to the railroad corridor on the east side of the tracks. Parcel 1 (HE-MPC-9686), which is used to store large piles of aggregate and sand, is on the east side of First Street, north of Dowling Avenue. The parcel is accessed from First Street at multiple points along the road. The east side of the parcel is dominated by a ridge of fill with voluntary trees and vegetation growing on top.

Parcel 2 is the most densely built-on parcel in the UHT. It has room for commodities storage on the north end (HE-MPC-9687). It holds three large monolithic concrete domes (HE-MPC-9671 to HE-MPC-9673) with loadout shelters (HE-MPC-9674 and HE-MPC-9675), a steel grain elevator (HE-MPC-9666), storage bins (HE-MPC-9669), a conveyor system (HE-MPC-9664), a rail dump (HE-MPC-9665), a truck dump and hoist (HE-MPC-9667), a control building for the grain elevator (HE-MPC-9668), a truck/rail dump (HE-MPC-9676), a large pre-cast concrete warehouse (HE-MPC-9661), a rail scale (HE-MPC-9685), and a small prefabricated shipping and receiving building (HE-MPC-9662). The east edge of the parcel has two steel and concrete docks: the north dock (HE-MPC-9657) and the south dock (HE-MPC-9659). Circular mooring cells (HE-MPC-9656 and HE-MPC-9658) made of steel and concrete are located in the river next to the docks. A load-out tower (HE-MPC-9663) sits atop one of the mooring cells by the grain elevator.



The three southern parcels, Parcels 3 to 5, are all used for open commodity storage. The railroad corridor is on the west side of Parcels 3 (HE-MPC-9688) and 4 (HE-MPC-9689), which are unpaved. On the east edge by the river, fill has created a ridge that has volunteer trees and vegetation. Parcel 5 (HE-MPC-9690) is the southernmost parcel and is accessed on the west by an unpaved road from Thirty-third Avenue. The parcel is paved with asphalt and also has chain-link fencing subdividing part of it for storage. Two large asphalt tanks were located on the parcel, but were removed in the 1990s. Portions of a former petroleum dock (HE-MPC-9660) extend into the river. The dock has not been used for several decades and is in disrepair.

Located throughout the site are movable, heavy construction equipment including front loaders and trucks. The city also owned a towboat, *Rose Bee*, and a locomotive engine, which were used at the UHT. These were sold in the early 2000s after a decline in activity at the UHT. Also located on the site are concrete cubes measuring approximately 3 foot in length, width, and depth. Steel rebar protruding from the sides like large handles allow the cubes to be moved around the site to create temporary walls to define driving paths or demarcate storage areas. These are treated as furnishings on the site, similar to a street furnishing in a neighborhood, and not as a resource.



Concrete cubes holding back coal at the base of a commodities pile on the Upper Harbor Terminal, 2014.
(Hess, Roise and Company)

The table below lists resources and if they are contributing or not contributing to the historic district. Resources constructed during the period of significance that retain historic integrity contribute to the significance of the historic district.

Properties in the Upper Harbor Terminal Historic District				
Inventory Number	Resource Name	Type	Construction Date	Contributing/ Non-Contributing Recommendation for Local Designation
HE-MPC-9651	Office Building	Building	1968	Contributing
HE-MPC-9652	Scale House	Building	c. 1970	Contributing
HE-MPC-9653	Truck Scale	Object	c. 1970	Contributing
HE-MPC-9654	Scale House	Building	c. 1983	Non-contributing
HE-MPC-9655	Truck Scale	Object	c. 1983	Non-contributing
HE-MPC-9656	North Mooring Cell	Structure	c. 1984	Non-contributing
HE-MPC-9657	North Dock	Structure	1968	Contributing
HE-MPC-9658	Loading Area Mooring Cells (3)	Structures	c. 1974	Contributing
HE-MPC-9659	South Dock	Structure	c. 1971	Contributing
HE-MPC-9660	Petroleum Dock	Structure	1974	Non-contributing due to loss of integrity
HE-MPC-9661	Warehouse	Building	1971	Contributing
HE-MPC-9662	Shipping/Receiving Building	Building	c. 1985	Non-contributing
HE-MPC-9663	Load-out Tower	Structure	c. 1974	Contributing
HE-MPC-9664	Conveyor	Structure	c. 1973-1988	Contributing
HE-MPC-9665	Rail Dump	Structure	1973	Contributing
HE-MPC-9666	Grain Elevator	Structure	c. 1978	Non-contributing
HE-MPC-9667	Truck Dump/Hoist	Structure/Object	c. 1978	Non-contributing
HE-MPC-9668	Control Building	Building	c. 1978	Non-contributing
HE-MPC-9669	Dust Tanks (4)	Structures	c. 1978	Non-contributing
HE-MPC-9671	Dome (12,000-ton capacity)	Building	1987	Non-contributing
HE-MPC-9672	Dome (8,000-ton capacity)	Building	1984	Non-contributing
HE-MPC-9673	Dome (16,000-ton capacity)	Building	1984	Non-contributing
HE-MPC-9674	Load-out Shelter (adj. to 12,000-ton dome)	Building	1988	Non-contributing
HE-MPC-9675	Load-out Shelters (adj. to paired domes)	Buildings	1984	Non-contributing
HE-MPC-9676	Truck/Rail Dump	Structure	1988	Non-contributing
HE-MPC-9678	Dike Wall	Structure	c. 1975	Contributing
HE-MPC-9679	Boiler Shed	Building	c. 1975	Contributing
HE-MPC-9680	Petroleum Pumping Spout (partially non-extant)	Object	c. 1975	Non-contributing due to loss of integrity
HE-MPC-9682	Truck Staging Area	Site	c. 1985	Non-contributing
HE-MPC-9683	Rail and Roadway System	Object	c. 1974-1985	Contributing
HE-MPC-9684	Rail and Roadway System	Object	c. 1968-1985	Contributing
HE-MPC-9685	Rail Scale Shed (scale extant, shed non-extant)	Building/Object	1991	Non-contributing

Properties in the Upper Harbor Terminal Historic District				
Inventory Number	Resource Name	Type	Construction Date	Contributing/ Non-Contributing Recommendation for Local Designation
HE-MPC-9686	Open Commodity Storage Area	Site	1968-1986	Contributing
HE-MPC-9687	Open Commodity Storage Area	Site	1968-1986	Contributing
HE-MPC-9688	Open Commodity Storage Area	Site	1968-1986	Contributing
HE-MPC-9689	Open Commodity Storage Area	Site	1968-1986	Contributing
HE-MPC-9690	Open Commodity Storage Area	Site	1968-1986	Non-contributing due to loss of integrity

PART 2: HISTORIC SIGNIFICANCE – UPPER HARBOR TERMINAL HISTORIC DISTRICT

Upper Mississippi Harbor Development

The Upper Harbor Terminal was constructed as part of the Upper Mississippi Harbor Development, which was the culmination of decades of lobbying by Minneapolis boosters to make Minneapolis the “best inland harbor in America.” The federal government had been trying to improve navigation along the entire river since the 1820s, and early on the U.S. Army Engineering Corps (later Corps of Engineers) were assigned to the task. By the late-nineteenth century, a navigable river was considered an important way to compete with railroads and their monopoly on transporting goods and commodities. A federal committee recommended Saint Paul as the head of navigation for a minimum four-and-a-half-foot channel that would extend downriver to Alton, Illinois. Congress approved the plan in 1878, and hundreds of wing dams were built between Saint Paul and Saint Louis, Missouri to focus the river’s current and scour the riverbed for a deeper channel.²

Minneapolis’s political and business leaders had successfully persuaded Congress in 1867 to support the construction of a lock and dam at Meeker Island, which was three miles downriver from Saint Anthony Falls. The facility was planned as one of three small locks and dams that would bring river traffic to Minneapolis. Despite having federal appropriations, the private company contracted to build the lock and dam failed to start the project at the time. In 1894, the Army Corps finally began construction on the Meeker Island



Constructing Meeker Island Lock and Dam on the Mississippi River near the Franklin Avenue Bridge, Minneapolis, ca. 1904.
(Minnesota Historical Society)

Lock and Dam, and it was completed in 1906. A second lock and dam, downriver from Meeker Island, was authorized in the Rivers and Harbors Act of 1899 and construction was underway in 1906, when engineers questioned the three-dam plan. The next year, Congress authorized a six-foot channel depth from Cairo, Illinois, to Minneapolis. The plans for the second lock and dam were revised to include a high dam and a lock with a thirty-foot lift. This would accomplish in one facility what the three-dam plan had hoped to do. Government Lock and Dam No. 1 was completed in 1917, and the Meeker Island facility, which was no longer needed, was partially removed and then submerged in the pool above the new dam. The Ford Motor Company

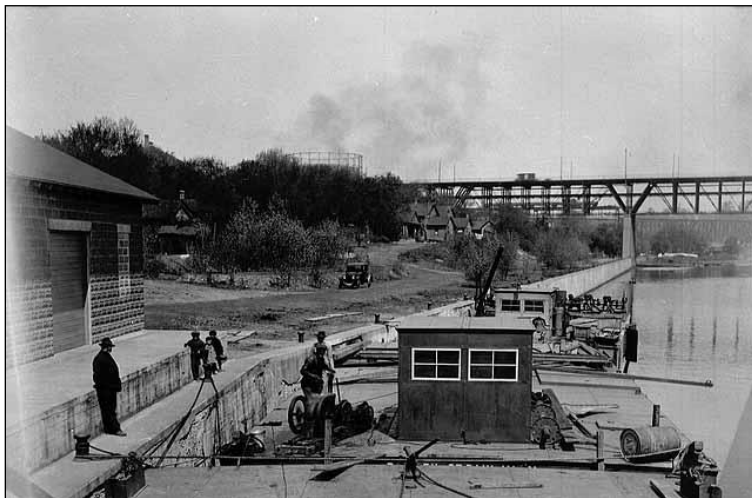
² Erin Hanafin Berg and Charlene Roise, Hess, Roise and Company, “Upper Mississippi Harbor Development Architectural/Historical Survey, Minneapolis, Minnesota,” October 2007, available in the City of Minneapolis Community Planning and Economic Development Department, Minneapolis, Minnesota, 5-6.

constructed a hydroelectric plant at the new dam, and it would become commonly known as the Ford Dam.³

Historians Berg and Roise note:

Ironically, the early twentieth-century improvements to the Upper Mississippi River channel corresponded with a decline in transportable goods from the region. The volume of timber, once the most important freight on the river, diminished rapidly around the turn of the century. Few river cities had terminal facilities that would allow commodities to be transferred between barge and rail, and railroads had been extended far into the heartland, usurping the river's role in transporting grain.⁴

Despite this decline, the city constructed a municipal barge terminal in 1927 on the flats underneath the Washington Avenue Bridge. It secured the city the title of head of navigation on the river, but the site was surrounded by bluffs that limited the amount of available land and convenient access to railroad and vehicular.⁵



Minneapolis Municipal terminal near the Washington Avenue Bridge, ca. 1927.
(Minnesota Historical Society)

A new era of shipping began for Minnesota, and Minneapolis, when the Rivers and Harbors Act of 1930 authorized expanding the nine-foot channel upriver into Minnesota. Senator Henrik Shipstead, a Farmer-Labor member from west-central Minnesota, propose the amendment and helped it clear both houses of Congress. The Army Corps drafted plans for twenty-six new locks and dams that would create a series of slackwater pools from the base of Saint Anthony Falls to near Saint Louis. The Ford dam would be retained and fit into this system. The nine-foot channel

was promoted as way to counter railroad monopolies, and then morphed into a work-relief effort during the Great Depression. The timetable was accelerated to put as many people to work as possible and the system was completed in 1940, which was decades sooner than originally planned.⁶

The nine-foot-channel legislation was reauthorized in 1937, and Minneapolis boosters pushed to extend the channel above Saint Anthony Falls. Senator Shipstead supported a 4.6-mile extension

³ Berg and Roise, "Upper Mississippi Harbor Development," 6-7.

⁴ Berg and Roise, "Upper Mississippi Harbor Development," 7.

⁵ Berg and Roise, "Upper Mississippi Harbor Development," 7-8.

⁶ Berg and Roise, "Upper Mississippi Harbor Development," 8.

of the channel, and Congress passed the legislation authorizing the Upper Mississippi Harbor Development. The Army Corps found the project to be uneconomical and refused to endorse, but was charged with designing and constructing the locks and dams. The City of Minneapolis had to bear the cost of bridge modifications and provide free of cost to the federal government all of the land needed for the projects. The city also assumed all responsibility to secure local cooperation.

The city would invest \$6.6 million by the end of the project in 1963, which included land acquisition, bridge modifications, and other improvements.⁷

Construction of the Upper and Lower Saint Anthony Falls Locks and Dams was a complex project. The downtown riverfront was still heavily used for active industries and multiple bridges carried vehicular and railroad traffic across the river. The geography of the riverbed posed challenges with crumbling sandstone that had to be overcome.

Construction work also could not disrupt the traffic at the municipal barge

terminal, which transferred important commodities like coal and heating oil. The development of plans took longer than expected and then World War II delayed the construction start until 1948. While politicians, business and civic leaders, and the editorial boards of the Minneapolis newspapers supported the project, some members of the public began to question the expense and alterations to the river. Construction lagged and cost more than originally planned and doubts about the long-term viability increased with the delays. In 1954, the Army Corps also questioned the viability of the project, but the state and city's elected officials continued to support the work and sponsored a public relations campaign that brought the corps around to continuing the project.⁸

The project was completed with the dedication of the Upper Saint Anthony Lock and Dam in September 1963. While local advocates had continued to promote the project, it had been held up nationally as an example of pork barrel spending. Once completed, there was concern that the economic benefits would not appear. Several private companies that had pledged to build docks and terminals in the Upper Harbor had lost interest because of the project delays. Many had



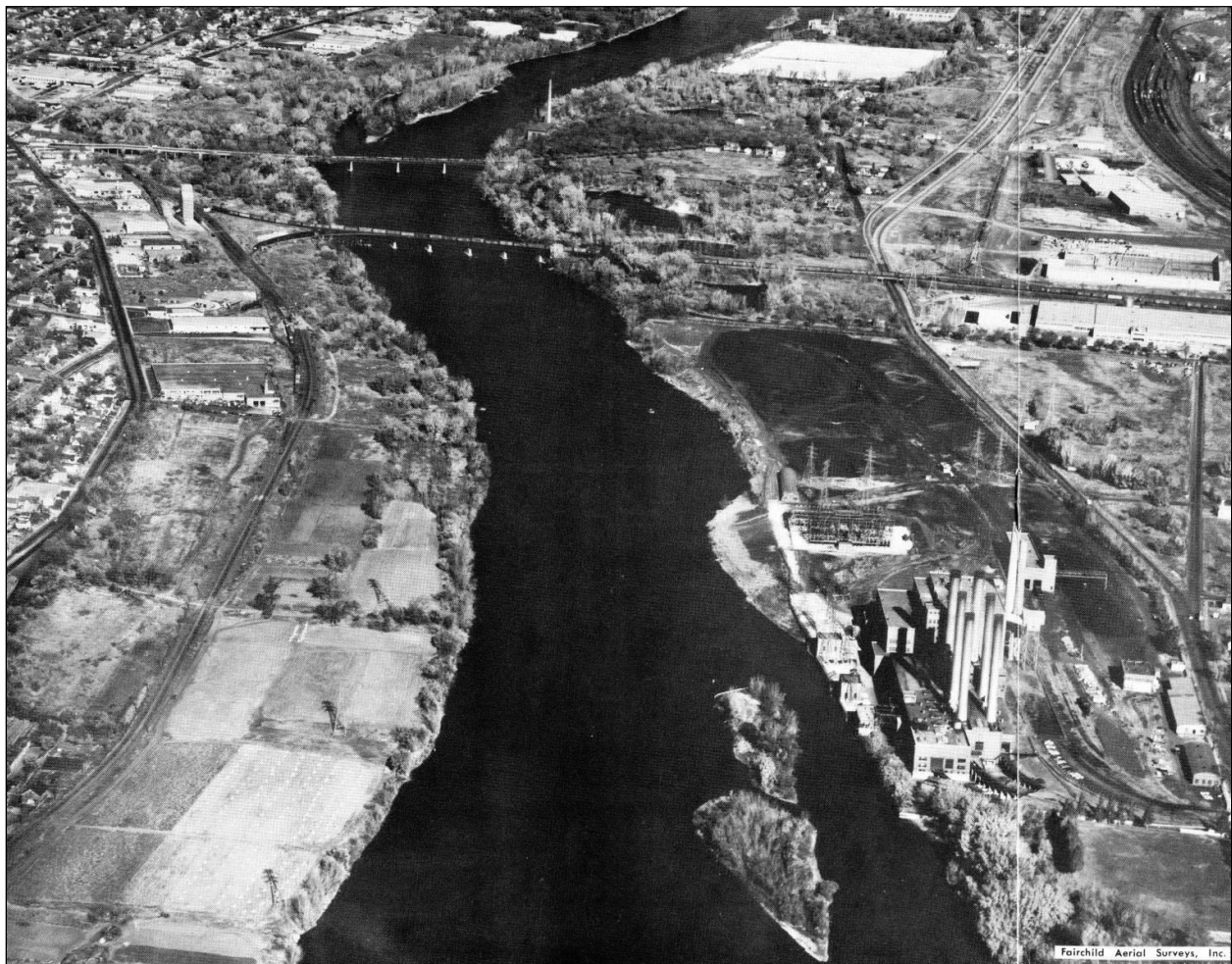
An illustration by the Corps of Engineers showing the anticipated physical impact of the locks and dams on the area of Saint Anthony Falls, ca. 1945. (Minnesota Historical Society)

⁷ Berg and Roise, "Upper Mississippi Harbor Development," 9-10.

⁸ Berg and Roise, "Upper Mississippi Harbor Development," 10-13.

moved to the Minnesota River, where a new navigation channel had been established and the land was less expensive to acquire. Even the company that operated the city's municipal terminal under the Washington Avenue Bridge had no plans to expand above the falls. Hope for the Upper Harbor was rekindled by the completion in 1963 of a dock at the Northern States Power Riverside Plant. The facility would receive approximately one-third of the coal tonnage required for the plant by barge. The next year, the American Iron and Supply Company built a barge dock at its complex on North Pacific Street between Twenty-eighth Avenue North and Thirty-first Avenue North. Scherer Brothers Lumber and the J. L. Shiely Company also constructed barge docks that year. Despite the private investment, the amount of barge traffic remained low, especially since the Army Corps had an annual minimum tonnage requirement for the Saint Anthony Locks and Dams. If the amount of shipping could not be increased, the corps could close the locks.⁹

The city council created a Citizens' Upper Harbor Committee to explore governmental and private options for the Upper Harbor area to encourage development. The committee drafted a



This photograph shows the area of the future Upper Harbor Terminal, ca. 1955. The NSP Riverside Station Power Plant is at right. (*Upper Harbor: Minneapolis and the Future. . .*)

⁹ Berg and Roise, "Upper Mississippi Harbor Development," 13-16.

bill for approval by the legislature in 1965 that would give the Minneapolis City Council the same powers as a port authority. The committee also recommended that the city council establish the Minneapolis Industrial Development Commission (MIDC) to develop a public river terminal in the Upper Harbor. Northern Waterways Terminals Corporation, which managed the municipal terminal under the Washington Avenue Bridge, proposed relocation that same year. In 1967, the MIDC recommended the city council build a public terminal in the Upper Harbor and phase out operations at the other site downriver.¹⁰

The city focused on a twenty-one-acre parcel it owned in north Minneapolis. The parcel was bounded by Dowling Avenue North, Thirty-third Avenue North, Second Street North, Washington Avenue North, and the Mississippi River. The site was level and had room for expansion, adequate drainage, and excellent access to rail and roadways. Consultant Merlin H. Berg developed a preliminary layout for the site. He anticipated demand for storage and transfer of many different kinds of commodities ranging from newspaper, twine, and wire to coal, salt, and fertilizer. Additional land would be needed if demand grew and if a warehouse, tanks, and elevators were constructed. Berg recommended that the city acquire adjacent parcels to extend the site.¹¹



Photo showing Parcels 2 to 5, ca. 1990, looking north.
(River Services, Inc.)

¹⁰ Berg and Roise, "Upper Mississippi Harbor Development," 16-17.

¹¹ Berg and Roise, "Upper Mississippi Harbor Development," 17-19.

The first company to manage the terminal was the Northern Waterways Terminals Corporation, which had previously leased ten acres of the municipal terminal at Bohemian Flats, under the Washington Avenue Bridge. The company agreed to undertake the initial capital improvements to the site, receiving reimbursement from the city, at a depreciated rate, only if the company's lease was terminated. Northern Waterways commissioned the construction of a 3,000 square-foot office building (HE-MPC-9651), a scale (HE-MPC-9653) and scale house (HE-MPC-9652), and a barge dock (HE-MPC-9657). The office and barge dock were completed in 1968 at a cost of about \$200,000. The scale and scale house were built shortly thereafter. Architecture and engineering firm Toltz, King, Duvall, Anderson and Associates (TKDA) designed both buildings. Northern Waterways also installed roadways and fencing so vacant land could be used for open commodity storage. In 1969, TKDA was hired to plan the remainder of the Upper Harbor Terminal site. The plans called for developing the site in three stages, adding buildings, and acquiring more land to diversify the kinds of commodities that could be stored and transferred at the terminal.¹²

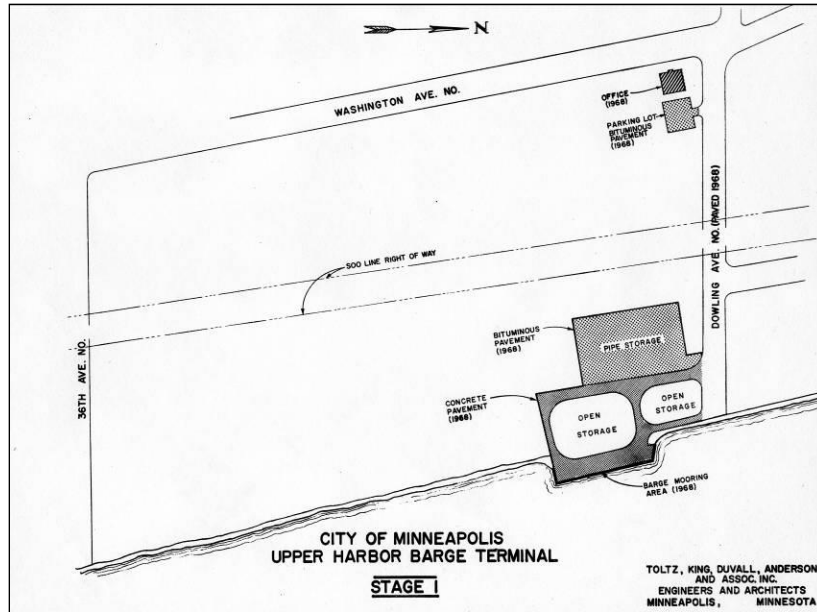


Photo showing Parcels 1 and 2, ca. 1990, looking north.
(River Services, Inc.)

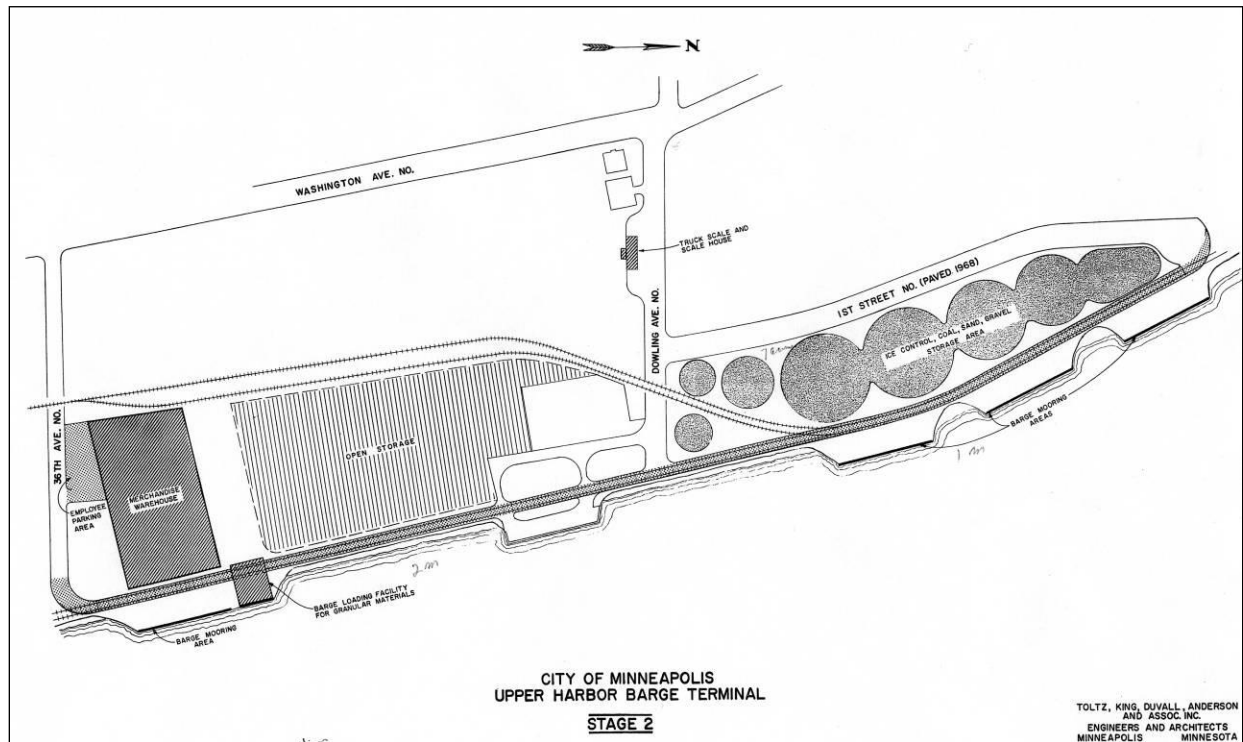
The second phase of the Upper Harbor Terminal's development was completed in 1971 with the construction of a 110,000 square-foot warehouse (HE-MPC-9661) and another barge dock (HE-MPC-9659). Additional land was purchased, and facilities were gradually built over the next

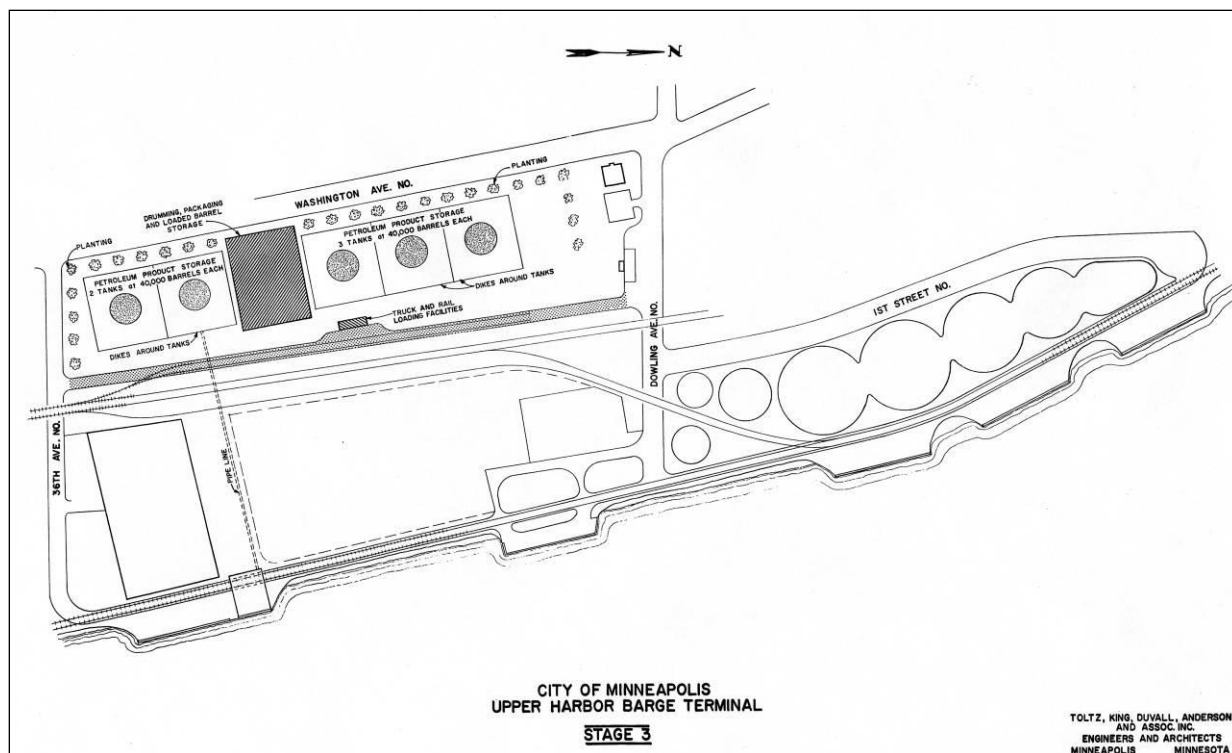
¹² Berg and Roise, "Upper Mississippi Harbor Development," 19.

sixteen years, but the work did not follow the TKDA plan. Asphalt tanks (HE-MPC-9677), dike walls (HE-MPC-9678), and a petroleum dock (HE-MPC-9660) were built in the early to mid-1970s. A grain handling facility was built in the mid-1970s, with a four-silo elevator (HE-MPC-9666 and HE-MPC-9669), overhead and underground conveyors (HE-MPC-9664), a rail dump (HE-MPC-9665), and a riverfront load-out tower (HE-MPC-9663). Between 1982 and 1987, four thin-shell concrete storage domes (HE-MPC-9670 to HE-MPC-9673) were erected to store fertilizer. The construction method, which used inflated fabric membranes sprayed with insulation and concrete, and reinforced with rebar, was a recent innovation at the time.



Three stages of development were planned for the Upper Harbor Terminal by TKDA. The first stage (above) was completed in 1968 and the second stage (below) between 1969 and 1971. The third stage (following page) was not realized, and the site was significantly expanded to the south and several unplanned structures were added. (CPED files)





Vital infrastructure, such as roadways and railroad spurs, office and accessory structures, and open storage areas, also took shape over the years.¹³

New construction at the terminal often coincided with a change in the companies that managed the property. The Upper Harbor Terminal has been managed by six companies. Northern Waterway Terminals, which had operated the original municipal terminal since 1949, declared bankruptcy in 1973. The city engineer’s office took over operation of both terminals for what proved to be a very expensive year—the facilities (and the city) lost approximately \$500,000. The Bolander Conlan Terminal Corporation leased the Upper Harbor facility from the city from 1975 until the company was purchased in 1979 by Con-Agra, which assumed the lease. Late in 1982, Con-Agra sued the city over a number of issues and, when the lawsuit was decided in the city’s favor, Con-Agra’s contract was terminated. Packer River Terminals, which also operated a barge terminal facility in South Saint Paul, ran the Upper Harbor Terminal from 1983 to 1991. This contract, too, ended with a lawsuit: the company claimed that a two-year drought, which greatly reduced revenues, permitted the company to withhold rent payments. Although the lawsuit resulted in a favorable judgment for Minneapolis, it required that the city find a new operator for the Upper Harbor Terminal. River Services, Inc. has operated the Upper Harbor Terminal since 1991.¹⁴

Private terminals continued to be built or expanded in the Upper Harbor area after the UHT was completed. However, the Upper Harbor area did not create the industrial economic activity that the city had hoped for. Minneapolis initially saw an upward trend in shipping that culminated with the most tonnage shipped in 1976. Capital investments made in the UHT, including the

¹³ Berg and Roise, “Upper Mississippi Harbor Development,” 19.

¹⁴ Berg and Roise, “Upper Mississippi Harbor Development,” 21.

grain elevator complex and the fertilizer domes, helped it compete for shipping agricultural commodities, but it was not enough to reverse Minneapolis's decline in overall shipping. A 1985 *Minneapolis Star Tribune* article noted that the U.S. Army Corps of Engineers had contacted the city in 1983 about increasing traffic or face the closure of both of the locks at Saint Anthony



Aerial photograph of the Upper Harbor Terminal in 1985, looking south towards downtown Minneapolis. The white silo complex in the foreground was part of a privately owned industrial property and was razed in 2007. (City of Minneapolis)

Falls. While the Corps decided to keep the locks open, the shipping goals were still not being met. The lockmaster, who had been operating the upper lock since 1963, was quoted: “We’ve seen better times down here.” The article also stated that the peak of shipping was in 1976 and while the city was given an annual goal of 3 million tons, it was only meeting half that amount. The city’s port authority coordinator, James Forsyth, explained that while there were daily shipments of gravel and sand, agricultural commodities were less reliable. He also explained: “Coal, which once accounted for half of the shipments on the river, is barely seen anymore.”¹⁵

¹⁵ Bob von Sterberg, “Slowdown in River Shipping Makes Days Drag at the Locks,” *Minneapolis Star Tribune*, November 11, 1985.



Asphalt tanks located on Parcel 6, 1983, looking north.
(City of Minneapolis)

While the article discussed the challenges facing the city, it also referenced new residential condominium towers on the east side of the river. Redevelopment of the Minneapolis riverfront into residential uses and parkland was gaining momentum. The J. L. Shiely operation sold its “C” Yard on the intermediate pool to the Minneapolis Park and Recreation Board, and relocated to a new Yard “D” in

the Upper Harbor in 1988-1992. Even with the addition of a new terminal in the Upper Harbor, it was not enough to reverse the decline of shipping.

In 2001, the City of Minneapolis adopted the *Above the Falls* master plan, which recommended closure of the UHT and redevelopment of the site. The increase in the Mississippi River of the invasive Asian carp also contributed pressure to close the Upper Saint Anthony Falls Lock to traffic as a way to slow down the spread of the species and protect fishing in northern Minnesota. In 2014, Congress voted to permanently close the lock to navigation and to stop dredging the river above the falls. While it was the end of an era for shipping in the city, the UHT had already failed in stimulating and supporting industrial commerce in Minneapolis. An economic analysis on the impact of the closure completed for the Metropolitan Council found that only eighty-four corps and river industry jobs would be lost.¹⁶

City-Owned Industrial Developments in Minneapolis¹⁷

The UHT was a significant investment in industry by the City of Minneapolis. It is important to evaluate if it was significant as a municipal enterprise. The Minnesota Office of the State Auditor (OSA) has identified three types of enterprises typical in Minnesota: necessary enterprises, quality of life enterprises, and enterprises for profit. The city’s sewer and water utilities fall under the necessary enterprises, and metered parking falls under the enterprises for profit

¹⁶ 160 Cong. Rec. H47 (daily ed. May 20, 2014); Steve Brandt, “Spring Thaw Might Bring Last Raft of Barges,” *Minneapolis Star Tribune*, December 20, 2014.

¹⁷ This context was developed by Saleh Miller and Nicole Foss, 106 Group, as part of the “Intensive Architecture/History Evaluation for the Upper Harbor Terminal,” prepared for Community Planning and Economic Development, City of Minneapolis, April 2017. The context will be summarized here.

category. The UHT falls under the quality of life category, which also include the Minneapolis Convention Center and the Target Center.¹⁸

The City of Minneapolis has been a facilitator of private development, including industrial development. However, the few industrial enterprises owned and operated by the city have been focused on the Mississippi River. The municipal barge terminal under the



Warehouse interior, ca. 1985, looking south.
(City of Minneapolis)

Washington Avenue Bridge and a brickyard at Fiftieth Avenue North along the Mississippi River were two previously owned enterprises. The brickyard was adjacent to the Minneapolis workhouse, also known as Camden Station, and employed inmates. It was started in 1904 when the superintendent discovered a clay deposit on the grounds of Camden Station. The majority of the bricks were sold, with the remaining utilized for city construction projects. Newspaper articles from 1910 and 1911 suggest that the city made a profit from the enterprise. It may have closed around 1930 when male inmates were relocated to the Parkers Lake Workhouse in Plymouth. After female inmates were relocated in 1953, Camden Station was demolished, and the land converted to agricultural use.¹⁹

The municipal barge terminal, also known as the Washington Avenue Terminal, has been referenced above. It was constructed in 1927 after evicting most of the residents living in the area, which was known as Bohemian Flats. The city's goal was to encourage barge traffic above Saint Paul and the development of private terminals in the city. By 1937, the Washington Avenue Terminal was considered inadequate because of frequent flooding and limited space to expand. After activities moved to the UHT in 1960s and 1970s, the site was transferred to the Minneapolis Park and Recreation Board who have developed it into a park.²⁰

The Washington Avenue Terminal and the UHT did not consistently generate revenue for the city, and the UHT has been subsidized for most of its existence. The city justified the subsidization because it provided a competitive alternative to railroads, minimizing rate inflation. The UHT also provided indirect benefits including employment at the site and free storage of

¹⁸ Miller and Foss, "Intensive Architecture/History Evaluation for the Upper Harbor Terminal," 9-10.

¹⁹ Miller and Foss, "Intensive Architecture/History Evaluation for the Upper Harbor Terminal," 11.

²⁰ Miller and Foss, "Intensive Architecture/History Evaluation for the Upper Harbor Terminal," 11-12.



Towboat *Rose Bee* maneuvering barges at the north dock, ca. 1985, looking south.
(City of Minneapolis)

road salt, dredged sand, and sewer pipe for the Public Works Department. The UHT also contributed the majority of the tonnage passing through the Saint Anthony Falls locks, which helped keep the locks open. This benefited private businesses and recreational boaters using the river.²¹

With the end of railroad traffic to the terminal in the early 2000s and the end of barge traffic in 2015 when the Upper Saint Anthony Falls

Lock and Dam was closed, the direct and indirect benefits of the UHT were not enough to justify its continued expense and operation. City-owned, quality-of-life, industrial enterprises have not been common in the city's history, perhaps because they have not been reliable sources of income. The UHT is the only remaining example of this specific type of enterprise in Minneapolis.²²

PART 3: RATIONALE FOR LOCAL HISTORIC DESIGNATION – UPPER HARBOR TERMINAL

Local historical designation is an official action that promotes the preservation of historic resources by recognizing specific people, places, and events that are deemed to be significant in relation to the history and heritage of Minneapolis. Through the requirements set out in the Heritage Preservation chapter of the City's Code of Ordinances, the act of designation establishes a series of protections that are administered through the ordinance to ensure protection of significant places throughout the city against demolition or inappropriate alterations.

Designation Criteria – Upper Harbor Terminal

Title 23, Chapter 599.210 of the Minneapolis Code of Ordinances lists seven criteria which are considered when determining whether a property is worthy of local designation as a landmark because of its significance. The Upper Harbor Terminal is considered below in relation to each of the seven criteria.

²¹ Miller and Foss, "Intensive Architecture/History Evaluation for the Upper Harbor Terminal," 12.

²² Miller and Foss, "Intensive Architecture/History Evaluation for the Upper Harbor Terminal," 13.

CRITERION 1: The property is associated with significant events or with periods that exemplify broad patterns of cultural, political, economic, or social history.

The Upper Harbor Terminal Historic District is associated with the Upper Mississippi Harbor Development, which was led by the U.S. Army Corps of Engineers and the City of Minneapolis to create the largest inland port in the United States. The Saint Anthony Falls Locks and Dams, modified bridges, and several private terminals were included in the boundaries of that development. The UHT was the only publicly owned terminal and was vital to increase the overall tonnage passing through the Saint Anthony Falls Locks and Dams. The historic district is also the only remaining example of a city-owned industrial business and represents a significant investment in industry by the city. The Upper Harbor Terminal Historic District has local significance under Criterion 1.

CRITERION 2: The property is associated with the lives of significant persons or groups.

Although several politicians and business leaders advocated for the creation of the larger Upper Mississippi Harbor Development, no significant individuals were strongly associated with the creation and construction of the city-owned Upper Harbor Terminal. The Upper Harbor Terminal Historic District does not have local significance under Criterion 2.

CRITERION 3: The property contains or is associated with distinctive elements of city or neighborhood identity.

The UHT is representative of a river terminal that connected river, rail, and vehicular traffic to move commodities. It has distinctive elements, including docks, mooring cells, a warehouse, a grain elevator, storage domes, and open storage areas that are associated with a mid- to late-twentieth century industrial site. It is the largest terminal of its kind in the City of Minneapolis and the only terminal to combine distinctive elements like the storage domes and the grain elevator complex in the same property. The Upper Harbor Terminal Historic District has local significance under Criterion 3.

CRITERION 4: The property embodies the distinctive characteristics of an architectural or engineering type or style, or method of construction.

Docks, mooring cells, open commodity storage areas, roadways, and railroad corridors are features specific to twentieth-century river terminals. This property type may also have industrial structures, like warehouses, grain elevators, and conveyor systems. The UHT contains a combination of transportation features (docks, mooring cells, roadways) and industrial features (storage areas, warehouse, grain elevator) specific to river terminals and embodies the distinctive physical characteristics of a mid- to late-twentieth century river terminal. The Upper Harbor Terminal Historic District has local significance under Criterion 4.

CRITERION 5: The property exemplifies a landscape design or development pattern distinguished by innovation, rarity, uniqueness or quality of design or detail.

The UHT has characteristics similar to privately owned river/barge terminals in Minneapolis. Terminals are typically situated on flat land abutting a major river with access to vehicular or railroad corridors. Large sections of the complex are open land used for storing commodities. Buildings and structures are utilitarian and may include warehouses, elevators, storage tanks, and conveyor systems.

The UHT is larger than the private terminal complexes in Minneapolis and has a greater variety of structures. The private complexes are run by companies in specific industries such as metal recycling or concrete production. The size and layouts of most of the private complexes have remained the same over several decades. The UHT was gradually expanded in size and in use as the city tried to increase the collective amount of tonnage shipped through the Saint Anthony Locks and Dams. The plan for the UHT morphed over time as the operating companies pursued new commodities to keep the site active. The evolution of the UHT, with its wide array of products, was more haphazard and changed frequently compared to the focused operations at private complexes.

The UHT has structures and buildings typical of river terminals. Although the UHT is the largest terminal in Minneapolis, the layout of the resources in the district does not represent innovation, rarity, uniqueness, in the quality of design or detail of a river terminal. The Upper Harbor Terminal Historic District does not have local significance under Criterion 5.

CRITERION 6: The property exemplifies works of master builders, engineers, designers, artists, craftsmen, or architects.

The UHT is an industrial site, and while the buildings and structures show the work of architectural, engineering, and construction companies, the resources at the UHT and the district as a whole do not exemplify the work of these companies. The Upper Harbor Terminal Historic District does not have local significance under Criterion 6.

CRITERION 7: The property has yielded, or may be likely to yield, information important in prehistory or history.

Nienow Cultural Consultants completed a Phase Ia Archaeological Literature Review of the UHT in June 2020. They found that underground equipment related to the UHT would be considered extensions of the above-ground structures and not archaeological resources. NCC identified the potential for archaeological resources that predate the construction of the UHT. They identified general areas that might have the potential for archaeological resources associated with Native Americans. They also identified areas that might include the remains of earlier buildings. These included the Bovey De Laitre Lumber Company Buildings, which were located on what is now Parcel 1, and the Log Cottage Company building, which was located on what is now Parcel 5. No Phase I or Phase II testing has occurred to confirm if any resources related to Native Americans or earlier buildings are extant. At this time, the Upper Harbor Terminal Historic District does not have local significance under Criterion 7.

Integrity of Historic Resource

A historic district must retain historic integrity to be eligible for designation. The Upper Harbor Terminal Historic District has not been moved and retains its integrity of location. The setting around the district has lost some of its integrity with the demolition of the private river terminal to the north and the removal of river terminal resources at the Riverside Plant to the east. The district had an original plan and the first two phases were constructed. By the mid-1970s, however, the terminal was expanded with new structures that were not envisioned in the plan. The district does not retain integrity of design.

The integrity of materials in the district is challenging to evaluate. Eighteen of the resources on the site contribute to the historic significance of the historic district. Contributing buildings and structures retain integrity of materials. Some contributing resources, like the open commodity storage areas, have always changed in appearance depending on the materials being stored. These storage areas are also the largest physical areas and visually dominate the district. Nineteen of the resources do not contribute to the historic significance because they were constructed or modified after the period of significance. These include several structures and parcels. Some of the non-contributing structures are relatively small in size, like the second scale house (HE-MPC-9654) while others are very large, like the concrete storage domes (HE-MPC-9671 to HE-MPC-9873). Parcel 5, which is now used for open storage, housed large asphalt tanks during the period of significance. These were removed in the 1990s and the character of that parcel was dramatically changed, and it no longer contributes to the significance of the historic district.

Given the age of the buildings and structures on the site, workmanship is not visible in most of the buildings and structures. The district retains the feeling and association of an industrial river terminal dating from the mid- to late-twentieth century. While the number of contributing and non-contributing resources are almost equal, the contributing resources are more visually dominant throughout the district. It is also possible that non-contributing resources could be demolished in the future, which would return historic character to the district. The Upper Harbor Terminal Historic District retains sufficient historic integrity to merit local designation.

Period of Significance

The period of significance for the Upper Harbor Terminal Historic District begins in 1968 when the first buildings and structures were constructed at the site following a plan. The UHT was an important investment by the City of Minneapolis to encourage private development in the larger Upper Mississippi Harbor Development. The period of significance ends in 1976 when the UHT helped Minneapolis achieved the greatest shipping tonnage through the Saint Anthony Falls Locks and Dams. After that point the city never met the Army Corps' minimum tonnage requirement. New structures and alterations at the UHT after 1976 did not follow the original phased plan for the site. These modifications were made to keep the UHT profitable and improve the tonnage shipped through the Upper Mississippi Harbor Development, but they ultimately did not succeed.

Relationship to the Body of Locally-designated Properties in Minneapolis

The City of Minneapolis designates properties that represent and reflect elements of the city's culture, social, economic, religious, political, architectural, or aesthetic history as local heritage

landmarks. As of July 2021, 179 individual properties are designated as landmarks in the City of Minneapolis and twenty groups of properties have been designated as historic districts. The City of Minneapolis has designated properties related to industry and transportation, including the Minneapolis Warehouse Historic District, the Milwaukee Road Depot and Freight House, and the Shoreham Yards Roundhouse (razed). The designated properties date to the nineteenth and early twentieth centuries. No mid- to late-twentieth century properties related to industry and transportation are designated.

Built between 1968 and 1991, the Upper Harbor Terminal Historic District represents a more recent period of industrial activity in Minneapolis. It also highlights a significant investment by the city to sustain industrial properties and jobs in the twentieth century. Designating it as a historic district would preserve a more recent industrial resource in the city.

The Upper Harbor Terminal Historic District is located within the McKinley Neighborhood and the Camden Industrial Area. There are no locally designated properties in either neighborhood.

Relationship of the Minneapolis Preservation Plan

The proposed designation helps fulfill the goals outlined in the 1990 Preservation Plan for the City of Minneapolis by systematically studying a property for its potential for preservation.

Comprehensive and Long-Range Planning

Title 23, Chapter 599.260 of the Minneapolis Code of Ordinances requires the planning director to submit all proposed designations to the Minneapolis City Planning Commission for review and comment on the proposed designation. In its review, the City Planning Commission shall consider but not be limited to the following factors:

- 1) The relationship of the proposed designation to the city's comprehensive plan.
- 2) The effect of the proposed designation on the surrounding area.
- 3) The consistency of the proposed designation with applicable development plans or development objectives adopted by the city council.

The relationship of the proposed designation to the city's comprehensive plan:

The *Minneapolis 2040 Comprehensive Plan* identifies multiple future land uses for the Upper Harbor Terminal Historic District.

The future land uses for Parcels 6 and 7 along Washington Avenue North and the part of Parcel 1 facing North First Street are identified as **Corridor Mixed Use**. The use includes mixed use multi-story development, and contiguous expansion of commercial zoning is allowed. Currently these parcels have either no buildings or very small, one-story buildings. The proposed designation would have an impact on the use and may prohibit the Corridor Mixed Use.

The future land uses for the western portions of Parcels 2 through 5 are identified as **Production Mixed Use**. The website for the *Minneapolis 2040 Comprehensive Plan* states that this use “allows both production and non-production uses, recognizing that while many buildings in these areas are no longer viable for modern production industries, they are increasingly occupied by a wide variety of uses that contribute to the economic health and diversity of the city. Residential

uses are allowed as part of mixed-use buildings that provide production space and must incorporate mitigation strategies to address potential conflicts between existing production uses and new residences. Adaptive re-use of older industrial property is encouraged.” The parcels included in this use hold a warehouse and open storage areas. The proposed designation might have an impact on the use. If the warehouse on Parcel 2 were reused, then the designation would have no impact. If new buildings and structures were constructed on the open areas on Parcels 3 and 4, it would impact the historic character of those parcels. Parcel 5 held multi-story tanks during the period of significance and the construction of new buildings on this parcel might be acceptable.

The future land uses for east edges of Parcels 1 through 5 are identified as **Parks and Open Space**. This use applies to land or water areas generally free from development. The website for the *Minneapolis 2040 Comprehensive Plan* states that Parks and Open Space are “primarily used for park and recreation, natural resource conservation, transportation, historic, or scenic purposes. Park related uses such as amphitheaters, food service, parkways, and equipment rental are also permitted.” The proposed designation would have no impact on the Parks and Open Space use. The grain elevator complex and the monolithic concrete domes are non-contributing resources to the Upper Harbor Terminal Historic District. If these structures were removed for open space, it could potentially return historic character to the district. Maintaining open space on Parcels 1, 3, and 4 would also preserve historic character.

The future built form districts for the UHT include **Corridor 6** and **Parks** in *Minneapolis 2040*. The **Corridor 6** district is typically applied along high-frequency transit routes as well as in areas near METRO stations. It applies to all of Parcels 6 and 7 and the western portions of Parcels 1 through 5. This built form allows a variety of building types on both moderate and large sized lots. It also restricts building heights to two to six stories, with a minimum building height of at least two stories. The proposed designation would have an impact on the built form for most of the parcels. Parcels 1, 3, 4, 6, and 7 have either no buildings or small, one-story buildings. Constructing two- to six-story buildings on these parcels would harm the historic character of the historic district. Parcel 2 has the warehouse, which is a contributing resource to the historic district, and demolition of the warehouse could affect the district’s historic character. Parcel 5 historically had large tanks, and the construction of new buildings that are at least two stories in height might fit with the character of the district.

The **Parks** district is typically applied in areas with the Parks and Open Space designation. It applies to the eastern edges of Parcels 1 through 5. The built form allows for new and remodeled buildings designed to support typical parks activities such as shelters, amphitheaters, food service, and equipment rental. One-story to two-and-one-half-story building heights are allowed. The proposed designation would have no impact on the built form because the parcels either have non-historic structures (domes and grain elevator) or no structures, and the built form works with the historic conditions.

The following policies of the comprehensive plan would apply to the designation of the Upper Harbor Terminal:

Policy 60 – Intrinsic Value of Properties: Increase the awareness, understanding, and appreciation of the economic and intrinsic value of older properties important to the city’s heritage.

As an industrial site, the Upper Harbor Terminal Historic District does not have the same character as a residential or commercial neighborhood. It has structures, like the grain elevator and conveyors, that are not safe for people to explore. There is also the potential for pollutants in the soils throughout the site given the commodities stored there. The economic value of the site has never been particularly vital, and it has usually operated at a loss to the city as its owner. While designation would increase awareness about the history of the site, it might be seen as a barrier to cleaning up the property and using it in a way that is open to more people.

Policy 76 – New Parks: Build new parks in underserved areas in order to ensure that all Minneapolis residents live within a ten-minute walk of a park.

Designation of the Upper Harbor Terminal Historic District may restrict redevelopment of part of the site into a public park.

Policy 92 - Identify and Evaluate Historic Resources: Continue to identify, examine, and evaluate historic contexts and historic resources, with a focus on communities that have been traditionally underrepresented.

The Upper Harbor Terminal Historic District is a mid- to late-twentieth-century industrial site. Although people were employed to work at the site, it did not employ extensive numbers of people, as compared to a manufacturing facilities. The potential historic district does not have a strong connection to the community. Designating the district would not increase the focus on traditionally underrepresented communities.

Policy 93 – Stewarding Historic Properties: Preserve, maintain and encourage the adaptive reuse of historic districts, landmarks and historic resources, especially in locations that historically have experienced disinvestment.

Local historic designation offers protections for historic resources through the city’s regulatory framework. Design guidelines are usually developed for local historic districts and these guide alterations and limit change that might damage the historic character of the properties in the district. It is possible that the Upper Harbor Terminal Historic District can be adaptively reused for new purposes that would be more beneficial to north Minneapolis, which has historically experienced disinvestment.

Policy 97 – Preserving and Enhancing Public Lakes and Waterways: Ensure ongoing preservation and improvement of the natural and built environment near the city’s lakes and waterways.

Local designation of the Upper Harbor Terminal Historic District could allow for adaptive reuse of the resources in the district that would also improve the environment of the Mississippi River, which is one of the most important waterways in the city.

The effect of the proposed designation on the surrounding area:

Designation of the Upper Harbor Terminal Historic District could potentially maintain the open, undeveloped parcels that dominate most of the district. There is also the potential that part of the district could continue to be used for industrial purposes that would preserve contributing resources. It is also possible that designation would slow or prohibit the adaptive reuse of the district, especially for the construction of new buildings.

The consistency of the proposed designation with applicable development plans or development objectives adopted by the City Council:

The UHT is included in the *Above the Falls Master Plan Update*. The plan states that the property “can be closed at some point to pursue a higher value future that makes better use of the City’s riverfront” and that the UHT is “a prime location for a new riverfront park and compatible development.” Designation of the Upper Harbor Terminal Historic District might support redevelopment of the site for parkland, but it also might limit the construction of new buildings and structures in the district.

National Register Status

The Upper Harbor Terminal is not listed in the National Register of Historic Places (NRHP). In 2020, the Upper Harbor Terminal Historic District was evaluated for eligibility for the NRHP and found to be not eligible under any criteria. The Minnesota SHPO concurred with the findings. While the UHT is not eligible for the NRHP on its own, the SHPO determined that the UHT is a contributing resource to a larger potential historic district for the Upper Mississippi Harbor Development. The tentative boundaries for that historic district extend from the University of Minnesota Dock upriver to the Great Northern Railroad Bridge, which is north of the UHT.

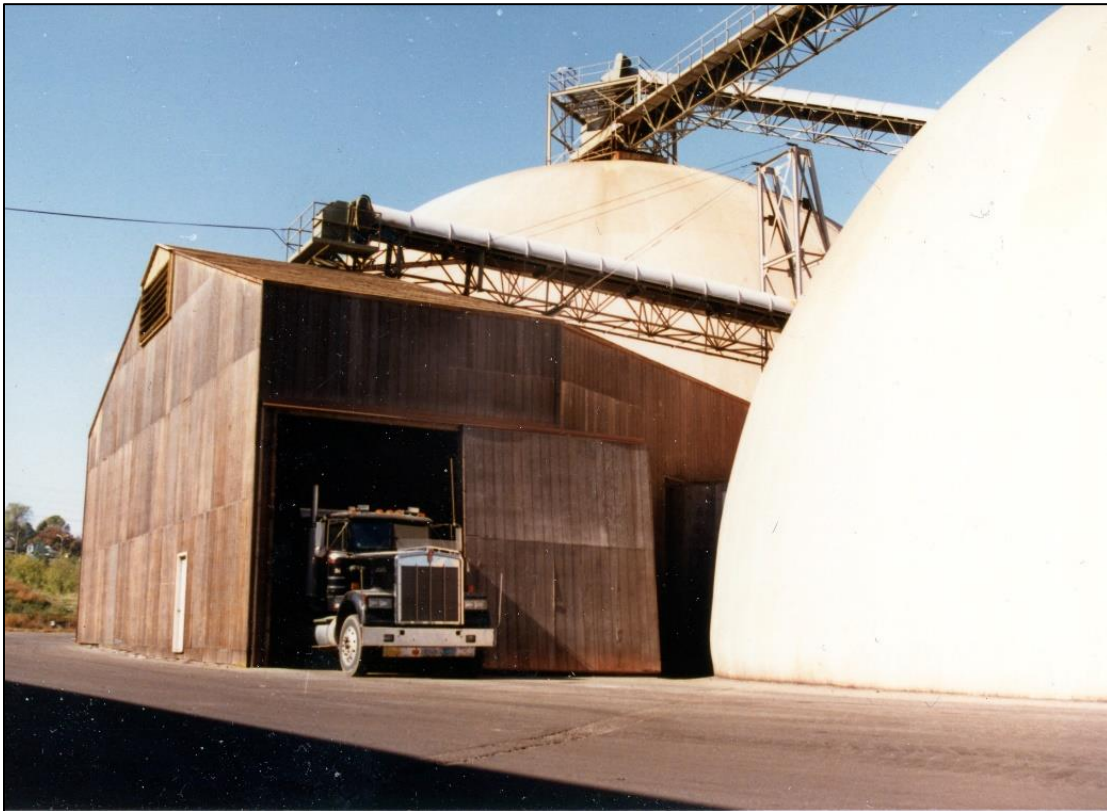
State Designation

The Upper Harbor Terminal has not been designated by the state of Minnesota as a historic district, historic place, or historic site.

PART 4: HISTORIC SIGNIFICANCE – MONOLITHIC CONCRETE DOMES

*Monolithic Concrete Domes*²³

Domes have been used in architecture across the world for thousands of years. There are many types of domes, including the corbel dome, cloister vault, crossed-arch dome, ribbed dome, and hemispherical dome. The geodesic and monolithic domes designed in the twentieth century continued new innovations in dome design. While most people associate domes with religious, governmental, and social buildings, they can also serve utilitarian functions. A dome can create a large open space ideal for storage of commodities.²⁴



Domes, HE-MPC-9672 and HE-MPC-9673, ca. 1990.
(City of Minneapolis)

R. Buckminster Fuller developed the geodesic dome in the late 1940s. It utilized a network of triangles providing a self-balancing structural framework. The domes have been used in residential and office architecture. Monolithic domes are “carved, cast, or excavated from a single piece of material.”²⁵ The first modern monolithic dome is reportedly the Winter Garden Ice Rink, constructed in Provo, Utah, in 1963. It was a triaxial elliptical dome with reinforced concrete approximately 4 inches thick. The dome was constructed by mounding dirt to create a

²³ This context was developed by Saleh Miller and Nicole Foss, 106 Group, as part of the “Intensive Architecture/History Evaluation for the Upper Harbor Terminal,” prepared for Community Planning and Economic Development, City of Minneapolis, April 2017. The context will be summarized here.

²⁴ Miller and Foss, “Intensive Architecture/History Evaluation for the Upper Harbor Terminal,” 13.

²⁵ Miller and Foss, “Intensive Architecture/History Evaluation for the Upper Harbor Terminal,” 13.

form that the rebar and concrete were shaped around. After the concrete cured, the dirt was removed through the structure's doorways and then the interior was finished.²⁶



Dome, HE-MPC-9670, after collapsing, 2018.
(City of Minneapolis)

David, Barry, and Randy South developed a new method for constructing monolithic domes in the late 1970s. David had studied engineering and business in college, and followed Fuller's innovations in dome design. While inspired by Fuller, he was looking for a faster way to design domes using fewer individual pieces. He learned about casting polyurethane foam, and realized that it might be used to make domes. South moved to Idaho, where polyurethane was a popular waterproof material used in potato storage. He formed his own urethane foam company to create domes for agricultural storage. In 1975, David discovered that a polyurethane dome could be made fireproof if the foam was coated with a half-inch thick layer of stucco or plaster. After hearing of a house constructed from foam over a large, inflated plastic balloon, he worked with his brothers to develop a unique construction system. The South brothers inflated a large fabric membrane, sprayed the inside with three inches of polyurethane, embedded rebar in the foam, and then sprayed three inches of concrete. They eventually changed the reinforcing to bent wire that could be more easily fed through the foam. In 1979, the Souths received a patent for the design and construction method of their monolithic dome.²⁷

²⁶ Miller and Foss, "Intensive Architecture/History Evaluation for the Upper Harbor Terminal," 13-14.

²⁷ Miller and Foss, "Intensive Architecture/History Evaluation for the Upper Harbor Terminal," 14-15.



Information about the monolithic concrete domes spread through word of mouth and articles in industry journals. The South brothers incorporated the Monolithic Dome/Monolithic Domes Institute to promote and construct utilitarian domes throughout the country and the world. As of 2017, the company had built 4,000 structures.²⁸

Above: Dome, HE-MPC-9672

Right: Dome, HE-MPC-9673

Both photographs were taken in 2020.
(Hess, Roise and Company)



Four domes were constructed by Monolithic Dome at the UHT between 1982 and 1987. The first dome (HE-MPC-9670) was built on Parcel 1 in 1982 and had a capacity of 1,800 tons. The construction process utilized the inflated fabric membrane coated on the inside with three inches of polyurethane foam, reinforcing, and concrete measuring between three and six inches in thickness. The fabric was left in place and formed the exterior surface of the dome. The dome was 90 feet in diameter and 30 feet tall. A 16-foot-wide by 12-foot-tall doorway on the south side of the dome allowed access to the interior. In 2018, the dome collapsed when too much aggregate was stored inside the dome, which pushed against the exterior and collapsed the structure.²⁹

Domes (HE-MPC-9672 and HE-MPC-9673) were built in 1984 on Parcel 2 between the warehouse and the grain elevator. The construction methods and materials were identical to the first dome. The larger dome (HE-MPC-9673) has a capacity of 16,000 tons, a diameter of 122 feet, and height of 80 feet. The concrete ranges in thickness from 4 to 10 inches. An opening on

²⁸ Miller and Foss, "Intensive Architecture/History Evaluation for the Upper Harbor Terminal," 16.

²⁹ Miller and Foss, "Intensive Architecture/History Evaluation for the Upper Harbor Terminal," 33-34; Hess, Roise and Company, and Jerry Mathiason, "Minnesota Historic Property Record No. HE-MPC-9670 – Dome," November 2018, available at the City of Minneapolis.

the south wall measures 18 feet wide and 14 feet tall. The smaller dome (HE-MPC-9672) has a capacity of 8,000 tons and a diameter of 107 feet. No plan or cross-section drawings are available, and the height and thickness of the concrete is unknown. A large opening is on the south side of the dome. A wood-frame, plywood-clad load-out shelter (HE-MPC-9675) was built on the south sides of the two domes around 1984. It was not designed by Monolithic Dome and was not part of the original dome construction. Conveyor systems extend to the domes and enter the structures through openings in the top. These allowed fertilizer to be transported from barges into the domes. Front loaders were used to move the fertilizer into trucks, which transported the fertilizer out of the UHT.³⁰

The final dome (HE-MPC-9671) was built in 1987 north of the grain elevator complex. It has a capacity of 12,000 tons, a diameter of 132 feet, and height of 66 feet. It was constructed with the same methods and materials as the other domes. A large doorway on the south side of the dome opens into load-out shelter (HE-MPC-9674) that was added around 1988. The shelter is wood-frame and clad in plywood. A large opening on the east side of the shelter allows trucks to enter the space. While it was constructed by Dome Systems Corporation, it is not original to the dome. A conveyor connects to an opening in the top of the dome. Like the two other extant domes, the conveyor transferred fertilizer into the dome from barges.³¹



Dome, HE-MPC-9671. Photograph taken in 2020.
(Hess, Roise and Company)

The fabric outer layers are failing on all three domes leaving the polyurethane insulation exposed, which is causing it to slowly break down.

PART 5: RATIONALE FOR LOCAL HISTORIC DESIGNATION – MONOLITHIC CONCRETE DOMES

As noted above, local historical designation is an official action that promotes the preservation of historic resources by recognizing specific people, places, and events that are deemed to be significant in relation to the history and heritage of Minneapolis.

³⁰ Miller and Foss, “Intensive Architecture/History Evaluation for the Upper Harbor Terminal,” 35-36.

³¹ Miller and Foss, “Intensive Architecture/History Evaluation for the Upper Harbor Terminal,” 37.

Designation Criteria

Title 23, Chapter 599.210 of the Minneapolis Code of Ordinances lists seven criteria which are considered when determining whether a property is worthy of local designation as a landmark because of its significance. The Upper Harbor Terminal is considered below in relation to each of the seven designation criteria.

CRITERION 1: The property is associated with significant events or with periods that exemplify broad patterns of cultural, political, economic, or social history.

The domes were built to store fertilizer and provide another commodity option at the UHT. Individually, they are not associated with significant events or with periods that exemplify broad patterns of cultural, political, economic, or social history. The domes do not have local significance under Criterion 1.

CRITERION 2: The property is associated with the lives of significant persons or groups.

The domes are not associated with the lives of significant persons or groups. They do not have local significance under Criterion 2.

CRITERION 3: The property contains or is associated with distinctive elements of city or neighborhood identity.

Considered as a group, the three monolithic concrete domes represent a unique visual feature on the Minneapolis riverfront and are representative of the industrial use at the UHT. The size and shape of the domes is not displayed by any other property along the Mississippi River in the city. The domes are visible from the air and from tall buildings in other parts of the city. As unique features, they act as place markers on the landscape. As a group, the domes have local significance under Criterion 3.

CRITERION 4: The property embodies the distinctive characteristics of an architectural or engineering type or style, or method of construction.

The three domes each embody the distinctive characteristics of monolithic concrete domes, as designed by the Monolithic Dome company. The domes were constructed using the methods patented by Monolithic Dome. The domes retain their original forms, and the materials particular to the Monolithic Dome construction system—canvas membrane, polyurethane insulation, metal reinforcing, and concrete—are extant. Each dome, individually, has local significance under Criterion 4.

CRITERION 5: The property exemplifies a landscape design or development pattern distinguished by innovation, rarity, uniqueness or quality of design or detail.

The domes do not exemplify a landscape design or development pattern that is distinguished by innovation, rarity, uniqueness, or quality of design or detail. The domes do not have local significance under Criterion 5.

CRITERION 6: The property exemplifies works of master builders, engineers, designers, artists, craftsmen, or architects.

Monolithic Dome, the company who designed and constructed the domes at the UHT, were prolific and built over 4,000 nationwide using standardized plans and materials. The domes do not exemplify the works of the company and do not have local significance under Criterion 6.

CRITERION 7: The property has yielded, or may be likely to yield, information important in prehistory or history.

The three monolithic domes have not yielded, and are not likely to yield, information important in prehistory or history. The domes do not have local significance under Criterion 7.

Integrity of Historic Resource

The domes have not been moved and retain integrity of location. The domes are located in the Upper Harbor Terminal and the neighboring structures and buildings were present at the time the domes were constructed. The domes retain integrity of setting. The domes retain the original design, by Monolithic Dome. The materials on the domes have begun to erode, including the outer fabric layer and the polyurethane layer. The integrity of the materials are becoming compromised. The nature of the construction did not require a skilled workman, and integrity of workmanship is not relevant for these structures. The domes retain integrity of feeling and association of an industrial structure that held fertilizer.

Period of Significance

The period of significance is recommended as the year that each dome was constructed.

- Dome (12,000-ton capacity, HE-MPC-9671) – 1987
- Dome (8,000-ton capacity, HE-MPC-9672) – 1984
- Dome (16,000-ton capacity, HE-MPC-9673) – 1984

Relationship to the Body of Locally-designated Properties in Minneapolis

The City of Minneapolis designates properties that represent and reflect elements of the city's culture, social, economic, religious, political, architectural, or aesthetic history as local heritage landmarks. As of July 2021, 179 individual properties are designated as landmarks in the City of Minneapolis and twenty groups of properties have been designated as historic districts. The City of Minneapolis has designated properties related to industry and transportation, including the Minneapolis Warehouse Historic District, the Milwaukee Road Depot and Freight House, and the Shoreham Yards Roundhouse (razed). The designated properties date to the nineteenth and early twentieth centuries. No mid- to late-twentieth century properties related to industry and transportation are designated.

The three monolithic domes are located within the McKinley Neighborhood, and there are no locally designated properties in this neighborhood.

Relationship of the Minneapolis Preservation Plan

The proposed designation helps fulfill the goals outlined in the 1990 Preservation Plan for the City of Minneapolis by systematically studying a property for its potential for preservation.

Comprehensive and Long-Range Planning

Title 23, Chapter 599.260 of the Minneapolis Code of Ordinances requires the planning director to submit all proposed designations to the Minneapolis City Planning Commission for review and comment on the proposed designation. In its review, the City Planning Commission shall consider but not be limited to the following factors:

- 4) The relationship of the proposed designation to the city's comprehensive plan.
- 5) The effect of the proposed designation on the surrounding area.
- 6) The consistency of the proposed designation with applicable development plans or development objectives adopted by the city council.

The relationship of the proposed designation to the city's comprehensive plan:

The *Minneapolis 2040 Comprehensive Plan* identifies the future land use for east edges of Parcel 2 as **Parks and Open Space**. This use applies to land or water areas generally free from development. The website for the *Minneapolis 2040 Comprehensive Plan* states that Parks and Open Space are “primarily used for park and recreation, natural resource conservation, transportation, historic, or scenic purposes. Park related uses such as amphitheaters, food service, parkways, and equipment rental are also permitted.” The proposed designation of the domes might have an impact on the Parks and Open Space use. If the structures could not be adaptively reused for new purposes, then they could limit changes to the surrounding land for parkland..

The future built form district for the area including the domes is **Parks** in *Minneapolis 2040*. The Parks district is typically applied in areas with the Parks and Open Space designation. This built form allows for new and remodeled buildings designed to support typical parks activities such as shelters, amphitheaters, food service, and equipment rental. One-story to two-and-one-half-story building heights are allowed. As noted above for the future land use, designation of the domes might have an impact on the built form if the domes cannot be adaptively reused for new purposes related to parks activities.

The following policies of the comprehensive plan would apply to the designation of the Upper Harbor Terminal:

Policy 60 – Intrinsic Value of Properties: Increase the awareness, understanding, and appreciation of the economic and intrinsic value of older properties important to the city’s heritage.

The domes are unique structures on the Minneapolis riverfront. While designation would increase awareness about the history of the domes and the surrounding industrial site, it might limit adaptive reuse of the site in a way that is open to more people.

Policy 76 – New Parks: Build new parks in underserved areas in order to ensure that all Minneapolis residents live within a ten-minute walk of a park.

Designation of the monolithic domes at the UHT may restrict redevelopment of the land around the domes a public park if the domes cannot be adaptively reused.

Policy 92 - Identify and Evaluate Historic Resources: Continue to identify, examine, and evaluate historic contexts and historic resources, with a focus on communities that have been traditionally underrepresented.

The domes do not have a strong connection to any communities in Minneapolis. Designating them would not bring focus to traditionally underrepresented communities.

Policy 93 – Stewarding Historic Properties: Preserve, maintain and encourage the adaptive reuse of historic districts, landmarks and historic resources, especially in locations that historically have experienced disinvestment.

Local historic designation offers protections for historic resources through the city’s regulatory framework. If it is possible that the monolithic domes can be adaptively reused for new purposes, then designation as landmarks could be more beneficial to north Minneapolis, which has historically experienced disinvestment.

Policy 97 – Preserving and Enhancing Public Lakes and Waterways: Ensure ongoing preservation and improvement of the natural and built environment near the city’s lakes and waterways.

Local designation of the Upper Harbor Terminal Historic District could allow for adaptive reuse of the resources in the district that would also improve the environment of the Mississippi River, which is one of the most important waterways in the city.

The effect of the proposed designation on the surrounding area:

Designation of the monolithic domes as local landmarks could be beneficial the surrounding area if the domes can be reused for new purposes. If the domes are not adaptable, then designation could restrict future uses to the surrounding area.

The consistency of the proposed designation with applicable development plans or development objectives adopted by the City Council:

The monolithic domes are located within the UHT, which is included in the *Above the Falls Master Plan Update*. The plan states that the property “can be closed at some point to pursue a higher value future that makes better use of the City’s riverfront” and that the UHT is “a prime location for a new riverfront park and compatible development.” Designation of the domes might support redevelopment of the site for parkland, but it also might limit the transformation to parkland.

National Register Status

The three monolithic concrete domes are not listed in the National Register of Historic Places (NRHP). In 2020, the domes were evaluated for individual eligibility for the NRHP and found to be not eligible under any criteria. The Minnesota SHPO concurred with the findings. The domes

are non-contributing resources within Upper Harbor Terminal, which the SHPO determined was a contributing resource to a larger potential historic district for the Upper Mississippi Harbor Development. As non-contributing resources within the larger district, the domes would not be eligible for the NRHP.

State Designation

The three monolithic domes have not been designated by the state of Minnesota as a historic district, historic place, or historic site.

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APPENDIX A: ARCHITECTURE/HISTORY INVENTORY FORMS

These inventory forms were created in 2020 as part of a reevaluation of a larger potential historic district. The recommendations for eligibility on the forms might not agree with the recommendations in this report. Please use the forms for descriptions of the individual resources and defer to this report for contributing/non-contributing status for local designation.