RACINE CREAM BRICK STRUCTURES: An Inventory

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- - - AND - - -

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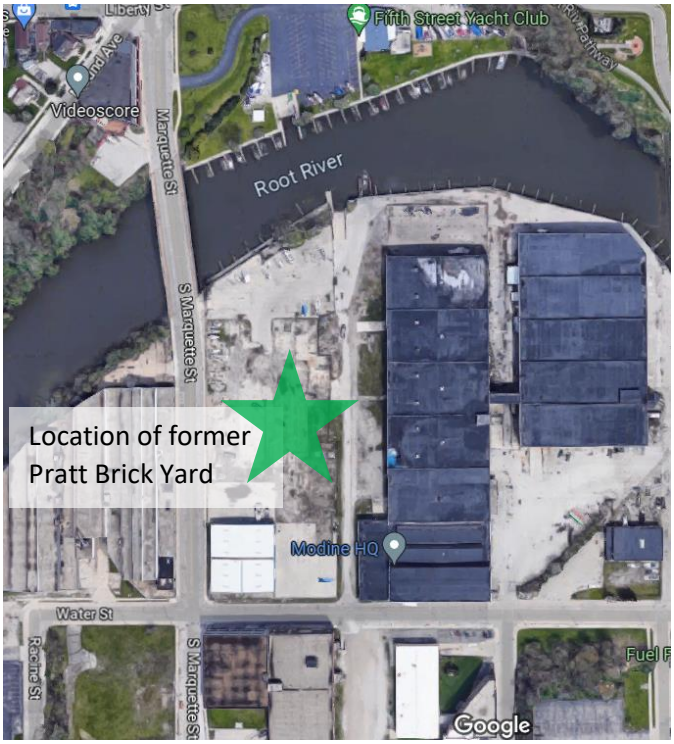
PUPRPOSE OF THIS REPORT

This report is prepared in conjunction with Independent Studies and Research associated with the candidacy for a Master of Science in Architecture from the University of Wisconsin-Milwaukee, School of Architecture & Urban Planning Historic Preservation Institute. The formulation of this report has been undertaken at the request of the Office of the Mayor of the City of Racine as empowered by applicable local, state, and federal acts and entitlements.[i] This report and the associated inventory are intended to be used as an initial reference to foster further discussion and analysis, and for the potential development of programs designed to assist property owners in the repair, maintenance, renovation, or preservation of cream brick structures in the City of Racine.

ORGANIZATION OF THIS REPORT

A BRIEF HISTORY OF RACINE'S CREAM BRICK MANUFACTURING (1836 to 1914)

Note: For a map of the brickyard locations see *Figure 1* at the end of this report.



Benjamin Pratt - Production was begun by Benjamin Pratt in 1836 at a location on the south side of the Root River, just east of Marquette Street. The first two brick structures were the government lighthouse which once stood at the location of the current Racine Public Library, and the Henry F. Cox home that once stood at 513 – 6th Street.[ii]


First Lighthouse

Heath & Dickenson - From 1865-1875 the company Heath and Dickenson produced bricks of clay and sand. For bricks delivered to the job site the cost was $4 per 1,000 bricks. For bricks that were picked up at the brick yard, the cost was $3.50 per $1,000. No more exact location was given for the Heath and Dickenson operation other than Town of Mt. Pleasant.[iii]

Becker & Gage - In 1867, the Becker and Gage (later Becker and Sons – 1870) brickyard produced brick at a location on the west end of 11th Street at Herrick Avenue (now South Memorial Drive) in an area still know as Herrick's Flatts (or, The Flatts).[iv]

Smith & Co. Location as seen today: Google

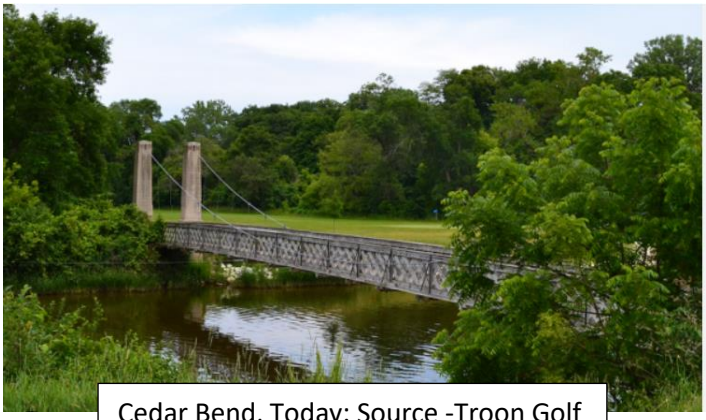
C.A. Smith & Co. - Another producer was C.A. Smith and Co. C.A. began producing bricks in 1868 at a location at the west end of 9th Street, west of the Chicago & Northwestern Railway right-of-way. A first of its kind for Racine, the bricks were made with a hand-operated press rather than individual wooden forms.[v]

Burdick & Erskine Bros. - From the late 1870 to the 1910's Burdick Bros., later Burdick and Erskine, and lastly (1880) Erskine operated a brick yard northwest of the corner of Goold St. and Main St. When the yard closed, the clay pit was filled in the 1920's and used for many years as an ice-skating venue, informally named Crystal Lake.[vi]

Source: Racine Journal Times 2-24-1996

Looking back John Halverson was teaching his future bride, Florence Butgereit, how to skate on Crystal Lake (2100 block of North Main Street across the street from the present Racine Zoo Park) in this 1920 photo. LaVerne

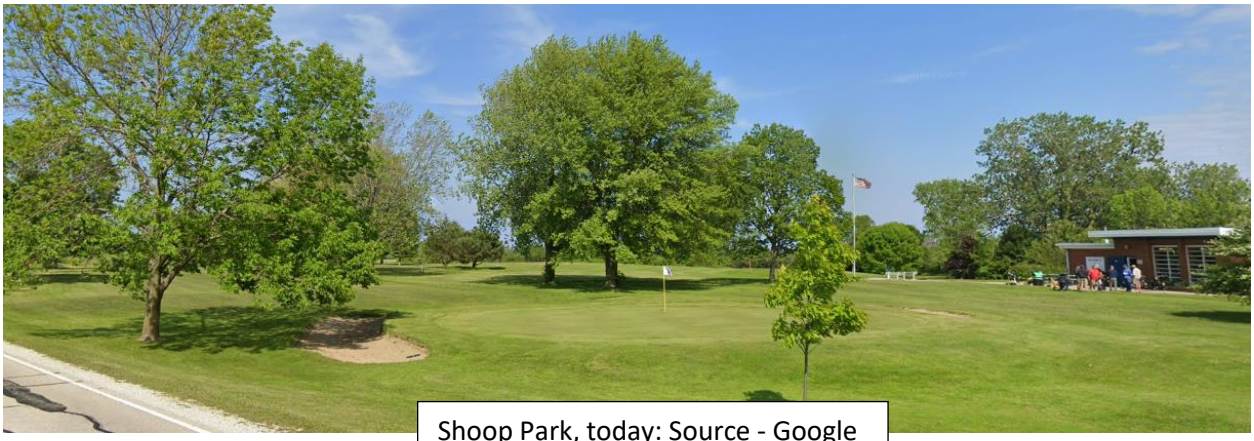
F.H. Haumersen & Sons - This company was started by Frederick Haumersen in 1871 at what is now the Racine Zoo. This brickyard was near Baumann's brickyard. The mixing pit left behind from years of digging for clay now forms the zoo lagoon.



Cedar Bend, Today: Source -Troon Golf

Hilker Co. - Probably the largest and longest-lived brick producer, Hilker Co. began in 1872 (later Hilker Bros. Brick Manufacturing Co. – 1893) operated three locations over the company's life: at a location now known as Shoop Park, a location on the northwest corner of Goold Str. and Main St., and a location at Cedar Bend (now part of Washington Park golf course). By 1885 their yards

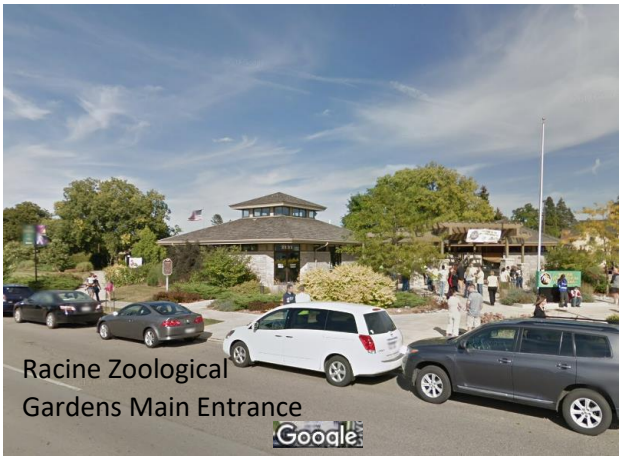
Hilker's Brick Yard Late 1800's (Future Shoop Park): Source - Racine Journal Times

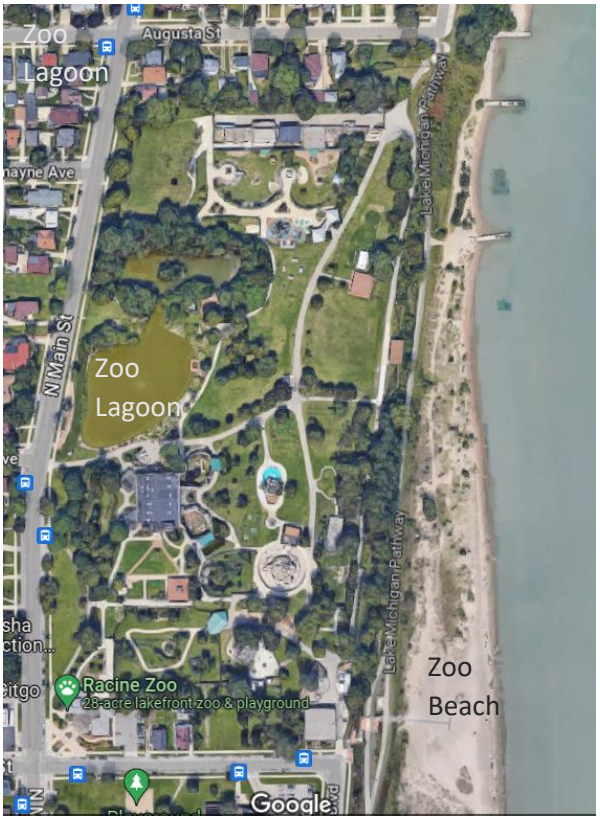


Shoop Park, today: Source - Google

produced 4 million bricks a year, feeding the needs of the growing community. Despite modernizing their operations to compete with the brick yards of Milwaukee and Chicago, Hilker Bros. ceased operations as costs rose and their veins of clay were depleted.[vii] [viii]

Bauman Brickmaking Co. Located at the current site of the Racine - Zoological Gardens, in 1881 Bauman Brickmaking Co. produced bricks, as well as at current day Lake Park (southeast corner of Main St. and Goold St.). This was a productive operation utilizing 6 clay pits turning out 16,000 bricks per day.[ix]





Golede Brickyard - The Golede Brickyard (later known as the Morris Bros. Brickyard) was another brick making operation in Racine but was sold to the Hilker Bros. in 1895. Like C.A. Smith and Co., Gloede/Morris brick were also formed in a mechanical hand press. No precise location is given for this operation other than "north of Racine, along lakefront".[x]

THE BRICK MAKING PROCESS[xi]

To gain a better understanding and appreciation of the city of Racine's historic cream brick resource a brief summary of the brick production process, the laborers, and the brick business provides a good foundation.

The Clays common makeup found along the western shores of Lake Michigan includes silica, lime, magnesia, alumina, iron, potash, and other trace elements. Amounts of elements can vary by location, and along with firing time and temperature, varying colors and strengths of brick are achieved.[xii]

Brick production[xiii] took place in warm months when the ground was not frozen. During the winter months, workers chopped wood for kilns for summer months during which the process took more than four weeks. With the assistance of horses and mules, workers would dig and mix a combination of clay, sand, and water. Once the proper constancy was reached, the mixture was pressed into molds to achieve the proper form and size, then unmolded and set out for air drying for three weeks. Early producers would hand fill the brick forms, but later operations moved to mechanized presses for filling brick forms to increase production rates and lower unit costs.

After air drying, up to 25,000 bricks were then baked in a kiln for eight days. When baking was complete, the bricks were removed from the kiln and separated into three classifications. The top layers of the kiln were the hardest bricks and were used primarily for sewer construction. The center layers of kiln bricks were used for a building's exterior face bricks. The bottom and side layers were used for interior and common walls.

Face Brick salvaged/reclaimed uncleaned.

Common brick salvaged/reclaimed uncleaned.

The workmen unionized by 1903 and scheduled to make 7,200 pressed bricks per day. Yard truckers made $2 per 1,000 bricks trucked. Workmen stacking brick into the kiln made $2.50 per day.

Hilker's Brick Yard Workers Late 1800's: Source - Racine Journal Times

It took lots of horsepower as well as manpower to make bricks in the old days

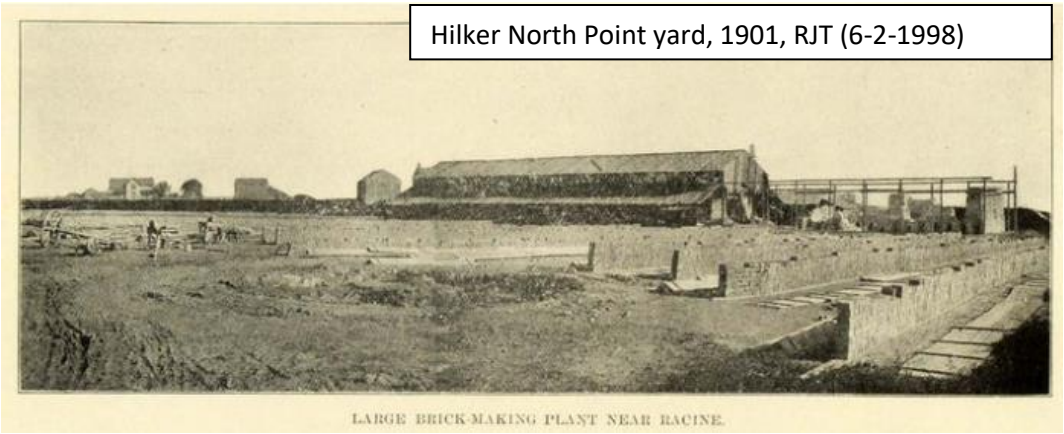
The brick business was changing by the turn of 19th century. With ever improving rail transport, and improvements to road networks (to a lesser extent), competition for brick yards from out of the Racine area became more intense.

Additionally, cream brick was considered "old fashioned" and rich, dark reds and browns "tapestry" brick was being imported for "modern" buildings in Racine. Additionally, by 1910, veins of red, blue, gray, and purple clay were beginning to thin out.

Due to Chicago and Milwaukee brick producers mechanizing and reducing production times, costs were driven down and eventually the less mechanized producers in Racine were pushed out of business. Hilker's brickyards tried to compete by using machinery, especially at the Cedar Bend yard, but by 1914 they too went out of business.

Other factors that lead to the demise of cream brick manufacturing in Racine, and in other communities, included the previously mentioned depletion of clay veins, the increased use in building foundation construction of cinder block and concrete block. Use of cinder and concrete block in foundations eliminated the need to

Hilker North Point yard, 1901, RJT (6-2-1998)



LARGE BRICK-MAKING PLANT NEAR RACINE.

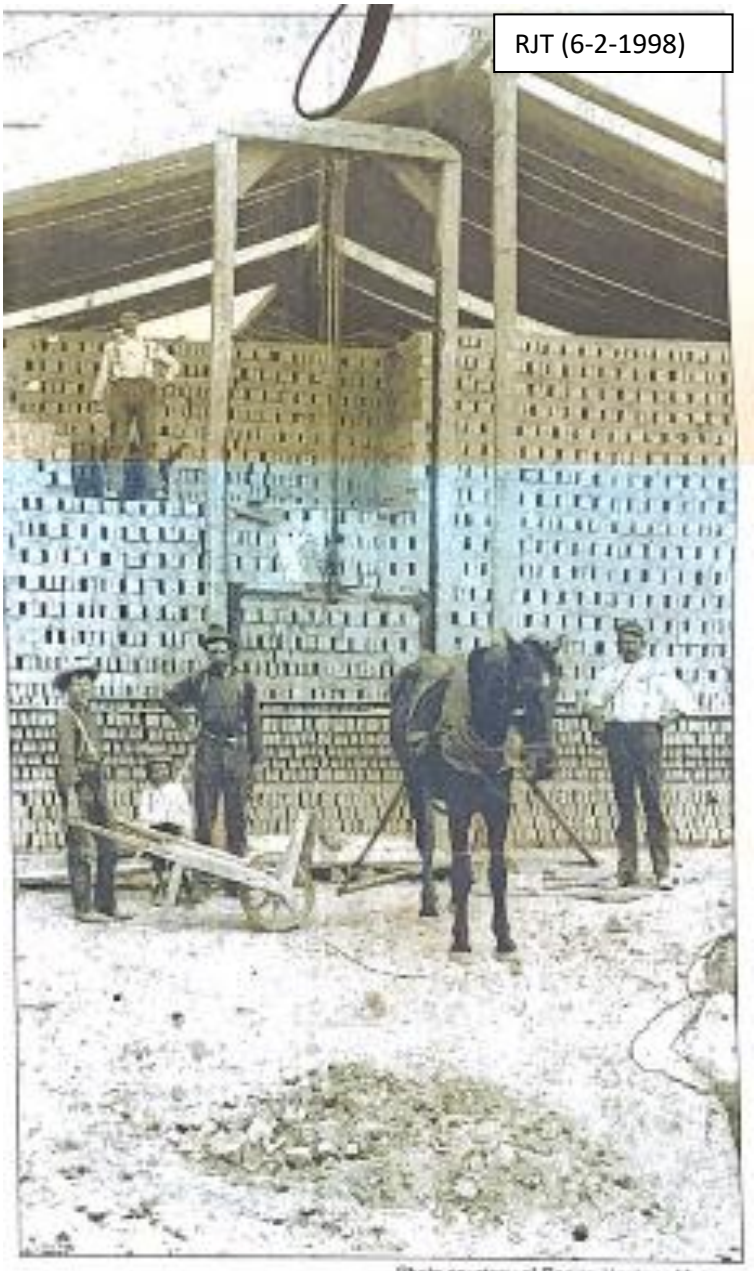


Photo courtesy of Racine Heritage Museum

The Burdick brickyard, about 1900. Standing on the pile of bricks is Dave Burdick. In foreground, from left to right, are George Weitlet, young Russell Burdick, Lewis Burdick and a Mr. Graw.

construct double wythe walls, and their increased unit size meant fewer block units were needed to construct a foundation as opposed to a brick foundation. This eliminated the length of time needed to construct a foundation since fewer individual units were being hand-set to construct the walls.

Decorative cement brick for exterior walls and poured concrete foundations also began to offer more variety and alternative construction materials and techniques.

Evolving building practices also impacted the demand for cream brick. Builders began shifting away from double wythe structural brick walls to more quickly constructed and cost-effective structural lumber or structural steel walls using a single wythe of brick as a decorative veneer. This shift decreased the shear number of bricks needed to construct a building.

As stated earlier, in 1875 Heath & Dickenson was selling cream brick for $4 per 1,000 bricks. For bricks that were picked up at the brick yard, the cost was $3.50 per $1,000. By 1894, Haumersen was selling common brick for $6.30 per 1,000. Long since out of the brick production business but still selling brick, in 1991, Haumersen was selling salvaged brick for $250-275/1,000. Today on the internet one can find full dimensioned salvaged “Milwaukee” cream brick selling for $1.25 per brick. Also available is salvaged cream brick cut into ½ in thick veneer slices offered for sale at $18.00 a square foot.

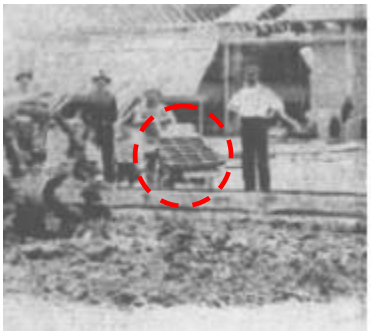
Racine brickmakers in the early 1900s

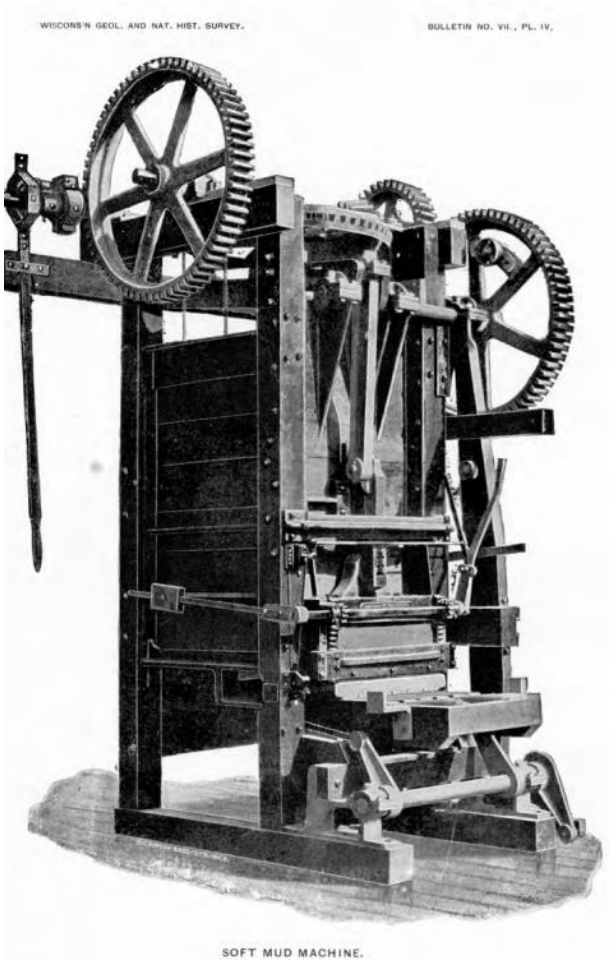
Hilker Co., run by brothers Adolph and William Hilker, was the largest of Racine's many brickmaking companies. Carol Johnson of 3929 W. Johnson Ave. submitted this photo of a group of Hilker employees at its Cedar Bend (now part of Washington Park) plant in about 1903-04. Johnson said the man closest to the horse is her grandfather, John Carl Noffke. The others are unidentified. Hilker Co., founded in 1872, was producing 4 million bricks a year by 1885 and eventually had three brickyards. The others were at what is now Shoop Park and near Goold Street. While other brickyards were closing in the early 1900s, the Hilkers invested in brickmaking machinery and tried to keep up with the growing competition from Chicago brickmakers. Hilker made bricks until 1914.

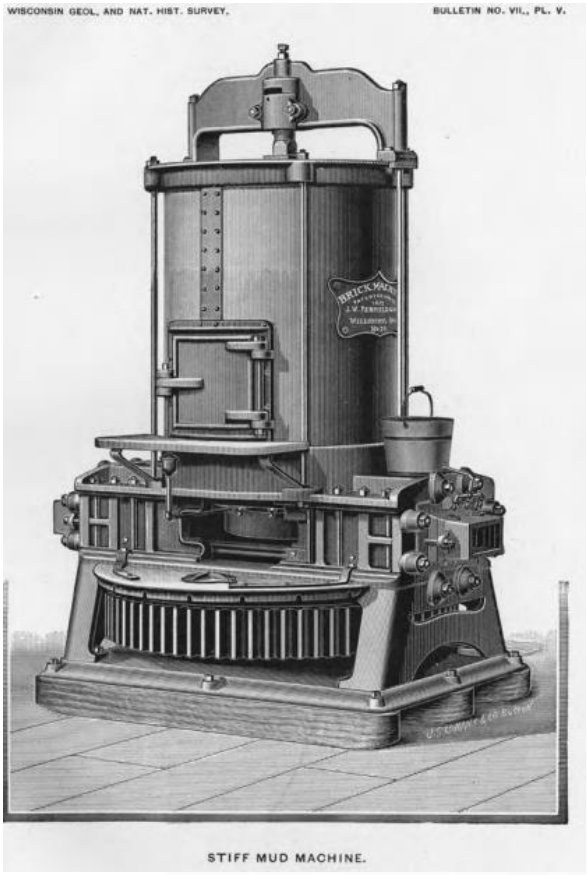
Source: Racine Journal Times (undated)

600 brick pallet, $1.25 per brick, 8" L x 2 ¼" H x 3 ¾" W pink/red or buff/bright yellow cream brick. DePere, WI

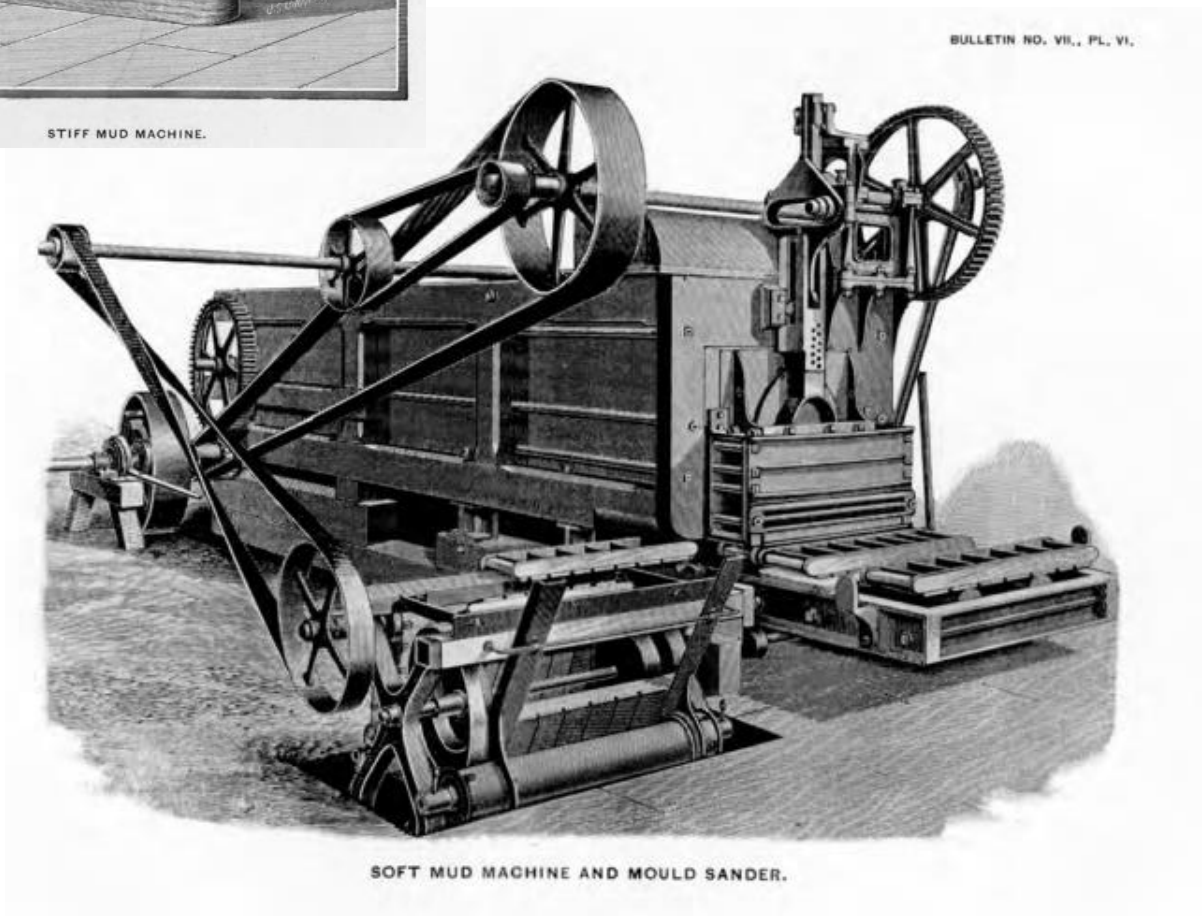
The machinery of brick making made all the difference in speeding up the brick forming process. Most of Racine's brick makers opted to continue hand filling the brick forms thus placing them at a competitive disadvantage. In the photo to the left, visible is a hand filled wooden form used by the Hilker Bros. into the late 1800's. As indicated on Page 8, to better compete Hilker Bros. invested in brick making machinery helping them to survive until 1914. While unknown what Hilker Bros. used, the following are some examples of brick forming machinery circa 1900. All used a scove kiln to fire their clay into bricks.[xiv]







STIFF MUD MACHINE.



SOFT MUD MACHINE AND MOULD SANDER.

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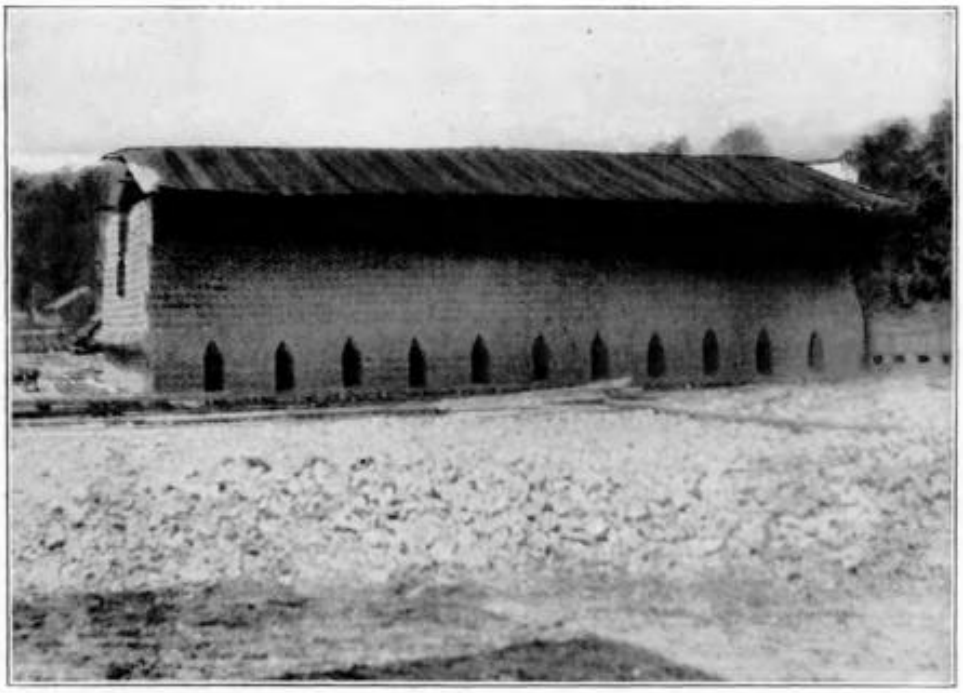

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TYPICAL SCOVE KILNS.

HILKER BROTHERS NORTH POINT BRICK YARD, RACINE.

CLAY BANK, TYPICAL FOR THE LACUSTRINE AREA.

Eventually developed into today's Shoop golf course.

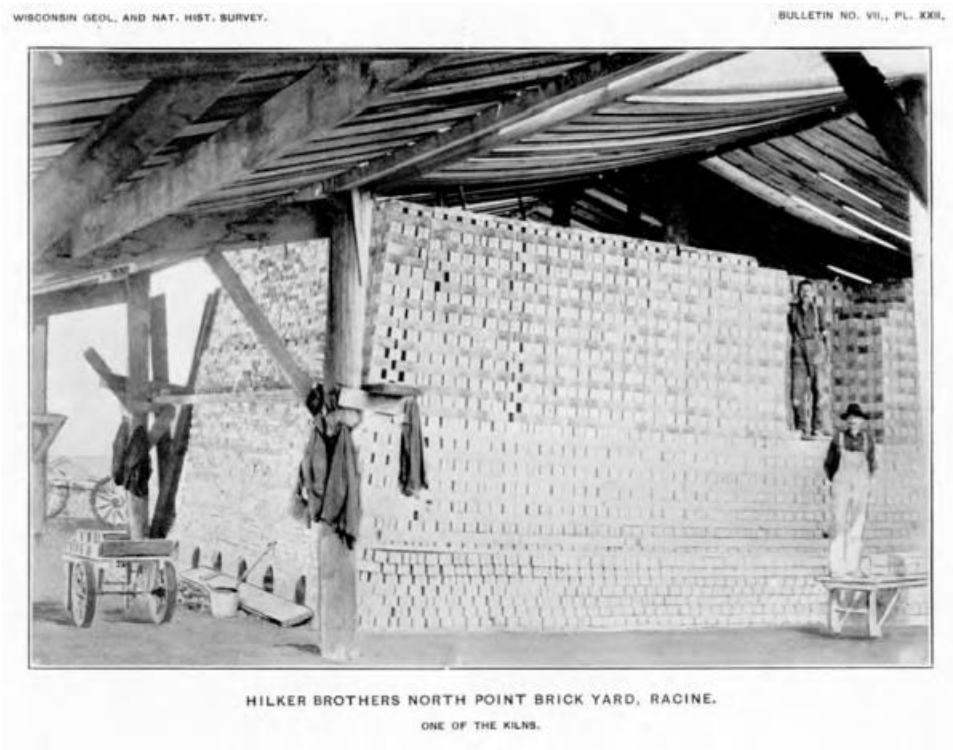
A SNAPSHOT IN TIME: 1901 STATE REPORT ON RACINE'S BRICK INDUSTRY

The following are excerpts from a report by Ernest Robertson Buckley. The Clays and Clay Industries of Wisconsin. 1901. Pages 105 through 120. Wisconsin Geological and Natural History Survey. Madison, Wisconsin. To summarize the text would be at the risk of losing context, the understating methods, and technical detail best stated by the original author.

"Racine is situated on Lake Michigan in the southeastern part of the state and in the midst of the lacustrine clay deposits. Five brick plants have been established in this vicinity, four of which are at the present time actively engaged in the manufacture of brick.

One of the plants is equipped for making chemical sand brick out of lake sand and natural cement but owing to unfortunate circumstances the plant is now idle.

This plant is owned and operated by W. H. Lathrop and is known as **the Chemical Sand Brick Company**. The sand used in the manufacture of these brick occurs in abundance along the lake shore. It is mixed with natural cement and compacted by hydraulic pressure into any desired shape or size. The brick are variously colored with pigments provided for the purpose. The main objection to these brick is their weakness. The strength is so low that they frequently crack when subjected to very slight unequal stresses. They are also somewhat softer than the brick manufactured out of clay and when exposed to the atmosphere, weather more rapidly.



HILKER BROTHERS NORTH POINT BRICK YARD, RACINE.
ONE OF THE KILNS.

It is thought that a very desirable brick ought to be made out of this combination, if portland instead of natural cement were used.

The plants that are engaged in the manufacture of brick out of clay are owned and operated by Bauman and Sons, F. N. Burdick, F. H. Hammerson and Sons, and The Hilker Brothers Brick Manufacturing Company. The clay which occurs at all of the yards is essentially the same. In some places the red burning clay has a greater depth than at others. The percentages of quartz, calcite and limestone gravel are not the same in the clay from all the yards. However, in general, the clay is essentially the same and if burned with equal care the brick manufactured at one yard ought not to be superior to those at the others.

The Hilker Brother's Brick Manufacturing Company own and operate three yards in this locality. One of the yards, known as the North Point, is located about three miles north of the city near the North Point light house. The clay at this place is covered with sod and sand to a depth of one to three feet. Underneath the sand, occurs from six to ten feet of purplish colored clay containing very few pebbles.

This clay is shoveled from the bank and conveyed in dump carts: to vats in which it is tempered. About six wagon loads of sand is mixed with clay sufficient for manufacturing 12,000 brick. A small amount of fine coal is also mixed with the clay to assist in burning.

A Philadelphia tempering wheel operated by horse power, is used to mix the clay in the vats. The brick are moulded by hand, 4,000 brick being a day's work. The brick are dried in hacks on the yard and burned in scove kilns.

The clay bank at the Lake Shore yard consists of a stripping of about two and one·half feet of sod and sand, underneath which occurs from four to eight feet of laminated purple and blue clay and an unknown depth of blue clay which contains a considerable quantity of limestone gravel. The upper surface of blue clay is uneven and billowy, making the thickness of the workable clay uncertain. At this plant the clay is tempered in wooden pug mills operated by horse power. The brick are moulded by hand, dried in hacks on the yard, and burned in scove kilns .

At the Cedar Bend yard both common and repress brick are manufactured. The clay which is used at this yard has a somewhat different appearance from that which is mined at the other yards. The upper four to six feet has a greenish blue color and is streaked with reddish brown iron oxide which gives it much the appearance of a late alluvial deposit. Underneath this blue clay occurs two to three feet of sand, six inches of gravel, and forty feet of blue clay which is practically free from gravel of any kind.

The work at this yard is all done by hand. The brick :are made and repressed by hand. All the brick are dried in hacks on the yard and burned in scove kilns. The repress brick are sold in four grades known as the (1) dark colored (2) medium colored (3) white colored and (4) hard.

The average annual output from these yards during the last three years has been in the neighborhood of three and a half million brick. The common brick sold in 1899 for $5.50 per M. kiln run and the repress for $10.00 per M.

The yard owned and operated by **F. H. Hammerson and Sons**, is located near the North Point yard of the Hilker Manufacturing Company and is worked on essentially the same plan. The clay is mixed with a small percentage of sand and tempered in wooden pug mills operated by horse power. The brick are moulded by hand, dried in hacks on the yard and burned in scove kilns.

At Burdick's Yard the workable clay has a thickness of from three to ten feet underneath which occurs about sixty feet of blue clay in which limestone gravel is abundant.

The clay which is being used is laminated and has a purple and blue color. A small quantity of fine coal is mixed with the clay to assist in burning. The clay is mixed in a vat by means of a tempering wheel operated by horse power. The brick are moulded by hand, dried in hacks on the yard, and burned in scove kilns. It requires about eight days to burn the brick and a little over onethird of a cord of wood is consumed for each thousand brick burned.

The clay which occurs at **Bauman and Sons'** yard is similar to tha.t at the previously described yards. The clay is mixed with a small percentage of sand and pugged with tempering wheels. The brick are moulded by hand, dried in hacks on the yard, and burned in scove kilns.

The average annual output of this yard for the last three years has been about one million brick. The kiln run brick sold in 1899 for $5.00 and $6.00 per M.

All the brick manufactured at these several plants are ordinarily made without sanding and are known as "slop brick." The clay is thrown into the moulds by hand and it is usually so soft that the workmen are badly bespattered with the mud which flies from the moulds.

In general it may be said that the method of manufacturing brick at these yards is very much behind the conception of the modern brick maker. Plants operated on a. plan similar to these require the investment of very little capital. The brick, however, are moulded, dried and burned in such a manner that the cost of manufacture is above the average. With two moulders and six men to haul the clay from the pit and carry away the brick, the maximum output of a plant such as these is about 8,000 per day.

Under these conditions it is somewhat difficult for the Racine factories to compete in price with those in which improved machinery is used. It must be said, however, that the methods employed at the Racine yards insure a good strong brick, while the brick manufactured by some of the cheaper methods are not so reliable. The method of tempering clay with a wheel, although somewhat expensive is certainly very desirable. The brick which are made by hand from clay which is thus tempered are usually superior to those which are manufactured by the rapid method employed by some Chicago factories. However, it is believed that improved methods of drying, burning and moulding could be employed without materially lessening the quality of the brick.

Laboratory Examination.-Samples of clay from the "West" and "Cedar Bend" yards of the Hilker Manufacturing Company were examined in the laboratory of the survey.

The clay from the West yard is hard and brittle when dry but very soft and plastic when wet. It slacks very readily, breaking down into very fine scales. Under the microscope the grains were found to average about .009 mm. in diameter, the largest not exceeding .029 of a mm. Numerous rhombic crystals of calcite were observed under the microscope. Many of the individuals were slightly discolored with iron oxide.

The blue clay from the Cedar Bend yard is hard and granular when dry but slacks readily in water, breaking down into a fine scaly mass. The clay has no distinguishing odor or taste, and feels decidedly smooth when pressed between the fingers.

This clay is coarser grained than the preceding. The largest grains are .71 of a mm. in diameter. A greater number of the grains are .5i of a mm. in diameter, while the smaller grains range from .0058 and .0029 of a mm. in diameter. The individuals are mainly sub· angular in outline.

Quartz is a much more abundant constituent of this than the preceding clay. Calcite, iron oxide, chlorite, and kaolin are also present in undetermined proportions."

End of excerpts.

SURVEY METHODOLOGY

Areas were surveyed between January 13 and March 28, 2023 during 17 separate surveys sessions. "Windshield" surveys were systematically conducted by dividing the city into 20 survey areas and slowly driving the street grid therein to observe each structure. Over 25,000 structures were visually surveyed to arrive at the 850 structures described in the data presented in the table below. The information should be treated as a starting point for additional confirmation of brick composition (in some cases), structure evaluation for condition, and the design of programs to aid in the preservation and/or restoration, and the continued reuse of these cream brick structure.

The use of cream brick is quite pervasive in structures throughout the city. Examples observed of the varied uses for cream brick were driveways, fence pedestals, fences/walls, mailbox posts, chimneys, monument signs, exposed foundations, knee walls and bulk heads, full common walls, full decorative facades, reclaimed cream brick, building accents, and entire building facades. Cream bricks were also used in the construction of sewer lines.

However, for this report, efforts were focused on documenting habitable buildings rather than secondary or tertiary structures as identified above. The reasoning for this focus is to concentrate on structures that are most prominent, and most likely to support potential investment in loans, grants and tax credits for rehabilitation, restoration or continued and/or adaptive reuse from agencies such as the City of Racine, the State of Wisconsin, Wisconsin Historical Society, or the US-Department of the Interior.

Cream brick structures were observed in the field and documented by street and address data established in the field, the status of brick, and the structure's apparent use. Based on these flied observations, a structure's status was then placed in one of six categories: original, original painted, original altered, original-painted-altered, original reclaimed, reclaimed accents.

Field observations were then cross-referenced with City of Racine assessment records available through the City of Racine's online geographic information system (GIS). The survey team then recorded into the database the City of Racine officially recognized parcel data for where structures were observed. This information included street name, address, and parcel number. Using this officially designated address allows properties to be searched and mapped through the City's GIS and promotes uniformity with the official assessor's database.

Buildings Not Inventoried

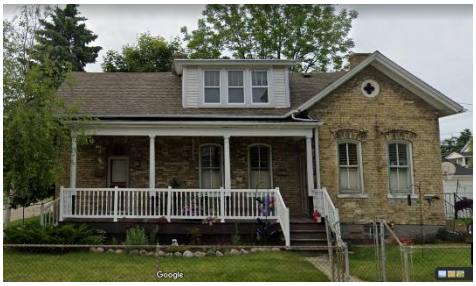
In conducting the field work, a certain number of buildings were suspected to be cream brick that had been covered with siding or stucco. These buildings would require physical inspection, and possibly core sampling, to determine their original status as a cream brick structure.

BUILDING STATUS ASSIGNED

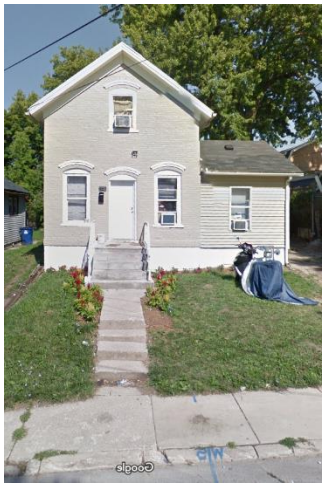
For the objectives of this inventory, 825 qualifying structures were observed, and their status is defined as follows:

Original: structure appears to be presenting as originally constructed (2048 N. Wisconsin St. ca 1893). Of this type, 253 structures were noted. These structures display no apparent exterior additions or alterations that depart from the original configuration of the structure when first constructed. The brick on these structures displays no apparent evidence of having ever been painted.

Original, Painted: structure appears to be original, but brick has been painted (1840 N. Wisconsin St. ca 1900). Of this type, 44 structures were noted. These structures display no apparent exterior additions or alteration that depart from the original configuration of the structure when first constructed, but the cream brick has been painted (peeling paint helped to identify the cream brick beneath).



Original, Altered: structure appears to be original, but later altered (porch, dormers, addition, etc.) (2023 N. Wisconsin St. ca 1884). Of this type, 237 structures were noted. The brick on these structures displays no apparent evidence of having ever been painted.



Original, Altered, Painted: structure appears to be original, but later altered and painted (918 Elm St. ca 1880). Of this type, 114 structures were noted. The brick on these structures has been painted, and additions made to the building footprint and/or roof line that alter the appearance of the original structure.

Original, Reclaimed: entire structure built with reclaimed cream brick (722 Orchard St. ca 1941). Of this type, 135 structures were noted. These structures display no evidence of the brick being painted, but their later construction and brick appearance indicated that the structure was built from salvaged cream brick: bricks have varying tones of cream, tan, green, or red hues, or assorted brick show evidence of original environmental staining, or painting. The structures may have additions which post-date the original date of construction.

Reclaimed, Accents: structure displays reclaimed cream brick as a decorative accent (single façade, wainscotting, porch, store front, etc.) (3737 Canada Goose Crossing ca 1992). Of this type, 42 structures were noted.

BUILDING USE CATEGORIZED

In addition to building status being assigned, the building use that was observed in the field was noted. Residential uses totaled 601. Commercial uses totaled 173 structures and included retail, office and institutional uses such as a meeting and retreat facility, or a hospital. Industrial uses totaled 25 structures but often included structures having multiple connected/common wall additions of cream brick. Churches totaled 20 structures. School buildings totaled 6 structures.

SUMMARY TABLE OF STATUS AND USE *, **

Cream Brick by The Numbers

BRICK STATUS	Quantity of…	USE	Quantity of…
Original	253	**Residential**	601
Original, Painted	44	**Commercial**	173
Original, Altered	237	**Industrial**	25
Original, Painted, Altered	114	**Church**	20
Original, Reclaimed	135	**School**	6
Reclaimed, Accents	42		

*For the full list of properties refer to the table at the end of this report.

** See Figure 2 for Goolge MyMaps plotting of inventoried structures (orange pinpoints).

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RELFECTIONS ON METHODOLOGY

Google Street View or Windshield Survey: To consider the method of gathering property information, the "windshield" survey method proved to be most time consuming yet most accurate.

When the project was initially conceived, it was thought that a large portion of the field work would be able to be conducted using Google Street View. However, unless properties had a zero-foot set back from the street property line, the picture resolution from Google was not fine grained or in focus enough to be able to distinguish between brick textures, and frequently, color.

Additionally, addresses on Google Street view were often blurred out, blocked, or simply not legible. Addresses typed into Google Street view were not always reflected accurately in the field. Also, building views were frequently obscured by trees and shrubs, other vegetation, or neighboring structures.

When conducting the field surveys, the team initially prepared an area map using the city's GIS data base. The map was generated for that day's target area and contained the parcel number as a cross reference and an address was noted in the field. Once getting back to the office, the data was then cross referenced with the City Assessor's records. This method proved to be cumbersome in the field as the survey team attempted to locate a property on the map, then determine the address of the property, then make sure the address was assigned to the proper parcel on the area map; all while attempting to determine what the property's status was: Original, Original Painted, Original Altered, Original Altered Painted, etc.

What was found to be more helpful was to continue to use a map, only to keep track of the streets traveled, and on a separate data table enter the address of the property and corresponding status observed. This adjustment greatly aided in simplifying data collection in the field and avoiding mis-labeling parcels on the map. Properties in the table were later, in the office, aligned with the official property address as recognized by the City Assessor's office, and the proper parcel ID number.

Mapping: Daily survey area assignments mapping was generated using the city's online GIS. Mapping of surveyed data was fairly easy using Google MyMap for a broad overview of the noted properties on a city-wide basis. However, given the large area being surveyed, the Google MyMap map shown in Figure 2. is not as discernable as would be desired. More targeted mapping can be produced when tabular data can be downloaded into the a GIS system and sorted buy the different property statuses observed, as illustrated in Figures 3 & 4 (by Associate Planner Steven Madsen of the City of Racine, Department of City Development).

NEXT STEPS

To keep the project on course with the stated intent "… to be used as an initial reference to foster further discussion and analysis, and for the potential development of programs designed to assist property owners in the repair, maintenance, renovation, or preservation of cream brick structures in the city of Racine…" the following recommendations are for consideration by the City of Racine to utilize the gathered data for the protection of this valued resource:

- Explore with the Wisconsin Historical Society the possibility of establishing a scattered site National Register cream brick historic district designation to set the groundwork for property owners to be able to access State and Federal tax credits for building rehabilitation or restoration projects. When this project was first conceived, initial discussions with the office of the State Historic Preservation Officer representative, Jason Tish, and to this writer has been indicated a positive reaction to the possibility of this approach.
- Determine which building statuses or areas make the most sense for the city to focus on. Such as: return on investment, visibility of target structures (access corridors/first impressions), adjacent active redevelopment, social or neighborhood impact on self-image to encourage additional reinvestment, neighborhood reinvestment and crime reduction.
- Only concentrate on buildings in poor and fair condition, or those in fair and average condition, as identified in the city's Assessor records.
- Use GIS mapping to isolate or visualize patterns and overlay other potential qualifying factors such as historic or design districts, access corridors, flood plains, income or household data, redevelopment areas, crime, others.
- Determine which tools Racine already has that can assist property owners with grants, loans, or other forms of assistance: façade grant program, tax increment districts, federal or state housing or economic development programs, homeowner loans or grants, business improvement district, and business development programs, CDBG.
- Conduct on-site inspections of the buildings with status of Original, Original Painted, Original Altered, Original Painted Altered to verify results of windshield surveys.
- Obtain samples of brick at each structure for chemical analysis to determine the origin of the cream brick (Racine, Chicago, Milwaukee, Sheboygan, or elsewhere).
- A review of the City's building permits may also yield information as to the builder and/or their brick supplier.

Figure 1. BRICKYARDS IN RACINE AREA 1839-1914

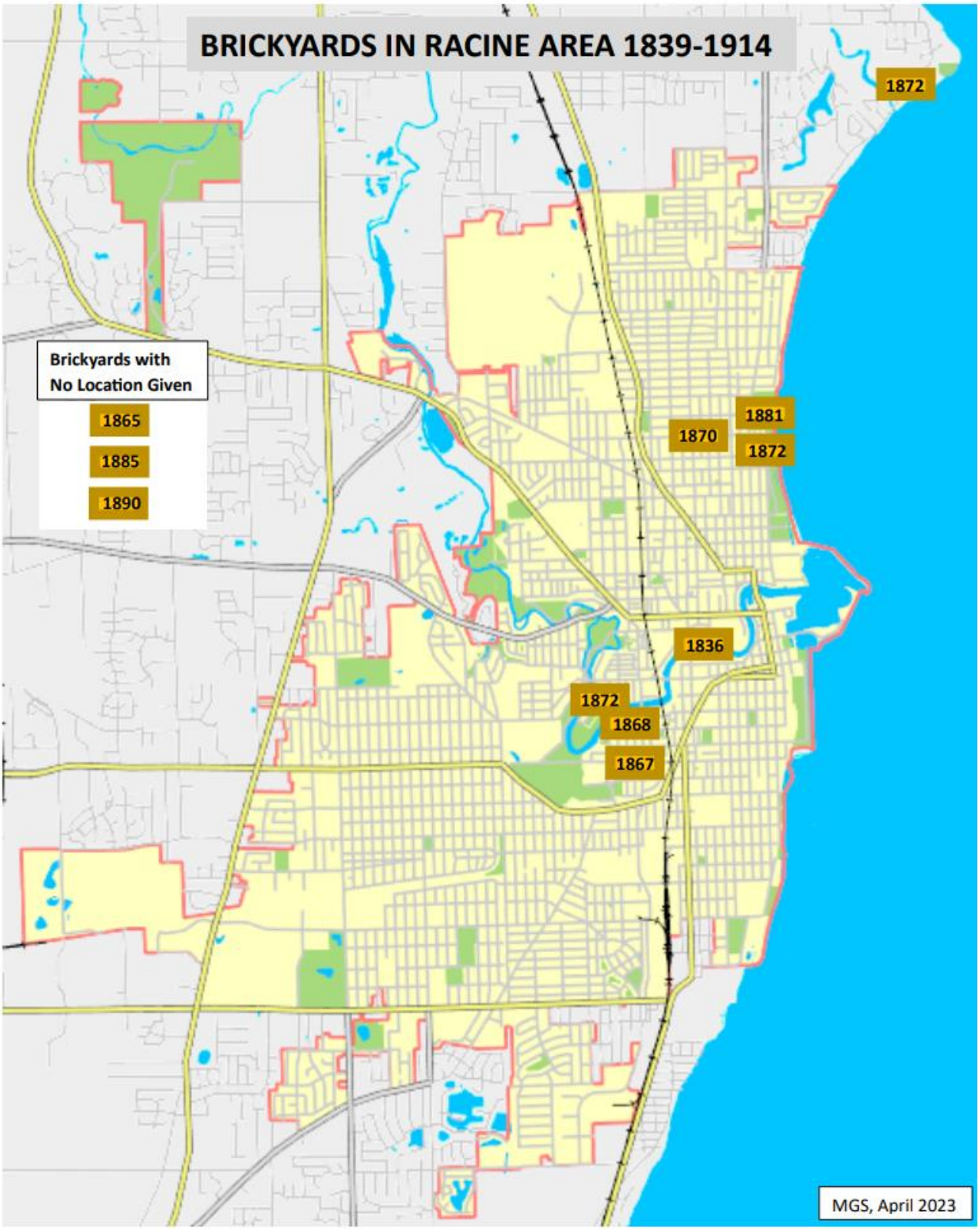


Figure 2. LOCATION OF INVENTORIED STRUCTURES (Google MyMap, May 16, 2023)

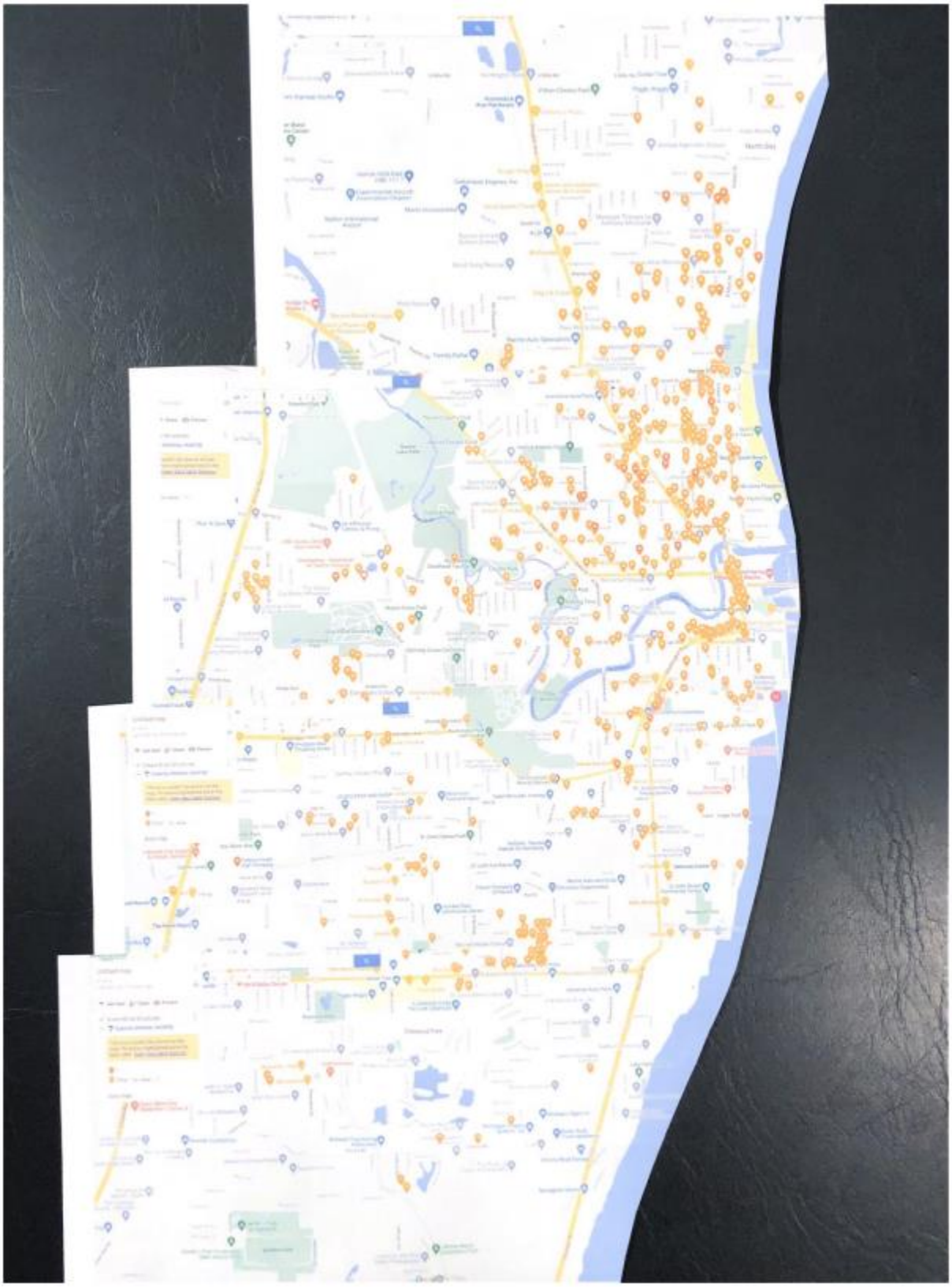


Figure 3. LOCATION MAP PRODUCED USING CITY OF RACINE GIS MAPPING (June 8, 2023)

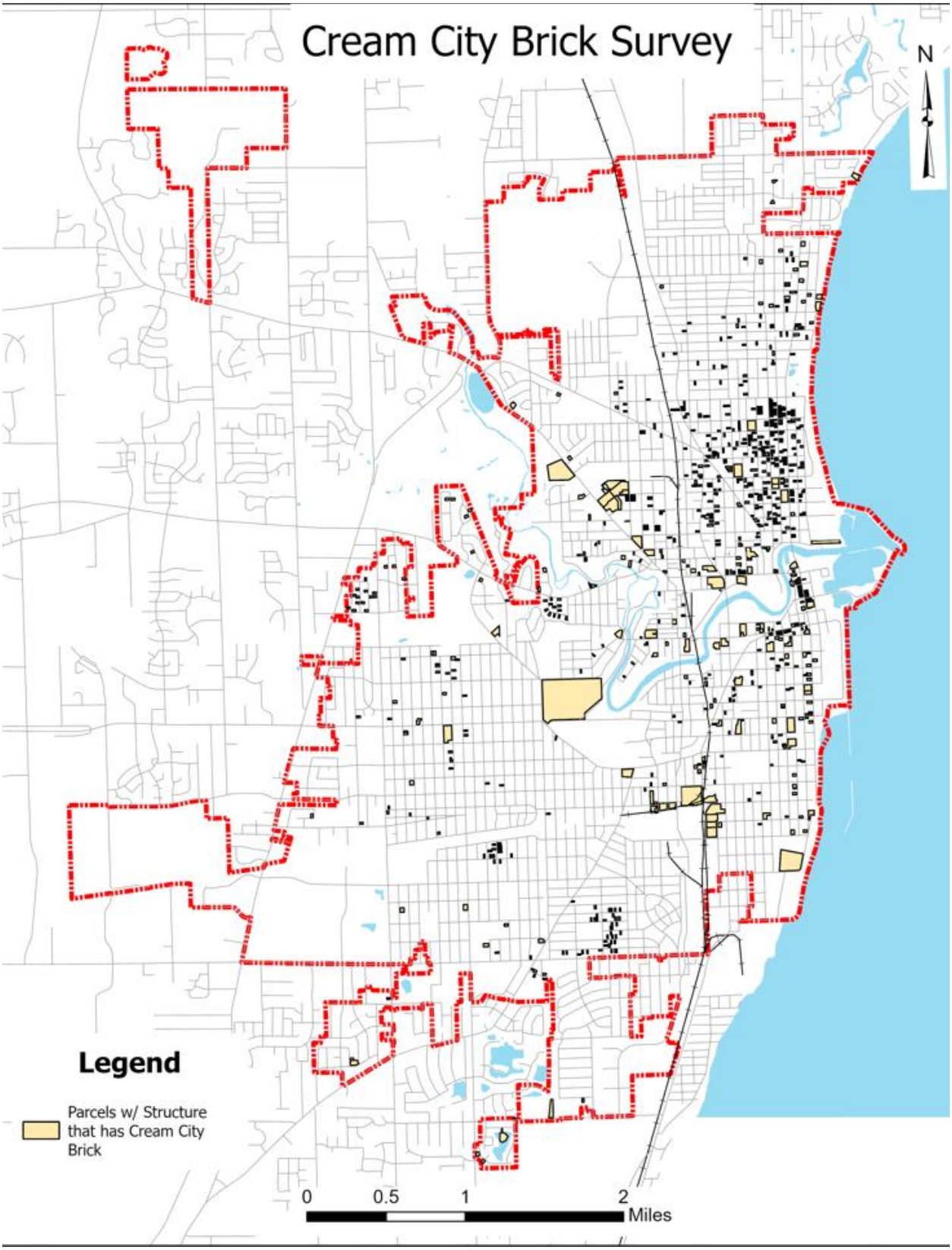
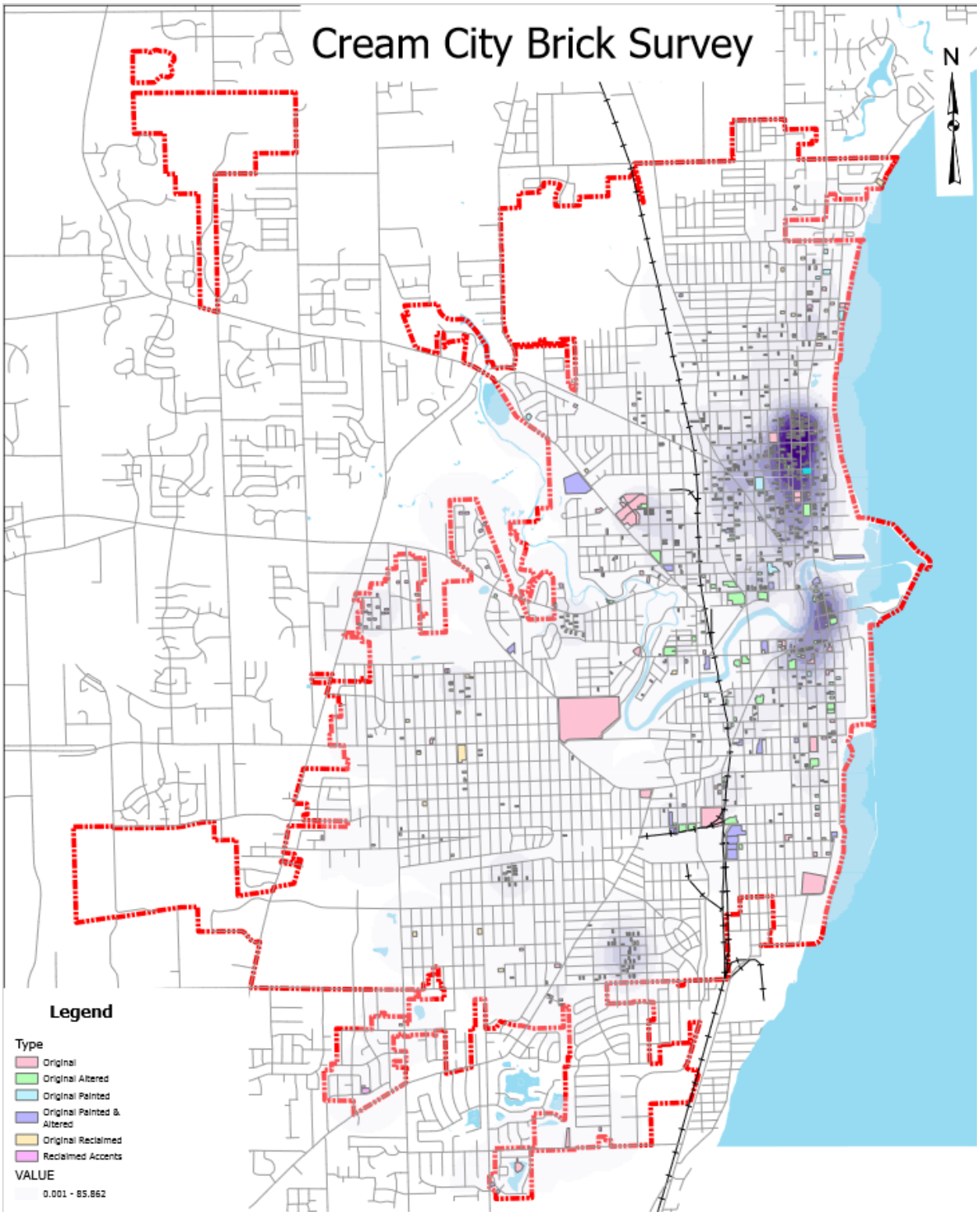


Figure 4. "HEAT MAP" PRODUCED USING CITY OF RACINE GIS MAPPING (June 8, 2023)



ASSORTED CREAM BRICK STRUCTURES


Google


Google

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[iii] Ibid

[iv] Ibid

[v] Ibid

[vi] Ibid

[vii] Ibid

[viii] Preservation Racine, Inc. Presents: The Cream Brick Tour, 16th Annual Tour of Historic Places. Sunday 29, 1991.

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[xiii] Preservation Racine, Inc. Presents: The Cream Brick Tour, 16th Annual Tour of Historic Places. Sunday 29, 1991.

[xiv] Ernest Robertson Buckley. The Clays and Clay Industries of Wisconsin. 1901. Pages 72, 77, Wisconsin Geological and Natural History Survey. Madison, Wisconsin.

SURVEY DATA BASE (by separate document).